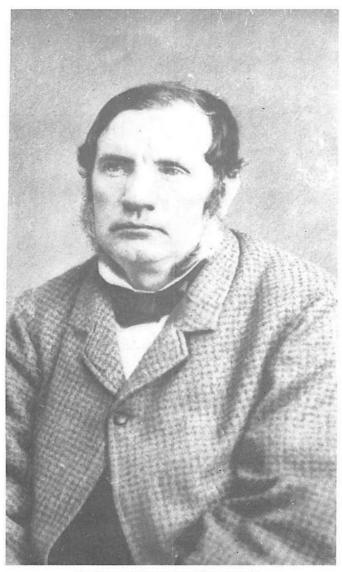
HAWKE'S BAY Acclimatisation Society CENTENARY 1868-1968





The Hon. D. McLean, First President, 1868-69

HAWKE'S BAY ACCLIMATISATION SOCIETY CENTENARY

1868 - 1968

Compiled by:

CENTENNIAL PUBLICATION COMMITTEE

Research and Edited by:

JOYCE M. WELLWOOD

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H.B. ACCLIMATISATION SOCIETY 1968

Supplement to

HAWKE'S BAY ACCLIMATISATION SOCIETY'S ANNUAL REPORT AND BALANCE SHEET 1967- 1968

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Contents

				Page
The President, Committees, Secretaries,	Curato	rs	100	13
The History of the Society, 1868-1968		441	(000)	20
Acclimatisation Societies of New Zealand	ł	444	440	128
The Game Farm, Greenmeadows		***	***	129
The Kiwi	***	***	***	135
Fish Hatcheries in Hawke's Bay	44	400	1	139
Trout in Hawke's Bay	***	***	***	145
				147
Rivers—Mohaka, Ngaruroro, Tuki 7 Maraetotara	Tuki, T	utaek	uri,	
Central Hawke's Bay	100	16	-	156
Southern Hawke's Bay	100	40-	***	158
Lake Tutira		100		160
The decade, 1930-1940	-		***	161
Game Refuges in Hawke's Bay	***	(10)	100	163
Ahuriri Wildlife Refuge	900	200	***	165
Lake Tutira	440	***	44	169
Affiliated Shooting and Angling Clubs				184
Acclimatisation Society Exhibit at the	e Haw	ke'e	Rav	
A. & P. Spring Show				195
Licences: Facts and Figures	5245	10-	741	198
Game Birds of Hawke's Bay	100		***	201
Deer	000		730	211
Work in Hawke's Bay of the Ecology	Divisis	m of	tlan	
D.S.I.R.		on or		215
Summary of Protection of Animals Acts,	1861-1	956		229

Illustrations

			Page
First President, the Hon. D. McLean			2
Present President, Mr M. A. J. Adam			12
Facsimile of Balance Sheet, 1874-1875			31
Hawke's Bay Acclimatisation District Boundaries	(196	8)	54
Hawke's Bay Acclimatisation Council, 1967-196	8		126
Pheasant Pens at Game Farm, Greenmeadows			130
Main Pond, Game Farm, Greenmeadows			133
Mangatera Hatchery, Dannevirke			140
Captain D. G. Hamilton's private hatchery, Da	nnevi	rke	142
Tuki Tuki Brown Trout			146
A mixed bag, Whana Whana, February, 1956			150
Map of Lake Tutira			168
Ahuriri Lagoon, pre-earthquake, 1931			188
Ahuriri Lagoon, 1968			190
The Society's Annual Exhibit at the Hawke's Bay Spring Show	A. &	Ρ.	196
Morning bag from Poraite Swamp			200

Foreword

In reviewing the hundred years of the Hawke's Bay Acclimatisation Society's history, I am conscious that this Province is only part of the over-all scene of New Zealand's endeavour to produce what has become a unique method of Wildlife and Freshwater Fishery Management. Faults there have been, but the final result must be judged on today's position, not on the detail of past errors. Progress can be but forward, provided that Man learns from his mistakes; the history of the Hawke's Bay Acclimatisation Society exemplifies this axiom. Today finds New Zealand with trout fishing that is famous the world over; with shooting that is within the reach of every man; and with management that involves not only Government Departments and Acclimatisation Societies, but also the personal effort of all sportsmen.

This achievement could be regarded as the conclusion of a century's progress, but in fact it must be recognised as the beginning of an era, for we stand upon the threshold of a new concept of Game and Fish management. I refer to the vast fund of technical and scientific knowledge now available to us. It will be by putting this into practice that we may ensure that the heritage, which has taken a century to produce, will be improved and implemented to reach undreamed of possibilities.

I hope that this book will induce in the reader an awareness and appreciation of the unstinted efforts of countless Hawke's Bay individuals, who have, in the last hundred years, made it possible for shooters and anglers to enjoy boundless opportunities to indulge in their particular sport.

> M. A. J. ADAM, President.

"If a bird's nest chance to be before thee in the way, in any tree or on the ground, with young ones or eggs, and the dam sitting upon the young, or upon the eggs, thou shalt not take the dam with the young, thou shalt in any wise let the dam go, but the young thou mayest take unto thyself; that it may be well with thee, and that thou mayest prolong thy days."

(Deuteronomy 22:6.)

Preface

A publication to mark the occasion of many types of centenary is not an unusual custom. Through the years many ardent secretaries have filed thousands upon thousands of words relating to the work of their organisation, and therefore an abundance of information is available, making an historical treatise comparatively simple.

Up to 3rd February, 1931, Hawke's Bay Acclimatisation Society, too, was in possession of such treasure. But unfortunately on that day a disastrous earthquake brought devastation to Hawke's Bay Province, particularly to Napier and Hastings. To add to the turmoil in Napier, many serious fires broke out, increasing the death toll, and destroying the office records and buildings of scores of business houses and Government Departments.

But fortunately for this centennial history, three sources of information were available,

- 1. Newspapers, housed in the "Daily Telegraph" office, Napier and in the Hawke's Bay and East Coast Museum, Napier.
 - 2. National Archives, Wellington.
 - 3. Department of Internal Affairs, Wellington.

It was hoped that the Library of the Wildlife Branch of the Department of Internal Affairs might hold the Society's Annual Reports. It did, but extreme was our disappointment to find that the oldest Report was dated 1923, for the 1922-1923 year of operation. The reason for this date was that in the amended Animals Protection and Game Act, 1921, all Acclimatisation Societies were required to forward to the Minister of Internal Affairs, annually, a full statement of accounts, with balance sheet duly audited.

And according to the reply from the Department of Internal Affairs to the request for particulars of registration by the Hawke's Bay Acclimatisation Society in 1934, this Society's registration was gazetted 12th October, 1922. No earlier.

Yet a newspaper published in April, 1878, printed a copy of a circular sent by the Colonial-Secretary to eleven Societies,including Hawke's Bay, a circular agreeing that Game Licences could from then on be issued by the Societies themselves, and that those fees as well as those for fishing could be retained by the Society. From this it would appear that Hawke's Bay was already registered.

Further, the previous year, the Hawke's Bay Society's secretary wrote to the Colonial-Secretary complaining that the Gazette Proclamation dated 29th March, 1877, would result in the loss of the Society's newly acquired pheasants, partridges and quail. He had something to say about licences, too.

The cargo of birds on the "Queen Bee" berthed at the Spit, Napier, in October, 1874, suggested that Hawke's Bay was at least attempting to put into practice acclimatising activities.

Yet in 1881, the reply was in the negative, when the secretary wrote to the Colonial-Secretary inquiring whether the Hawke's Bay Society had been previously registered. The immediate reaction to that surprising information was to make formal application for registration, which was gazetted, 17th November, 1881. Evidently this registration and the seventeen rules of the Society lost themselves in the Dark Ages of last century. But those very rules, amended from the foundation rules of the Society in 1868, were later to cause more than a small ripple on the Acclimatisation Pond, in general.



How best to tackle the task of collating all the material submitted by the many generous contributors to this book presented a problem; in fact, many problems. In some instances there was duplication or over-lapping of information, plus divergence of opinion. Memory, too, sometimes plays us false, but the verification or repudiation in National Archives or in the local newspapers was a guarantee of authenticity—except when they disagreed!

The gamble of success or failure in the newspaper search for facts and figures gradually developed into a challenge, the laurels too often resting on the brow of the newsprint, which refused at times to divulge its secrets.

Newspaper research at any time is a hazardous occupation, all too often fruitless; but when crowned with even partial success, the sense of achievement is sufficient to provide inspiration to continue the delving. Hours merge into days, until a stalemate is reached when the newspapers no longer will co-operate, but become deadly enemies. Are they concealing the required facts, or is the information actually not within their pages?

Unanswerable of course, but we offer it as our only explanation of the many gaps in the history of the Hawke's Bay Society. We beg forgiveness, too, for possibly incorrect names or initials or dates. But above all we hope that members will not only be proud of the achievements of the Society, but that they will also be farsighted enough to look back and read "between the lines", of the endeavours of so many people who, through this first hundred years, strove to further the aims of acclimatisation.

> Joyce M. Wellwood. Editor.

Acknowledgement and Thanks

Wildlife Branch of the Department of Internal Affairs.

Library of Wildlife Branch.

National Archives.

Animal Ecology Division of the D.S.I.R.

"Distribution and Abundance of the Rook in New Zealand" by P. C. Bull, Animal Ecology Section, D.S.I.R.

Marine Department.

Ministry of Works, Drafting Division, Napier.

"The Daily Telegraph", Napier.

"The Hawke's Bay Herald" and the "Hawke's Bay Herald-Tribune", Hastings.

"The Naturalisation of Animals and Plants in New Zealand" by G. M. Thompson.

"Tutira" by H. Guthrie-Smith.

"Kiwis in Captivity" by F. D. Robson

The Hawke's Bay Art Gallery and Museum—Historical Affairs Section.

Department of Agriculture, Hastings.

Ornithological Society of New Zealand-Hawke's Bay Section.

Hawke's Bay Catchment Board.

Anglers' and Shooters' Clubs:-

Ahuriri Lagoon Shooters' Club. Hastings and District Anglers' Club.

Heretaunga Shooters' and Anglers' Club.

Scinde Anglers' Club.

Messrs J. Archer Absolom, W. R. Anderson, F. E. Aldridge, Dr D. A Bathgate, Dr P. C. Bull, B. T. Cummingham, K. E. Francis, W. A. Gunn, L. Harris, J. N. Lowry, N. B. MacKenzie, C. Mackie, I. W. N. Mackie, R. Marshall, Mrs K. Mooney, J. G. Mulvey, T. Orman, S. G. Peterken, A. I. Rainbow, E. Renouf, R. V. Sargent, E. G. Webber, K. A. Wodzicki.

Special thanks are extended to the members of the Society's Centenary sub-committee, who gave so much of their talent and time to assist the Editor—Messrs A. M. Duncum (Chairman), M. A. J. Adam (ex-officio), I. A. Anderson, A. D. Carruthers, H. F. Perfect, G. Rusbatch, A. C. Russell, H. M. Swinburn; and G. A. Bale and S. G. Peterken co-opted.

To all, who have not been acknowledged elsewhere, and who have helped to make this centennial souvenir possible, we extend our sincere thanks.

Joyce M. Wellwood Editor.



M. A. J. Adam, President, 1965-

Presidents of the Hawke's Bay Acclimatisation Society

```
The Hon. D. McLean.
1868-1869
1869-1881
          The Hon. I. D. Ormond.
1881-1883 J. N. Williams.
1883-1894 T. Tanner.
1894-1925 F. Logan.
1925-1934 J. H. Edmundson.
1934-1937 H. M. Bishop.
1937-1940 J. H. Edmundson.
1940-1945 H. M. Bishop,
1945-1947 T. Parker.
1947-1949 F. G. Smith.
1949-1951 E. A. Williams.
1951-1954 J. G. Mulvey.
1954-1958 J. N. Lowry.
         J. G. Mulvey.
1958-1959
          J. N. Lowry.
1959-1965
1965-
          M. A. J. Adam.
```

To be elected President of any group, no matter how diverse the objects, is an honour bestowed on the chosen few.

From its very foundation, the Hawke's Bay Acclimatisation Society has been strengthened by men, whose names have been associated with the building of the Province in general. In 1868 the most important man in the Province, its first Superintendent, the Hon. D. McLean, busy as he was, evidently thought the concept of acclimatisation sufficiently important that he attended the first meeting to discuss the subject, and later at the meeting accepted the first Presidency. But during his second year in office, His Honour was called to Wellington by the Prime Minister, to act in the capacity of Minister of Native Affairs.

However, an able man was available to take the Hon. D. McLean's place, both as Superintendent of the Province, and as President of the Acclimatisation Society. This was the Hon. J. D. Ormond, a foundation Acclimatisation Society committee member, who held the position of President for nine or ten years, possibly eleven. Whether Col. G. S. Whitmore and F. Sutton held office each for one year, 1877 and 1897 respectively, or whether they were merely in the Chair for those annual meetings in the absence of the Hon. J. D. Ormond, then a member of Parliament, no one has been able to find any printed proof.

But proof there is in newspapers of this particular period that F. Sutton held the office of Secretary from 1872 to 1881, and possiblly up to 1883.

In 1880, J. N. Williams, Frimley, Hastings, an ardent committee member from the mid-seventies, and eulogised within these pages, became President for three years. Registration of the Society took place during his term of office.

Thomas Tanner, a foundation committee member, came from Hastings as did his predecessor. His presidency lasted for eleven years, during which time he spared no effort for the Society even though he was a busy farmer.

Succeeding Mr Tanner, Mr F. Logan, a Napier barrister, took office for what turned out to be the longest term of any President of the Society—thirty-one years. (It is possible that Mr C. A. Fitzroy, Havelock North, may have been President, 1913). A point of interest, perhaps, is the fact that the highly respected Mr Logan, whose length of office in no small way is responsible for the many diversifications within the Society today, was never a committee member. But his son, Mr I. B. Logan, still living in Napier, Westshore, carried out valuable work as a committee man from 1916 to 1944, and held office more than once as Vice-President.

Two wars, and their aftermath took their toll of the health of the Society during Mr Logan's three-decade term, but under his leadership it survived, convalesced, and began to revive, with no thought that the Depression was just round the corner.

In 1925, Mr J. Edmundson, Napier, took over from Mr Logan. It was a difficult task, following a President of such calibre, but Mr Edmundson obviously was a success, for he held office for two periods with a total of twelve years' service. During his first session, the Slump and the 1931 Napier (and Hastings) earthquake must have resulted in financial difficulties for the Society. The following membership figures bear this out—in 1928 there were 254 members; in 1929, 220; in 1930, 97; in 1931, 79.

Mr H. M. Bishop, Hastings, also was President for two periods, the first time between Mr J. Edmundson's two, the second preceding Mr T. Parker. Fifteen years as a committee member stood Mr Bishop in good stead as President, but his lot was not an easy one in his second session, which co-incided with World War II.

A well-deserved Presidency was earned by Mr T. Parker, Napier, in 1945, following nearly twenty years as a conscientious committee member. Unfortunately his terms of office was prematurely terminated by his death after only two years as President.

The next to attain the Presidency was Mr F. G. Smith, Napier, affectionately nick-named Mako, because of his ability as a deep-sea fisherman. His impact on the Society was felt mainly in the sphere of angling, and his generosity with his firm's trucks helped the Society financially.

Mr E. A. Williams, Napier, an architect, succeeded Mr Smith and likewise held office for two years. For over twenty years Mr Williams gave unstinted service on the committee of the Society.

At the opening of the second half of the twentieth century began a new era of living Presidents. There are three—Mr J. G. Mulvey with two terms of office; Mr J. N. Lowry with two terms of office, and the present President, Mr M. A. J. Adam.

The first is Mr Mulvey, an accountant, now living in Woodville. He held office from 1951 for four and a half years, the period divided into one term of three years, and one of one and a half years, terminated by his resignation. His business-like attitude to the affairs of the Society in general, and Ranging, in particular, resulted in the work of the Rangers reaching a new peak of efficiency.

Mr J. N. Lowry followed both of Mr Mulvey's two terms of office. The first was for four years, the second for six and a half, thus a total of ten and a half years as President, a codicil to his legacy of forty-two years' work for the Hawke's Bay Acclimatisation Society. Life Membership was accorded him; and his father, Mr T. H. Lowry was similarly honoured before him.

Possessing a prodigious memory, Mr J. N. Lowry has a fund of first-hand knowledge reaching back to the first decade of this century. Naturally he remembers the sporting activities of his parents and grand-parents. (No mention of his Cambridge Blue for tennis). For twenty years their property was so well stocked with game that "they could go out and shoot ten cock pheasants before breakfast." And the Loch Leven trout imported from "White Rock", Canterbury, by the late Mr Walter Ensor to stock the Kuripapango lakes? He could remember his father returning with full bags from most of his sorties. He could well recollect the enjoyment of boating trips across to the Iron Pot from his father's racing stables, run by the unforgettable F. Davis on the western side of the Inner Harbour. Black Swan were prolific even in those days.

Early photographs substantiated many of Mr Lowry's memories of red-letter days. One in particular concerned a trip he went with his parents to Waikaremoana, he, a boy of six years of age. They caught thirty-eight trout, averaging 5½lbs. At Inland Patea, at a later date, Mr Lowry was a member of a party of anglers, who caught one hundred fontinalis for lunch. Another fishing exploit he recalled occurred 28th January, 1918 at Jellicoe Point, Waipehi, when his was one of three rods that caught ninety-eight trout.

But regarding shooting, there were countless anecdotes of success—no allusions ever to marksmanship. But what a first-rate shot he was, and still is. At Lake Ohingo, scene of many highlights in his sporting memorabilia, his mind went back to opening day, 1944—eight guns totalled 120 duck, 21 swan, and 33 pukeko. Somthing probably unique was the occasion when three guns took a complete covey of quail, forty-seven birds.

Mr Lowry was responsible for importing fifty pair of grouse for Tongariro National Park, about 1926. The grouse were shipped by Spratts' (famous dog-biscuit Co.) free of charge on the "Papanui". Prior to the arrival of the game birds, Mr Lowry imported one and a half hundred-weight of heather seed to be sown to improve the habitat for their acclimatisation. The birds were insured for £2 a head, but unfortunately only fifteen arrived alive; and though the survivors nested, the grouse were last seen three years after their liberation.

In the many and varied projects that Mr Lowry has undertaken for the Hawke's Bay Acclimatisation Society, either as President or as committee-man, he has always given of his utmost. His generosity with time, labour, or money for the affairs of the Society will never be forgotten, nor the record-breaking number of years devoted to the improvement of acclimatisation.

Mr M. A. J. Adam, successor to Mr Lowry, was elected to office in November, 1965, and accordingly has the honour of being President in the year of the Society's centenary. A Central Hawke's Bay farmer, Mr Adam is a keen sportsman, particularly in the realm of fishing and in the shooting of upland game.

As a Chairman he has been outstanding, and his tenure of office has been an exceptionally busy one with some major changes in Society policy. The membership of the Council has been extended to sixteen (four representatives for the four District subdivisions). The Game Farm became closed to visitors, and as a consequence, the kiwis and the other display birds were transferred elsewhere within the Society's District.

While Mr Adam is the last President in the first hundred years of the Hawke's Bay Acclimatisation Society, he was simultaneously the first President of the Hawke's Bay Wildlife Trust, an organisation, that evolved from a public meeting called by him as President of the Acclimatisation Society, and founded in 1966. At present he is Vice-President of the North Island Acclimatisation Societies' Council, a body on which he has made considerable impact.

Mr Adam is keenly interested in all matters pertaining to wild life and conservation, whose future, he feels, lies in the field of a more scientific approach.

COMMITTEEMEN THROUGHOUT THE CENTURY 1868-1968

A M A . I	SLI: T A	Pickard, W. A.
Adam, M. A. J.	*Harris, L. A.	Tickard, W. 71.
Aitken, J. D.	***Harvey, Dr F. N.	***Pickett, T.
Algar, H. E.	Haycock, H.	Pickett, T. F.
Anderson, I. A.	Hay, L.	*Rainbow, A. I.
Anderson W P	Heighway, S. H.	Renouf, A. W.
Anderson, W. R.		
Andrews, S.	Herrick, Col.	Renouf, E.
Ashby, P. C.	Hill, V. D.	Ricketts, R. C.
Beswick, G. A. L.	Holt, D. L.	Rhodes, J. R.
Birch, W. J.	*Holt, R. C.	Roberts, S. F.
Bitch, W. J.	Howard T A	
**Bishop, A. M.	Howard, T. A. Hunter, Paul	Robson, F. D.
Bone, L. G.	Hunter, Paul	*Rusbatch, G.
Bowes, A.	Jameson, K. B.	Russell, A. C.
Boyd, S.	Job, E. V.	Russell, Capt.
Brown Carturiahe	Johnstone, R.	Shortt, L. J. E.
Brown Cartwright		***CL-i
Browning, H. A.	Joll, I.	***Shrimpton, W.
Burke, W. U.	Joshua, J.	Sidey, T.
Burton, J.	**Kennedy, C. D.	Simmonds, W. H.
Cameron G G	Kinross, J. G.	Simmons, H. E.
Campbell D M	Kirkley, C.	Sinclair, A. F.
Campbell, D. N.	Kirkicy, C.	
Cameron, G. G. Campbell, D. N. Canning, J. D.	Klenner, A. W.	Smith, A.
Carlisle, J. W.	Laing, T. W. Lawn, E. V.	*Smith, F. G.
Carr, O.	Lawn, E. V.	Smith, N. E.
Carruthers, A. D.	Le Comte, A. W.	Smith, W. A.
	***Logan, I. B.	Somerset-Smith, O.
Cawsey, K. L. M.		
Chadwick, R. M.	Long, A. C.	Stafford, A.
Chambers, B.	Lopdell, L.	Staines, F. J.
Chambers, J.	****Lowry, J. N. Lowry, T. H.	*Stephenson, L.
***Coleman, J. H.	Lowry T. H.	Stewart, G. W.
	*McIntyre, J. B.	Stitt, E. J.
Crooks, C.	Melintyte, J. D.	*Tapper T
Crowther, S.	McLean, P. S.	*Tanner, T.
Davies, A. E.	McLean, R. D. D.	Taylor, J. D.
De La Haye, E. A.	Mackie, I. W. N.	Tennent, H. B.
Duncum, A. M.	Mannering, G. E.	Tiffen, H. S.
eep1 I U	Miller, M. R.	Unwin, R. J.
**Edmundson, I. H.		
Ellis, H.	Mitchell, D. S.	Walden, P.
Fabian, J. C. K.	Moore, R. H. G.	Walker, M.
Fitzroy, C. A.	*Morrin, T. V.	Warren, H. G.
Fitzgerald, Dr V.D.	Morris, G. M.	Wellwood, R.
Fleming, L. B.	*Mulvey, J. G.	*White Cedric
	Marvey, J. C.	Whitmore, G. S. Col.
Foreman, G. R.	Nairn, C. J.	*Whate W A
Francis, K. E.	Nelson, W. H.	*Whyte, W. A.
Fraser, A. L. D.	Newman, Capt.	**Williams, E. A.
Garnham, F. C.	Nichol, Jas.	*Williams F. W.
Gilchrist, A. S.	North, L. W.	Williams, J. H.
	***O'Meara, A. E.	*Williams, J. N.
Golding, C.	**O Media, 71. L.	Williams, I. D.
Gordon F. L.	**Ormond, Hon J. D.	Williams, J. R.
Goulter, E. R.	Paget, D. S.	Williams, R. P.
Goulter, S. I.	**Parker, T.	Williams, Dr
Greene, J. C.	*Parsons, P.	Wilson, C. D.
Comman P W	*Parsons, S.	Wilson, C. D. Wilson, J. T.
Gunn, R. W.		Winleys II M
*Haggerty, R. H.	Peterken, S. G.	Winlove, H. M.
Handyside, J. S.	Phillips, E.	

(Each asterisk indicates a decade of service on the Committee. Regrets for the many, who just miss out for two, or three, or four, decades as the case may be.)

SUPERNUMERARY COMMITTEE MEMBERS, FARMING REPRESENTATIVES, SPECIAL REPRESENTATIVES, and SPECIAL APPOINTEES

(As some of the members listed below held office in more than one of the above categories from time to time, it was difficult to tabulate. Some in the list were also at different times members of the Committee of Management. All however worked enthusiastically for the Society)).

Alpe, W. I.
Ashby, P. C.
Beer, G. L.
Bliss, B.
Clarke, M. P.
Cooke, L. E.
Crooks, C. L.
Doube, E.
Fabian, J. C. K.
Field, F.
Golding, C. L.
Graham, G.
Greene, J. C.
Gunn, R. W.
Harris, L. A.
Hayhow, H.

Heighway, S. H.
Howard, L. W.
Jane, F. J.
Klenner, W. A.
McHardy, I.
McHardy, T.
Mackie, I. W. N.
Mills, G. E.
Mitchell, D. S.
Mitchell, T. M.
Mulholland, D.
Mulvey, I. G.
Nairn, J. H.
Neill, D. R.
Osborne, I.
Peterken, S. G.

Pickard, W. A.
Rainbow, A. I.
Renouf, A. W.
Ricketts, R. C.
Rogers, G.
Rossiter, B. J.
Rusbatch, G.
Simmonds, W. H.
Smith, I. E.
Tennent, H. B.
Walker, I. N.
Wedd, R. A.
Welsh, W.
Wilson, J. T.

LIFE MEMBERS OF THE SOCIETY

1868-1968

Edmundson, J. H. Haggerty, R. H. Harris, L. A. Harvey, Dr F. N. Ioshua, I. Logan, F. Logan, I. B. Lowry, J. N. McIntyre, I. B. Mulvey, J. G. O'Meara, A. E. Ormond, Hon, J. D. Peterken, S. G. Pickett, T. F.

Rhodes, J. R. Russell, Capt, W. R. Smith, F. G. Tanner, T. Whitmore, Sir, G. S. Williams, E. A.

In the 1882-1883 Annual Report appears the bald fact, "Seven Life Members". It is left to us, eighty-five years later to question who they were, and to surmise from the work of those pioneers in the early days of the Society the names of the men worthy of the honour of Life Membership.

"Therefore we dub you Life Members, Messrs W. J. Birch, J. H. Coleman, the Hon. D. McLean, F. Sutton, H. S. Tiffen, W. Shrimpton and J. N. Williams."

SECRETARIES .

1868-1872 H. S. Tiffen

1872-1881 or '83 F. Sutton

1883-1885 or '86 W. J. Birch

1885-1886 A. S. Birch or C. A. Fitzroy

1886-1888 W. J. Birch

1888-1912 C. A. Fitzroy

1912-1914 J. Parker

1914-1915 R. D. Anderson

1915-1917 T. Parker

1917-1925 R. D. Anderson

1925-1937 R. M. Chadwick

1937-1957 I. L. Prime

1957- H. M. Swinburn

CURATORS

Mangatera Hatcheries,	? Miller ?	
Dannevirke	J. Anderson	1923-1935
Game Farm Hatcheries,	F. D. Robson	1934-1949
Greenmeadows	S. Roberts	1949-1952
	K. E. Francis	1952-1960
	D. C. Macalister	1960-1963
	T. B. Munro	1963-

History of the Society

Following Government legislation in the forties and fifties to import animals and plants to supplement the inadequate indigenous food supply of birds and fish, the early settlers in the late sixties reached a stage of security where they began to consider the importation of animals and birds, "which would greatly contribute to the pleasure of the settlers of New Zealand, and help to keep up those associations with the Old Country, which it was desired should be maintained".

Thus the motive of the 1861 Protection of Certain Animals Act and its Amendments, '62, '63, '64, '65, and '66.

Hawke's Bay is first mentioned on the fringe of Acclimatisation matters in June, 1867, when Governor, Sir George Grey, proclaimed that the "Protection of Animals Act, 1866, shall come into force in the Province of Hawke's Bay".

Seven months later, at the close of the Hawke's Bay Agricultural Society's meeting, 27th January, 1868, the subject of establishing an Acclimatisation Society in Hawke's Bay was brought up for discussion.

Donald Gollan Esq. was voted into the Chair.

It was resolved "That as it is highly desirable to encourage the introduction of insectivorous birds, useful plants, and trees, an Acclimatisation Society be formed".

The annual subscription was fixed at one guinea, and the following were appointed as office-bearers:

President: His Honour, the Superintendent, Donald McLean. Vice-President: Lieut, Col. G. S. Whitmore.

Committee: Messrs Cartwright Brown, O. Carr, C. J. Nairn, J. D. Ormond, H. R. Russell, T. Tanner, H. S. Tiffen.

Through an omission no secretary or treasurer was appointed, but Mr H. S. Tiffen agreed to act temporarily in both capacities.

The "Hawke's Bay Herald" marked the occasion of the foundation of the Society with the following editorial, 4th February, 1868.

"For some time past there has been a growing desire on the part of the settlers to introduce the insectivorous birds of the mother country to protect the farmer from the ravages of the caterpillar and the grasshopper. We are glad to find that our Superintendent at the meeting of the Agricultural Society on Thursday expressed himself so favourably on the subject. Already he has organised for pheasant to be disposed of among the settlers.

"The insectivorous birds of England are chiefly those which live singly and make their nests in hedgerows. With the exception of the starling, which is both gregarious and almost, wholly insectivorous, the gregarious birds are partly granivorous. Of these the rook requires trees. This bird destroys many insects, which few other birds can reach, and therefore does much more good than harm. On the other hand, the sparrow does not do much good; and field-fares and the like, blackbirds etc. do a great more harm than good. Stonechats, chaffinches, tomtits, robins - - - all these are valuable auxiliaries to the farmer, and do no appreciable harm,

"These birds, partly from their solitary habits, are very defenceless; and here they would be refugeless from their many enemies - - hawks, cats, and owls. As the chief duty of an Acclimatization Society will be to take steps to prevent them from extirpation, after they reach our shores, some expense will be necessary for some time. The Auckland Acclimatisation Society already has an extermination fund, arising from the sale of game licences.

"The efforts of His Honour, the Superintendent, to import pheasants in considerable numbers, will aid materially what has already been done by settlers in a private capacity. It is also planned to introduce Californian quail, a prolific breeder, already thriving elsewhere in New Zealand.

"If what is promised is well done, and the birds arrive safely, it is not too much to hope that in a year or two, at most, we shall hear of game licences being issued to sportsmen in this province."

Within a month, advertisements appeared under the title of the Society, offering "Twenty pairs of Pheasants for Sale, at £5 per pair". (Incidentally a prior advertisement appeared in May, 1867: "Canaries and Parrots. A choice lot for Sale. Apply to Mr Peters, behind Masonic Hotel", Napier.)

Paragraph in "The Hawke's Bay Herald", 11th February, 1868, "It will be seen from advertisement, that Mr Tiffen is receiving orders for the pheasants, expected from Auckland. These birds are tame, having been bred in the Domain. They are expected to arrive by return trip of the "Star of the South"."

About this time appear many allusions in the local papers to the Salmon ova on board the "Celestial Queen", a clipper ship bound for Dunedin for the Otago Acclimatisation Society. Due in April, the 100,00 salmon ova, safe in their ice-house, apparently withstood storms in April, but did not arrive until 19th May, a day of great jubilation in Dunedin.

In April and May, advertisements appeared asking members to forward subscriptions; below this notice, the following: "A collection of valuable seeds, presented by the Messrs Carr of Petane, is ready for distribution among members. Members desirous of obtaining choice vine-cuttings are requested to send in names before 1st June".

H. S. Tiffen (Sec.)

1869-1870-1871

For reasons unknown, but easily conjectured when life in the seventies in Hawke's Bay is considered, the Hawke's Bay Acclimatisation Society failed to acclimatise itself to acclimatising. This conclusion is based solely on the fact that from our combined sources of supply of knowledge of its activities, not one word appears.

But one political item of interest that has indirect bearing on the Society was the resignation of His Honour, the Superintendent, Donald McLean, in order to take up the position of Minister of Native Affairs, in Wellington, in 1869.

In July of that year, His Honour also resigned from his position of President of the Hawke's Bay Acclimatisation Society. Succeeding him in both positions was the Hon. J. D. Ormond. The Secretary-Treasurer, H. S. Tiffen, continued as such, but extended his many public duties to the office of Speaker of the Provincial Council of Hawke's Bay.

Then in mid-February, 1871, the Society awakened from hibernation with a spate of daily advertising for six weeks asking for new members.

The "Hawke's Bay Herald" lent its pen with the following reprimanding editorial:

24th March, 1871

"Is nothing going to be done towards forming an Acclimatision Society; or rather towards revivifying the one already in existence? What between caterpillars, beetles, slugs, and other destructive insects, half the crops attempted to be grown in this Province are, year after year, swept off the face of the country. The cure, and only cure, is a supply of insectivorous birds. Pending a reply from the Mother Country, a limited number could be readily got from Auckland, Dunedin, or other places. We want, therefore, an Acclimatisation Society with money annually at its disposal."

1872-1873

Editorial, 20th January, 1872, "Hawke's Bay Herald".

"The trout, which will arrive today by the Paddle-steamer, "Dacota", owned by the Californian, New Zealand and Australian Mail Steamship Company, are, we believe, 160 in number, and

most of them are from two to three inches long. They are packed in two cans, which fit into a case about 4ft square, together with four smaller jars. It is regarded as of much importance that they should be liberated with as little delay as possible. The result is anxiously looked for in other Provinces."

23rd January

"Trout from "Dacota" have been liberated into streams of the Tuki Tuki and the Waipawa; and some have gone to Maraekakaho, with some to Porangahau."

1872

Editorial, 2nd April

"The recent importation of birds into this Province is, we are happy to learn, likely to turn out a success. Of the partridges, one has been found dead, but the rest are doing well.

"The rooks which were set loose in the vicinity of the Big Bush, are still for the most part not far from it. Odd birds, however, have been seen elsewhere. Of the two jack-daws, one has been seen about the town, (Napier), for some time past; and the other came in a day or two ago. They are likely to build somewhere about the Bluff.

"Great pains have been taken by settlers of homesteads to protect any of the introduced birds from their great enemy, the hawk. The reward for hawks' heads is now increased to one shilling, double the previous price."

26th April, "Hawke's Bay Herald"

The Kiwi

"The kiwi is becoming very rare now, in this part of New Zealand. One was caught in Runanga, some days ago, and is now in the possession of Mr Rich of the Customs."

Reciprocal Acclimatisation?

"A large collection of New Zealand birds, numbering about 350, was lately shipped on the "Queen Charlotte" from Lyttelton for exchange and sale in England. Mr Bills, the gentleman in charge, has also taken with him a considerable number of birdskins, moa relics, etc., and will bring out a large number of English birds on his return."

Pigeon-post was operating in 1872, when the Telegraph was so near completion. An outstanding flight was made during this year, from Coromandel to Auckland in forty minutes. The average time was one hour.

23rd November, 1872

"Increase in sharks due to the Maoris' preferring mutton. They used to eat 30,000 sharks per annum."

Copy of Book Review appearing in "Nature" in England, 1872, "The Ornithology of New Zealand"

The two books in question are:-

"A History of the Birds of New Zealand" by Walter Lawry Buller, D.Sc., F.L.S., C.M.Z.S., Part I. (London 1872)

"A Catalogue of the Birds of New Zealand, with diagnosis of their species," by Frederick Wollaston Hutton, F.G.S., Assistant Geologist. Published by command. (New Zealand 1871).

A long review of praise for both works, closes however, on this note "The subject is worthy of close attention, whether we regard the various forms of New Zealand birds from the point of view of their intrinsic interest, or from that of so many being on the verge of extinction.

"We have hinted at some of the insuperable causes of extinction in our own land. But there is another and possibly more powerful cause, which is entirely under control. This is the silly mania for "Acclimatisation", which has been so warmly fostered by many well-meaning, but ill-advised persons, both at home and in the colonies; and nowhere more than in New Zealand.

"The English Acclimatisation Society fortunately came to an end, before it had time to do any harm here; but its example has been mischievous in our dependencies. In a reckless way animals and birds of extremely doubtful advantage have been transferred to the Antipodes; and there, it seems impossible to deny, that they, in a few years, be found, not only ousting the kinds which are less specialised, and therefore less able to meet them on an equal footing, but unaccompanied by any of those checks, which keep the whole of a natural fauna balanced, the importations will inevitably become the greatest of nuisances."

SHIPMENT OF BIRDS FROM ENGLAND PER THE "QUEEN BEE"

1874

What a red-letter day for the Hawke's Bay Acclimatisation Society was 17th October, 1874, when the "Queen Bee' discharged her long-awaited cargo of six hundred and fifty birds, "for the settlers to remind them of Home."

How vivid is your imagination, not only for the scene that morning at the Spit, Napier, but also for the hundred-and-one preparations and the organisation that must have been necessary in England before even the first bird was caught and bought, caged and embarked?

In all probability there were tears of homesickness that morning in Napier, tears however that soon dried with joy and laughter at the chorus of disturbed binds roused from the routine of life at sea for nearly seventeen weeks.

What a commotion! How did the Society's committee or staff cope with the next phase of "Operation Birds"? Who were the lucky settlers to buy a pair of the "Fifteen only partridges"? What happpened to the odd one? Of the 206 larks, who became the owner of the pair supplied by Mr Walter Swayland, Brighton at a cost of one shilling each? And the blackbirds and the thrushes? And dare we ask, who bought the 72 rooks? Yes, 72 rooks!

But where the story began, with the Agent General in London, real facts take over, filling in the gaps between the bird-catchers and the final nail in the cages on board the "Queen Bee."

Perhaps a good starting point would be the Agent General's letter to the Hawke's Bay Society's Chairman, Napier.

30th June, 1874.

Sir,

Referring to former correspondence on the subject of my shipment of Birds to Hawke's Bay per "Queen Bee", I have now the honour to forward for your information a statement of expenditure, from which you will perceive that the total cost amounts to £344 1s 2d, leaving a balance in hand, of say £50.

I may mention that the five Tanks (£5 each; £25) put on board to carry water for Birds on the voyage have been paid for out of funds placed at my command, and are, therefore, the property of the Society.

The amount of seed and other food for the passage out may appear unnecessarily large, but I consider it prudnet to be on the safe side in this respect, especially as any residue at the end of the voyage can be utilised by the Society.

With regard to the proposed further shipment of small birds in October next, I may state that in order to carry this out, it will be necessary to add a further sum of say One Hundred Pounds to the funds in my hands. If you should decide on doing this, it will be well to communicate with me by cablegram, otherwise we shall be too late to avail ourselves of the October flight. All that season

the birds will be obtainable at very cheap rates in the market; and Mr Thatcher assures me that for a total cost of £150 (including his own honorarium of £20) he would be able to place on board between 500 and 600 small birds of the kind indicated in your list.

The trouble and labour of collecting and shipping the late consignment was such that I though it right to increase the remuneration to Mr Thatcher from £20 to £30, an amount which he has thoroughly earned by his constant and assiduous care in carrying out my instructions. I consider myself fortunate in having secured his services for another shipment, if required, and shall have much pleasure in undertaking it for you, if requested.

I have the honour to be, Sir, Your most obedient Servant, Isaac Earl Featherston, Agent-General.

His Honour, The Superintendent, Hawke's Bay.

You may be curious to know the work of the Agent-General. This position was created by the Immigration and Public Works Act, 1870, Dr Earl Featherston being first Agent-General to be appointed. He organised the Immigration and Public Works Schemes from London—arranging for the despatch of emigrants, the transport of machinery, and railway equipment. He also selected school teachers, engineers, civil servants and others. In this more general capacity he was concerned to some extent with wildlife—e.g. salmon to New Zealand. And, of course, this latter explains how he became involved in sending out birds to the Hawke's Bay Society.

In the earlier years, the Agent-General was paid from the Immigration and Public Works Department vote. Although he was responsible to Cabinet, in effect he was was really working under the Immigration Department. In about 1875-76, however, immigration to New Zealand declined and the Agent-General became more the general representative for New Zealand in London. In 1880, the Agent-General came under the Colonial Secretary's Department.

In 1905, the title of Agent-General was changed to that of High Commissioner, and thus we are up to date. Next we must meet Mr Manning Thatcher, without whom the consignment of birds would have been impossible. Obviously he has thought of every thing, as if it were all in the day's march to send 650 birds by sailing ship to far-off practically unknown New Zealand.

Money expended by Mr Thatcher on behalf of the Government of New Zealand. (Hawke's Bay Acclimatisation Society)

(Hawke's Bay Acclimatisation Society)			
	£	S	d
Mr Winter for attendance on birds, food etc.	40	0	0
Mr Winter for 100 Blackbirds and Thrushes			
@ 2/- each	10	0	0
Mr Winter 10 cages as per Invoice	6	0	0
Mr Winter 2 cages 5/- ea, and 4 scrapers		14	6
Mr Winter 2 boxes 2/-, pails 2/9, pans 2/-, box 3/ Mr Winter rent of house and shed for Rooks, Black		9	9
birds, Thrushes: 5 weeks @ 12/-	3	0	0
Mr Winter Cases to convey Rooks on board		15	0
Mr Winter Van Hire 8/-; Dock Charges 9/5		17	5
Mr Swaysland for 42 Rooks @ 3/-	6	6	0
Mr Swaysland for 28 Blk, and Thrushes @ 3/-	4	4	0
Mr Swaysland for 2 Larks @ 1/-		5	0
Mr Castang for 15 Partridges @ 7/-	5		0
Mr Castang for 4 pans and porterage		3	0
Mr Holder for 17 doz. Larks (all good sound picke	d		
birds @ 12/-	10	4	0
Mr Holder for 17 cages with food and water tin	iS		
complete @ 3/6	2	19	6
Mr Burton for 3 weeks' wages @ 30/-	4	10	0
Mr Burton for extras at Gravesend	3	7	7
2 Cock Canaries and Cage for the Captain	1	0	0
Meat for Rooks in Docks		10	0
Men's Assistance in Docks and Carriage of Rooks		14	0
Netting for Cage doors 5/-; Dock Dues 3/6		8	6
Sieves 8/-; van to Docks 10/-		18	0
Returning hampers 2/9; Waterman's Attendance		12	9
Strongly built coop for partridges (6ft. L.)	2	10	0
Man for various errands, 18, 19, 20th June	1	0	0
Bought in small quantities 75 Blackbirds	10	6	3
Bought in small quantities 63 Thrushes	8	13	3
Bought in small quantities 91 Blk. B. and Thrushes	11	7	6
My Travelling Expenses during whole time as pe	r		0
Account	5	10	6
	£143	9	6

The total consignment of 650 birds was made up as follows:

 Blackbirds	and	Thru	ishes	344	357
Rooks .			* 1		72
Larks	***		***	***	206
Partridges	***	Service	5	144	15

(Disregarding the Captain's canaries and two owls appearing on the ship's manifest, only once! There seems some doubt, too, whether the rooks numbered 42 or 72?)

Consider for a moment the food for this Oceanic Aviary. An enlightening docket from Thomas P. Bartholomew, will assist here.

June 20th, 1874. d 11 tons Patent Poultry Food 33 0 0 1½ tons Bird Gravel 10 0 8 Bushels Hemp Seed 10/-4 0 16 Bushels Fig Dust 4/-3 4 0 8 Bushels Pheasant and Partridge Mixture 9/-3 12 0 5 cwt. German Paste 69/-17 0 4 Bushels Canary Seed 12/-2 8 0 4 Bushels Hemp Seed 10/-0 0 8 tins for German Paste and Soldering 3/9 1 10 28 Strong coopered barrels for Poultry Food, Hemp Seed, etc. 3 17 0 12 strong extra coopered Barrels for Gravel 13 0 10 bags for Gravel 9d. 7 6 10 sacks for Poultry 9d. 8 live sheep 42/6 17 0 0 58 Bushels of fodder for sheep 1/6 4 0 4 bales of compressed hay 13/-2 12 0 200 eggs 0 1 case for eggs 1 9 5 sacks for fodder 1/-0 Dock Charges for 77 packages 8 £101 Sacks Returned 6 £101 Discount 11 11

£100 10 0

Once aboard, the birds became the responsibility of a Mr Joseph Burton, a passenger on the "Queen Bee". For his services from June 20th until October 17th, he was paid £1 per week, thus totalling £17. William and Henry Bough, whether boys, men, or greybeards, we know not, received each for the seventeen weeks at 5/- per week, the sum of £4 5s.

Perhaps the three pairs of blankets at 6/- each were for these three musketeers; for them also, or for the rooks, the afore-mentioned sheep and the "Beef 29" costing 19/4 from I. Short, Butcher, address 77½ High St, Gravesend! Mr Burton evidently had six packages of baggage, for which he paid the sum of 3/6 Dock Charges. The Boughs must have been travelling light.

Perhaps too, the teapot at 2/10, the chopper at 1/2, and the bass broom at 1/9, handle 4d, not forgetting the 6d padlock, were items for the bird-watchers, on the four months' long voyage.

During all this itemising, the carpenters have been busy to the tune of £7 10s working on board the "Queen Bee", fitting up Stern cabin, and three others in Saloon, with perches, boughs, lockers, and shelves; also stopping up air openings, covering Stern windows and side scuttles with wire-netting, and making a wire-netting door.

They made an 8ft pen for the six sheep, too. £2.

And lastly, Captain Buck's Account for Freight per "Queen Bee" bound for Napier.

For Birds:

5 tanks	340ft	5in			
11 bags	53ft	9in			
12 kegs sand	27ft	Oin			
27 casks	182ft	3in			
	603ft	5in	£ 30	3	5
200 gals water			1	10	2
U				13	2
5 tanks at £5	5 0 ea		26	5	0
			£58	11	9

Public Auction of some of the receptacles used for the birds en route, raised the sum of $£22\ 10s\ 6d$.

4 iron tanks	£16	0	0
1 iron tank	3	15	0
3 bird cages small		1	0
3 bird cages large, 3/- 3/6 4/-		10	6
2 casks		6	0
4 casks		14	0
6 casks	1	4	0
	€22	10	6

Charges

Commission 5%	£1	2	0
Advertising		11	6
Cartage		5	0
Bell Ringing		5	0
	€2	3	6

£20 7 0

Lyndon, Auctioneer, Napier.

28th November, 1874

Tantalizingly, no further facts are available as to what happened to the gallant "650" after their arrival in mid- October, 1874. In all probability some exchanged their state-room cage accommodation aboard the "Queen Bee" for many varieties of homemade cages in settlers' homes. Were some liberated in the nearest bush - - - the Big Bush or the Small Bush in the Mangateretere-Clive area? Were some sold privately or by auction? How far from Napier had some flown in a week, or in a month?

As many questions as there were birds could be asked. But no matter where the birds were, if their song gladdened the hearts of the homesick settlers, the "650" project achieved its immediate object, with the long-term results never invisaged.

1874-1875

Evidently the Society took heed of Dr Featherston's advice to send an extra £100 to add to the balance he had in hand after the shipment of birds per "Queen Bee". For in February, 1875, a consignment of birds was delivered at Napier, from the barque "Hudson", after her record-breaking voyage of 84 days.

Colourent of Couple and Copie	udding ing the
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(hairman)

Compared with the lavish details of the "Queen Bee" birds, the "Hudson" details are sparse:

60 robins 110 goldfinches and chaffinches 44partridges 137 larks

Thus a total of 351 birds for liberation. Receipts in the National Archives reveal that Robert Holland received a cheque for £12 8s 6d for "Attending birds aboard the "Hudson" from 17th November to 12th February". The Superintendent directed that an extra £5 bonus be added. Likewise a bonus of £2 was given to Alfred Coombe for assisting in the care of the birds on the voyage.

Another Archives receipt, signed by W. Reisima, 17th February, 1875, indicates that it was payment for conveyance of birds to Kaikora (Otane), Waipawa, Waipukurau, and Wallingford.

But perhaps the most significant item of news from 1874-1875, from the point of view of present-day members interested in the early history of the Society, is the copper-plate handwritten Balance Sheet housed at National Archives. This Statement issues the first information of the financial position of the Society since its inception. It does, however, indicate that there had been an annual balance the previous year, but no trace of it could be found.

Statement of Receipts and Expenditure by the Acclimatisation Society during the year from 1st July, 1874 to 30th June, 1875.

Receipts:

Balance from last year	£22	17	3
From Provincial Treasurer, unexpended balance of vote, '73/'74	79	2	6
From E. Lyndon, Proceeds of Tanks etc.	20	7	0
From Licence Fees to kill game	14	0	0
From Provincial Treasurer, unexpended balance of vote, '74/'75	436	19	0
	£573	5	9

Expenditure:

To J. D. Ormond Refund cost of trees	10	0	0
To W. Miller, Petty Cash Payments	5	9	0
To J. Cunningham, Timber and Trout Conveyance	6	10	0
To Routledge & Co. Freight Salmon Ova		7	6
To T. Watt, Conveying trout and seed to country	1	17	6
To J. Burton, Gratuity attending to birds	17	0	0
To H. and W. Bough Gratuity attending to birds	8	10	0
To F. Sutton, Posts and rails	3	1	0
To H. Kraeft, Skylarks	4	10	0
To T. Watt, Conveying birds to country	1	10	0
To G. T. Fannin, Petty Cash payments	1	5	6
To W. Reisima, Conveying birds to country	7	0	0
To Robert Holland, Gratuity, Birds on voyage	17	8	6
To Alfred Coombe, Gratuity, Birds on voyage	2	0	0
	£86	9	0
Balance Credit on 30th June, 1875	£486	16	9
	-		_

Memo: According to the Gazette, nine Game Licences had been issued, but only seven were paid into the Bank by 30th June.

Sgd.
J. D. Ormond,
Chairman.

(Not the least interesting item to shooters of today must be this first reference to Game Licences, and the cost).

1876-1877

Annual Meeting

20th March, 1877

President: Hon J. D. Ormond (absent) (Col. Whitmore in Chair).

Committee: The Hons. J. D. Ormond and Col. Whitmore, Capt. Newman, J. Burton, J. D. Canning, J. Chambers, J. Joshua, J. G. Kinross, J. R. Rhodes, F. Sutton, H. S. Tiffen, J. N. Williams.

Secretary: F. Sutton

Report.

Finance: £450 in hand.

Fish:

Salmon: The principal expenditure for the year was connected with the importation of salmon ova, amounting to £120. But it was felt that this expense would be well justified, when the rivers would be stocked with salmon. The laborious work of distribution had been undertaken by Mr J. N. Williams, to whom the Society was under a great obligation. Mr F. W. C. Sturm was also thanked for his trouble and attention regarding the hatching of the salmon ova at Clive.

Special thanks were also accorded to Mr R. P. Duff, San Francisco, who had organised the shipment of salmon ova at the behest of the Hon. J. D. Ormond. (Mr Duff unsuccessfully tried to arrange a small shipment of mountain hen for the Society).

The casualties of the ova were small, the cost about £4 per

1000.

Trout: It was proposed to procure a large supply of trout ova for the coming season.

Netting: Netting, it was reported, at the Ngaruroro and other river mouths was becoming common, and was to be deprecated in connection with the possible loss of the salmon, which the Society had gone to such trouble to procure. The matter was placed on record so that possible legislation at the next session of Parliament might result. If a prescribed gauge of three-inch mesh for netting were introduced, the salmon and trout would not suffer loss, was the general opinion.

Carp: The carp turned out some years before in Te Aute Lake (now known as Lake Poukawa) had succeeded remarkably and arrangements were made for distribution elsewhere.

Game:

Quail: Arrangements fell through the previous year for a large shipment of Californian Quail; but it was proposed to purchase some from Nelson, where they were plentiful.

Partridge: Forty brace were ordered, but only twelve arrived by the "Fernglen". Partridges turned out some three year before had not noticeably increased though two small coveys had been seen near Okawa. (Hastings).

Pheasants: Increased steadily.

Game Licences:

"Previous year there was a disposition evinced by the members to raise the licence fee for shooting imported game, but it was thought too late in the season to make the change."

Col. Whitmore then moved that the fee be raised from £2 to

£2 10s. Carried.

A long discussion on the length of shooting season followed, one member suggesting one month only, as opposed to previous year's three. No change,

Rangers:

The Society had only one paid ranger, and two holding office without pay. Long discussions on advisability of another paid ranger. It was felt that there were many unscrupulous shooters in the district. The chairman suggested that any person holding a licence could demand to see the licence of any other person shooting game. As many honorary rangers as possible was the answer to the problem. The Chairman added that he himself had been instrumental in having his gamekeeper appointed as a ranger so that he might be empowered to act. If other members of the Society did likewise, it would serve the purpose very well.

The argument see-sawed, reaching no finality probably because of a red herring thrown in by Mr Heslop. To be more accurate, it was not one red herring, but hawks in the plural. Mr Heslop considered that the work of the rangers in detecting those unlawfully engaged in pursuing game, was of secondary importance to that of the destruction of hawks: "I would like to see men appointed for that purpose only."

Finally Mr Heslop moved, "That the Committee be requested to appoint one or more rangers to assist in the destruction of vermin throughout the district, on such terms as may seem desirable." Carried.

Rabbits:

Mr Kinross drew attention to the necessity for procuring the passing of a law to prevent the further introduction of rabbits. Only a few days before, he had seen a man newly arrived in the district liberate three rabbits, which he had with him in a basket.

Mr Kinross moved, "That the members of the General Assembly for the district be requested to procure the necessary legislation to prevent the further introduction of rabbits." Carried.

NEWSPAPER SNIPPETS

4th August, 1876, "Daily Telegraph"

Mr Colenso appealed to the Acclimatisation Society to stop buying the legs of kingfishers, erroneously accused of eating mice.

9th November.

The ship, "City of New York" brought 60,000 salmon ova from San Francisco. Some were taken to Mr Shrimpton's property Matapiro, and some to Mr Sturms' at Clive. Only 21% were bad.

Two Points of View

The "Daily Telegraph". "Seventy mynas, the insectivorous birds recently imported from India, have been turned out by Mr Tanner, and are now thriving in the Big Bush. Settlers at Clive complain that they are raiding their strawberries and cherries; and as well, driving the doves out of the dovecoats to take possession. Mr Sturm, however, does not mind what they eat of his fruit, because at the same time they are ridding the small fruits of insects."

"The Hawke's Bay Herald"

"A small number of Indian mynas, at a cost of £8 has been introduced and liberated at Riverslea. (Hastings). They have increased wonderfully, and from all reports the Committee considers them very useful birds. They apparently live almost solely on grubs and insects." (!!!)

1876-1877 Regulations for Shooting Season

"Pheasants may be shot, taken, or killed between May 1st and July 31st, but only between the hours of sunrise and sunset; native game may be shot, taken, or killed between April 1st and July 3st.

It was in this year that the Society applied to the Colonial-Secretary for permission to issue its own licences. The reply pointed out that as the law stood, the Collector of Customs, Napier, was the person to issue licences and receive fees. (Fees were later handed to the Society.)

Licences were fixed at 50/-.

RANGERS

It was in this year, too, that the first Ranger was appointed— Mr Patrick Coghlan.

The following year, Charles Morgan of Wallingford was likewise appointed Ranger, to be followed later in the year by:-

Sergt. David McGuire

Const Joseph St. Randwick
"Joseph Motley
"Alfred James Mitchell
"Gerald Tronson

" James Robinson " John Ryan " Thomas Hervey

Rangers were changed annually, and in 1879, the following names were suggested by Inspector Scully and submitted to the Colonial-Secretary.

James Warrilow, Hastings Sergt. James O'Malley (A.C) Const Wm. J. Livingston "Joseph Motley"

" Wm. Raymond

" John Maddigan

Const John Murphy

Britten Irwin Gerald Tronson David Shaw

" John Farmery Thomas Hervey

The first list of Rangers found in the National Archives, showing place where operating, appeared in 1887.

Sergt. John Cullen, Napier Const Edwin Lawler, Napier Const Thos. Smith, Taradale Const John Weathered, Clive Arthur Pickering, Hastings Sergt A. Ryan Waipawa Const D. Brosnahan, Waipukurau Const J. Siddells, Ormondville Sergt P. Carlyon, Woodville Const D. Shaw, Wairoa Mr L. Campbell, Woodville Mr A. Macdonald, Kuripapango Mr H. Graff, Dannevirke

1877-1878

Annual Meeting

27th March

President: Hon. J. D. Ormond.

Committee: Captain Newman, Messrs J. R. Rhodes, J. N. Williams

Secretary: F. Sutton.

Report:

Fish:

The Californian salmon ova, plus that kindly given by Mr W. Shrimpton, were placed in streams in the district, and 5000 in the Manawatu. The Manawatu Acclimatisation Society contributed £50 towards the cost. The Otago Society was thanked for ova sent.

A successful experiment was tried in using breeding ponds, at Clive. Expenditure was £42 more than receipts. A suggestion was made that a man be employed half-time, to oversee the ponds, as people were in the habit of poking the fish with sticks. The motion was carried.

Game:

Season for Imported Game, 1st May-31st July. Season for Native Game, 1st April-31st July.

Rangers:

Mr J. N. Williams reported that the Rangers were achieving little, and should be dismissed. "I do not think it is the business of the Society to preserve Game. The Society organises the importing of Game—that is sufficient."

Motion to discontinue Rangers, carried.

Bounties:

Mr J. R. Rhodes moved that bounties for hawks' feet be discontinued from 15th April. Carried.

Licences:

Another request arrived from the Colonial-Secretary asking whether the Hawke's Bay Acclimatisation Society would undertake the issuing of Licences.

It was agreed to comply with the request.

The Manawatu Acclimatisation Society, following Hawke's Bay's request of the previous year, applied to the Colonial Secretary, asking for power to issue game licences (in hands of Collector

of Customs) as well as fishing licences.

As a result of this, a circular was sent from Wellington to eleven Societies, including Hawke's Bay, agreeing that game licence could from then on be issued by Acclimatisation Societies; and that those fees, as well as fishing could be retained by the Societies, instead of being paid into the Public Account.

1878-1879

Annual Meeting

10th June, 1879

President: Hon. J. D. Ormond, M.H.R., or F. Sutton.

Committee: W. J. Birch, W. U. Burke, J. H. Coleman, M. R. Miller, Capt. Russell, M.H.R., A. Smith, T. Tanner, H. S. Tiffen, J. N. Williams.

Secretary: F. Sutton.

"NO MEETING HAD BEEN HELD SINCE MAY, 1878, AND THE LAST ELECTION OF COMMITTEE WAS IN MARCH 1877."

With the foregoing words of doom, the Secretary-cum-possibly President, Mr F. Sutton began reading the Report, the shortest in the Society's history.

Finance: Credit of £24 11s. Expenditure £42 to J. N. Williams for work on the Fish Ponds on Mr Sturm's property.

Hawks:

The bounty for hawks was withdrawn; the previous year totalling £150.

Rangers:

Regular rangers were no longer employed. The Police acted as Rangers, except in Wairoa.

Mr C. A. Fitzroy was the first to break the silence, with the under-statement that the affairs of the Society seemed to be somewhat irregular. There seemed to be no presiding body in the shape of a committee, and Mr Sutton seemed to have everything left to him. It was hardly fair to place him in such a position.

Mr Tiffen added that he did not know if he had even paid his subscription. "Things are not right."

Capt Russell next asked how many meetings of the late committe had been held. Mr Sutton, "Only one."

Capt. Russell, "And that was when they were elected, I suppose?"

Mr Sutton, "The business of the Society has been left almost entirely to Mr Williams and myself. A General Meeting was called last May, BUT NO ONE ATTENDED. There would not have been a meeting, even today, had it not been for the published proposal to offer bounties again, for the destruction of hawks."

Mr Tanner observed that the Society's funds should not be lying idle. A further suggestion from him was that the Society should consider introducing new varieties of fish, to give a change of diet, and to cheapen that class of food.

Mr Tiffen re-directed the attention of members to the stalemate the Society was in and suggested the best way to secure a good working committee was to appoint a small number of gentlemen, interested in the work of the Society. With a large and mixed committee, he felt that no good would ever be accomplished. "Mr Williams has done more than Chairman, (President) Secretary, Treasurer and Committee combined."

Election of officers apparently followed.

President: J. N. Williams.

Committee: W. J. Birch, C. A. Fitzroy, Capt. Russell, F. Sutton, T. Tanner.

Secretary: S. Sutton.

It was decided that the year should be deemed to have commenced from 1st May, and that the present committee hold office until May, 1880. A balance sheet showing the Society's funds as at 1st May was ordered to be published.

DESTRUCTION OF HAWKS AND SHAGS

Mr Birch moved that the Society again offer sixpence each for the destruction of hawks and shags. Seconded by Mr Fitzroy.

Mr Tiffen sprang to the defence of the hawk, quoting that the best authorities agreed that Hawks were the greatest enemies of rabbits, hares, and other small animals, which bid fair to overrun the country. To get rid of the hawk would be folly. A number of gentlemen, well-meaning but knowing nothing of natural history rush frantically into introducing this, that, and the other animal, which do more harm than good, and then destroy their natural enemies.

Mr Coleman, "You might as well talk of introducing rabbits to feed the hawks." Mr Sutton, "Hawks are more likely to destroy pheasant rather than rabbits, and that is one of the reasons they should be exterminated. As for the hawks destroying the rabbits, hawks and rabbits are not about at the same time."

Capt. Russell, "At any rate, so far the hawks have failed to exterminate the rabbits."

Mr Tanner, "The introduction of pheasants, in my opinion has not been beneficial. They provide amusement, and that is all. Many members appear to think that the Society exists solely for the introduction of game birds."

Mr Tiffen, "You say the pheasants feed on insects. Well, the other day, I opened the crops of two. I found no insects in them—they were full of grass-seed."

Mr Sutton, "I opened the crops of six brace, and found nothing but caterpillars and beetles. In only one were there a few grains of Indian corn."

Mr Tiffen, "What about introducing hedgehogs? They are valuable in destroying insects."

Mr Miller, "Spare the hawks for another year."

Mr Williams then spoke at length, pointing out that it was not the business of the Society to offer premiums indiscriminately for the killing of hawks throughout the country. He knew that in the past, hawks' feet had been brought in from outside Hawke's Bay District—as far away as near Wanganui. Shags should also be killed, but their heads would be brought even from Auckland, Poverty Bay, or anywhere else.

Mr Williams admitted that it was necessary to kill the shags to protect the imported fish; but he thought it would be better to employ men to watch the places where the fish were liberated. Their sole job would be to keep that area clear of shags until the fish were sufficiently numerous to render the precaution unnecessary. To attempt to kill all the hawks would be useless—the funds of the Society would be expended before any great diminution of shags was evident.

Mr Tanner then agreed with a great deal of what Mr Williams had said, and he felt inclined to move an amendment. The shags did not go far inland, and therefore they could be better destroyed by employing men to watch the fish preserves. He moved, "that two men be employed for the destruction of hawks and shags, and for the preservation of game and fish introduced by the Society."

Mr Tiffen objected to the motion, on the grounds that it would be more expensive and less effective than the plan in the original proposal.

Mr Williams retorted that judging from the many remarks made that day, he felt that the Society should be renamed, "The Hawke's Bay Preservation Society", because so many members seemed to think that was its sole object. If people wanted to preserve pheasant, they should do so at their own cost, he continued. When introduced, the birds should be protected by the Society, until they became acclimatised and were numerous. He reminded members that the clearing off of the fern and scrub was destroying more pheasants than the hawks were.

Capt. Russell intervened, accusing Mr Williams of thinking or talking as if hawks were found in one or two localities only, whereas they were everywhere in winter. In summer they appeared to go to the mountains. He believed that partridges would have been numerous but for the hawks, and he suggested using the carcases of dead lambs baited with strychnine.

Mr Sutton, "What about the dogs? They would eat the meat, too."

Capt Russell retaliated with the fact that only the shepherd would have the right to keep a dog, and that he would not have one when ewes were lambing.

Mr Tanner then offered to supply poison gratis to anyone for use in this way. He could poison 50 hawks for 6d. After a final aimless discussion, Mr Tanner withdrew his amendment, Mr Birch then coupling shags with hawks in the original motion.

Mr Tiffen next moved that the part of the motion referring to hawks be struck out, but this was negatived on a division.

The original motion was then carried, Messrs Williams, Tiffen and Miller dissenting.

1799-1880 16th January

"Mr J. N. Williams went to the Spit yesterday to collect a box of whitefish ova, packed in ice. The property of the Acclimatisation Society, the ova were transported by Mr Williams to his property at Frimley."

2nd February

The whitefish all died at Frimley.

2nd July

"Poachers took twenty-five hares from Col. Whitmore's Clive Grange property yesterday.

"Steps must be taken to prosecute the offenders."

REGISTRATION OF THE SOCIETY, NOVEMBER 7th, 1881

The original application in October was more an inquiry as to whether the Society had already been previously registered. The reply in the negative resulted in a formal application, signed by J. N. Williams, Chairman, W. J. Birch, Thos. Tanner, members, and C. A. Fitzroy, Secretary.

The special points of the original seventeen rules of the Society were:—

- Objects—The introduction, acclimatisation, and domestication of all animals and birds, fishes and plants, whether useful or ornamental.
- Every donor of ten pounds in one sum shall become a lifemember; every subscriber of one guinea per annum shall be a member.
- Committee shall meet on first Tuesday in January, April and October.
- 4. Annual meeting in January.

Gazetted, November 17th, 1881.

1883-1884

Annual Meeting

1st February, 1884

President: T. Tanner.

Committee: W. U. Burke, J. H. Coleman, Capt. Russell, W. Shrimpton, F. Sutton, R. Wellwood, J. N. Williams.

Secretary: W. J. Birch.

Report:

					£	S	d
Receipts	£408	14	10	Shooting Licences	222		
				Subscriptions	21		
Expenditure	£224	3	5	Wages	11-1	3	0
				Shags' feet	12	11	0
				Californian tree see	d 20	0	0
				Trout and Perch	25	0	0

Membership:

There were seven Life Members, thirty-six ordinary members, and two honorary members. (Over 80% unpaid subscriptions?)

Liberations:

Extensive expansion work in three spheres was the program for 1883: Nevada Quail 150

American Brook Trout 440

Californian Tree seeds (bought and sold)

English trout 7150

The quail arrived in two batches, the first healthy and sold well, but the second apparently underwent severe mortality in the cages en route, and the survivors were turned loose in an effort to save them.

The American Brook Trout (well-thought of in Scotland as a good sport fish and a good table fish) were sent up from Opawa, Christchurch, and released at Kuripapango. An express waggon was sent to Napier to transport them on arrival at the Spit, and only five were lost. The Society retained 240 for breeding.

With the English trout ova bad luck attended both orders, disease and attack by fungus setting in at two months old. The explanation advanced was that overcrowding was the cause. Hasty liberations resulted in the saving of a fair proportion: Col. Herrick liberated 1000 in a stream in the Ruataniwha, Mr Holden the same number in the upper waters near Hampden. Mr R. D. D. McLean took 1500 to Marackakaho, and Mr Preece, with much difficulty, conveyed 750 to Waikaremoana. The Maori Chief, Renata, was made a gift of 200.

Perch:

In exchange for trout, Mr Fulton, Dunedin, sent 25 perch, which J. N. Williams transferred to his own large dam at Edenham, Elsthorpe, to join the perch already there.

Tree Seeds:

Mr H. S. Tiffen was responsible for negotiation with the Curator of Yosemite Valley, leading to the importation of tree seeds from the west coast of America, whose climate was surmised to be similar to New Zealand's. The success of the venture led to many subsequent seed consignments.

Shooting Licences:

The fee was raised to 30/-. A suggestion that a gun tax be imposed, and that boys under 14, be prohibited from carrying guns, did not meet with general approval, and was dismissed.

1884-1885

Annual Meeting

2nd March

President: Thos. Tanner.

Committee: W. U. Burke, J. H. Coleman, C. A. Long, T. Sidey F. Sutton, M. Walker, R. Wellwood, R. P. Williams.

Secretary: (In absence of W. J. Birch in England) C. A. Fitzroy. Report:

Balance Sheet:

Receipts:	£332	8	3
Expenditure:	£245	6	5
(Shags' feet bounty	£28	12	8)

Trout:

Main operation for year was the importation and liberation of trout ova, a most successful venture with a loss of only 1% in the 48,000 purchased from the Otago Society.

(It appears that those ova were sold to individual farmers).

a. Bolton, Mangatahi, £24	1200
b. Johnston £18, Herrick, £6, Upper reaches	1000
of the Waipawa	1200
c. Gaisford, Oringi, and Tanner £28	1200
d. Warrilow, Hastings, £24	1200

Perch: Perch, placed under J. N. William's care at Edenham, increased considerably, and Committee recommended that some be caught and distributed.

Salmon: The Government offered a £1 for £1 subsidy on subscriptions from all the Acclimatisation Societies of the country, to defray cost of bringing Salmon ova from England, by one of the direct ocean steamers.

Hawke's Bay's quota was &60. (Do we deduce that there were 57 members?)

The Chairman of the Christchurch Acclimatisation Society travelled expressly to England to supervise the export of the ova.

Pheasants: A public meeting, convened by F. Sutton, during the previous year, its object, the protection of Pheasant.

Resolutions:

- a. That it be recommended to Acclimatisation Society, to offer a reward for the destruction of hawks and hares.
- That the Society be requested to have hares protected as game.
- c. That next season be a closed season for pheasants.

The Society's reaction was:-

- a. Funds absolutely inadequate.
- b. No proposal.
- c. Endorsed.

At the annual meeting, Mr Sutton spoke against the closed season, which would result in the Society's losing fees from shooting licences. Though Californian quail were increasing rapidly, the shooters would not buy licences if limited to quail. Mr Sutton then moved that the shooting season be from 1st May to 31st July. Motion lost.

Mr Tanner next proposed that a close season be declared for pheasants. Carried.

Letter to the Editor, "Hawke's Bay Herald", 3rd March, 1885. "Sportsman" points out that pheasants in Hawke's Bay district are not likely to derive much benefit from the close season, when the guns can be used against other imported and native game. The slaughter that has gone on for the last few years amongst ducks for the shop, has seriously lessened the supply. It would be a good thing if the Society had proclaimed a close season for all game, bar hares for coursing."

Small Birds:

"Enormous increase of small birds and their damage upon all classes of settlers viewed with alarm by public, in general; but the Society takes the opportunity to remind the said public that the Acclimatisation Society is not responsible for the introduction of linnets, sparrows, larks, nor HARES."

1886-1887

Annual Meeting 4th March, 1887

President: T. Tanner.

Committee: W. J. Birch, J. H. Coleman, C. A. Fitzrov, Col. Herrick, R. Johnstone, Capt. Russell, W. Shrimpton, F. Sutton, R. P. Williams.

Secretary: W. J. Birch.

Membership: Including new members, thirty-six.

New Members: Cartwright Brown, J. W. Carlisle, ? Hunter, P. S. McLean.

Game: "The Society is dead, and might as well be buried. It had served its purpose in the past."

These strong word were uttered by Mr F. Sutton, after the lengthy discussion following a request from Mr Campbell, Woodville, urging a licence fee of 10/6 to shoot native game. The ensuing money should be used to renew the bounty on hawks' feet. Mr Campbell decried the indiscriminate shooting of native game, which was becoming very scarce. He added that pheasants and quail were becoming plentiful in the bush, but that they, too, would be exterminated, if everyone possessing a gun were allowed to shoot native game.

A request for a ranger was refused as there were no funds. (But at the end of the meeting Mr Campbell was appointed ranger for Woodville; and Mr A. Macdonald for Kuripapango.)

Shooting Season: A letter from the Wellington Acclimatisation Society suggested that the different societies in the North Island should unite in fixing the same days for the commencement and conclusion of the shooting season. Dates suggested were 1st April for native game; 1st of May for imported game, the season for both to terminate 31st July.

Discussion followed, Col. Herrick urging that 1st May was quite early enough for native game. "Ducks in May are not worth eating." He moved that season for both commence 1st May.

Mr Sutton agreed that there was some force in Col. Herrick's argument, but he felt that public sentiment was in favour of 1st April for native game. If 1st May were adopted the result would certainly lead to illicit shooting before that date.

Mr T. Sidey seconded the amendment, on the grounds that if Col. Herrick's motion were carried, it would be merely handicapping those who observed the law. Those shooters would find everything driven away by the illicit shooting of the previous month.

Mr Sutton related, that several years before, when 1st May was fixed for all game, there was as much shooting in April, as if that month had been adopted. On being put to the vote, Mr Sutton's amendment was lost, 4 to 3.

Mr Sidey then moved that season for native game be extended to 31st August. This was opposed by Col. Herrick and others, who reminded that the birds were then pairing. This amendment also lost.

Finally Col. Herrick's original motion was carried.

Trout: Reverting to Mr Sutton's remarks that the Society might now be buried, as it was dead, Mr Tanner observed that though the Society might no longer import birds, it was doing good work in the acclimatisation of trout.

Some fine trout had already been caught between the Ngaruroro bridge and the sea; and fish were gradually spreading from the heads of rivers and creeks, where they were liberated. Mr Birch said they were thriving in the Manawatu and tributaries; the Rangitikei, and the Ngaruroro. Mr Williams added that trout were frequently seen at Clive.

"Hawke's Bay Herald" paragraph clswhere in same issue as the report of the Annual Meeting:—

"Indirect testimony to the value of small birds—the accursed of farmers—was yesterday borne by several speakers at the annual meeting of the Acclimatisation Society. The all but total disappearance of pheasants was discussed. Hawks, wekas, and the destruction of cover were all mentioned as contributory causes.

Mr Tanner remarked that the absence of insect foods was also an important factor. When pheasants were plentiful so were locusts, grass-hoppers, and small beetles. When opened, the crops of birds positively proved the presence of many such insects."

14th July, 1886.

A local suggestion, following the Parliamentary enquiry on the Rabbit nuisance, was that the Government should import large number of weasels, stoats, and pine martens to deal with rabbits.

24th August.

Capt. Corbett advocated the importation and use of badgers instead of stoats and weasels suggested for eradication of rabbits.

1887-1888

The following lists of holders of Game licences appeared in both the newspapers during the last two weeks in July. 1888.

Amundsen, A. Arrow, C. H. Baker, H. Baker, H. Bodley, H. Brisson, T. Brisson, T. Britten, E. Britten, I. Brooks, M. E. Cartwright Brown Brown, H. M. Cammock, D. Carnell, C. Carlisle, I. W. Candina, M. Coots, E. Corskie, A. Cotterill, A. I. Couper, W. I. Couper	W. H., A., Chas., A., W. H. M., Chas., A., W. Thos., Chas., G. D. A. W. O., W. H., S. Chas., G. T. H., C., C., A., H., C., C., A., H., C., C., A., H., C., C., A., H., H.
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Advertisement, 1st-9th August, 1888

"The Hawke's Bay Acclimatisation Society can supply Settlers with following Trout ova this season, in any quantities up to 10,000 of each kind.

Prices for eyed ova, delivered to any part of the District:

Brown Trout, 40/- per 1000 Fontinalis Trout, 60/- per 1000 Loch Leven Trout, 60/- per 1000

C. A. Fitzroy.

Advertisement, 25th October-10th November.

"Fishing Licences for the 1888-1889 season, available until 3rd April, 1889, can be obtained from Mr C. M. Campbell, Woodville, Mr A. Macdonald, Kuripapango, or from the under-signed.

Amount of fee is £1."

C. A. Fitzroy.

1892-1893

Advertisement, 5th May

"The Shooting season for both Native and Imported Game will commence on 1st May, and will close on 31st July.

"The Licence Fee for selling any Native or Imported Game is £5; and for Shooting Imported Game, 10/-.

"It is illegal to sell any Game before 1st May, or after 1st August.

"Licences obtainable from any of the following Post Offices: Napier, Wairoa, Mohaka, Hastings, Waipawa, Waipukurau, Ormondville, Norsewood, Dannevirke, Wimbledon, Porangahau, and Woodville.

"The Society will pay the sum of two guineas, in addition to half the fine to any person, who will give such evidence, as will lead to a conviction, of any person shooting or selling Game, without a licence or out of season."

C. A. Fitzroy, Hon. Sec.

6th May

"Notice is hereby given that I have taken out a Licence to Sell Game.

John Higgins."

9th May

Under heading "Selling Licences", appeared the following advertisement for the first time.

"Notice is hereby given that the following persons have taken out Licences to Sell Game:

> Conroy and Co. John Higgins. Joseph Baines. William Pilcher. (William Cross's name added later)

20th February, 1893.

"Weasels", according to a paragraph in the "Hawke's Bay Herald", "can evidently travel—for one was found dead the other day on Te Haroto run, Upper Mohaka, fully 150 miles from the nearest place, where weasels had been turned out. Inspector Amyes, who found the animal, has been all over the Te Haroto district without finding any traces of rabbits. So it seems that the "eradicators" have reached the place, in advance of the pest to be eradicated."

Advertisement of Acclimatisation Society, 19th April.

"Both native and imported game season, 1st May-31st July. Licence to sell game, £5; Licence to shoot imported game, 10/."

C. A. Fitzroy, Hon. Sec.

1898-1899

Acclimatisation Society advertisement, 1st September.

"Fishing season will open 1st October, and close 30th April for all rivers under the control of the Hawke's Bay Acclimatisation Society, with the exception of the river flowing from the Waikaremoana Lake.

Licence Fee £1; Ladies' Lic. Fee 5/-; Boys under 16, 10/-. Tourists and residents outside the Province, 5/- per month.

Licences may be obtained from Messrs D. D. Hyde, Napier and Hastings; D. Ross and Co., Napier; Messrs Solomon and Co., and Mr Gilb Hamilton, Dannevirke; Mr W. H. Nelson, Woodville; Mr A. Corskie, Waipawa; and Mr A. Macdonald, Kuripapango."

(Usual notice about illegal fishing and fishermen.)

C. A. Fitzroy, Hon. Sec.

(This advertisement appeared non-stop from mid-November, until 30th January, Christmas Day included. (No newspaper on Boxing Day.)

President: F. Logan. (J. H. Coleman in chair)

Committee: B. Chambers, J. H. Coleman, . . F. L. Gordon, T. H. Lowry, P. S. McLean, W. H. Nelson, Hon. J. D. Ormond, Capt Russell M.H.R., W. Shrimpton, W. H. Smith, T Tanner, J. H. Williams.

Secretary: C. A. Fitzroy.

Report:

Balance Sheet:

Credit in Bank £137 8s 6d.

Member's Subscriptions £49 7s (47 members.)

Fish:

Trout: Disappointment at number of fry obtained from Masterton Hatchery—24,000. Auckland Society sent gratis 15,000 Rainbow trout ova to replace previous year's consignment which arrived in useless condition.

Perch: Generous gift of 160 fish from W. Nelson from his

Committee hopes to obtain from Masterton 60,000 fry, in addition to the 24,000 brown already mentioned. To be hatched at Dannevirke.

Licences: An upsurge of interest in fishing, resulted in 375 licences being issued. Two licences to net in Taupo, were taken out but were very few fish. Weights, 5lb. to 16lb. Recommendations that larger nets be used following year. From May to June, lists of licence holders appeared frequently in newspapers.

Clubs: Sporting and Angling Clubs of Masterton and Woodville of great assistance in the work of acclimatisation, and were commended by the President.

Rangers: Convictions thirteen; four under Animals' Protections Act, and nine under Fisheries' Conservation Act.

Shags: A resolution was passed that Porangahau be included in the district, where the reward paid was 1/- per pair of shag's feet.

Seagulls: Government was asked to withdraw protection from seagulls, on account of the damage they did to trout and lambs. Government was also asked for assistance in payment of shag bounty.

Tourist Department: The Department forwarded a list of animals, which it proposed to import, and asked Hawke's Bay for any further suggestions. The Society decided to increase its original £50 to £75 to assist in the importation of animals.

Acclimatisation of plants and grasses: The outgoing committee requested that incoming would consider advisability of importing and acclimatising plants and grasses.

Cruelty to horses, 20th February

A paragraph in "The Hawke's Bay Herald" drew attention to the cruelty by certain Maoris on the Taupo Plains, meted out to wild horses. The reason for the indiscriminate slaughter was the price of 6/- per horse for its mane and tail. Apparently raiding parties, armed with guns, caused the havoc and cruelty.

1886 Rules Amended, 1902.

-"and that are deemed desirable" added to Rule 1 referring to the acclimatisation and domestication of all animals and birds, fishes and plants, whether useful or ornamental.
- 2. A Chairman plus fourteen Committee members.
- Annual Meeting in May. (Previously in January, but often in February or even March!)

23rd January, 1903.

An Acclimatisation Societies' Association was formed on the above date, its object a governing body for the Colony, to which the various Societies could become affiliated on application—the main purpose to secure uniformity of action on Acclimatisation matters.

1902 List of Members of the Society

Beamish, N. E.
Birch, A. S.
Birch, Caccia W.
Carlyon, A. S. G.
Chambers, Bernard
Chambers, John
Coleman, I. H.
Corskie, A.
Crosse, T.
Donnelly, G. P.
Du Croz, P. F.
Erewhon Station
Fitzroy, C. A.
Gollan, S. H.
Gordon, F. L.
Groome, M. E.
Herrick, Frank
Hunter, G.

Hunter, P.
Iohnston, Sydney
Iohnstone, R.
Kennedy, C. D.
Logan, F. H.
Lowry, T. H.
McLean, Arch.
McLean, R. D. D.
McLean, P. S.
Morris, G.
Nelson, W. H.
North, W. L.
Ormond, J. D.
Robertson, P.
Ross, J. R.
Russell, A. Hamilton
Sanders, H. M.

Shrimpton, W.
Smith, Bros.
Smith, W. H.
Tanner, Thos.
Waterhouse, F. S.
Watt. E. I.
Wenley, G. S. V.
Williams & Kettle Ltd.
Williams, I. H.
Williams, I. N.
LIFE MEMBERS
Russell, W. R. Capt.
Whitmore, G. S. Sir
Joshua, J.
Ormond, J. D.
Rhodes, J. R.
Tanner, Thos.

President: F. Logan

Committee: B. Chambers, J. H. Coleman, S. Crowther, C. D. Kennedy, T. H. Lowry, P. S. McLean, R. D. D. McLean, G. M. Morris, W. H. Nelson, L. W. North Hon. J. D.Ormond, W. Shrimpton, T. Tanner, F. W. Williams.

Secretary: C. A. Fitzroy.

Report:

Balance Sheet:

Revenue:	£502 9s.	£	S	d
	(Shooting Licences	94	19	6
	(Fishing Licences and Fines	353	18	6
	(Members' Subscriptions	53	11	0

Expenditure:

£471 9s 7d

Balance £31 0s 5d plus 1903 Credit Balance

£231 18 9

Hatcheries at Waipawa: A sub-committee was set up to consider the establishment of hatcheries at Waipawa. It was asked to recommend that the Government would allow Mr Ayson to inspect and report on the proposed site, and to supply an estimate of the cost.

President of the Otago Acclimatisation: Mr A. C. Begg, President of the Otago Society, was present, and gave some interesting information on the activities of his Society.

Hawks: Mr P. S. McLean moved that the Society approach the Hawke's Bay A. and P. Society with a view to forming a joint committee for the purpose of legalising the destruction of hawks.

Conference of Acclimatisation Societies: The President and the Secretary were appointed delegates to the Conference in Wellington.

1905-1906

Annual Meeting

June

President: F. Logan.

Committee: Messrs B. Chambers, J. H. Coleman, S. Crowther, C. D. Kennedy, T. H. Lowry, P. S. McLean, G. M. Morris, W. H. Nelson, L. W. North, W. Shrimpton, H. G. Warren, F. W. Williams.

Secretary: C. A. Fitzroy.

New Members: J. W. Harding, J. Holdsworth, J. McFarlane, H. Pharazyn.

Report:

Balance Sheet:

Revenue Expenses Balance	£674	16	5	plus	£300 £609 £366	17 8 5	6 10 1
Licence Fe	ees:			-			_
Shooting	y .				£92	12	0
Fishing	•				£446	12	0
Deer sta	alking				£25	0	0
Member	s' Subsc	ript	ions		£69	6	0

Fish

Manawatu—fish in upper reaches deteriorating in size, and number, due probably to worm-fishing and the unusual number of shags.

Waikato and Rangitaiki—northern boundary, splendid season. Tongariro and Tokaanu end of Lake—splendid, ranging from 34lb. to 14lb.

Taupo—ranging from 2-16lb. (One Brown 21lb.)

Rangers—have obtained several convictions. New ranger for Tokaanu has resulted in a wholesome check upon trout poaching.

Ova: Ex-Masterton Hatchery:

Anaura stream	9000
Owhirikura	9000
Ngaruroro	9000
Arapawanui	9000
Tuki Tuki	18000
Waimarama	9000
Pohui	5000
Mangaone	7000

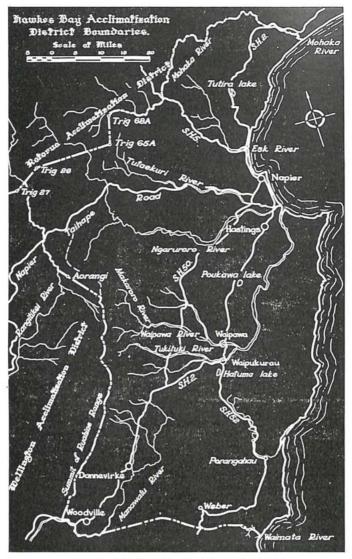
Ex-Auckland Society Hatchery

Tokaanu and eastern shores of Taupo, 20,000. Generous present to residents of Taupo, from Auckland Acclimatisation Society: 50,000 rainbow fry.

Deer: Seven licences issued to deer-stalkers.

In order to produce some new blood in the local herds, the Society aimed to get some red deer stags from Wellington.

Shags: Owing to their increase, the Committee decided to raise the bounty to 1/6 from 1/- on all birds in area lying between Petane and Woodville.



Hawke's Bay Acclimatisation District Boundaries, 1968

Motion: On the motions of the President, it was decided to recommend to the Government;

- a. Close season for 1906-1907 for both native and imported
- b. Black swans be included in list of native game.

Secretary's Remuneration: (This is the first time reference in a Report to payment for Secretary: £25).

1906-1907

Hawke's Bay Acclimatisation District defined, 4th April, 1907.

All that area bounded towards the North generally by East Taupo County; towards the North-East generally by the Wairoa Acclimatisation District, as defined by Warrant, under the Animals Protection Act, 1880, dated 28th September, 1901, and published in New Zealand Gazette, No. 87 of the year 1901; towards the south generally, by the Akitio and Pahiatua Counties; and towards the North-West, generally, by the Wanganui and Waimarino Counties, to the Southern boundary of East Taupo County aforesaid, the said area comprises the County of Hawke's Bay, Patangata, Woodville, Waipawa and Weber, and part of the County of Wairoa.

Sgd. William Lee, Baron Plunket, Governor of Colony of New Zealand.

1913-1914

12th June, 1914

President: F. Logan.

Committee:

Secretary: R. D. Anderson.

Although the annual balance sheet was read at this meeting, the committee decided to hold the annual general meeting 26th June, when a deputation from Dannevirke wished to discuss the closing of the Mangatera Hatchery.

Correspondence: The Hawke's Bay Acclimatisation Society drew the attention of the Minister of Internal Affairs to the fact, that netting was being extensively carried on at Taupo. The opinion of the Society was that mid-year was not the time for netting trout. The best time, it suggested, was between October and March, when the fish were leaving the rivers after spawning.

The Minister's reply was that the number of rivers to be netted had been reduced from seven to five at Easter, and that all netting would cease in April. The Commissioner of Crown Lands wrote informing the Society that it was the intention of the Land Department to leave a right-of-way along the banks of streams for fishing purposes, wherever it was possible or advisable.

The Ranger, on request, had sent in information on the locality of shaggeries throughout the district.

The Secretary was asked to write again to the Minister, asking if the Government would subsidize the Society for any payments made for the destruction of shags or shaggeries. In the same letter, the Minister was asked if Professor Prince, visiting Canadian fishing expert, might report on Hawke's Bay rivers and streams.

A satisfactory reply from Wellington contained the good news that £1 for £1 would be paid up to £75 as shag subsidy.

Dannevirke Deputation, 27th June, 1914.

A crowded meeting, expectant of fireworks, awaited the arrival of the deputation of three from Dannevirke, Messrs D. G. Gardner, J. D. Wilson, and F. Bottrell.

Mr Gardner opened their case by stating that Dannevirke felt that they had a grievance of such magnitude that a group of Southern Hawke's Bay sportsmen had called a meeting with the object of seceding from the Society and forming a separate Society for Southern Hawke's Bay.

For a long time there had been general dissatisfaction, but the straw that broke the camel's back was the letter from Mr Parker, the Secretary, requesting the removal of the Hatchery.

He went on to say, "Down in Dannevirke, we look on the hatchery as private property. The Shooters and Anglers' Club obtained the land, and most of the building material. The very existence of the hatchery is due to the Club's assistance to the ranger." Mr Gardner continued, saying that, at the invitation of Mr Logan, the President, the deputation had come to the annual meeting. "But we have not come with the intention of fighting, but with a conciliatory spirit."

Mr Logan opened his reply with the fact that the Society was desirous that there should be no secession, "a mistake for both ends of the district. Insufficient funds, into the bargain."

Mr Gardner intervened that shortage of funds was, in part, due to the wastage, through carelessness of liberation in their district. This matter had been previously pointed out to Mr Fitzroy, who had been asked to send more reliable fieldsmen. "But we are highly satisfied with the present curator, Mr Miller—the liberation is now carried out in a proper and systematic manner."

Mr F. W. Williams then entered the lists, and commented that if liberations in Dannevirke had been so bad, similar dissatisfaction would have been expected in other areas.

Mr Gardner maintained that, considering the number of licences taken out in Dannevirke, pro rata there should be a larger proportion of liberations in the southern part of the district.

The Chairman, without a smile, stated that only one third of the total licences had been issued to the Dannevirke area.

Mr Gardner, then on the defensive, replied that the drop in licences was due entirely to the lack of fish. He went on to suggest that every fisherman take out a shooting licence to get rid of the shags.

His next objection was to the issuing of licences to boys. "What they cannot catch, they disturb." If boys' licences could not be done away with, he further suggested that worm-fishing should be prohibited.

The Chairman's reply was that there was no power under the Act to prohibit the use of worms as bait and the subject of boys' licences could be considered only by the Conference.

"Harking back to the hatchery,," digressed Mr Gardner. "It could be made large enough to supply the whole of Hawke's Bay; easily 200,000 fish could be reared." He went on to remind the committee of the free food from the local abattoir for the fish.

The Chairman then admitted that Hastings' members had, for some time, been anxious to have their own hatchery.

Mr Williams made a suggestion that might placate both sides. "Let Dannevirke still hatch the ova, but send it to Hastings for further development. There was never any intention to take everything away from Mangatera."

The subject appeared thrashed out, with neither side reaching its objective.

Mr Bottrell next spoke on behalf of shooters, asking the Society to rear pheasants and partridges.

Mr Logan stated that the matter was already in hand—that 75 brace of quail had been ordered from Nelson, and that enquiries from Waikato for partridges were afoot.

The last word was with Mr Gardner, who suggested that a sub-branch be formed in Dannevirke.

Carried wholeheartedly.

"Hawke's Bay Herald", 22nd May, 1914.

Reference appeared regarding the efforts of the Otago Society in exterminating hawks. At a bounty of 3d per head, 8000 hawks were killed. The previous year had been a close season for shooting in Otago.

6th May. At the Conference of the Farmers' Union, a remit was sent to the Government:

"That this Conference views with alarm, the depredation on seed, and the spread of noxious weed, by certain birds protected by the Game Preservation Act; in its view, the interests of the farmer are being sacrificed for the sake of sport."

As a remedy, it suggested that legislation be brought down, whereby the Government-in-Council should declare the Game Preservation Act annulled in respect of certain birds and mammals for a certain period in certain districts, which were either firstly infested with blackberry or Californian thistle; or secondly bushdistricts where the surface-sowing of grass-seed was the customary method of laying down grass.

The Farmers' Union also asked the Government for the removal of protection of Quail.

(Unfortunately no trace of results of these remits could be found—Ed.)

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1914-1915

A notice, unique in the Society's history, published on the front page, column two, of the "Hawke's Bay Herald", was the sole reference to the annual meeting-the financial statement.

Receipts:

Receipts:					
4.37.7			£	S	d
	Cash in hand Subscriptions		32	12	4
	Shooting and fishing licences		632	7	9
1,557			£665	0	1
Expenditure:					-
9 1 11 12 1 29			£	S	d
	Printing, advertising, stationery		86	3	3
	Charges A/c legal expenses		107	14	1
	Ova, fry, hatchery expenses		122	3	9
7. 4	Destruction of shags	+	30	10	6
	Rangers' salaries and expenses	-	214	4	5
	Cash in Bank, 31st March		104	4	1
	.,		£665	0	1
			~00.5	· ·	

(An interesting item under Assets is the sum of £15. 5.3, the amount refunded by the Department of Internal Affairs, for 12 4 .9 F PS half-cost of shag destructions.

R. D. Anderson.

Advertisement, 9th June, 1915

"The Hawke's Bay Acclimatisation Society offers a reward of 1/6 per pair, for the feet and right wing of Black Shags."

1915-1916

Annual Meeting

16th June

2.1

President: F. Logan.

Committee: S. Boyd, J. H. Coleman, J. H. Edmundson, A. L. D. Fraser, S. J. Goulter, J. S. Handyside, C. D. Kennedy I. B. Logan, G. E. Mannering, P. S. McLean, T. Parker, Hon. J. D. Ormond, W. Shrimpton, F. W. Williams.

Secretary: T. Parker

Balance Sheet:

Revenue £752 14 8

a grid a contract to

Expenditure £530 0 1
Balance £213 14 5

Despite the fact of war, revenue was well maintained; almost 100% up on previous year. Shags at 1/6 totalled 736 birds, and £55 4s 7d was paid in bounties.

Trout: Brown and Rainbow, totalling 130,000 were hatched by the Society.

During the year, the Society applied for, and obtained an Order-in-Council, under which, the Tutaekuri was reserved for fly-fishing. The same Order-in-Council prohibited the use of bait, other than artificial fly, artificial minnow or spoon, in the Ngaruroro and the Tuki Tuki.

Sanctuary: The bed of the Tuki Tuki from the Waimarama Bridge to the Mangangara Stream was gazetted as a Sactuary for native and imported game.

President: F. Logan.

Committee: S. Boyd, J. H. Coleman, J. H. Edmundson, A. L. D. Fraser, S. J. Goulter, J. S. Handyside, C. D. Kennedy G. E. Mannering, Hon. J. D. Ormond, T. Parker, W. Shrimpton, F. W. Williams.

Secretary: T. Parker.

The above names, in conjunction with the representatives of the country Angling Clubs constituted the Committee for the ensuing year, as the number of nominations did not reach the number of members required.

1918-1919

Annual Meeting

23rd June

President: F. Logan.

Committee: S. Boyd, J. H. Coleman, J. H. Edmundsen, G. R. Foreman, S. J. Goulter, J. S. Handyside, Dr F. N. Harvey, C. D. Kennedy, Jas. Nichol, A. E. O'Meara, T. Parker, P. Parsons, W. Shrimpton.

Secretary: R. D. Anderson.

Balance Sheet:

Revenue £557 2 0 Expenditure: £596 11 2 Cash in Bank at Balance date: £217 18 10

Trout: Some 32,000 Rainbow trout in the Heretaunga Ponds. were liberated in various streams throughout the district as soon as the danger of winter floods was over.

Game: Little success in obtaining pheasants, although there was a standing order for young birds. The Society had about thirty Pheasants on hand, to be liberated at the end of the shooting season. A small consignment of Quail was expected at the end of August.

Shags and Hawks: Bounty paid during year, £41 18s 6d, thus accounting for 544 shags and 589 hawks.

Members' Subscriptions	£134	4	0
Fishing Licences	£320	4	0
Shooting Licences	£94	14	0

Rangers: Another one ranger required, according to Mr Boyd.

Licences: It was decided to advertise a list of Licence-holders.

Membership: Members present were earnestly exhorted to make a drive for new members. Membership stood at one hundred and fifty-seven.

1917-1918

Annual Meeting

5th July

President: F. Logan (G. E. Mannering presided)

Committee: S. Boyd, J. H. Coleman, J. H. Edmundson, S. J. Goulter, E. R. Goulter, J. S. Handyside, C. D. Kennedy, G. E. Mannering, A. E. O'Meara, T. Parker, P. Parsons, W. Shrimpton, F. W. Williams.

Secretary: R. D. Anderson.

New Members: S. Andrews, H. L. Brooker, A. Henderson, T. A. Howard, A. McLean, A. H. Probert, A. J. Toogood, W. Waugh.

Fish: Recommended that Committee brought forward as well as the annual report on fishing and shooting, a more detailed account of the activities in the whole district.

Licences: Licences to be endorsed to make them available for extra month's fishing at Taupo.

Hatchery—Mangatera: Permanent improvements carried out—concrete dam and ponds completed and used that season. To conserve water in dry seasons, Society procured a hot-air pumping plant, which materially assisted in the rearing of yearlings.

Hatchery—Hastings: The Society purchased a suitable section in Hastings. In conjunction with the Heretaunga Anglers' Club concrete ponds for the rearing of yearlings were erected.

Shags: Bounty—£33 18s. The Department discontinued subsidy of 9d. per shag.

Grievance by Mr Parsons that there were not enough birds to afford shooters enough sport. He felt that too much money was spent on fish. President: F. B. Logan.

Committee: S. Boyd, J. H. Coleman, J. E. Edmundson, S. J. Goulter, J. S. Handyside, Dr Harvey, C. D. Kennedy, I. B. Logan, A. E. O'Meara, J. Nicol, T. Parker, P. Parsons, W. C. Prime, W. Shrimpton.

Secretary: R. D. Anderson.

Report:

Hatcheries: Rainbow trout, 100,000; Brown trout 20,000; Combined total for Dannevirke and Heretaunga ponds.

Pheasants: There had been little success in procuring pheasants, but there was a standing order for young birds. The Auckland Acclimatisation Society had a scheme to breed pheasants to deliver to local Societies for ten shillings per head. It was decided that Hawke's Bay Society would become a shareholder in the Auckland project, and had sent £100 for 200 pheasants, which would be sold to landholders.

Police: The Inspector of Police was made an honorary member of the Society as a gesture of gratitude for the Force's help in bringing poachers to heel.

1922-23

President: F. Logan.

Committee: J. H. Coleman, J. H. Edmundson, Dr F. N. Harvey, C. D. Kennedy, C. Kirkley, I. B. Logan, A. E. O'Meara, T. Parker, P. Parsons, A. I. Rainbow, H. B. Tennent, W. G. Wood, E. A. Williams.

Secretary: R. D. Anderson.

The report for the 1922-23 year is special. It is the oldest one from the Hawke's Bay Society, held in the Department of Internal Affairs Library.

It is special for another reason, too—there is no actual report, but merely a statement of Accounts and Balance Sheet.

Unfortunately in the Revenue statement, subscriptions, Shooting and Fishing licence fees were lumped together into the healthy sum of £1400 odd; but of course from this amalgamation of figures, it was impossible even to guess the proportion of all three. Particular interest would have been the Subscriptions, because membership figures have proved most elusive.

1919 Members

A'Deane, J. B. Andrews, S. Armstrong, F.

Bai, C. Balfour, T. Banks, F. Barker, John Bate, H. Beamish, G. R. Bellamy, Arthur Bernau, Dr H. F. Bibby, E. Bibby, Jack Bibby, James W. Bickford, G. I. Black, Hugh Blakiston, R. N. Blyth, H. B. Booker, H. L Bourgeois, H. E. Boyd, S. Brown, A. D. Brown, R. E.

Campbell, H. M.
Carlyon, A. S. G.
Chadwick, H.
Chadwick, R. M.
Chambers, Bernard
Chambers, John
Chambers, Mason
Clark, Fred
Clark, T.
Clarkson, E. C.
Coleman, I. H.
Cotterill, G.
Couper, W. A.
Cowan, M. L.
Crosse, Thos.
Cunningham, F. A.

Duff, H. I. Dunn, A. C. Duncan, R. I.

Edmundson, J. H.

Fierabend, F. A. Fleming, R. I. Foreman, G. R.

Giblin, A.
Gordon, C. L.
Gordon, F. L.
Gordon, Major
Goulter, S. I.
Greenwood, M.
Groome, M. E.

Handyside, J. S. Harding, J. W. Harvey, Dr F. N. Harvey, I. T. Heatley, C. B. Henderson, A. Herrick, Bros. Hill, A. H. Holden, John Holdsworth, John Howard, T. A. Hunter, Geo.

Johnstone, Robt.

Kennedy, C. D. King, G. R. Knight, A. B. Knight, F. J. Knight, W. E.

Laing, T. M. Logan, Francis Logan, Ivan Lowry, T. H.

McCarthy, W.
Macfarlane, I.
McGaffin, A.
Mackie, I. W. N.
McKenzie, I.
McKinnon, Angus
Mackinnon, Lachlan
McLean, A.
McLean, Arch.
McLean, P. S.
McLean, R. D. D.
McLeod, I. S.
Matthews, Wrs. I. H.
Matthews, W. I.
Menzies, B. R.
Moore, W. G.

Nairn, Eric Nairn, Jack Nelson, F. E. Nelson, Oswald Nelson, W. H. Nelson, Wm. Nichol, H. Nichol, Jas. Nichol, Wm.

O'Meara, A. E. Ormond, Frank Ormond, G. C. Ormond, J. D.

Parker, Thos. Parsons, Philip Patullo, P. Prime, W. C. Probert, A. H. Rainbow, A. I. Raymond, Dr C. Raymond, Walter Retter, A. D. Robertson, P. Ross, J. R. Ryan, M.

Sanders, H. M.
Sandtmann, I.
Senk, W. M.
Shrimpton, W.
Simmons, S.
Small, W. H.
Smith, A. M.
Smith, H. Guthrie
Smith, Hector I.
Smith, S. H.
Smith, S. Vernon
Speedy, Max
Steven, W. Steven
Stothart, Robt.
Strachan, M. H.
Sullivan, E. F.

Takle, R. Thorburn, Geo. Toogood, A. I. Turnbull, R. M.

Van Asch, W.

Walsh, F. B.
Waterhouse, F. S.
Waugh, W.
Wellwood, Norman
White, E. R.
Wilder, R. P.
Williams, Alec
Williams, A. M.
Williams, E. A.
Williams, F. W.
Williams, Gordon
Williams, H. & Sons
Williams & Kettle
Williams, W. T.
Wilson, F. A.
Wood, W. G.

President: F. Logan.

Committee: H. M. Bishop, J. H. Coleman, J. H. Edmundson, Dr F. N. Harvey, C. D. Kennedy, C. Kirkley, I. B. Logan, T. Parker, A. É. O'Meara, P. Parsons, A. I. Rainbow H. Tennent, E. A. Williams, W. G. Wood.

Secretary: R. D. Anderson.

Finance: 31st March, 1924.

Revenue from fishing Licencesc, £490; from Shooting, £622; from

Members' Subscriptions, £151.

Expenditure, £1300-The Hatcheries and Fish Ponds at Dannevirke, Hastings and Awatoto.

Trout: More ova than in previous years was available at Mangatera Hatchery. Under supervision of Dannevirke Anglers' Club the Hatchery greatly improved in efficiency.

Heretaunga Club's ponds at Hastings, and the new pond at Awatoto proved of great benefit in the rearing of yearlings.

Game: Pheasants liberated, 252.

Boundary: Northern Boundary was extended to the Mohaka river.

Deer: Culling was proving satisfactory, but the general opinion was that new blood was required to improve the standard of trophy.

1924

Alterations to their respective boundaries in the vicinity of the Mohaka River produced a spate of correspondence between the Rotorua and Hawke's Bay Acclimatisation districts at the beginning of this year.

The Department of Tourist and Health Resorts joined in the foray.

Hawke's Bay opened the question by asking Rotorua for the alteration at the Mohaka. The Tourist Department objected to any reduction in areas, but suggested an exchange of areas.

Correspondence:

Tourist Department, 17th March.

"That the south bank of the Mohaka river from its mouth at the coast, to its intersection at the East Taupo County, be the dividing line.

"This will mean that the Tourist Department cedes the area between our present southern boundary line and the Mohaka river to the Hawke's Bay Society, conditional on the Hawke's Bay Society's agreeing to our proposal, that the Mokaka river should be the boundary; and then ceding to the Rotorua District, the area north of the Mohaka river to the east of the East Taupo County boundary."

Hawke's Bay Society, 1st May.

"Hawke's Bay agrees to suggested alteration provided that the boundary is made from the middle of the Mohaka, and not from the south bank. This Society has of late years largely increasits liberation of trout ova and fry, and we wish, if the boundaries are altered, to have a definite interest in the Mohaka river, so that we can assist in the stocking and ranging of this river.

"Would you please approach the General Manager of the Tourist Department, in this matter?"

Tourist Department, 4th June.

The General Manager of the Tourist Department agreed.

1924-1925

Annual Meeting

Iune

President: J. H. Edmundson.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey, C. Kirkley, T. M. Laing, J. N. Lowry, I. B. Logan, A. E. O'Meara, P. Parsons, W. A. Pickard, T. Pickett A. I. Rainbow, F. D. Robson, W. H. Simmonds, H. B. Tennent, E. A. Williams, J. T. Wilson.

Secretary: R. D. Anderson.

Finance: Revenue from Fishing Licences £349; from Shooting £503; Members' Subscriptions, £143.

Expenditure, £1370.

Rangers: Two good men were appointed, the Police also assisting. Increase in bounty paid for shags and hawks—£48.

1925-1926

Annual Meeting

June

President: J. H. Edmundson.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey, C. Kirkley, T. M. Laing, J. N. Lowry, I. B. Logan, A. E. O'Meara, P. Parsons, W. A. Pickard, T. Pickett, A. I. Rainbow, F. D. Robson, W. H. Simmonds, H. B. Tennent, E. A. Williams, J. T. Wilson. Secretary: R. M. Chadwick.

(For the first time the Report aspired to three pages.)

Finance: "In good position"—Revenue from Fishing licences £540; from Shooting £914; Members' Subscriptions £161.

Expenditure: £1880—Main item, £294 Bounty on Hawks and Shags. Rangers, £248; Pheasants Bought, £242; Hatchery £227; Curator, £217; Bonus to Curator, £10; Grant to Heretaunga Anglers' Club, £20; Commission to Licence Sellers, £36; Secretary's Salary, £125.

Hatchery—Dannevirke: The output increased from 49,000 to 63,000, the credit to Mr J. Anderson, plus Clubs.

Awatoto and Heretaunga Ponds—of 15,000 fry, about 50% survived and were liberated.

ANGLERS IN GENERAL ENJOY A GOOD YEAR.

Game: The Society recommended to Department of Internal Affairs that shooting season would be from 1st May-31st July, and that there should be "Bag Limits":

- 5 cock pheasants.
- 5 Mallard duck
- 10 Australian quail.
- 20 Californian quail.
- 25 in all of Grey duck, Widgeon and Black swan.

Further Hawke's Bay recommendations to Department.

- That Paradise duck, Native pigeons and Pukeko be protected.
- That there be an open season for Godwits, 1st January, to 28th February, 1927.

SPLENDID BAGS

Efforts were made to obtain Californian Quail for breeding purposes, and for liberation in Southern Hawke's Bay.

Liberation of Pheasants.

Rissington Te Pohue	52 32	Maungawhare Maraetotara	30 18	Puketitiri Waihou	12
Tangoio Waikare	25 33	Maraekakaho Olrig	10	Takapau Miscellaneous	12
Crownthorpe Kereru	10 24	Waipukurau Dartmoor	12	TOTAL	-
Moangiangi	10	Moteo	6	TOTAL	425

BREEDING OF PHEASANTS

Under the supervision of Ranger F. D. Robson, the Society began the breeding of pheasants in 1925. The results were most successful—130 birds reared, and 60 liberated. To improve the strain, five cock birds of recently imported English strain were purchased from the Auckland Society; also from Auckland, from Mr Wright, twelve pure-bred Chinese Ringnecks.

Red Deer: Stalkers reported sport as good. The Society suggested that there be no limit to number or sex of deer to be taken or killed, nor should there be a limitation of the number of points.

This recommendation was approved by the Department.

After the season concluded 31st May, members could, on application to Secretary, be given permits to shoot at any period over land where deer were troublesome. Transport of deer from the South Island to the North was forbidden by the Department.

1926-1927

Annual Meeting

6th June

President: J. H. Edmundson.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey, C. Kirkley, T. M. Laing, J. N. Lowry, I. B. Logan, A. E. O'Meara, P. Parsons, T. Pickett, E. A. Williams.

Supernumerary: A. I. Rainbow, W. A. Pickard, H. B. Tennent, W. Simmonds, J. T. Wilson, W. J. Alpe, E. Doube, I. W. N. Mackie, R. A. Wedd.

Secretary: R. M. Chadwick.

Finance: Revenue—£1901. From Fishing Licences £574 from Shooting £803; Members' Subscriptions £167. Expenditure—£1714. Game Farm (first mentioned) £92.

Fishing: It was the best season for a great many years, especially in the Tuki Tuki, Ngaruroro, and Tutaekuri.

Requirements for next season;

From Marine Department's Hatcheries at Hakataramea, 300,000 Brown eyed ova.

From Government Hatcheries at Tongariro 300,000 Rainbow eyed ova.

Apropos of the Hatchery at Tongariro, the Society was encouraged, after many years of urging, to realise that the Tongariro project had become an established fact; and that ova would be supplied to Taupo and the Societies. Game: Game was not plentiful, particularly ducks, but pheasants and quail appeared to be increasing.

Pheasant Pens: In August last year, the Committee decided to proceed with the erection of pens for the breeding of pheasants, Mr E. A. Williams provided plans. The venture proved a great success. Mr F. D. Robson, the Society's Ranger, on whose property the pens were situated, was congratulated. From that source, 300 pheasants were available for liberation that season.

Awatoto Ponds: Owing to difficulty in obtaining necessary supervision, the Ponds did not prove the success anticipated. Therefore the Committee arranged for the construction of a "natural" pond on Mr Robson's property, where results were most satisfactory

Members were earnestly requested to visit the farm, Church Road, Taradale, where the pheasant and fry could be inspected.

Red Deer: A good year was reported—restriction on heads less than eight points.

Hawks and Shags: Reduction of bounty regretted by Society, but the diminution in Hawks was particularly noticeable.

1927-1928

Annual Meeting

28th June

President: J. H. Edmundson.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey, T. Laing, J. N. Lowry, I. Logan, A. E. O'Meara, T. Parker, T. Pickett, A. I. Rainbow, L. J. E. Shortt, E. A. Williams,

J. T. Wilson.

Supernumerary: As for last year, except for A. I. Rainbow, back on the Committee.

Secretary: R. M. Chadwick.

Finance: Revenue—£1885. From Fishing Licences £576; from Shooting, £675; from Deer, £136; Members' Suscriptions, £217.

Expenses-£1376. No details.

Fish: Best fishing season for years except in Manawatu. Liberations:

Rainbow

Hastings District		Waipukurau	40,000
Napier	94,000	Waipawa and	Otane
			40.000

Brown:

Manawatu and tribs.	Tuki Tuki	20,000
200,000	Esk	20,000
Small streams 36,000	Ngaruroro	14,000

Sale of Brown Fry-21,000 to Feilding.

Buying Orders: Marine Department, Hakataramea: 400,000 Brown eyed ova. Government Hatchery, Tongariro: 300,000 Rainbow eyed ova.

Game Farm: Pheasant pens proved a great success, with 300 birds available for liberation, and 200 expected for following year.

Among the 323 liberations previous August were four for Cornwall Park, Hastings.

Bounties: Extraordinary reduction in payments, previous year £312, this, £43. The Society inaugurated a competition in addition to bounty. Trophies to value of £35 were offered to persons forwarding the greatest number of hawk beaks and feet before 31st Iuly.

Opossums: Opossums proved troublesome in the Wakararas. The Committee asked the Minister to consider issuing licences for trapping. It also appealed for an open season for stoats and weasels but was unsuccessful. The Hawk's Bay Society even suggested that instead of protection for these predators, the time had come for a bounty to be offered.

1928-1929

Annual Meeting

Iune

President: J. H. Edmundson.

Committee: H. Ellis, Dr Fitzgerald, Dr Harvey, T. M. Laing, J. N. Lowry, I. B. Logan, I. W. N. Mackie, A. E. O'Meara, T. Parker, T. Pickett, A. I. Rainbow, F. G. Smith, H. E. Simmons, E. A. Williams.

Supernumerary: E. Doube, J. N. Walker, W. Walsh.

Sub-Committees: This year marked the first occasion in which Sub-Committees were set up for Fish, for Game and for Deer.

Secretary: R. M. Chadwick.

Obituaries: Messrs J. H. Coleman, C. D. Kennedy, Sir R. D. D. McLean.

The report for this year appeared in booklet form, similar to the present annual report. Fourteen pages.

Report:

Finance: Revenue—£1766. Increase in Game Licences: £132 Increase in Deer Licences: £31 Increase in Members' Subs.: £43 Decrease in Fish. Licences: £78

Expenses: £1377.

Fish: Worst fishing season for years in Northern and Central Hawke's Bay. Liberation of Rainbow fry to same destinations as for previous report, 70,000, 40,000, 100,000 and 100,000.

Brown Fry liberations: 30,000; Te Pohue 40,000 10,000; 20,000; 30,000.

Repeat sale of Brown Fry to Feilding, 21,000.

Buying Orders: Northern Canterbury Hatchery: 350,000 Brown eyed ova; Government Hatchery, Tongariro: 370,000 Rainbow eyed ova.

Liberation of 4000 yearling fish from Hastings Ponds—Tuki Tuki.

Liberation of pheasants: 220.

Red Deer: Season 15th March to 20th May.

The Department refused the request that the number of stags be limited to four, and that no stags carrying less than 10 points be taken or killed. The Department insisted that there be no limits, and antlers, 8 points.

Ngamatea was mentioned as providing particularly good hunting.

Warning was given about use of full metal case bullets.

Bounty: Result of trophy offer "not encouraging". (No mention of name of winner.)

Opossums: Close season.

Whitebait: Mentioned for first time in Acclimatisation affairs. An open season was declared during July, August, September and October each year. The Marine Department investigated the possibility of placing certain restrictions on taking Whitebait and Inanga.

Extension of Fishing Rights:

- An unsuccessful appeal was made to the Department urging that Taupo fishing licences be extended to cover Waikato River to Waiotapu Bridge.
- An unsuccessful appeal also to Department for Fishing Rights of Rangitikei and Runanga streams to be incorporated in Hawke's Bay District fishing licences.

Bi-Annual Conference of North Island Acclimatisation Societies. Hawke's Bay Delegates: H. M. Bishop, C. Kirkley.

Hawke's Bay Remits

 That the Government again be asked to remove protection of ferrets, stoats, and weasels.

- That sparrow-hawks be removed from list of protected birds.
- That Taupo fishing licences be extended to cover the Waikato River to Waiotapu Bridge. (All appeals unsuccessful.)

An important remit put forward at the Conference urged the consolidation of all trout and salmon fishing throughout the Dominion, and all to be placed under ONE control instead of the multiple jurisdiction of the Department of Internal Affairs, the Marine and the Tourist Department.

Hastings Agent: As recognition of the work done by Mr T. Pickett, the Committee unanimously approved his appointment as the Society's Official Agent at Hastings.

"The New Zealand Fishing and Shooting Gazette" was made the official organ of the Society.

1929-1930

Annual Meeting

30th June

President: J. H. Edmundson.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey, T. M. Laing, I. Logan, J. N. Lowry, I. W. N. Mackie, A. E. O'Meara, W. A. Pickard, T. Pickett, A. I. Rainbow, H. E. Simmons.

Supernumerary: P. C. Ashby, E. Doube, G. Graham, W. A. Klenner, I. N. Walker.

Secretary: R. M. Chadwick.

Report:

Finance. Revenue £1553. Decrease in Game Licences: £48
Decrease in Deer Licences: £97
Decrease in Fish Licences: £97
Decrease in Members' Subs. £18

Expenses: £1858-Increase of £480, but cash in hand, £897.

Fish: Liberation of 370,000 Rainbow fry, and 400,000 Brown. Sale of Brown fry, 14,000; and 7000 Rainbow to Feilding.

Buying Orders: Otago Hatchery: 250,000 Brown eyed ova. Tongariro: 250,000 Rainbow eyed ova.

Trout: The 50,000 Brown fry purchased from the Society by the Heretaunga Anglers' Club, were placed in the Society's ponds, and upon Mr C. A. Cook's property at Hastings. The fry were liberated as opportunity and conditions afforded.

Under the supervision of Mr S. Heighway, 5000 fry were placed in the Society's ponds at Hastings.

Mr T. M. Laing investigated the suitability of the placing of ova in the Central Hawke's Bay streams.

Fly-Fishing: The Mangaone, Makaretu and Manganouku were gazetted to be reserved for sole use of fly-fishermen.

Atlantic Salmon: The Committee was unsuccessful in introducing this fish into the Mohaka River. The Chief Inspector of Fisheries, Mr Ayson, expressed the opinion that the temperature in the lower reaches was unsuitable to acclimatise any species of salmon.

Fresh-Water Research Committee: At the Annual Conference of Acclimatisation Societies it was decided to extend the good work of the Wellington and the North Canterbury Societies regarding Fresh-water Research, by setting up a New Zealand Committee with power to employ more staff, their salaries to be subsidised by all Societies.

Contributions from individual Societies were at a fixed rate of 10% of all Fishing Licences; 20% of all Opossum revenue. The minimum subscription was set at £50.

Imported and Native Game: A request to the Minister for an open season for two weeks for Pukeko refused.

Liberation of Pheasants: Some new areas included Woodville, Putorino, Maraetotara, Tikokino, Clarench, Patoka, Porangahau. Hatuma, Wanstead, Okawa to Blowhard.

Quail: An endeavour was made to procure Californian Quail from Taumaranui District, where plentiful; but though the Auckland Society agreed, the Department would not consent.

Wild Rice: In an attempt to increase the number and improve the condition of Duck, Wild Rice seed was imported from Wisconsin Nurseries, U.S.A. It was planted in the lakes of Waipukurau, Te Aute, Tangoio, and on dams in Maraekakaho and Okawa. but discouraging results dictated its discontinuence.

DEER CONFERENCE, IN MAY, AT CHRISTCHURCH.

Mr T. Pickett, as the Hawke's Bay representative took his place along with forty-five other delegates. All agreed:—

- That deer were a menace to New Zealand forest, farm, and bird-life.
- 2. That steps be taken urgently to remove that menace.
- That there should be one directing body, the Government, in consultation with the interests represented.

It was further agreed that if extermination were possible, it would certainly be costly; and that the Government should be prepared to meet the cost.

Opinions were divided as to whether the Department of Internal Affairs or the Forestry Department should take charge.

The Minister at the conclusion of his speech, said, "Speaking frankly, I consider that the first step to deal with the situation is to remove absolutely, all protection on deer, chamois, and thar. I would be agreeable to protection being re-imposed for a short shooting season under licence to give Acclimatisation Societies the opportunity of obtaining revenue for further deer destruction."

Hastings Agent: On account of giving up his business, Mr T. Pickett resigned from the newly-created position of Hastings Agent, finding it impracticable to continue.

1930-1931

Annual Meeting

4th August

President: J. H. Edmundsen.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey, T. M. Laing, I. B. Logan, J. N. Lowry, T. V. Morrin, A. E. O'Meara, T. Parker, T. Pickett, A. I. Rainbow, H. E. Simmons, F. G. Smith, E. A. Williams. Dannevirke representative: W. A. Pickard.

Secretary: R. M. Chadwick.

Report:

All records having been burnt in the fire following the earthquake, 3rd February, 1931, no minutes were available, and only a restricted Report was read.

In the absence of the President, Mr H. M. Bishop was in the Chair. He referred to the excellent spirit which had dominated the District since the earthquake, and expressed the hope that members would rally to the support of the Society, which had been hard hit financially.

Thanks were extended to the Otago, Southland, Auckland and Wellington Acclimatisation Societies for their practical support in sending trout ova.

The need for rigid economy was stressed, as it was obvious that there would be reduced revenue from subscriptions, as well as from licences. A commission of 5/- was offered to canvassers of new members.

Pheasants: Because of the low finances of the Society, pheasant poults at 10/- per head were offered for sale to the Wairoa, Gisborne and Wellington Acclimatisation Societies. Later in the year Wellington was offered 50 full-grown birds at 15/- each.

24th June

President: J. H. Edmundson.

Committee: H. M. Bishop, H. Ellis, Dr Fitzgerald, Dr Harvey. T. M. Laing, I. B. Logan, J. N. Lowry, T. V. Morrin, A. E. O'Meara, T. Parker, T. Pickett, A. I. Rainbow, H. E. Simmons, Dr Williams, E. A. Williams. Dannevirke Representative: W. A. Pickard.

Secretary: R. M. Chadwick.

Report:

The number of resignations to the Society, due, no doubt, to economic conditions, was instrumental in a circular being sent to members who had resigned. The letter invited the continuation of their membership, free of any obligation to pay subscription until conditions warranted a resumption.

The New Zealand Acclimatisation Societies' Association agreed to previous year's request to cancel, or at least reduce the annual £50 levy for the work of the Central Fish Research Committee. Cancellation was allowed, but the Society made a £5 donation.

Opossums: Close season.

For purposes of scientific research, licences to fish during the close season were issued to Messrs C. Crooks, C. Golding, Dr F. N. Harvey, I. W. N. Mackie, W. A. Pickard, T. Pickett, and L. Stephenson.

Report of Finance Committee meeting, held 15th December.

Present:-Messrs J. H. Edmundson, H. B. Bishop, A. I. Rainbow, T. Parker, and R. M. Chadwick, Secretary.

Following an investigation of the financial position, in which the past and the present years' results were reviewed, and the possibilities of the next two years considered, the following rommendations were submitted to the Committee.

- 1. That Messrs Robson, Ranger, and Anderson, Curator, be given notice of the termination of their appointments as at 31st March, 1932.
- 2. That the Hatchery at Mangatera be leased to J. Anderson or to the Dannevirke Anglers' Club, the terms and conditions of lease to be agreed upon.
- That the Society guarantee to purchase from the Hatchery each season a definite number of fry at a price to be agreed upon.
- That in the event of neither J. Anderson, nor the Anglers' Club being prepared to lease, the Hatchery be closed temporarily, the Society to purchase its requirements from some outside source.

- That in the event of F. Robson being prepared to continue with the breeding of pheasants, the Society guaranteed to take a definite number at a price to be agreed upon.
- That in the event of F. Robson not desiring to continue the breeding of pheasants, the Society would purchase its requirement from some outside source.

The foregoing bomb-shell was discussed in Committee two months later, 16th February, 1932. The reactions varied—"unnecessarily drastic; halve the salaries of the Ranger and Curator, and reduce their duties by half; a member could undertake the secretarial duties in an honorary capacity; impossibility of the Dannevirke Anglers' Club to run the Hatcheries as a business proposition; cessation of pheasant and fish breeding for at least a year; salaries of employees must not be reduced etc."

Finally Mr H. M. Bishop moved that the Finance Committee review the financial position again at the end of March, and offer further recommendations at the end of April.

The second set of recommendations made by the Finance Committee was adopted, 12th April, 1932.

1. That pheasant bonus be discontinued.

That not more than 150 pheasants be raised the following season.

3. That only Rainbow ova be purchased that season, and

expenditure be limited to £30.

 That the matter of salaries be reviewed at the end of July, at which date the income from shooting licences would be known.

(Then followed six items of expenditure that could be dispensed with, a total of £81 10s 6d the amount saved.)

No editorial comment is necessary to re-enforce the message, "Times were hard."

1932-1933

Annual Meeting

27th June

President: J. H. Edmundson.

Committee: H. M. Bishop, C. Crooks, H. Ellis, Dr Fitzgerald, Dr Harvey, T. M. Laing, I. B. Logan, J. N. Lowry, T. V. Morrin, T. Parker, T. Pickett, H. E. Simmons, F. G. Smith, L. Stephenson, E. A. Williams.

Dannevirke Representative: W. A. Pickard.

Secretary: R. M. Chadwick.

Report:

Balance Sheet:

Revenue: £1116 10 Expenditure £1005 17 Balance: £110 13

Membership: Prior to the earthquake the number of members was 220, but the current list stood at only 79 financial members, as against 91 the previous year. Urgent appeals were made for members to pay their subscriptions and to interest new members in the Society.

Fishing Club Reports

Dannevirke Rod and Gun Club.

The Manawatu was fairly well stocked between Woodville and Dannevirke, the Kumeroa-Oringi reaches being particularly good. An average weight, based on careful records of 258 fish, was 1lb. 9ozs. the weight ranging from 12oz. to 3lb. 3oz. The largest authenticated fish taken was a Brown, weighing 5lb. 2oz. caught in the Tamaki East.

Excellent supplies of insects and the smaller forms of water life and bullies were found in the Manawatu. The Mangatoro also carried a fair supply. The appearance of a few inanga in the Manawatu proved a hopeful sign.

Dannevirke and Woodville anglers were perturbed at the depredation of seagulls.

Heretaunga Anglers' Club.

"Rivers are well-stocked and quality of the fish is exceptional. Practically all fish taken have been above average, ranging from over 2lb, and up to 8½lb.

An interesting trout fishing competition between the Heretaunga and the Karamu Anglers' Clubs took place on the Tuki Tuki, over one week-end. Sixteen competitors caught 42 trout, chiefly Rainbow, of an aggregate weight of 99lb., the average weight being 2lb. 5\frac{3}{4}\text{oz}. The largest fish caught were two Rainbow, 3\frac{1}{4}lb. and a Brown, 5\frac{3}{4}."

Waipukurau Anglers' Club.

"Yearlings are plentiful, but takable fish few. The records of one angler show that in 203 hours' fishing, he caught 57 fish. The largest recorded weight was 7lb. 9oz.

The depredations of shags is a matter of serious concern, the mortality amongst yearlings alarmingly high."

Karamu Anglers' Club.

"Fish in rivers plentiful, but bags not up to last season, chiefly on account of boisterous weather conditions, and an extensive quantity of green weed in the rivers.

The largest fish taken was a Brown in excellent condition, 83lb.

Of the large number of trout in the Tuki Tuki, their condition leaves nothing to be desired, but their fighting powers are, more often that not, negligible. Incidentally, these fish do not rise to the fly in the daytime, like most of their species, but feed after dark, at any time until about up to midnight.

Rainbow are still the predominant fish.

Referring back to last season, it was noticeable that on a hot day a large hatch of fly was the usual observation, and hundreds of fish could be seen rising to these spent flies. Wet fly fishermen secured large numbers of fish. This season however, no hatch of fly was apparent, and a great many bags slumped on this account.

Plenty of fish food in the rivers—bullies, inanga and smelt, though many fish found have contained nothing but caddis and snails."

Dannevirke Report by Mr Pickard.

"Fishing very good, the limit bag being taken once or twice. One angler at Woodville has taken 300 fish, another in Dannevirke between 275 and 300 this season. The heaviest fish caught weig ted 7½lb., Mr Jackson using a minnow.

Average for the season just over 1½lb.

New Zealand Fresh Water Fish Research.

The Hawke's Bay Acclimatisation Society was some-what concerned as to the wisdom of continuing financial support to the Research organization, as so little information was made available. However, the Wellington Society, after discussing the whole question with Professor Percival, advised the Hawke's Bay Society to carry on with financial aid, as the project in hand as well as the scheme mapped out for future research should repay one-hundred-fold."

A letter was sent to the Research Society, pointing out the need for intensive research work in the Lake and rivers of Taupo, in preference to rivers in many parts of the Dominion.

Game: Despite the reduction of feeding grounds caused by the earthquake in the Napier district, and the drainage of the Te Aute swamps, Grey duck were plentiful.

The Committee recommended to the Department that the shooting season be from 2nd May to 30th June.

- "1. Bag Limits: 5 cock Pheasants; 5 Mallard ducks; 25 in all of Grey duck, Widgeon, and Black swan. Not more than 20 Grey duck to be taken in one day.
- 2. That no limit be placed on the number of Californian and Australian quail to be taken or killed.
- 3. That Paradise duck and Native pigeon be protected.
- 4. That a close season be declared for Godwits. (They were fast disappearing from the district since their feeding area, the Ahuriri Lagoon had become dry land after the earthquake.)"

The Game Farm activities were proving a great success, particularly the breeding of pheasant, 86 cocks and 112 hens being liberated that season.

Conference of New Zealand Acclimatisation Societies' Association.

The President and Mr H. M. Bishop were Hawke's Bay's delegation at the 19th conference, held in Wellington. 12th and 13th October, 1932.

The remits put forward by them from the Hawke's Bay Society were both carried and read thus:

- "That the type of fly, which may be used on the Tongariro be more clearly defined."
- "That in the interests of the conservation of fish in Lake Taupo, no fishing be permitted during the following hours:

November: 9pm to 5am

December | 10pm to 5am

February | 9am to 5am

March | April | May | 10pm to 5am

The Hawke's Bay President was elected a member of the Executive Council of the New Zealand Acclimatisation Societies' Association.

Karamu Anglers' Club.

The best wishes of the Society were extended to a new organization of anglers, which affiliated with the Society, and was to be known as the Karamu Anglers' Club, under the presidency of Mr H. M. Bishop.

Curator's Report on Water at Hatchery, 6th May, 1933.

"The water supply has diminished considerably; the springs are insufficient for the present season's Hatchery requirements. A well, already sunk, but not used, could supply one ½ inch and one ¾ inch bore, the cost of connecting, £20 to £25.

A further source of water had been pin-pointed by a waterdiviner, the cost of making it workable, £18 to £20.

One important factor is that a well, previously available to the Hatchery, though on private property has recently been diverted for the farmer's own use."

1933-1934

Annual Meeting

28th June, 1934

President: J. H. Edmundson.

Committee: H. M. Bishop, C. Crooks, H. Ellis, Dr Fitzgerald Dr Harvey, C. Kirkley, I. B. Logan, J. N. Lowry, T. V. Morrin, T. Parker, E. Phillips, T. Pickett, H. E. Simmons, F. G. Smith, L. Stephenson, E. A. Williams.

Dannevirke representative: W. A. Pickard.

Supernumerary: C. Golding, A. W. Renouf, W. Welsh.

Secretary: R. M. Chadwick.

Letter to Department of Internal Affairs, 1st June.

The Secretary, Mr R. M. Chadwick, wrote, asking if the Department had any particulars of the registration of the Hawke's Bay Acclimatisation Society, as all records had been destroyed by fire following the Napier earthquake of 3rd February, 1931.

Reply: "The New Zealand Gazette, No. 73, 12th October, 1922 contains notification of a certificate of registration. We regret that there is no spare copy of the rules of the Hawke's Bay Society."

Reply: "At a special Gen ral Meeting, 6th November, it was decided to substitute a new set of rules. Enclosed are two copies for approval."

At that General Meeting those new rules were adopted, and signed by Messrs H. M. Bishop, Chairman, and Dr V. D. Fitzgerald, committee member.

In October the Dannevirke Anglers' Club decided not to assist as usual in the stripping of Brown trout at the Mangatera Hatchery that season. Again a special sub-committee under the President, Mr J. H. Edmundson, met Dannevirke Club representatives, asking for explanations etc.

In November another inspection of the Mangatera Hatchery was made by Messrs H. M. Bishop, C. Crooks and R. M. Chadwick; and further discussion took place between the Dannevirke Anglers' Club and the sub-committee.

6th February, 1934.

At a meeting of a Special Sub-Committee—Messrs J. H. Edmundson (Chair), H. M. Bishop, T. Parker, L. Stephenson, A. I. Rainbow, (absent), H. M. Bishop moved that "the property, owned by Mr T. Robinson, situated at Jervoistown, Greenmeadows, be purchased by the Society.

Area: 4 acres 2 roods 32 perches.

Price: £1100.

Cash deposit: £100.

Balance: To be paid at rate of £100 per annum, and bearing interest rate of $5\frac{1}{2}\%$.

The property contained a 2-inch artesian well, a creek 4ft. wide, running through, and excellent drainage. The piece of land was the highest in Greenmeadows, and not subject to floods."

On that same date at a meeting of the full committee, it was unanimously recommended to purchase the property. One suggestion by Mr H. Ellis, that the water be analysed.)

8th May, 1934.

Mr H. M. Bishop reported that after thorough investigation of several properties, and taking into consideration the conditions exisiting at Mangatera Hatcheries, due to the failure of the water supply, the sub-committee recommended the purchase of the T. Robinson property, Harvey Road, Greenmeadows. The purchase price had been reduced £50 from the original quote, thus £1050.

Unanimous decision to purchase.

Mr Robson, the Ranger was instructed to make preparations on the new property for the hatching of 50,000 Rainbow ova. The hatching of Brown trout at Mangatera was to continue for that year only. The ponds at Hastings and Awatoto were put on the market.

5th June, 1934.

Messrs H. M. Bishop, T. V. Morrin and H. Ellis were appointed as the Farm Committee to supervise and control all matter pertaining to the farm activities.

Open season for Opossums in Hawke's Bay District for period of six weeks ending 31st August.

1934-1935

Annual Meeting

27th June, 1935.

President: J. H. Edmundson.

Committee: H. M. Bishop, C. Crooks, H. Ellis, Dr Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, T. Parker, E. Phillips, T. Pickett, H. E. Simmons, F. G. Smith, L. Stephenson, E. A. Williams.

Dannevirke representative: W. A. Pickard.

Secretary: R. M. Chadwick.

THE NEW RULES

Re approval of new rules, the Under-Secretary wrote, 9th January.

"From our perusal of the rules, it seems that persons are not entitled by virtue of the fact that they are licence holders, to apply for membership.

In view of the fact that this is the general rule of other Acclimatisation Societies, we should be pleased to know whether there are any special reasons why this should not be provided for in the case of your Society."

Society Reply, 19th January.

"... The position is that any person, whether a licence holder or not, may apply for membership, and provided that conditions of Clause 4b are complied with, are duly elected.

"The purchase of a licence, either to shoot or fish, does not automatically entitle such purchaser to the privileges of membership, either under the old rules, or under the new, for the reason that the Society does not favour that principle.

"It has always desired, and still agrees to the practice of keeping membership a matter altogether apart from that of licences. Many licence holders are members; and on the other hand, which is a matter of importance, many of our members neither fish nor shoot, but have a personal interest in the objects of the Society."

Under-Secretary's Reply, 23rd January.

"How many members in Society?"

Hawke's Bay Reply: "Ninety-eight financial members."

Under-Secretary, 7th February.

"The Hon. Minister for Internal Affairs directs that provision is to be made for licence holders being able to claim enrolment as members of the Society without payment of any additional money, provided that the total of licence fees paid during the year is not less than one guinea."

Wrangling continued from the end of 1934 to 1938. Matters reached such a stage, that Mr H. M. Bishop, Acting President of the Society, sought an interview with the Hon. Minister of Internal Affairs.

The previous correspondence was again read, and further discussed. The Under-Secretary pointed out that the Hon. Minister's predecessor was not prepared to agree to the absence of membership provisions referred to. There were other matters in dispute, too. With the knowledge that all rules of Acclimatisation Societies were to be reviewed, and uniformity arrived at, the Hon. Minister did not press the matter.

(The Hawke's Bay rules had been agreed upon by the North Island Acclimatisation Societies' Council, even with the thorny question of licence-holders being not automatically members. The N. I. Council considered the subject to be a domestic matter of the Hawke's Bay Society, and therefore decided to pass the Hawke's Bay rules.)

Deputation, 13th December, 1938.

Present: Hon. W. E. Parry, Minister of Interal Affairs, Mr J. Bennett, representing Department of Internal Affairs, Mr H. M. Bishop, President of Hawke's Bay Acclimatisation Society, Mr E. J. C. Wiffen, Secretary New Zealand Acclimatisation Society's Association.

Mr Bishop did not wish to discuss further the controversial subject of membership, but asked for the alteration of rules relating to vice-presidents, and that pertaining to all meetings being held in Napier.

And there the matter rested until 5th October, the following year, 1939, when Hawke's Bay again passed the rules, identical in substance in the main, to those of 6th November, 1934.

Not until 12th June, 1940, nine months later, did approval arrive from the Department of Internal Affairs.

But the bone of contention was not buried, and was brought to the surface and notice of the Hon. W. E. Perry again in 1944 at the instigation of the Central Hawke's Bay Anglers' Club. The Minister replied that the subject was a domestic matter, and that the Club should make direct representation to the Hawke's Bay Acclimatisation Society.

1949.

The Rules were amended, 18th October, and approved by the Hon. M. A. Bodkin, Minister of Internal Affairs.

1951.

Further amendments were submitted to Wellington, who replied, suggesting that the amendments be left in abeyance, as a new Act was proposed for next session of Paliament.

1953.

The Wildlife Act was passed in October, 1953, its most interesting section to many Hawke's Bay sportsmen, Part III, relating to Acclimatisation Societies in general, but containing the answer to the locally long-debated question of automatic membership by virtue of licence payment. The Act stated that membership of an Acclimatisation Society was open to any person, who had attained the age of sixteen years, and who was the holder of a fishing or shooting licence, and who made written application annually for membership. With these three requirements fulfilled, membership was available without payment of any other fee.

Societies were then given a period within which to amend their Rules to bring them into line with the new Act. Following considerable correspondence with the Department the Rules of the Hawke's Bay Society as amended were put to a Special Meeting, 30th April, 1957, and came into force the following November.

This time lag of four years (Wildlife Act was passed 31st October, 1953) allowed plenty of time for thought, discussion, and dissension, particularly the latter as the following move shows.

1955 28th July.

Above the joint signatures of Mr F. J. Jane, President of the Napier and District Wild Fowl Shooters' Association, and Mr S. Heighway, President of the Heretaunga Wild Life Association (Shooters and Anglers) a letter was written to the Minister of Internal Affairs, concerning the disapproval of their two Associations of some of the new rules submitted by the Hawke's Bay Acclimatisation Society. The signatories claimed that the new rules did not represent the true feelings of the majority of the licence holders, who, because of the contentious membership clause had no representation on the Council.

On the same date, the above two presidents wrote to the Controller of the Wild Life Department, seeking his co-operation.

The nature of the replies to these two letters is officially unknown, but apparently the new 1957 arrangement of a Committee of Management, with representatives from four divisions of the District proved satisfactory.

In the new organization the Council was made up of four members from both Napier and Hastings, plus two from Central and Southern Hawke's Bay; but in 1965-66, a third member was added to both Central and Southern representatives. In 1966-67 Central Hawke's Bay's quota was increased to four, and in 1967-68 Southern Hawke's Bay too, had four.

This Committee of Management, often sub-divided into subcommittees for various undertakings, also has had through the years the help of many non-voting Special Members with the various titles: Special Representative, Farming Representative, Special Appointee, and Supernumerary.

Little is known of the original rules drawn up at the birth of the Society in 1868, but that there were seventee seems conclusive from the reference to inquiry about registration in 1881. (See entry for 1881.)

Membership Appeal appearing in the 1932-33 annual report.

"In regard to membership, the contention of many sportsmen that it costs a member one guinea per annum extra for the same privilege as licence holders is, in a measure, correct, and on its face value the latter has the better of the deal. It is doubtful. however, if the value of a man to a society can be measured by that standard. The man, who purchases a licence, generally does so for his own personal gratification, and has little thought or sympathy for the development of acclimatisation matters generally. Members are looked upon as men, who take the broader view, and wish to do all in their power to assist the Society in its efforts to acclimatise birds and fish, without which any Province would be very poorly off. Membership creates a permanent organization, from which good men, who will give freely of their time and ability, are chosen as executive officers. To pay for these comprehensive activities more money is required than can be obtained from licence-holders; hence the membership fees, which enthusiasts are keen to subscribe. Without this spirit prevailing no society can last."-R. M. Chadwick.

1935-1936 Annual Meeting 30th June, 1936.

President: J. H. Edmundson.

Committee: H. M. Bishop, C. Crooks, H. Ellis, Dr Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, T. Parker, E. Phillips, T. Pickett, H. E. Simmons, F. G. Smith, L. Stepsenson, E. A. Wiliams. Dannevirke Representative: W. A. Pickard.

Secretary: R. M. Chadwick

Report:

Complimentary Licences:

Resolved that:

- 1. All complimentary licences be discontinued.
- Reduction of number of licence sellers.
- 3. Increase of commission of licence-sellers from $2\frac{1}{2}\%$ to $3\frac{3}{4}\%$.

Fish: Despite the strong disapproval from Woodville Rod and Gun Club, and no reply from Dannevirke Anglers', the Executive Committee, decided to increase the length of the takable fish from 10 inches to 12 inches, to apply to the whole District. Two months later the resolution was rescinded in reference to Brown trout, but the limit bag remained at 15 as in the original resolution. (Rainbow remained at 12 inches.)

The possibilities of stripping ova in Sandy Creek, Lake Tutira, were discussed.

Flies: Departmental ruling that with the exception of the bittern, no feathers of the kiwi or any other totally protected bird may be used in the making of flies.

Te Mata Park was declared a Sanctuary.

Game: The Department wrote to all Societies requesting their views on a close season for game in 1936, and a proposal to raise the licence fee. Hawke's Bay strongly opposed both suggestions, but a limit of 10 Grey duck was forwarded resulting from a motion by H. Ellis.

Opossums: Protests and support letters were received from numerous Societies, following a circular from Hawke's Bay regarding the proportion of revenue allocated to them by the Department from the funds received from opossum skins by way of Royalties and Levies.

Amended Rules: Rule 8 was amended to read "that the Society shall be governed by a Committee of Management, consisting of a President and fifteen members of Committee, who shall be elected at the Annual General Meeting. Five to form a quorum.

Any affilited body, upon payment of one guinea, shall be al lowed one representative, entitled "supernumerary", on the Committee."

In February, 1936, a sub-committee met in Dannevirke a number of the Society's members from Woodville and Dannevirke to discuss the practicability of installing fish ponds for the rearing of fingerlings and yearling trout from fry supplied by the Society. A suitable water-race existed at Oringi, the property of Mr W. H. Gaisford ,who was willing to provide the services of a member of his staff, to attend to the feeding.

But Curator F. D. Robson's report on the unsuitability of the arrangement, led to the abandonment of the scheme.

However, in April, the Acclimatisation Committee decided to grant a further 100,000 Brown trout fry for liberation in Southern Hawke's Bay waters, as a gesture of appreciation of the increased membership and donations made by the Woodville and Dannevirke clubs.

Pheasants: The Farm Committee was deputed to look into the matter of breeding and distributing pheasants, along lines suggested to Messrs J. H. Edmundsen and H. M. Bishop, when attending the Conference.

Later, settings of pheasant eggs were offered to members willing to hatch them, and finally liberate them.

1936-1937

Annual Meeting

29th June, 1937.

President: J. H. Edmundson.

Committee: P. C. Ashby, H. M. Bishop, C. Crooks, H. Ellis, C. Golding, Dr Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, T. Parker, E. Phillips, T. Pickett, E. Renouf, F. G. Smith, E. A. Williams.

Supernumerary: Dannevirke Anglers' Club: T. M. Mitchell; Karamu Anglers' Club: A. W. Renouf.

Secretary: R. M. Chadwick.

Report:

Finance: (Excluding the Farm Property).

Revenue: £1025 2 0. £xpenditure: £802 12 9.

Membership: 119.

Fish: Unsatisfactory season throughout the North Island. The Department of Scientific and Industrial Research continued to carry on its excellent work. The much-discussed question of the provision of funds for carrying on the work of Fish Research had been settled on a most satisfactory and equitable basis, the Government having assumed full responsibility for the expense, the funds being provided by a 10% levy upon the aggregate money received for fishing licences by every Society in the Dominion, the fund to be administered by the Marine Department.

Hatchery: Game Farm: To provide extra water for the hatchery and holding ponds, an additional three-inch artesian bore, sunk to a depth of 125ft, provided a further supply of 150,000 gallons per hour. The Society was indebted to the Dannevirke and Woodville Anglers' Club for contribution towards the cost of the work.

A head-box fitted outside the hatchery, made possible the taking of leads to the three new holding ponds, in which fingerlings and yearlings were reared. Under that arrangement existing ponds could be thoroughly renovated and spelled. The system of holding-ponds consisted of a series of trenches with intermediate falls at intervals for aeration purposes, no concrete whatever being used in the construction.

The Hatchery reported that the 200,000 Rainbow eyed ova procured from the Government Hatchery, and the 120,000 Brown eyed ova from the Otago Society had been hatched at the Farm, and liberated.

Game Farm: The Committee was more than ever convinced that its action in purchasing the Game Farm had justified itself. The arrangement of hatching and rearing of fry, plus the breeding of pheasants, placed under one control, proved both economical and efficient. Mr F. D. Robson was congratulated upon the care and attention given the birds, and the satisfactory results obtained.

The natural increase of pheasants was well maintained, particularly in the Putorino district, where the best bags were obtained. Following the loss of 50 young birds with Coccidiosis the previous year, the future plans were to install extra incubators and brooders.

Game: The Shooting season recommended to the Department was from 1st May to 30th June.

Bags to be no more than the following:-

5 cock pheasants; 25 head in all of Grey duck, Mallard duck, Paradise duck and Black swan; (no more than two Paradise duck, or more than five head in all of Black swan. The killing of Paradise duck to be restricted from 1st May to 7th May. The first time for many years that total restriction had been lifted. No limitation on Californian and Australian quail.

The Curator was instructed to proceed with rearing a limited number of Grey duck—eggs were offered by Mr C. Golding and some duck by Mr J. N. Lowry.

Pukekos: Under the provisions of the Animal Protection and Game Act, any persons suffering damage to property, crops etc. by the depredations of pukeko, could apply directly to the Minister of Internal Affairs for permission to destroy them. The request was then forwarded to the local Acclimatisation Society for investigation and report. Upon receipt of the Society's approval, the Minister issued the necessary permit.

Close season for pukeko and godwits.

Opossums: The previous season was declared open for trapping, the Wakarara and Tikokino districts proving the most prolific. But the number of skins taken proved disappointing, being approximately 60% of the previous year. For this reason the Society recommended to the Department that the whole Hawke's Bay District have a close season.

Licence Fees: For some years Acclimatisation Societies throughout the Dominion were hampered by want of the necessary funds to proceed with an expansion scheme in the breeding of game and the rearing of fish. Due chiefly to the efforts of the Auckland Society, which body was first responsible for placing the matter before the Minister of Internal Affairs, an amendement to the Act was put through the House, making it possible to increase the fees for Game and Fishing Licences. Thus the Game licence went from £1 5 to 1 10 and the Fishing Licence from £1 to £1 5.

Conference of New Zealand Acclimatisation Societies: Held in Wellington, in April, 1936, the Conference provided for change in administration. Two Councils were set up, one for each Island, their work to co-ordinate the activities of the Societies by a central control in each Island.

Admission Fee to Game Farm: It was decided in October, 1936, to charge Adults 6d and children 3d entrance fee. School children with teachers were admitted free. Half of the income from that source went to Mrs F. D. Robson, to compensate, in a small way, for her time and attention to Game Farm affairs.

November, 1936.

"Peg-leg Pete" The Department sent a letter of reminder referring to previous correspondence in which it was suggested by the Department and agreed to by the Society to liberate the kiwi (in residence at the Game Farm) to some suitable area. But no information on the subject had been received by the Department.

The Society decided to liberate the kiwi if the Department insisted, but made a last appeal to obtain authority to keep it at the Farm.

Authority was granted, and Peg-leg Pate became the founder of the small colony of kiwis, which delighted tens of thousands of visitors for almost thirty years. Ahuriri Lagoon: The Public Works Department notified the Acclimatisation Society that shooting was to be prohibited on the Ahuriri Lagoon in the 1937 season. But as a result of a deputation the consent of the Resident Engineer was given for Saturday and Sunday shooting only.

Annual Meeting

28th June, 1938

President: J. H. Edmundson. (On leave. H. M. Bishop in Chair.)

Committee: H. M. Bishop, R. M. Chadwick, H. Ellis, C. Golding, Dr F. N. Harvey, I. B. Logan, T. Parker, E. Phillips, T. Pickett, A. W. Renouf, F. G. Smith, E. A. Williams.

Supernumerary: C. Crooks, T. Mitchell, J. E. Smith, P. Walden. Secretary: I. Langdon Prime.

Report.

1937

Finance:

Revenue: £1692 6 7
Expenditure: £1346 3 2 (£100 paid off mortgage)
(The Society's Hastings section sold at a profit of £12 10s).
Membership: 131.

Fish: Disappointing season for anglers.

Trout: Report of the purchase of 200,000 Rainbow eyed ova from the Government Hatchery, and 250,000 Brown eyed ova from North Canterbury Society. Both lots were hatched at the Farm and liberated throughout the District. Good results were obtained with the Rainbow ova, but the Brown were not satisfactory, the loss unfortunately high.

Pheasants: During the year 302 birds were liberated, a large increase from last season. With reference to the breeding, some difficulty was experienced with the electric incubator at the hatching period, with the result that a large percentage of birds was lost at the pipping stage. It is interesting to note that Hawke's Bay was not the only Society to suffer in this manner.

Opossums: Owing to the depressed state of the fur market, and the poor prospects of payable prices, a close season was to be observed for the year, 1937-1938.

Secretary: During the year, Mr R. M. Chadwick, who had been secretary for thirteen years, tendered his resignation owing to his having accepted a full-time appointment as secretary to the Hawke's Bay branch of the Automobile Association. Mr I. Langdon Prime, Napier became the new Secretary.

President: J. H. Edmundson.

Committee: H. M. Bishop, H. A. Browning, R. M. Chadwick, Dr F. N. Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, A. E. O'Meara, T. Parker, T. Pickett, A. W. Renouf, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams.

Supernumerary: T. Mitchell.

Secretary: I. Langdon Prime.

Report.

Finance: The May floods of 1938 indirectly were responsible for a deficit of £77, inasmuch as they apparently resulted in a decrease of £180 in shooting licences, and of £100 in fishing licences. The fact that 1936-37 fishing licence fees, amounting to £213, were included in the '37-'38 balance explained the drop of £500 in the income of the year. Despite the adverse picture, the balance sheet showed a credit of £422.

Fish: Purchases of Rainbow and Brown, numerically the same as for last year, were made from the same sources.

The deputy-chairman, Mr H. M. Bishop, represented the Society at the opening of the Government Hatcheries at Ngongataha, the previous September.

In conjunction with the Marine Department's Inspectors, the Society took active steps to prevent pollution of streams in the district, and arrangements were made for plant to be installed to prevent sawdust from the mills polluting the streams.

Farm Property: Additional brooder-house accommodation was necessary to implement the success of the curator, Mr Robson, with the pheasant-breeding. Accordingly extra building and electrical wiring greatly improved the facitities. The existing brooder-houses were lined throughout, this no doubt, contributing in no small measure to the successful breeding season.

Pheasants: During the year 513 birds were liberated, the largest number for many years. The Hawke's Bay Society was one of the most successful in New Zealand with its pheasant-rearing the previous season.

Dr F. Hall, a member of the Society, imported two dozen Hungarian pheasants for the Society the previous year. This introduction of such a fine strain proved to be undoubtedly beneficial. Thanks were extended not only to Dr Hall but also to the Shaw, Saville, Albion Co. which shipped the birds freight free; and thanks also to the Curator of the Auckland Zoological Park, who attended the birds during their quarantine period.

Shags: Various successful Shag Drives were organised and financed by the Society during the season.

1939-1940

Annual Meeting

9th July, 1940.

President: H. M. Bishop.

Committee: H. A. Brown, D. M. Compbell, J. H. Edmundson, Dr F. N. Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, P. Parker, P. Parsons, T. Pickett, A. W. Renouf, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams.

Supernumerary: T. Mitchell.

Secretary: I. Langdon Prime.

Report:

Finance: The Accounts show a deficit of £5 in comparison with previous year's £77; but they do not include the £30 profit on the sale of the Awatoto section. The increase in shooting licence fees, from 25/- to 30/- is mainly responsible for increased revenue from that item. The Department ear-marked the extra in licences for the payment of bounties on vermin.

Shooting Licence fees amounted to £840.

Fish: Improved fishing conditions, and recovery from the '38 flood resulted in an increase in number of licences taken out—£334.

Purchased of Brown eyed ova from Otago Society totalled 400,000; from the Government Hatchery, 50,000 Rainbow.

Pheasants: Congratulations were extended to Mr Robson, his wife, and daughter, for the highest figure yet recorded at the Society's Game Farm in the pheasant-breeding project,—1100 birds.

Opossums: An open season operated from 20th July to 15th September, 1939. Because of severe snow storms in the southern parts of Hawke's Bay, the season was extended for a fortnight by the Minister.

. Altogether this Society stamped over 7000 skins.

Bounties: From the fund recently set up from the additional five shillings per game fee, the Society spent £133 on vermin control. This was paid out on hawks, stoats, ferrets, weasels, polecats and hedgehogs. Though the amount spent was more than collected from licence holders, the results obtained in this vermin destruction effort were considered highly satisfactory.

The following members formed a committee to manage the affairs of the Game Farm and Hatchery the previous year.:—H. M. Bishop, I. B. Logan, T. V. Morrin, T. Parker, and E. A. Williams.

1940-1941

Annual Meeting

7th August, 1941

President: H. M. Bishop.

Committee: H. A. Browning, D. M. Campbell, J. H. Edmundson, Dr F. N. Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, T. Paker, S. Parsons, T. Pickett, A. W. Renouf, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams.

Secretary: I. Langdon Prime.

Honorary Member: A. M. Brodie, Esq., M.R.C.V.S.

Report:

Finance: A surplus of £162 17s 5d as compared with last year's £5 1s 10d deficit was the heartening news of the balance sheet. A further £100 was paid off the mortgage on the Society's Greenmeadows property, the sum of £350 yet to be paid.

Membership: Fees amounted to only £73 12s, a considerable drop perhaps on account of the War.

Fish: The purchase of 36,000 Brown eyed ova from the North Canterbury Society, and 200,000 Rainbow eyed ova from the Government Hatchery resulted in successful hatching at Greenmeadows. The installation of an electric lamp over the fish pond proved a success from the trout-feeding point of view.

The Farm committee with the same officers as last year continued its good work.

Pheasants: Again a very successful breeding season was experienced at Greenmeadows, a total of 918 birds being liberated.

Opossums: An open season was again declared, but revenue amounted to only £45 15 $\,$ 6.

The response to vermin control resulted in the payment of £85 11s in bounties.

1941-42

Annual Meeting

20th October, 1942

President: H. M. Bishop.

Committee: H. A. Browning, D. M. Campbell, L. B. Fleming, Dr F. N. Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, A. E. O'Meara, T. Parker, S. Parson, T. Pickett, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams. Secretary: I. Langdon Prime.

Report:

Finance: No further items of interest appeared different in essence from the usual annual report.

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		1268	1	6.
	-	249	9	3
		80	12	0
	***	695	18	0
		249	15	0
34-	***	62	10	0
004.0	440	85	11	0
		26	15	0
			1268 249 80 695 249 62 85	80 12 695 18 249 15 695 18 249 15 62 10 85 11

1942-1943 Annual Meeting 20th October, 1943

President: H. M. Bishop. Vice-President: T. Parker

Committee: H. A. Browning, D. M. Campbell, Dr F. N. Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, A. E. O'Meara, S. Parsons, T. Pickett, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams.

Secretary: I. Langdon Prime.

Report:

Three-quarters of a century's successful management of the Society was an item on record at this meeting, an item quoted in particular, to off-set the reduced revenue due to the observation of a close season for game.

Subscriptions, too, were lower, £68 15 0.

(Apparently the Society had its first overdraft that season—&64+11-2.

Fish: The purchase of 100,000 Rainbow eyed ova from the Government Hatchery resulted in their being successfully hatched at the Game Farm. Between 25,000 and 30,000 ova were stripped from trout held at the Farm.

Pheasants: The breeding of pheasants was reduced owing to the close shooting season, but approximately 200 birds were reared. Farm Property: All available land had been brought into cultivation, the barley and maize planted reducing the purchase of pheasant feed.

Petrol restrictions, up to a point, curtailed the activities of the

Farm Committee, which, however, was still most active.

Honorary Veterinary Surgeon: It was with deep regret that the Society recorded the passing of Mr A. M. Brodie, whose advice and assistance were always available to the Society. In particular, he had helped in the prevention and treatment of disease in connection with the pheasants.

Close Shooting Season?: The Minutes of a Meeting in April, 1942, contain a reference to the "unexpected announcement in the Press that the War Cabinet had cancelled the short Open Season." But apparently this decision was rescinded, because in a later newspaper advertisement inserted by the Acclimatisation Society appeared a notice that a limited supply of ammunition was available to licence holders only, for the forthcoming Open Season for Game.

The Minutes close with "All the applications were carefully gone through, and after full consideration, it was resolved that 12 cartridges be issued to each applicant, who had declared less than 25 in hand."

It was then moved that the Secretary should apply for petrol to take the ammunition to the Licence Agents in each town.

1943-1944

1.

Annual Meeting

7th November, 1944.

President: H. M. Bishop.

Vice-President: T. Parker.

Committee: H. A. Browning, D. M. Campbell, L. B. Fleming, Dr F. N. Harvey, I. B. Logan, J. N. Lowry, T. V. Morrin, A. E. O'Meara, S. Parsons, T. Pickett, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams.

Secretary: I. Langdon Prime.

Report:

Finance: A surplus of £40 over expenditure compared favourably with previous year's deficit of £616. The improvement was due to an Open Season for game being declared.

The licence figures spoke for themselves—£818 for game,

£270 for fish.

Total Mortgage repaid to T. Parker, for Farm Property. Members' subscriptions—£80 12.

Fish: Again it was impossible to purchase Brown trout ova, but 100,000 Rainbow eyed ova purchased from the Government Hatchery were successfully reared at the Game Farm, along with some 20,000 ova stripped from trout held at the Farm.

Pheasants: Owing to the re-opening of the season for native and imported game, the Society was able to increase the number of pheasants reared, the majority being liberated on the river beds.

Poaching: Additional rangers were engaged at periods during the year, but a special appeal was made to all sportsmen to give their co-operation in assisting to stamp out poaching in Hawke's Bay.

1944-1945

Annual Meeting

16th October, 1945

President: T. Parker.

Vice-President: I. B. Logan.

Committee: H. A. Browning, D. M. Campbell, L. B. Fleming, Dr F. N. Harvey, L. Lopdell J. N. Lowry, T. V. Morrin, A. E. O'Meara, S. Parsons, T. Pickett, F. G. Smith, L. Stephenson, Cedric White, E. A. Williams.

Supernumerary: G. L. Beer. Secretary: I. Langdon Prime.

Report:

Revenue:	£1980:	Subscriptions	***	£95
	7577.77	Shooting Licences		£1515
		Fishing Licences		£245
		Opossum Revenue		£21
		Sale of Pheasants		£102

Expenditure: £1431.

Fish: During the year, 250,000, Rainbow eyed ova and 100,000 Brown eyed ova were ordered, hatched at Greenmeadows, and liberated at the fry stage throughout the district. It was impossible to rear trout past the fry stage on account of the scarcity of food. The following season, however, full supplies of liver were assured, so the Committee had decided to extend the races at the Hatchery, and retain a proportion of trout to the fingerling and yearling stages.

Pheasants: Just under 500 pheasants were bred at the Game Farm, and liberated in various parts. The policy of liberating the majority of birds on riverbeds was most popular, and good bags were obtained by many shooters.

Farm Committee: Dr F. N. Harvey, L. B. Fleming, T. Parker, T. Pickett, and E. A. Williams.

President: T. Parker.

Committee: L. B. Fleming, Dr F. N. Harvey, V. D. Hill, C. Holt, L. Lopdell, J. N. Lowry, A. E. O'Meara, S. Parsons, T. Pickett, F. G. Smith, J. D. Taylor, Cedric White, E. A. Williams, H. M. Winlove.

Supernumerary: I. Osborne. Secretary: I. Langdon Prime.

Report:

A surplus of £987 was recorded.

Subscriptions £100 £2077 Shooting Licences Fishing Licences £287 Opossum Revenue £38

Fish: Only 50,000 of the 250,000 Brown eyed ova ordered were supplied, and the following year's propects seemed to be similarly unsatisfactory. A total of 300,000 Rainbow eved ova however, came to hand, in time.

Pheasants: On account of the shortage of pheasant food, the Society was unable to breed as many birds as planned, but 233 pheasants were liberated, nevertheless.

Farm Property: Extensive renovations and improvements at Burness Road, Greenmeadows were carried out, additional assistance at the Game Farm being engaged for the purpose. A plan for future modification of the Game Farm and Hatchery was prepared by Mr L. B. Fleming and Mr E. A. Williams.

The Farm Committee: L. B. Fleming, Dr F. N. Harvey, S. I. Parsons, T. Pickett and E. A. Williams.

1946-1947 Annual Meeting 16th September, 1947

President: F. G. Smith.

Committee: L. B. Fleming, Dr F. N. Harvey, V. D. Hill, C. Holt, L. Lopdell, J. N. Lowry, A. E. O'Meara, S. J. Parsons, T. F. Pickett, A. D. Purchas, E. J. Stitt,, J. D. Taylor, Cedric White, E. A. Williams, H. M. Winlove.

Supernumerary: J. Osborne.

Secretary: I. Langdon Prime.

Report:

A surplus of £160 was recorded. A large item on the expenditure side was £252, paid to the North Island Vermin Control Board, £75 being returned by way of bounties.

Subscriptions amounted to only £67, Shooting Licences to £1517, a drop of £560; Fishing licences were up, £331, as was Opossum revenue, £63.

Fish: The 310,000 Rainbow eyed ova ordered were successfully hatched and reared at Greenmeadows, the bulk of the fry being liberated in streams, Lake Tutira, and the District's rivers. But 20,000 were retained until the yearling stage. As predicted previous year, Brown eyed ova were impossible to obtain from either the North or the South Island. Fortunately the Wellington Acclimatisation Society's Masterton Hatchery was generous enough to supply 150 Brown trout yearlings. It is intended to retain these in a holding-pond at the Hatchery, with the view to stripping them.

Farm Committee remained the same as for previous year.

Pheasants: In spite of the shortage of pheasant food, 450 birds were reared, 350 being liberated, the balance remaining as stock birds for the ensuing season's breeding.

1947-1948

Annual Meeting

12th October, 1948

President: F. G. Smith.

Committee: L. B. Fleming, A. S. Gilchrist, Dr F. N. Harvey, D. L. Holt, R. C. Holt, L. Lopdell, J. N. Lowry, A. E. O'Meara, S. J. Parsons, T. Pickett, A. D. Purchas, E. J. Stitt, Cedric White, E. A. Williams, H. M. Winlove.

Supernumerary: J. Osborne.

Secretary: I. Langdon Prime.

Report:

The surplus of £65 was particularly good, when the substantial amount of repairs, maintenance, and improvements were noted, amounting to £95. Vermin Control levy and bounties reached £258. Power and Lighting, an item often taken for granted, totalled £151.

Fish: The best news under this heading was the Society's success in obtaining 200,000 Brown eyed ova from Lake Hayes in the South Island.

Pheasants: Approximately 550 birds were bred and liberated, this total being the highest since before the War.

Kiwis: The Kiwis at the Farm were doing well, and the Society decided to make the Farm open to visitors during the following hours weekly: Monday, Tuesday and Friday 9.30-10am; Sunday, 2.30-3.30.

Farm Property: The property became financially unencumbered this year. An additional artesian well was sunk, while an extra holding pond and several additional races were excavated. A maize crib was erected to house the excellent crop grown at the Farm.

Farm Committee: The same group as last year was again congratulated on its good work. Unfortunately Mr Fleming and Mr Winlove did not seek re-election, because of business reasons.

Marine Department: At the request of the Marine Department two pages of the eight in this year's annual report, were devoted to publishing a statement for the information of anglers, on the research work being carried out by the Department.

1948-1949 Annua President: E. A. Williams.

Annual Meeting 18th October, 1949

Committee: E. A. De La Haye, R. Haggerty, L. A. Harris, Dr F. N. Harvey, D. L. Holt, R. C. Holt, L. Lopdell, J. N. Lowry, J. B. McIntyre, J. G. Mulvey, A. E. O'Meara, S. J. Parsons, T. F. Pickett, S. F. Roberts.

Supernumerary: G. L. Beer, B. J. Rossiter.

Secretary: I. Langdon Prime.

Special Meeting of Licence Holders: During the year special meetings were called in various centres throughout the Province, and proved highly successful. Meetings of Licence holders in Hastings and Waipukurau were addressed by members of the Society's Committee of Management, who discussed matters concerning the welfare of shooting and fishing licence holders.

A further general meeting in Dannevirke was addressed by Mr D. F. Hobbs, Senior Fisheries Research Officer of the Marine Department; and by Mr I. L. Prime.

Farm Property: Improvements: bricking in trout Races and extending them; sinking new well. Pheasant liberations, 930, an increase of 380. Ova hatched, 300,000 Rainbow; 200,000 Brown.

Anglers' Diaries: The Society made Anglers' Diaries available for issue with Fishing Licences. The co-operation of all anglers in the keeping of the diaries was especially sought, as the collation of the results was expected to be of inestimable value to the future of Angling.

President: E. A. Williams.

Committee: G. A. L. Beswick, R. H. Haggerty, E. A. De La Haye, L. A. Harris, D. L. Holt, R. C. Holt, L Lopdell, J N. Lowry, J. B. McIntyre, A. E. O'Meara, J. G. Mulvey, T. F. Pickett, S. F. Roberts, O. Somerset-Smith.

Supernumerary: G. L. Beer, B. J. Rossiter.

Secretary: I. L. Prime.

Farm Property: Hatchery and races were re-constructed and improved. Erection of new pheasant pens. Pheasant liberations, 800. Hatchery: 300,000 Rainbow, and 100,000 Brown; 50,000 Rainbow retained as yearlings.

Mr S. F. Roberts was appointed to understudy Mr F. D. Robson, who had intimated that he wished to be relieved of his position in the near future.

1950-1951

Annual Meeting

6th November, 1951

President: J. G. Mulvey.

Vice-President: J. N. Lowry.

Committee: M. Beamish, G. A. L. Beswick, A. E. Davies, A. S. Gilchrist, R. G. Haggerty, L. A. Harris, Dr F. N. Harvey, R. C. Holt, J. B. McIntyre, A. E. O'Meara, T. F. Pickett, O. Somerset-Smith, W. A. Whyte, E. A. Williams.

Supernumerary: C. L. Crooks, G. E Mills, B. J. Rossiter.

Secretary: I. L. Prime.

The 83rd Annual report appeared in a new format—a booklet of twelve pages, $8\frac{1}{2} \times 5\frac{1}{2}$ in.

Farm Property: Most of the year the Farm was closed to visitors to give the new curator ample time to become conversant with his duties.

Fishing: The season was unusual because of the number of floods, causing unsuitable conditions for fishing. The Tuki Tuki yielded most fish, but the Ngaruroro was extremely disappointing.

Lake Tutira produced some good bags, and showed the possibility of the lake's being developed into a major fishing area. Mr D. F. Hobbs of the Marine Department expressed a favourable opinion of the lake's potential.

Mr Roberts spent two weeks at the Government Hatchery at Turangi, to gain first-hand knowledge of stripping and eyeing ova. On his return he constructed an experimental trap at Lake Tutira, where 25,000 were secured.

Liberations: 122,000 Rainbow; 73,000 Brown. Pheasants 1050.

Anglers' Diaries: A special appeal was made for more anglers to keep diaries. Mr Hobbs stressed the need for co-operation of both local and visiting anglers, and particularly mentioned that blank days should be recorded.

Ducks: Reclamation of swamp lands, closer settlement, and the greatly increased gun pressure combined to make the future of the wild duck in New Zealand, most uncertain. The Wildlife Department proposed carrying out a Dominion-wide survey.

In an endeavour to assist the wild duck population, the Hawke's Bay Society organized various projects.

- 1. Breeding Pond in Woodville.
- Two Sanctuaries were gazetted.
 (a) One in Central Hawke's Bay

(b) One in Dannevirke.

3. A duck-banding station was established in Norsewood.

Ranging: Consideration was given to appointing a full-time ranger to reduce widespread poaching. A warning was issued on careless identification of protected grebe, mistaken for wild duck.

Kiwis: On 26th October, all five kiwis escaped from the Game Farm, every effort failing to locate them.

1951-1952

Annual Meeting

10th June, 1952

President: J. G. Mulvey.

Vice-President: J. N. Lowry.

Committee: G. A. L. Beswick, C. L. Crooks, A. E. Davies, A. S. Gilchrist, R. H. Haggerty, L. A. Harris, Dr F. N. Harvey, R. C. Holt, J. B. McIntyre, A. E. O'Meara, T. F. Pickett, O. Somerset-Smith, W. A. Whyte, E. A. Williams.

Supernumerary: G. E. Mills, S. G. Peterken, B. J. Rossiter.

Secretary: I. L. Prime.

A major increased item of revenue, £550, in the balance sheet resulted from the fee for Fishing Licences being raised to £2.

On the other hand a decrease of £223 was shown in the sale of Shooting Licences.

Farm Property: Again the Farm was closed for most of 1951; but in 1952 visitors were admitted Monday, Tuesday and Friday, 9.30-10am.

Anglers' Diaries: Only one in sixty anglers returned diaries, (in two other Societies, the ratio was one in six!) Another appeal was launched, and again Central Hawke's Bay was commended for sending in the bulk of the few diaries returned.

Shooters' Diaries: In an endeavour to assist the Wildlife Department in a National Survey, the 1952 Game Licences were printed with an attached diary form, which the Department asked to be returned at the end of the season.

Banding: Twenty-five Internal Affairs Department duckbands were returned by Shooters in the Hawke's Bay Acclimatisation district. Twenty Mallards were banded later in the season.

Rules of the Society: The resolution, providing for postal voting in the election of officers of the Society, and passed at the previous Annual General Meeting, was not approved by the Minister, because of pending legislation, possibly affecting the whole of the Society's constitution.

Work of the Freshwater Fisheries Section of the Marine Department. A three-page summary of the year's activities of the above body was included in the Hawke's Bay Society's annual report.

1952-1953

Annual Meeting

14th July, 1953

President: J. G. Mulvey.

Vice-President: J. N. Lowry.

Committee: G. A. L. Beswick, L. G. Bone, C. L. Crooks, R. H. Haggerty, L. A. Harris, Dr F. N. Harvey, R. C. Holt, J. B. McIntyre, A. E. O'Meara, T. F. Pickett Snr., T. F. Pickett Jnr., O. Somerset-Smith, G. W. Stewart, W. A. Whyte.

Supernumerary: B. Bliss, G. E. Mills, S. G. Peterken, B. J. Rossiter.

Secretary: I. L. Prime.

Finance: A surplus of approximately £300 resulted, despite a decrease of £335 from the sale of Fishing Licences—accounted for no doubt by the exceptionally wet season. The revenue from Shooting Licences, however, was increased by £186, and admission fees to the Game Farm by £89.

Farm Property

Fish: Five additional outside races were constructed for holding fry. The total seven races thus became capable of holding 350,000 fry.

The large-scale stripping plan organised for Sandy Creek (Lake Tutira) was disappointing as only 100,000 of the 310,000 ova stripped were reared for liberation. The failure of the Tutira ova, plus the inability to obtain fry from the Internal Affairs Department or from other Societies resulted in no liberation of Brown trout during the year.

Anglers' Diaries: The annual Diary scheme was discontinued, and in its place the Internal Affairs Department planned for the compilation of a diary at five-yearly intervals.

Further floods resulted in another disappointing fishing season, the Marakeke stream being the highest in memory.

Game:

Shooter's Diaries: The response from shooters was very disappointing, only 34 diaries being returned. Even so, they made interesting reading. The 34 shooters bagged a total of 806 ducks, of which 447 were shot during the first week-end. The total bag was made up of 533 Grey, or Spoonbill, 188 Mallard and 85 Paradise. In addition to ducks, the bags contained 58 Swan, 108 Puke-ko, 11 Pheasants and 55 Quail.

Kiwis: During the year three additional Kiwis were received at the Game Farm.

Pheasants: The disease, which was noted in the pheasants the previous year was diagnosed as avian tuberculosis, and on advice from the Department of Agriculture the whole flock at the Game Farm was destroyed. The loss to the Society was a severe one, but it was gratifying the way other Societies and private breeders came to the rescue with gifts of eggs and pheasant chicks: from Tauranga 400; Franklin 61; Paraparumu 540; Rotorua 200; and E. A. Higgins, Whangarei, 500.

The new pens that were immediately erected elsewhere on the Farm Property housed only sufficient birds to build up the breeding flocks. Thus no birds were liberated in 1953, and that season was declared closed for pheasants.

Curator: During the year, Mr S. F. Roberts left the Society's service, and was replaced by Mr K. E. Francis, who took up duties 9th April, 1953.

President: J. N. Lowry.

Vice-President: Dr F. N. Harvey.

Committee: G. A. L. Beswick, L. G. Bone, C. L. Crooks, R. G. Haggerty, L. A. Harris, R. C. Holt, J. B. McIntyre, A. E. O'Meara, T. F. Pickett, Snr., T. F. Pickett, Jnr., G. Rusbatch, O. Somerset-Smith, G. W. Stewart, W. A. Whyte,

Supernumerary: B. Bliss, S. H. Heighway, T. McHardy, G. E. Mills, D. Mulholland, S. G. Peterken, B. J. Rossiter.

Secretary: I. L. Prime.

The Annual Balance date was changed from 31st March to 31st August, in 1954, and therefore all facts and figures for that Annual Report covered a period of seventeen months.

Farm Property: Over £800 was spent on improvements to the residence attached to the Game Farm; concrete races were extended; the new pheasant pens were completed; and the brooder houses were renovated.

Pheasants: The Committee of Management, following the pheasant losses, embarked on a pen-breeding scheme, whereby approved persons were issued with free eggs to breed pheasants for ultimate liberation by the Society. So successful was the project, that Mr Francis, the Curator wrote a booklet on the subject, many other Societies later putting its advice into practice.

Ducks: Following the success of the pen-breeding scheme for pheasants, the staff at the Game Farm embarked on a duck-breeding project. The ducks were bred on the Farm, and distributed as day-old ducklings. The following year eggs were given to breeders, some breeders taking day-old chicks, or half-grown ducks. The Mallards were increased and liberated on suitable local waters, including the Ahuriri Lagoon. Over 300 birds were banded. Pairs of adult birds with clipped wings were placed on suitable water in the district to breed naturally. As was hoped, they attracted other breeding birds, that helped to build up colonies.

Wildlife Act, 1953: The big difference that the Wildlife Act, 1953, made to the Hawke's Bay Acclimatisation Society was that all holders of either a fishing or a shooting licence became members of the Society without further payment, upon making written application for membership annually.

Under the new Act, all Societies had to be approved by the Minister of Internal Affairs.

President: J. N. Lowry.

Vice-President: Dr F. N. Harvey.

Committee: G. A. L. Beswick, L. G. Bone, C. L. Crooks, J. C. K. Fabian, R. H. Haggerty, L. A. Harris, R. C. Holt, J. B. McIntyre, A. E. O'Meara, T. F. Pickett Snr., G. Rusbatch, O. Somerset-Smith, G. W. Stewart, W. A. Whyte.

Supernumerary: S. H. Heighway, F. J. Jane, T. McHardy G. E. Mills, D. Mulholland, S. G. Peterken, B. J. Rossiter.

Secretary: I. L. Prime.

Finance: As the presentation of Accounts took a different form under the new Wildlife Act gazetted the previous year, the secretary was unable to produce comparable figures, but suffice it to say that the actual result of the year's operation was a loss of £1063.

Farm Property: New farm machinery was purchased, and an acre of land planted in lucerne and permanent pasture.

Trout Liberations: In scope and variety, liberations were more extensive than ever before, but unfortunately the Hatcheries at Turangi were unable to supply the 300,000 Rainbow eved ova ordered, because of the late run of spawning fish in the Taupo area. The conservator of Fish and Game at Rotorua came to the rescue with a token consignment of 25,000 ova. The order of 100.000 Brown ova placed with the Tasmanian Fisheries Commission was again late, but owing to the splendid co-operation of National Airways Corporation in icing the ova overnight and in transit to Napier, the consignment was saved, but the ova all had to be hatched at the Farm Property, where they were kept to the fingerling stage.

Vibert Boxes: The system of liberating Rainbow trout from Vibert Boxes was adopted in 1945 for the first time in New Zealand by the Hawke's Bay Society. The liberation of 20,000 Rainbow ova was undertaken by numbers of kindred sporting bodies throughout the Province.

Pheasants: All the old condemned pens were brought back into use mid-season, and cleared of fescue. The Game Farm released 552 pheasants, while nearly 400 were produced by pen breeders.

Kiwis: The Kiwis continued to be the chief source of attraction, but Mr Francis was responsible for assembling more exhibition birds—different types of rare pheasants, wekas and peacocks. President: J. N. Lowry.

Vice-President: J. G. Mulvey.

Committee: G. A. L. Beswick, L. G. Bone, J. C. K. Fabian, R. H. Haggerty, L. A. Harris, R. C. Holt, J. B. McIntyre, A. E. O'Meara, T. F. Pickett, G. Rusbatch, O. Somerset-Smith, G. W. Stewart, W. A. Whyte, H. M. Winlove.

Supernumerary: J. C. Greene, S. H. Heighway, F. J. Jane, T. McHardy, S. G. Peterken, W. Welsh.

Secretary: I. L. Prime.

Finance: Up to this particular year, the Society's Accounts had been presented on a cash basis, but were then changed to show a complete statement of the activities for the year. The change resulted in the transfer to Accumulated Funds of a substantial sum, representing amounts outstanding from previous years.

Farm Property: Surplus areas continued annually to come under cultivation, and in particular that year a piece was used by Mr M. Boyle for market-gardening.

Trout: Three consignments, totalling 400,000 ova were received from Turangi. The first lot was distributed mainly in Vibert Boxes, 100 boxes containing roughly 120,000 ova. Unfortunately few survived the September floods. The second lot arrived while floods were still widespread, so the ova were placed in the Society's Hatchery to be raised to fingerlings. The third lot was wholly distributed in the remaining ninety-six Vibert Boxes

Vibert Boxes were widely distributed in rivers and streams from the Esk Valley to Waipukurau, and the boundary of the "Brown trout" watersheds.

Tending Fry: Not long after taking over the office of Curator, Mr Francis evolved a new method of feeding the fry at the Hatchery. The food was mixed with water, and frozen into blocks, which were suspended in racks above the young fish. As the blocks melted and dripped into the water, a steady supply of food reached the fish

Pheasants: Over forty farmers assisted in the pen-breeding scheme, producing just over 500 pheasants. From the Farm 560 birds were banded and released.

Ducks: From the Game Farm angle the duck breeding was not very successful, but Mallards increased, though the Grey and the Spoonbill scarcely held their own. The President suggested that a pen-breeding scheme similar to that for pheasants be instituted for Mallards, but nothing came of it.

Research: A short-time research survey initiated by the Society was carried out by the Freshwater Fisheries Branch of the Marine Department, Mr R. Baud being stationed at Tutira during spawning season. As a result, a valuable report, incorporating specific recommendations of an almost revolutionary nature was received by the Society. In general, anglers were warned that they would need to be prepared to encounter radical changes advised by Research Officers.

Almost simultaneously appeared a booklet by Dr Kaj Westerskov, a Government biologist, "Pheasant management and Shooting in New Zealand", its general tenor a complete change of approach to the breeding of pheasants, as practised throughout the country.

Rangers: A 30-strong Rangers' contingent attended a refresher course at the Game Farm in the Autumn.

1956-1957 Annual Meeting 26th November, 1957

President: J. N. Lowry.

Vice-President: J. G. Mulvey

Committee: J. C. K. Fabian, J. C. Greene, R. H. Haggerty, L. A. Harris, S. H. Heighway, R. C. Holt, J. B. McIntyre, D. S. Mitchell, S. G. Peterken, G. Rusbatch, G. W. Stewart. R. I. Unwin, W. A. Whyte.

Supernumerary: J. McHardy, W. Welsh.

Secretary: H. M. Swinburn.

Farm Property: Extensive plans were advanced to construct a duck pond to show a pattern of a suitable habitat for ducks. The Hawke's Bay Catchment Board arranged to take the levels without charge, and an Executive member of the Society subsequently arranged for the excavation.

A new Kiwi pen was constructed. A total of 4179 persons visited the Game Farm through the year. Organised parties of school children brought the total up to 5000.

Increased figures for pheasants; banded and released from the Farm, 670; pen-breeding scheme, 469.

Research: Progress has always had as many adherents as dissidents, but many anxious heads, gradually began to nod, not up and down, but side to side, at the iconoclastic recommendations that were finding their way into fishing and game research. No longer were the rearing and liberation of both fry and fingerlings considered worth the cost, and Societies began to receive advice to abandon the scheme. Though still in the experimental stage, the Vibert Box practice was the method of liberation in favour.

Regarding pheasant breeding, a statistician calculated that in many districts the cost of liberating one pheasant cost nearly twice as much a shooter's licence!

The large Government Farm at Ngongotaha had been recently closed down, because it was found that buying young pheasants from a private breeder was more economic. Dr K. Westerskov emphasised that the improvement of habitat was far more important than the liberation of articially reared pheasants. He considered that a large proportion of liberated birds never survived to reach the challenge of a gun.

The answer seemed to be the practice of liberating where the habitat was attractive to the pheasants. For that reason suitable areas were closed and breeding areas established by the Society, much to the opposition and criticism of not a few members. Swallowing the advice of research teams from home and abroad was a bitter pill for many of the older sportsmen.

Vermin: The payment of bounties on vermin, too, was considered out of date, and a great waste of money. Research officers indicated that less damage was done by hawks and other vermin than most shooters believed. Research had proved that healthy birds, given the suitable habitat, can escape predators. With unsuitable habitat, the casualties were high.

New Rules: The amended rules as required by the Wildlife Act, 1953, were submitted to a special meeting of members of the Society on 30th April, 1957, and were adopted, subject to several amendments. The approval of the Minister was subsequently obtained, for the rules came into force from the date of the next Annual General Meeting—26th November, 1957.

Pond Baiting: Although permission was obtained from the Minister for the baiting of ponds, rivers and lakes in the Hawke's Bay Acclimatisation district for the 1957 season, further baiting was prohibited by the Department.

1957-1958 Annual Meeting 26th November, 1958

President: J. G. Mulvey.

Committee of Management

Napier District: J. G. Greene, L. A. Harris, R. C. Holt (Vice-President), J. B. McIntyre.

Hastings District: R. G. Haggerty, J. N. Lowery, G. Rusbatch, R. J. Unwin. Central H.B. District: H. Haycock, S. G. Peterken.

Southern H.B. District: G. G. Cameron, K. B. Jameson.

Farming Representative: (Non-voting) D. S. Mitchell.

Special Representative: (Non-voting) J. C. K. Fabian.

Secretary: H. M. Swinburn.

Finance: The Hawke's Bay Electric-Power Board debentures having matured, were lodged, along with other funds not immediately required, in the P.O.S. Bank, thus adding £2500 to that account.

Farm Property: An Assistant Curator, Mr D. G. Macalister, was appointed so that Mr Francis could be freed for field duties and ranging. More than sixty trees were planted to a plan organised by the District Forestry Officer. Repairs were made to boundary fences, fish-races and troughs, and a new pen was constructed for the experiment on the possibility of raising quail in captivity.

Visiting to the Game Farm was further encouraged by opening the farm to visitors six days a week for nine months of the year. Attendance increased by 50% to 6767.

Trout: From Turangi Hatchery, 200,000 Brown ova were despatched in Vibert Boxes, ready for distribution, the Hatchery keeping 10,000.

The Dannevirke liberation was only moderately successful, due to flooding, with consequent silting up of boxes. As no further boxes were available of the first batch of the 300,000 Rainbow ova 160,000 were left at the Society's Hatchery, to be brought up to the unfed fry stage.

Because the quality of the water supply for the Hatchery had deteriorated over previous years, an inspection by the Marine Department was requested and carried out. Two important facts to emerge were that the water temperature was too high for the satisfactory raising of Brown trout; and that the maximum quantity of ova to be handled successfully at one time should be approximately 150,000. The latter finding, plus the fact that no further supplies of Vibert Boxes were allowed to be imported, suggested that future policy at the Hatchery would be the raising of ova to the unfed fry or to the fingerling stage.

Lake Tutira: The experimental season remained in progress, but stocks of fingerling and yearling fish were held at the Hatchery awaiting the Marine Department Research Officers' permission for their liberation. The establisment of smelt in the lake was an innovation under discussion.

Pheasants: As a result of the Society's policy of establishing pheasant population on various farming properties (closed to shooting for the previous three years) the time was considered ripe to seek the permission of some owners to allow the shooting of pheasants on their land. Agreement was reached, that in the 1959 season, selected farmlands would be open to pheasant shooting.

The prohibitive cost of raising pheasants at the Game Farm forced the committee to consider reducing the number of birds reared; and in the event of success in the rearing of quail, further work with pheasants might possibly be discontinued.

Ducks: The wintering of ducks from the Game Farm, at Eland Station continued to prove successful, over 300 ducks benefitting before liberation throughout the district.

Anglers' Hut: The Dannevirke Angling Club erected an Anglers' Hut at Oringi, the Society providing some financial assistance.

1958-1959 Annual Meeting 24th November, 1959

President: J. G. Mulvey. J. N. Lowry.

Committee of Management:

Napier District: H. E. Algar, A. Bowes, J. C. Greene, R. C. Holt, D. S. Mitchell.

Hastings District: S. H. Heighway, I. Joll, G. Rusbatch, R. J. Unwin, J. N. Lowry (Appointed President during year.)

Central H.B. District: S. G. Peterken, H. M. Winlove

Southern H.B. District: K. B. Jameson, E. V. Lawn.

Farming Representative: F. Field.

Special Appointees: J. C. K. Fabian, L. A. Harris, J. G. Mulvey, D. R. Neill.

Secretary: H. M. Swinburn.

Finance: The Annual Report showed a loss of £199, due to the cost of £270 for the reconstruction of the pheasant pens. The committee planned to increase the entrance fee for visitors.

Farm Property: Due to the illness of one member, the curtailed staff found it possible to open the Game Farm to visitors for only four instead of the nine months prescribed. Even so, the record of 7163 people visited the farm. This figure did not include school parties. Increased hours and days were planned, but the Kiwi was to be exhibited only once a day.

Trout: Air transport for the liberation of Vibert Boxes was an innovation, made possible by an improvised landing strip beyond the Kaweka Range. A private plane undertook the project to stock the upper Ngaruroro.

Lake Tutira: Recommendations forwarded by the Secretary for Marine, following the lake research, which ended 30th April 1959.

- 1. That the lake be opened for fishing all the year round.
- 2. No size or bag limits need be applied.
- 3. Liberations of specified number of fin-clipped fingerlings to be made in 1960 and 1961.
 - 4. In 1961 a further survey of the stock to be made.

Remit to the North Island Council: "That a clear week-end be left between the closing of the fishing season and the opening of the shooting, so that anglers will not have their fishing disturbed by shooters engaged in building mai-mais."

Pheasants: More pheasants were shot that season than for many years. A scheme for the issuing of day-old chicks to pen breeders was suggested for the following season.

Quail: The experimental raising of quail at the Game Farm was only moderately successful, due possibly to the fact that the pens were too small. They were enlarged.

Vermin Destruction: Dr F. N. Harvey offered to conduct a campaign against the hawk menace.

Ranging: A week-end Ranging Course, attended by rangers from all over the Province, was held at Te Pohue farm, prior to the opening of the shooting season.

1959-1960 Annual Meeting

22nd November, 1960

President: J. N. Lowry.

Committe of Management:

Napier District: A. Bowes, J. C. Greene, L. A. Harris, J. B. McIntyre.

Hastings District: S. H. Heighway, J. Joll, G. Rusbatch, R. J. Unwin.

Central H.B. District: M. A. J. Adam, J. D. Aitken.

Southern H.B. District: K. L. M. Cawsey, E. V. Job.

Farming Representative: D. S. Mitchell.

Special Appointee: D. R. Neill.

Secretary: H. M. Swinburn.

Finance: A surplus of £969, due to there being only two full-time employees at the Game Farm, compared with three the previous year; and due also to the increased Shooting Licences—2432 as against 2263 previous year.

Farm Property: Existing troughs at Hatchery, in use for over twenty years, were replaced with the concrete type used in Government Hatcheries.

A new house for the Assistant Curator was agreed upon, both for his sake and for the Society, whose fears, that the Game Farm was too often left unattended, would be thus obviated.

Gross receipts from visitors amounted to £668.

Trout: Trough liberations were experimented with, by placing a number of discarded troughs from the Hatchery in springfed streams. Two sites were chosen—Adams Creek (tributary of Tukipo) and the old hatchery at Mangatera. The troughs at Mangatera and two of those at Adam's Creek hatched well, but the remaining two at Adam's Creek suffered losses due to silting.

Rainbow hatched satisfactorily, but losses were experienced in the Brown.

Lake Tutira: "Sandy Creek" was surveyed, and much valuable information passed on by the Marine Department. The fish population was predominantly Brown trout, contrary to local opinion. Adequate food supply was available for a much larger population, the limited number of fish in the lake being mainly due to the grossly inadequate spawning facilities. The weed problem continued to be unsolvable, and would remain so, as long as aerial top-dressing was practised.

Waipunga and Ripia rivers: Approval was obtained for Hawke's Bay anglers to fish the Waipunga and Ripia rivers on the Hawke's Bay licence.

1960-1961 Annual Meeting 28th November, 1961

President: J. N. Lowry.

Committee of Management:

Napier District: A. Bowes, D. S. Mitchell, L. A. Harris, J. B. McIntyre.

Hastings District: I. Joll, G. Rusbatch, A. C. Russell, R. J. Unwin.

Central H.B. District: K. L. M. Cawsey, E. V. Job.

Southern H.B. District: K. L. M. Cawsey, E. V. Job.

Farming Representative: J. H. Nairn.

Special Appointee: D. R. Neill. Secretary: H. M. Swinburn.

Finance: Income increased by over £600, mainly due to the increased number of shooting and fishing licences.

Farm Property: Tendered price, offered by the Society for a two-roomed cottage for sale and removal from Hastings, was accepted. The result, a new Meeting Room and a small office at the Game Farm.

Trout: Queenstown Hatcheries supplied 200,00 Brown ova by road, rail and sea; they arrived in excellent condition with the original ice packing still largely unmelted.

New feeding methods were tried out during the year, on the advice of a commercial trout farmer in U.S.A. His suggestion was to give the fish food in pellet form. A change of diet was also experimented with at the Hatchery. The results of both these innovations were highly satisfacory, the fingerlings, in particular, gaining size and weight at a greatly increased rate.

Staff: The resignation of Mr Francis in May meant that Mr Macalister became Curator. The assistant staff were Mr Gordon Smith and Mr B. Marnoch.

Mangatera Hatchery: Members of the Dannevirke Angling Club carried out the required alterations to the Hatchery to bring it back into use.

Lake Tutira: The lake was again open for fishing throughout the year. Several tagged fish were caught:—

1/7/61	Rainbow Jack	18	inches	$3\frac{1}{2}$ lbs.
13/5/61	Rainbow Hen	19	inches	$3\frac{1}{2}$ lbs.
4/6/61	Rainbow Jack	$18\frac{3}{4}$	inches	$2\frac{3}{4}$ lbs.

All these fish were liberated as 5-inch fingerlings in August, 1960.

Liberations of Rainbow were made with the consent of the Department, as follows:—

1960	November	357
1961	June	430
1961	July	3000
1961	August	3000

On the advice of the Department only Rainbow fingerlings were released in order to attempt to convert the lake to a Rainbow rather than a Brown trout fishery.

Pheasants: Of the 505 birds liberated, a number of cocks were placed on riverbeds to provide sportsmen with more birds for the shooting season.

Ducks: The 1961 duck-shooting season was the best for several years in most parts of the district. Many limit bags. The preponderance of Mallards over Greys was again evident, a fact in general throughout the North Island.

Endeavours to have the Wanstead Lagoon retained as a breeding area for wildfowl were unsuccessful.

Quail: The liberation of quail, trapped in the Rotorua area, proved so successful, that application was made to the Conservator of Wildlife for more birds for Hawke's Bay.

Ranging: The usual course was held, but in addition another course was organized for honorary rangers under the Fisheries Act. Over thirty rangers attended, the Senior Field Officer of the Department of Internal Affairs, Mr L. W. Angus, being the principal speaker.

Interavailability of Shooting Licences: By paying an additional ten shillings, a shooter was eligible for a sticker to be attached to his licence, thus enabling him to shoot in another Society's district, except on the opening week-end.

Automobile Association: Co-operation between the A.A. and the Society resulted in the words "Trout Stream" being added, where applicable to signs on bridges giving names of river or stream.

1961-1962 Annual Meeting 27th November, 1962

President: J. N. Lowry.

Committee of Management:

Napeir District: A. Bowes, I. A. Harris, J. B. McIntyre, D. S. Mitchell.

Hastings District: I. Joll, G. Rusbatch, A. C. Russell, R. J. Unwin.

Central H.B. District: M. A. J. Adam, J. D. Aitken.

Southern H.B. District W. R. Anderson, E. V. Job.

Farming Representative: J. H. Nairn.

Special Appointees: L. E. Cooke, R. W. Gunn, M. P. Clarke.

Secretary: H. M. Swinburn.

Finance: A surplus of £1697 shown in the Annual Report was due to several factors—Fishing licences increased by £423, Shooting licences by £100, and Admission fees were up by £207. Wages were lower by £684 and Ranging expenses by £419.

Farm Property: The Meeting Room and Office Building were completed and 20 chairs and 5 tables were purchased from the Napier Park Racing Club Sale. The Scinde Anglers' Club built a small kitchen on to the building.

Several more birds were obtained for display—a peacock, a pair of Canada Geese, and some native parakeets.

A second pond was excavated, allowing for some of the overflow from the main pond.

Over 11,000 visitors looked over the farm during the year, £900 being paid in entrance fees. Of that substantial sum £246 remained after deducting all expenses.

Kiwis: For the first time for several years, one of the Kiwis at the Farm laid some eggs, but unfortunately all three eggs were found to be infertile.

Trout: As an experiment several thousand fingerlings were released in the farm pond in order to acustom them to living in larger volumes of water. This proved successful, but some difficulty arose later in transporting some of them to Tutira. One consignment had to be hurriedly released at Tangoio Stream. Apparently the "wild" fingerlings became so excited when placed in the cans for transport that they used up more oxygen than was expected. Later a request was sent to the Marine Department for a tranquillizer (for the fingerlings!!!).

Mangatera Hatchery: Once again the old hatchery was in use, up to its maximum capacity, the liberation of unfed Brown trout fry being its objective.

Pheasants: Many discussions took place throughout the year regarding pheasant policy. Much divergence of opinion. (A summary of the Pheasant breeding programme from 1943-1962 appeared at the end of the Annual Report.)

Ducks: The committee continued its efforts to obtain better wildfowl habitat, and produced a list of trees suitable for planting round dams and lakes. (List included in the Annual Report.)

A letter from the Controller of Wildlife indicated the department's concern for the provision of wildfowl habitat—

"This Department is concerned at the very rapid decrease of the swamps and open water areas vital to the survival of all water birds. "Some of the native species are already extremely rare and could in time become extinct if they are deprived of their habitat through continued drainage.

"Waterfowl are also dependent on swamplands to a large extent for feeding and successful breeding.

"Wherever possible it is desirable that conservation organisations purchase swamps, lakes, and their margins in order that they can improve such places to make them more attractive to waterbirds.

"Although arificially constructed water races are of some value they can never efficiently replace the once large areas of natural habitat that are now almost completely drained."

Partridges: During the year, the committee applied for a liberation of partridges, and were allotted 80 young birds from the Bulls' Game Farm. They were liberated in several areas at Twyford, near Hastings.

Chukor: The possibilities of Chukor breeding at the Farm went beyond the discussion stage; and some eggs, and perhaps birds were ordered.

Ranging: Managers of commercial freezers were warned to keep a register of the owners of the birds in their freezers, a requirement under the Wildlife Regulations.

North Island Council: The Society's representatives attending the annual meeting of the Council of the North Island Acclimatisation Societies were instructed to bring up again the question of feeding. During the normal dry summer of Hawke's Bay there is so little food for ducks that unless they are fed, they are forced to fly to other parts of the country where food is more plentiful; and once the ducks are gone they usually stay away.

The Hawke's Bay request was that feeding should be allowed in that Province up to the day before the opening of the season.

Request refused.

1962-1963 Annual Meeting 26th November, 1963

President: J. N. Lowry.

Committee of Management:

Napier District: A. Bowes, J. B. McIntyre, D. S. Mitchell, A. Stafford.

Hastings District: I. Joll, G. Rusbatch, A. C. Russell, R. J. Unwin. Central H.B. District: M. A. J. Adam, J. D. Aitken. Southern H.B. District: W. R. Anderson, E. V. Job.

Farming Representative: R. W. Gunn.

Special Appointees: L. E. Cooke, J. H. Nairn.

Secretary: H. M. Swinburn.

Finance: A surplus of £1665 was reported. Although income had increased by £1267, expenses were up by £1300. Fishing Licences rose by £987, and Shooting, £226.

The partridge project was responsible for £588 on the debit side.

Farm Property: Low water pressure in the summer made it advisable to install a larger diameter pipe line; 400 feet of 1½ inch piping was bought, and a satisfactory pressure was obtained.

Deep-Freeze: The storing of birds confiscated from persons charged with shooting offences, had been a problem, solved in 1963 by the Society's purchasing an 18 cubic feet deep-freezer.

Instruction for Anglers: In September a Field Day for Anglers was conducted by the Scinde Anglers' Club at the Game Farm, over 200 anglers attending. The Scinde Anglers' Club also undertook the re-construction of an anglers' hut at Mohaka. Following permission from the Commissioner of Crown Lands to erect a hut on the Mohaka river, the Society purchased two pre-fabricated huts from the Mohaka Bridge contractors, dismantled them, and transported them to the hut-site, where the Scinde Anglers' Club took over.

Record Sized Trout: As a result of an inquiry by the Marine Department for details of the largest trout caught in Hawke's Bay rivers, the following figures came to light.

Rainbow trout 19lbs. Tuki Tuki, 1949, Mr W. Potham.

Brown trout, 15lbs. Central Hawke's Bay, 1916, Mr H. Butler.

Mr W. A. Gunn, ranger, Tutira, reported that one angler caught in one day—Male Rainbow 8lbs. 5ozs., 25¼ inches; Female Rainbow 7lbs. 9ozs., 24¾ inches; Male Brown 7lbs. 8ozs., 25¾ inches.

Perch: After repeated requests by various members of the Society, arangements were made to obtain 60 perch from the Wellington Society's Hatchery, Masterton. The fish were subsequently liberated in various land-locked lakes and dams in the district.

Cochrane's Creck: This spawning stream had become seriously overgrown, so the Committee arranged for clearing operations to be carried out with the assistance of the property owners and the local Angling Club.

Ducks: The following summary was obtained from 57 shooters' diaries.

Species	1st week-end	Balance of season	% of total	% last year
Grey	223	76	22.3	19.6
Mallard	377	327	52.5	65.8
Spoonbill	26	8	2.6	1.0
Paradise	32		2.5	3.3
Swan	2		-	-
Pukeko	60		4.5	5.0
Pheasant	121		9.0	2.4
Quail	88		6.6	2.9

Endorsement of Fishing Licences: The scheme of interavailability of licences already existing between Wellington, Rotorua and Hawke's Bay worked so satisfactorily, that arrangements were set in train to include Wanganui and Waimarino.

Partridges: A further consignment of partridges was received in April, 1963, from the Bulls Government Farm, 60 being liberated again at Twyford, and 40 across the Ngaruroro at Korokipo. Indications showed that some of the previous year's liberation had survived to breed.

Over 80 bantams were used to hatch the partridge eggs from the Bulls Farm, as the technique for the incubator-hatching of partridge eggs had not been mastered. In fact the job of looking after partridges or their eggs had proved a full-time one, for one member of the staff.

The time-consuming aspect of the partridge rearing became a major factor in the long-deferred decision to reduce the number of pheasants to be raised. Consideration was given to a scheme to interest poultry breeders in the rearing of day-old pheasant chicks up to seven or eight weeks. The figure of seven shillings per head was tentatively suggested as the price the Society would pay per eight-week-old-chick. A basic stock of 200 birds would be maintained at the Farm.

Magpies: Damage by magpies to both native and game birds was reported as being serious enough to bring the matter to the notice of the Department.

Lake Hatuma: Once again the Society lodged a complaint with the Hawke's Bay Catchment Board against the proposal by neighbouring property owners to vary the lake level. Briefly the proposals involved the lowering of the level during winter to 398 feet, and the raising of the level by stages to 402 feet for the summer.

President: J. N. Lowry

Committee of Management:

Napier District: A. Bowes K. E. Francis, D. S. Mitchell, A. Stafford.

Hastings District: I. Joll, G. Rusbatch, A. C. Russell, R. J. Unwin.

Central H.B. District: M. A. J. Adam, J. D. Aitken.

Southern H.B. District: W. R. Anderson, E. V. Job.

Farming Representative: R. W. Gunn.

Special Appointees: L. E. Cooke, J. H. Nairn.

Secretary: H. M. Swinburn.

Finance: A surplus of only £260 was reported, but reasons for this, still made for a satisfactory financial position.

The drop of £178 in the summer fishing licences was off-set by an increase in the sale of winter licences. Shooting licences were down £56, but a partridge subsidy from the Game Management Fund, of £277 more than off-set that. A donation of £100 was received towards the Cochrane Creek project.

Farm Property: Improvements carried out in the incubator room provided for more guaranteed results from the hatchings. Wire-netting covers were constructed to cover the recently repaired fish-races, thus preventing the ducks from getting at the fingerlings.

Even though staff difficulties made it necessary to reduce the visiting days to three a week, the total number of sight-seers was over 12,000.

Salmon: A consignment of 2000 eyed ova was received from the North Canterbury Society in May, 1964. A successful hatch was achieved, and in July 1200 unfed fry were liberated in a tributary of the Mohaka. The remainer were retained a the Hatchery as fingerlings.

The fact that over 30,000 Rainbow fingerlings were liberated from the Game Farm last season shows how successful was the work carried out at the Hatchery. One of the main factors in this achievement was the construction, under the supervision of Mr A. Bowes, of a fish transport tank. The tank was able to be carried by either of the Farm trucks, and compressed oxygen kept the water suitably aerated.

Anglers' Huts: The Society's policy regarding the construction and operation of anglers' huts was formally included in its regulations:—

- Where a Club builds its own hut, the Society will usually assist with a grant. The hut remains the property of the Club, and is primarily for the use of Club members. An example is the Oringi hut at Dannevirke.
- Where the Society pays for the construction of a hut, even though it is erected by the members of a Club, that hut must be for the use of licence holders in general.

Six common-sense rules were drawn up for the running of the new hut at Mohaka. The hut was to be available to holders of full or half-season's Hawke's Bay Fishing Licences, and bookings could be made at the Society's secretary's office. A fee of 2/6 per person per night was charged, plus a refundable deposit of £2 for the key.

Freshwater Fisheries' Advisory Council: The 1964 meeting of the Council was held at the Game Farm, 19th and 20th March. A public meeting of anglers was held one evening to hear an address by Mr Cunningham of the Marine Department.

Electric Fishing Machine: The Society ordered one of the machines, which was as yet in the Marine Department specifications and blue-print stage.

Lake Tutira Board: The secretary of the Society, Mr H. M. Swinburn, was nominated to represent the Society and the Department of Internal Affairs on the Board, an appointment for a term of seven years.

Partridges: Of the 806 eggs produced during the season, 108 were sent to the Hobson Society on Department instructions. From remaining eggs 246 chicks were hatched but only 78 survived to adult stage. Forty of these were liberated at Korokipo, the balance held for breeding purposes.

Ducks: One of the poorest seasons for years, the average dropping from 18 birds to 11 per shooter.

The Game Committee inspected many dam sights and recommended the payment of subsidies totalling £285 for ten dams. This policy on the conservation and improvement of duck habitat had begun to develop into a major project of the Society.

Attendance of Members at Council Meetings: At a special meeting of the Society, 30th October 1963, Rule 23 was amended to read "that all meetings of the Council shall be open to members of the Society providing always that, upon a vote of not less than three-quarters of those Council members present, any matter for discussion upon the agenda may be taken in Committee."

At the Annual Meeting, 26th November, 1963, it was decided to revise some of the rules. A Sub-Committee was formed, consisting of the Chairman, four Committee members and four members of the Society, one from each district. Their proposed amendments to Rules 8 and 29:—

Rule 8. That representation on Council shall be four members for each district; of the sixteen representatives eight will resign each year.

Rule 29. That no major change in policy shall be made by the Council except by resolution of the Council, passed at a Meeting held after at least twenty-eight (instead of 21 as previously) clear days' notice of motion to all members of the Council, notice of such intention having also been given to the Society by advertisement in the local papers.

(The bold type referts to the suggested amendments.)

At the 1964 Annual Meeting, Rule 8 was altered to allow for increasing the Central and Southern Hawke's Bay representation from two to three members.

Staff: On the resignation of Mr Macalister to take up a position with the Marine Department in the South Island Mr T. B. Munro, who had wide experience of game and hatchery work in Scotland, was appointed.

Mr David Pike, engaged as Game Farm assistant during the year, became primarily responsible for the breeding side of the partridge and pheasant programs.

1964-1965 Annual Meeting 26th November, 1965

President: J. N. Lowry.

Committee: of Management:

Napier District: A. Bowes K. E. Francis, D. S. Mitchell, A. Stafford.

Hastings District: R. W. Gunn, I. Joll, G. Rusbatch, R. J. Unwin.

Central H.B. District: M. A. J. Adam, J. D. Aitken.

Southern H.B. District: W. R. Anderson, E. V. Job.

Special Appointee: L. E. Cooke.

Secretary: H. M. Swinburn.

Finance: The year's operations resulted in a surplus of £1615. Substantial reduction in expenses plus the 10/- increase in the shooting licence fee account in the main, for the higher income.

Unfortunately all the legal requirements were not complied with, when the fee was increased, and the Society's solicitors advised refunding the additional 10/-. Provision was accordingly made in the Society's Accounts. No partridge subsidy was received, but Fishing Licences showed a small increase. Although admission fees rose by £308 it was decided to allocate part of the Farm overheads against that income.

Farm Property: Because the pressure in the artesian bores supplying the Hatchery fell to a dangerous level after Christmas, a new bore was sunk at the far end of the property, resulting in an ample supply of water for all Game Farm requirements.

A new parakect pen was erected behind the Meeting Room where visitors could find it more easily, than in its previous position behind the garage.

Trout: Some Hawke's Bay rivers were again open for winter-fishing.

During June, 1965, 10,000 Rainbow fingerlings were liberated in Lake Tutira; and 10,000 unfed fry went into Sandy Creek in September.

With the co-operation of the Hawke's Bay Catchment Board and the Lands and Survey Department a map was planned showing Crown Reserves along rivers, and Catchment Board leases where anglers have access to rivers.

The recently organized new service arranged by the Society for anglers, whereby Napier and Hastings newspapers and the New Zealand Broadcasting Service supply, every Friday, details of river conditions for the following week-end, proved to be a most popular innovation.

Ducks: Dry conditions again resulted in a poor season. Of the ducks shot, 44% were got on the opening week-end.

Strong opposition to the amount of money spent the previous year on the conservation and improvement of duck habitat resulted in no further pond subsidies.

Endorsement of Shooting Licences: The fee paid between Hawke's Bay and Wellington Society members was raised to £1, on the insistence of the latter Society. The number of H.B. Licence holders desiring endorsements for Rotorua increased.

Instruction for Young Anglers: Due to the popularity of the young anglers' day conducted by the Scinde Anglers' Club, the Tutaekuri river was chosen as the venue for the 1965 outing. The young anglers were split into classes for instructions, and were then able to practise on the river which was netted off for the purpose, and in which trout from the Hatchery had been liberated for the occasion.

President: M. A. J. Adam. Committee of Management.

Napier District: A. Bowes, A. Duncum, K. E. Francis, D. S. Mitchell.

Hastings District: R. W. Gunn, I. Joll, A. C. Russell, J. R. Williams. Central H.B. District: J. D. Aitken, A. F. Sinclair, F. J. Staines.

Southern H.B. District: I. A. Anderson, W. R. Anderson, N. E. Smith.

Special Appointee: G. Rusbatch.

Secretary: H. M. Swinburn.

Finance: The year's operations resulted in a surplus of £247. compared with £1651 previous year. Although the number of shooting licences rose slightly, the net fees received fell by £286 compared with previous year. The value of fishing licences fell by £257, and in addition there was a levy of £323 for the Technical Field Officer scheme.

Farm Property: Routine maintenance was carried out, plus a new pheasant pen at the end of the existing row.

Visitors: For several years the Society has been aware of the problem concerning visitors to the Farm, and the consequent disruption of work for which the Game Farm was intended. The members of the Committee were unanimous that the visiting side must be divorced completely from the production side, and must be operated by separate staff.

As a major change in policy was involved it was decided to ask the views of members by means of a referendum.

- (a) The kiwis and display birds to be retained at the Game Farm under the separate management of the Society.
 - (b) The kiwis and display birds to be retained at the Game Farm under the control of some form of Wildlife Trust controlled by the Society.
- The kiwis and display birds to be removed from the Game Farm.

A total of 217 replies were received, and of these 109 were in favour of "2"; 63 in favour of 1 (b); and 42 in favour of 1 (a).

Subesquently a public meeting was convened at which the idea of a Trust was accepted.

Partridges: A comprehensive report on partridges in the district, prepared by the Curator of the Game Farm, Mr T. B. Munro, was included as an appendix in the Annual Report.

Salmon: A total of 1300 salmon parr were liberated in a tributary of the Mohaka river, at Pakaututu.

Lake Tutira. During the year 10,000 unfed fry and 400 tagged fingerlings were liberated. Of the tagged fingerlings, 38 were subsequently caught by anglers, and showed an average weight of 2lbs. and length, 15³/₄ inches. As the fingerlings were only 6-8 inches long when liberated in November, 1965, and the diaries cover the period from May to September 1965, the growth rate must be considered highly satisfactory.

Efforts begun several years previously to purchase or lease the 40 acres of land at the north end of the Lake from the Maori owners, achieved success during the year. A 50-year lease, rent free, was negotiated with the owners. The ranging position thus became clarified, and the area was ensured as a fishing water and habtitat for wildlife breeding.

Hydrologist's Report on Tutira: In August, 1965, the Hydrologist of the Hawke's Bay Catchment Board produced a comparison of Lake Tutira between 1925 and 1963.

- The lake is 490ft, above sea-level and covers 443 acres.
- 2. The lake level has risen by about one foot.
- There has been a reduction in mean depth of about 3½ft.
 This represents sediment from a catchment area of about 11sq. miles.
- Two exotic aquatic plants had become established: oxygen weed (Flodia Canadensis) and a close relative of Hydrilla Verticillata. The weed growth extends out to the 25ft. limit.
- Average temperature is 51° F. at 120ft, rising to 63° F. at the surface.
- The lake was formed by the massive collapse of part of the high ridge south of the lake.

Pond Feeding: The views of the Department on Pond Feeding were published and circulated to all Acclimatisation Societies, 28th September, 1966, and appeared as an appendix to the Hawke's Bay Acclimatisation Society's Annual Report.

Ducks: The 1966 season was an improvement on the preceding two years. A total of 54 diaries was received from shooters after the season. The average number of ducks shot per gun was 18.4 compared with 14.7 last year and 11.8 in 1964. Of the ducks shot, 40% were got on the opening week-end, compared with 44% previous year, and 64% in 1964.

President: M. A. J. Adam.

Committee of Management:

Napier District: A. D. Carruthers, A. Duncum, K. E. Francis, F. C. Garnham, D. S. Mitchell.

Hastings District: R. W. Gunn, G. Rusbatch, A. C. Russell, J. R. Williams.

Central H.B. District: A. W. Le Comte, D. S. Paget, A. F. Sinclair, F. J. Staines.

Southern H.B. District: I. A. Anderson, W. R. Anderson, N. E. Smith.

Secretary: H. M. Swinburn.

Finance: A surplus of \$3971 was reported. Fishing licences rose by \$960, and in addition the Technical Field Officer Levy for 1966, amounting to \$646 was refunded by the Marine Department. Fines recovered for shooting offences increased from \$14 to \$456.

Farm Property: A suggestion to establish the Game Farm and Hatchery at Dannevirke, where the Borough Council offered to provide 20 acres of land at a nominal rent, was considered by the Acclimatisation committee. It was agreed that it would be feasible to transfer the Game Farm, but the transfer of the Hatchery would give rise to problems, not the least the heavy cost, and the staffing. And there was always the question of adequacy of water at Dannevirke.

The Committee finally decided with regret that it was not possible to accept the generous offer of the Dannevirke Borough Council.

Visitors and Display Birds: The Hawke's Bay Wildlife Trust to whom the Kiwis and the Display birds were transferred, made arrangements for the temporary caging and care of the Kiwis at the Botanical Gardens, Napier, and the Display birds later went to the Dannevirke Domain.

Pheasants: For various reasons, disease and vandalism, etc., it was decided that the Society would discontinue its practice of hardening-off the pheasants in the Havelock North Cherry orchards. The total birds liberated was 716, and in addition 400 day-old chicks were sold to the Tauranga Society, plus 200 to the Otago Society, which also purchased 1000 eggs.

Partridges and Pheasants: Results of the year's breeding program were reasonably satisfactory, but the population would take years to be sufficient for shooting. In fact, the staff experienced considerable difficulty in rearing partridges as well as pheasants,

and the Committee decided that it was impracticable to raise both. Its final decision was that the staff should concentrate on pheasants and to purchase 200 partridges from a breeder in the Waikato, instead of breeding them on the Farm.

Ducks: The 1967 season was reasonably satisfactory, and more shooters appear to have shot a larger number of ducks. A total of 62 diaries provided the following averages:—Average number of ducks shot per gun was 27.2 compared with 18.4 previous year, and 14.7 in 1965. Of the ducks shot, 49% were shot on the opening week-end; 40% in 1966, and 44% in 1965.

Several dams were inspected and advice given on steps to improve them as duck habitat.

Opening Date of Angling Season: One of the subjects discussed at the Freshwater Fisheries Advisory Council meeting in April, 1967, was the suggestion that the angling season should be changed to open 1st June, and close 30th April. The reason for the tentative change was that the fishing grason did not coincide with the fiscal years of Acclimatisation Societies. The matter was left in abeyance, pending the consolidation of the Wildlife Act in the near future.

1967-1968 Annual Meeting 10th December, 1968

President: M. A. J. Adam.

Committee of Management:

Napier District: A. D. Carruthers, A. M. Duncum, F. C. Garnham, H. F. Perfect.

Hastings District: R. W. Gunn, G. Rusbatch, A. C. Russell, J. R. Williams.

Central H.B. District: A. W. Le Comte, R. H. G. Moore, D. S. Paget, J. F. Staines.

Southern H.B. District: I. A. Anderson, W. R. Anderson, Paul Hunter, N. E. Smith.

Members of Sub-Committees:

Ranging J. R. Williams*, A. D. Carruthers, R. W. Gunn, Paul Hunter, A. C. Russell, N. E. Smith.

Game: A. C. Russell*, W. Anderson, R. W. Gunn, D. S. Paget, H. F. Perfect, J. R. Williams.

Fish: F. C. Garnham*, I. Anderson, A. D. Caruthers, A. M. Duncum, R. H. G. Moore, G. Rusbatch.



G. Rusbatch, F. C. Garnham, N. E. Smith, R. W. Gunn, I. A. Anderson, R. H. G. Moore H. F. Perfect, A. D. Carruthers, P. Hunter, W. R. Anderson, A. M. Duncum, A. W. Le Comte T. B. Munro, J. R. Williams, A. C. Russell, M. A. J. Adam, H. M. Swinburn, D. Pike, F. J. Staines

- Finance: M. A. J. Adam[†], A. M. Duncum, H. F. Perfect, G. Rusbatch.
- Centenary: A. M. Duncum*, M. A. J. Adam (ex-officio), I. A. Anderson, A. D. Carruthers, H. F. Perfect, G. Rusbatch, A. C. Russell, H. M. Swinburn; and G. A. Bale and S. G. Peterken co-opted. (Chairman marked*)
- Life Members: I. B. Logan, J. G. Mulvey, J. N. Lowry, S. G. Peterken, L. Harris, J. B. McIntyre, R. H. Haggetry.

Game Farm Manager: T. B. Munro.

Secretary: H. M. Swinburn F.P.A. (N.Z.)

(For the one hundredth Annual Report and Balance Sheet see booklet.)

Acclimatisation Societies in New Zealand

Society				Ye	ar of	Establishment
Ashburton						1885
Auckland						1866
Bay of Island	ds					1895
Hawera	44					1879
Hawke's Bay	***					1868
Hobson			4			1901
Marlborough						1880
Mangonui-W	hanga	roa				1900
Nelson						1867
North Canter	bury					1863
Otago		**			(40)	1864
South Canter	bury					1895
Southland	**					1867
Stratford						1894
Taranaki						1873
Waimarino	***		***			1903
Waitaki Valle		nalga	matio	n of V	Vaima	ate
and Wai	taki)					1967
Wanganui						1868
Wellington	*		+1+		+	1871
West Coast	(ama	gama	ation	of G	rey a	nd
Buller)						1951
Westland						1888
Whangarei						1896

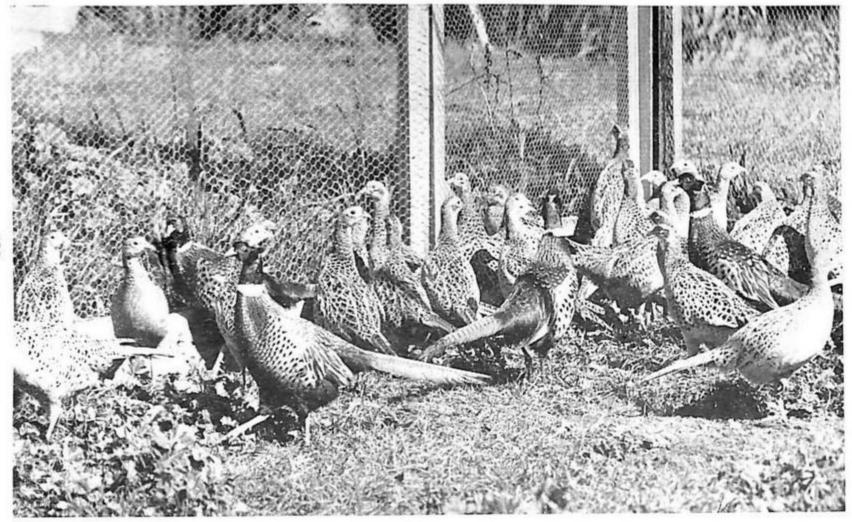
- N.B. (1) The Rotorua Acclimatisation District, controlled by the Department of Internal Affairs, was formed by severance from the Auckland District in 1907.
 - (2) The Southern Lakes Acclimatisation District was taken over by the Department in 1945 from the Lakes District Acclimatisation Society (established in 1879.)

The Game Farm

For the first sixty years after the formation of the Society, it seems there was no permanent base for game bird breeding in this district. Pheasants and Quail were purchased from other districts and liberated except for small numbers, which were held over until the end of the Shooting Season. The latter were apparently looked after by Committee members until the early 1930's when some pens were constructed on the property of the Society's Ranger, Mr F. D. Robson in Church Road, Taradale. These remained in use until the Game Farm was domiciled in Burness Road.

The Burness Road property, now known as the Greenmeadows Game Farm, was purchased in May, 1934, for £1050. It was not until 1944 that the final instalment on the purchase price was paid. Although intended originally as a Game Farm, in 1935 the Mangatera Hatchery Plant and Building were transferred to the Farm, where a Hatchery Building was erected and fish-races were excavated.

When the land was purchased, there were a dwelling and some outbuildings already on the property. Steps were immediately taken to erect Pheasant pens. The wire and standards for these were obtained from the Tomoana Showgrounds, and most of the construction was carried out with voluntary labour by members of the Committee. During the same year, work was commenced on the construction of brooder houses and a number of these were built between 1934 and 1938. Electric incubators were purchased and installed in 1938 and 1939. The War caused a temporary halt to the development of the Game Farm, but in 1948 a small Duck Pond was excavated and a number of native trees were planted on the property. Kiwi pens were added in 1949 and a Quail pen two years later. Substantial work was carried out in 1953 in altering and renovating the Curator's house and the outbuildings. Further renovations were carried out to the Garage and Workshop in 1957, and a large Duck Pond was excavated. thanks to financial support received from the then President, Mr J. N. Lowry. A tree planting was carried out in 1958, following a prepared by the District Forestry Officer. This mainly involved planting trees around the boundaries and round the edges of the Duck Pond. In the same year work was started on the repairs and reconstruction of the Pheasant pens, which were then requiring attention. This work was continued during the next six years.



Pheasant Pens - Acclimatisation Game Farm

Due to the increasing amount of work at the Game Farm, it was found necessary in 1960 to build a new Staff house for the Curator. The opportunity was taken to construct a new entrance to the Game Farm with a modern brick work gateway. For some years it had been found that although it was desirable to hold Management Committee Meetings at the Farm, there was no suitable room available. In 1960, therefore, a secondhand building was transported from Hastings and erected near the main gate to the Farm. One end of this was converted into a small office and subsequently a tearoom with Zip water heater was added, largely by the efforts of the Scinde Anglers' Club. The main part of the building was used as a Meeting Room, and in this were erected several glass cases containing mounted birds, both game and native. Among these are two Huias, which the Committee felt they were fortunate to obtain. The Meeting Room itself was equipped with table and chairs, and since then has been used to hold all meetings of the Management Committee, except those held in other towns.

When a second vehicle had been purchased, it was decided in 1963 to erect a new garage building to include an incubator room and storeroom. At this same time, the six brooder houses were replaced with new concrete-block type houses.

As the result of the decision to start breeding partridges, more pens were constructed at the rear of the Farm, and a wooden fence was put up to keep visitors away from the breeding section.

It had been found that the increasing number of visitors was becoming an embarrassment causing a great deal of waste time to the staff. As a result, in 1966 it was decided that, in spite of the substantial income received from admission fees, serious thought should be given to closing the Game Farm to visitors. This led to a decision by the Committee to ascertain the views of members by a postal ballot. The members were asked to choose one of the following alternatives:—

- (a) The Kiwis and Display Birds to be retained at the Game Farm under the separate management of the Society.
 - (b) The Kiwis and Display Birds to be retained at the Game Farm under the control of some form of Wildlife Trust controlled by the Society.
- The Kiwis and Display Birds to be removed from the Game Farm.

Replies to the Postal Ballot, totalling 217, were received, and of these, 109 were in favour of No. 2, 63 in favour of 1(b) and 42 in favour of 1(a). The Kiwis were subsequently handed over to the H.B. Wildlife Trust with the approval of the Department of Internal Affairs, and the Game Farm was closed to visitors. This enabled the staff to concentrate on their primary job of raising birds and fish.

PHEASANTS

As previously mentioned, pheasants were purchased in small numbers from the earliest days of the Society's existence. By 1933, when the pens on Mr Robson's property were in use, the number liberated rose on an average of 200 each year, reaching the peak of 1100 in 1946. The annual production of birds varied considerably in subsequent years, rising to 1050 in 1951, and falling to zero in 1953, when disease attacked the flock. For a few years the pens lay empty until regarded as safe for further breeding, but the numbers reared in 1965 and 1967 reached the record of over 1200 pheasants.

From 1963 to 1967 Cherry Orchards in the Havelock North area were used for hardening birds prior to liberation. The next year, however, severe losses of pheasant were experienced in some of the orchards and it was decided to abandon this system. All birds in future were to be raised on and liberated from the Game Farm. This necessitated the construction of additional pens, but fortunately supplies of wire-netting and posts were obtained free of charge from the Wellington Society's Paraparaumu Game Farm and the Department of Internal Affairs Farm at Bulls, both of which were being closed. During the same period, steps were taken to convert the previous display-bird pens for the use of game birds.

PARTRIDGES

Steps to raise partridges at the Game Farm were first taken in 1962, and by 1967, 150 birds were being released annually. Due to lack of space at the Farm, the breeding operations were stopped after that year and only a handful of birds was retained. It was proposed to purchase 200 birds from a Waikato breeder in 1968, but due to an outbreak of disease, no birds were received from that source.



Main Pond, Acclimatisation Society Game Farm, Greenmeadows. Curator: T. B. Munro

CHUKOR

A sitting of eggs was obtained from the North Canterbury Society in 1934, but it appears that endeavours to hatch these eggs did not prove successful. Efforts have been made on several occasions since that date to obtain a further supply but so far, this has not been available.

DUCKS

Although Ducks have been reared at the Game Farm since its establishment, the numbers involved have never been large. Considerable numbers of birds, particularly mallards, use the lake during the breeding season; and during the shooting season the sudden influx of birds often causes the Society staff no little embarrassment. The organised feeding of the ducks was stopped in 1967, to discourage the large concentration of birds in such a small area.

It is difficult to tell at this stage what form the Game Farm will take in the future. One school of thought considers the days of Game Farms have passed, while another feels that the Game Farm should be transferred further away from built-up areas. There seems to be no doubt, however, that the Hatchery will continue to remain at Greenmeadows for the foreseeable future.

THIRTEENTH CENTURY GAME CONSERVATION

The first indication of game management practices for conservation, which could be defined as the art of making land produce sustained crops for wild game for recreational purposes, was found by Marco Polo during his travels in the Mongolian Empire of Kublai Khan. (1259-1294 A.D.). He records that the great Khan had well-defined laws protecting hares, roe-bucks, fallow deer and large birds between March and October. These laws were enforced so that "they may increase and multiply". The Khan established habitatimprovement programs consisting of cover plantings, annual seeding of food patches, and winter feeding. Marco Polo observed large numbers of pheasants, partridge, crow, and other fowl, as well as many keepers stationed as game protectors throughout these areas.

The Kiwi

Although the management of kiwis for thirty-five years was only a minor part of the Acclimatisation Society's activities at Greenmeadows, its major role being the production of game birds and trout for liberation, such has been the interest displayed by the public in this unique bird that the kiwi has become synonymous with "Greenmeadows Game Farm" throughout the world.

The kiwi is a strange un-bird-like bird—all body, bill and feet—but nevertheless it is regarded by New Zealanders with affection and pride. Early politicians chose this unusual bird as the chief motif on our Country's Seal. It is portrayed on our coins, postage stamps, trade marks, and on scores of New Zealand products, especially our exports.

Our countrymen, visiting overseas, are proud to be known as "Kiwis"; and yet it would be near the truth to say that no more than one in 5000 New Zealanders has ever seen a kiwi alive, even in captivity. The odds would be considerably greater for those who have seen one in its natural habitat.

The story of the Game Farm kiwi began in 1932 with Peg-leg Pete, the victim of an opossum trap. When rescued, he was placed in the care of Mr F. D. Robson, the curator of the Farm at that period. It was found necessary to amputate the leg of the injured bird, and fit him with a wooden stump, hence the nick-name. Peg-leg was the guest of the Society for many years, and became not only the founder of the kiwi line at Greenmeadows, but also an internationally-known character.

Over the years other captured kiwis, mostly from Hawke's Bay and adjacent bush areas, were added to the flock at the Farm, where they began to breed. Although through the years many eggs were laid, and some successfully hatched, only two young birds survived. Even with this small success, the Society made history, for only one other kiwi had ever been bred and reared in captivity, one in Auckland, that met with accidental death, aged twelve months.

By 1949, when the flock had increased to ten, the Game Farm had developed into one of the most popular tourist attractions in the Dominin. In that year about 15,000 visitors, the majority from overseas, paid to see the kiwis. Unfortunately, the care, management, and display of the birds grew to an almost full-time job, taxing the Society's administration. And what was more serious

it was found that the young pheasants, and partridges in particular, in the rearing pens were in a state of constant agitation due to the almost continual stream of visitors in their vicinity.

In 1966, the Acclimatisation Society finally decided to remove the kiwis, along with the other display birds from the Farm, and to concentrate solely on the propagation of trout and game birds. The problem was to know what was best to do with the kiwis, for although they were revenue-producing to the extent of roughly £1400 a year, the Society Council considered that the sum would be insufficient to make the kiwis financially self-supporting as a separate entity on the Farm.

The timely setting-up in 1966 of the Hawke's Bay Wildlife Trust, an organisation whose title denotes its purpose, resulted in immediate action regarding the future of the kiwis. Until arrangements are made for the final housing at the Ahuriri Wildlife Refuge at Westshore, the birds are temporarily caged in the Botanical Gardens, Napier.

The Society, in the thirty-five years that it has assumed responsibility for the kiwis (originally by accident) has done a magnificent job in caring for, and displaying this distinctive regional asset for the benefit of the public.

There are three species of kiwi in New Zealand, the Brown, the Little Grey, and the Great Grey. Those on show at the Game Farm were members of the Brown Kiwi species, a group, subdivided into three races, which still survive in fair numbers—the North Island race northward of a line from Taranaki through Taupo to Hawke's Bay; the larger South Island race in Western Fiordland; and the giant Stewart Islander all over its island home.

Obviously the Brown Kiwi has brown feathers, but the two Grey species, in addition to being silvery-grey are spotted in the plumage. The feathers of the back of the Grey are much softer than those of the Brown, whose feathers are definitely stiff.

Although no longer common, kiwis are not rare, but because of their nocturnal habits, foraging only at night and hiding in dense ground foliage or burrows during the day, they are difficult to discover. Like other flightless birds in New Zealand, the weka, the takahe, the kakapo, and the extinct moa, the kiwi once flourished in large numbers, and had no enemies until the arrival of man. Introduced predators (dogs, pigs, stoats) and the

activities of man, himself, in hunting, bush-felling and burning soon changed the life-pattern of many native birds.

In the course of evolution, birds acquired flight for two reasons—safety and a quick means of travel to sources of food or water. Primeval New Zealand was unique in that though thickly forested with an abundance of food, there were no predators, other than the Harrier hawk. In such ideal habitat it is not surprising that some species of birds, finding little need for flight, became ground-dwellers, sustaining themselves on the rich forest floor. Over the centuries, consequently and gradually some birds entirely lost the power of flight. In addition to the previous list of flightless birds, at least six other New Zealand birds are poor flyers, possibly the reason the same evolutionary explanation—Pukeko, Swamp Crake, Little Grebe, Whitehead, Brown Creeper, Blue Duck.

Even in the exclusive group of flightless birds, the kiwi stands apart as a curiosity. It has no keel on the breastbone (to which the large flying muscle of flying birds is attached) and it lacks all evidence of even rudimentary external wings or tail. The plumage is composed of almost hair-like feathers, harsh to the touch, and having no interlocking barbs on the feather vanes.

The bill is long and highly specialised for probing deep into the earth in search of worms (important item of diet). The situation of the nostrils at the extreme tip of the upper mandible adds to the list of oddities associated with the kiwi. And for good measure long hairs similar to those of a cat surround the 4-inch bill at its base.

The kiwi has poor eyesight and relies almost entirely upon scent when searching for food or finding its way about the forest floor. The North Island Brown kiwi is about 18 inches in height and weighs between 4 and 5 lbs. All kiwis have powerful legs, equipped with strong claws, and although fast runners, their favoured method of defence is a kick delivered from any angle. Because of its habit of burrowing in the soil and travelling from one area to another by means of tunnels in the undergrowth, the kiwi has been compared with a rodent rather than a bird.

One egg and sometimes a second, several days later are laid in the burrow nest. The egg weighs 15 to 16 ounces, just slightly less than a quarter of the hen kiwi's own weight. No other living bird produces such a large egg in comparison with its size. After the third or fourth day the male kiwi takes over incubation and sits almost continuously for 75 days. The chick, on emerging from the shell is fully plumaged, almost black in colour, with feathers

nearly an inch long. Until about the fourth day, the chick's legs are too weak to support its weight, but on the sixth day the male kiwi opens the burrow (blocked a few days before hatching) and the chick sallies forth, its instinct already urging it to search for worms.

This regeneration process reads as a simple story, but the chances of survival of the kiwi under present conditions are debatable. For many years the kiwi has had the benefit of complete protection; but even with the concerted efforts by Government Departments, Forest and Bird protection societies, and other interested bodies its numbers continue to dwindle. The mere fact of continued land development with its consequent destruction of natural habitat, plus the depredations of introduced animals must eventually seal the kiwi's doom, even disregarding the possibility of extinction from the changing pattern in Nature itself.

Few kiwis are kept in captivity, and then only in limited numbers with the sanction of the Depatrment of Internal Affairs. Attempts to breed the kiwi in captivity have not proved successful; so perhaps with some human assistance, a scheme to establish a colony of say twenty to thirty birds might give the kiwi opportunities to breed in natural conditions. It is well-known that captive animals in small numbers often fail to reproduce, whereas large colonies sometimes succeed.



Fish Hatcheries In Hawke's Bay

From the early days of the Province, efforts were made to establish Game Fish in Hawke's Bay rivers, and many of the early settlers raised trout in their private hatcheries. A typical example is that of Captain D. G. Hamilton, who owned a property at the junction of the Manawatu and Mangatoro rivers near Dannevirke. He made the first liberation of trout in these waters in 1872, from ova obtained from Otago. At Tiratu, he owned a second hatchery. Although the ova had to be carried more than 50 miles on packhorses over rough bush tracks, following a long sea and land journey, successful hatches were made. Forty years later both rivers were fishing exceptionally well.

Transport in those days was always one of the major difficulties in hatching and liberating trout. In the 1890's, for instance, Brown trout were liberated in the upper Waipunga, the Rangitaiki and the Poronui rivers. This operation involved a trip of nearly a hundred miles, part of it by pack-horse, and the rest by gigs or drays. Various ingenious methods were used to keep the fish tanks aerated, lack of air spelling disaster. The pack-horse and later the bicycle over rough terrain provided plenty of movement in the cans of water carrying the fingerlings. Paradoxically, when the modern invention of the train became available for transport, mortality in the ova increased. The explanation lay, not in the mode of transport, but in the long waits at the stations, and the consequent immobility of the water containing the ova.

One one occasion Messrs A. E. O'Meara and A. I. Rainbow, stalwarts on the Society's committee for many years, made the long slow journey to Dannevirke by train, the sole purpose to watch over a consignment of ova from Masterton, en route to Hastings. Armed with bicycle pumps, they aerated the cans during all the scheduled and unscheduled stops on that return trip, and arrived back triumphant without loss of their charges.

Another private hatchery existed on the Maraetotara, but probably the best known one was that at Mangatera, Dannevirke. This was first constructed by local anglers in the carly 1900's, on the banks of a tributary of the Mangatera Stream, where several large streams emerged from a cliff face. This hatchery came under the jurisdiction of the Hawke's Bay Society just prior to World War I. During the 1920's a permanent curator was employed in trapping trout for ova from the local rivers, and raising



Mangatera Hatchery, Dannevirke, about half a century ago

them at the hatchery for liberation as fingerlings. The original fish races are still serviceable, but recently have been altered to comply with modern techniques.

Besides trout, attempts were also made to introduce salmon into Hawke's Bay rivers. In 1876, 60,000 salmon ova, supplied free of charge by the United States Government, arrived at Ahuriri from San Francisco. Twenty thousand were taken to Mr W. Shrimpton's hatchery at Matapiro, and the remainder went to Mr F. W. Sturm's at Clive, where they were apparently supervised by Mr J. N. Williams, of Frimley.

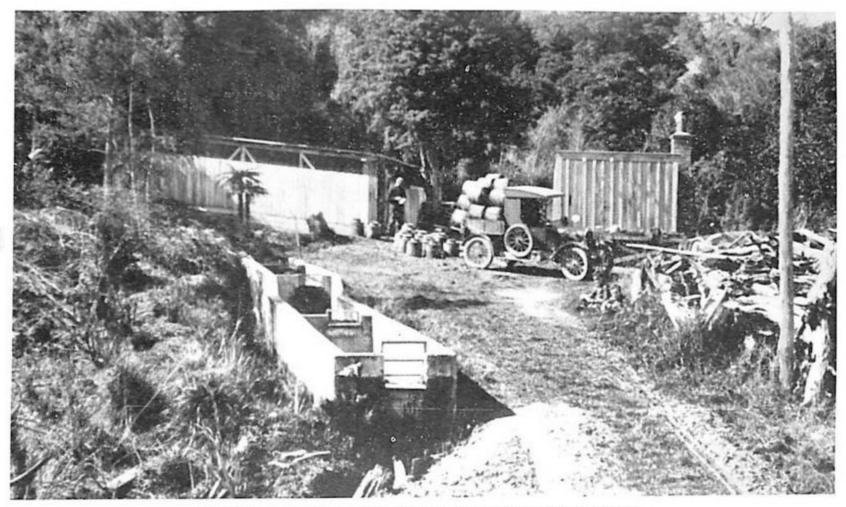
Losses at that stage were light, but unfortunately the water temperature at Matapiro was found to be too high, and all were lost. Greater success was obtained at Clive, where 30,000 were hatched. The parr were liberated in batches of 2000 in the upper reaches of the Ngaruroro and Tuki Tuki rivers. The trips on liberation projects took many uncomfortable days; and it says much for the enthusiasm of the anglers at that time, that this program was attempted, let alone completed.

Considerable public interest in the Hatchery at Clive was displayed by the public. The "Hawke's Bay Herald" thought the subject worthy of comment, "the young fish are swimming about in long troughs, through which artesian water flows over shingle. The troughs are shaded and covered, and when the covers are lifted the fish can be seen, the size of Sticklebacks."

Unfortunately Hawke's Bay rivers were found not to be suitable for salmon, and these fish did not become established, although two were reported in the Tukituki in the 20's.

In the early days of Hawke's Bay Acclimatisation trout ova were obtained initially from Southland and Otago (and they of course originally from England and Scotland); and then from Masterton, and the Hakataramea river, in Marlborough. In recent years the Society has obtained nearly all its ova from Government Hatcheries established later at Wanaka, Turangi and Ngongataha. In 1954, 1955, and 1957, consignments of Brown ova were obtained from Tasmania, and successful hatches resulted. For the last 10 years the Committee has aimed at producing 300,000 Rainbow, and 200,000 Brown each year, the Rainbow usually coming from the Tongariro or Ngongataha Hatcheries, and the Brown from Wanaka.

Soon after the First War two ponds were built by the Heretaunga Anglers' Club on land purchased by the Society on the corner of Tomoana Rd and Williams St.



Captain D. G. Hamilton's private hatchery, Dannevirke almost a century ago

Hastings. A four-inch bore artesian well was sunk and concrete ponds were built principally to raise fingerlings. Proximity to the Tomoana Freezing Works simplified the bill of fare, and the purchase of a large mincer, made Minced Sheep's Liver, No. 1 on the menu. Associated with this successful undertaking were the names of Messrs T. Pickett, S. H. Heighway, T. A. Howard, A. E. O'Meara, and A. I. Rainbow.

These ponds remained in use until the Greenmeadows Hatchery came into operation in 1935.

In 1933 a prolonged spell of dry weather resulted in the failure of the water supply at the Mangatera Hatchery. Although an artesian well was put down to improve the flow, the position was still unsatisfactory; and in 1934, the Society decided to close that Hatchery, the buildings and plant being transferred early in 1935 to the Greenmeadows property.

During the next five years a brick hatchery building was constructed, several artesian bores were put down, and fish races dug. Close to the entrance of the hatchery a small fish pond was made, additional ones being added in 1948, 1949, 1951, and 1968.

By 1960, the wooden troughs at Greenmeadows, used in the hatchery for 20 years, required replacement, so the opportunity was taken to re-equip with the type used in Government Hatcheries. As those troughs were made of concrete the initial cost was fairly high, but it was felt that their increased life would more than compensate the expenditure.

The Mangatera Hatchery was again inspected in 1960, and was found to be worth re-opening. The following year, after members of the Dannevirke Angling Club had carried out the necessary renovations, the Hatchery was once more used for hatching Brown ova. Further improvements were carried out during the next few years, but another dry spell was experienced in 1967, the lack of water forcing the cancellation of the second instalment of Brown ova from Wanaka.

In 1968 it once more became evident that the water supply at the Mangatera Hatchery could no longer be depended upon, and it was decided to concentrate all hatchery operations at the Greenmeadows Hatchery. To provide the additional accommodation required, two more fish races were built, and the tail race and drains were reconstructed. Consideration is at present being given to the installation of a "battery"-type incubator to enable more efficient use to be made of the hatchery.

Trapping operations in Sandy Creek were carried out in 1968, to ascertain whether it were feasible and economic to obtain ova from that source. Although a great deal of work and time were put in, not only by the staff but also by members of the Scinde Angling Club, the series of floods following continuous heavy rain during the winter, repeatedly blocked the screens and poured over the top of the gates. As a result few fish were caught. During the same period advice was received from the Wanaka Hatcheries that the order for Brown ova could not be filled, as the fish traps had been frozen for weeks. Although this was unfortunate, it was perhaps a blessing, as considerable difficulty was being experienced at the Greenmeadows Hatchery in holding the large stocks of unfed fry, impossible to liberate, due to the continuous flooding of the local rivers over several winter months.

Anglers, in general, agree that during the last ten years fishing in Hawke's Bay has noticeably improved. How much this has been due to the stocking policy of the Society, and how much to favourable seasons is open to argument; but there is no doubt that annually the Greenmeadows Hatchery is raising several hundreds of thousands of healthy fry and fingerlings for the rivers and lakes in the Province.

ACCLIMATISATION AND POPULATION

It is probable that few of today's hundreds of members are truly aware of the significant effort made by the founders of the Hawke's Bay Acclimatisation Society in the very act of founding that body in the year, 1868. The population in Napier in 1867 was 1827 persons, and that of Hastings was not recorded until 1884, 617 persons! These population figures surely add laurels to the crown of those enthusiastic members of the committees in the first decade or two. "... so much by so few."

Further Population Figures:

Napier '		Hastings		
1858	343	1881	617	
1867	1827	1886	1504	
1874	3514	1891	2303	
1878	5500	1896	3190	
1886	7677	1901	3650	
1891	8341	1906	4594	
1906	9045	1911	6286	
		1916	7909	
1921	14536	1921	9115	

Trout In Hawke's Bay

The Hawke's Bay Acclimatisation Society has been for nearly a century responsible for the administration of a considerable and important part of the fresh-water fishery of the North Island. It takes in an area, roughly bounded by the Mohaka river to the north, the Rangitikei river to the west, and the Manawatu river to the south. Through the years there have been many boundary changes, but prior to 1924 parts of the Wairoa County as far north as the Wairoa river, and the east Taupo County almost up to the shores of Lake Taupo were included in the Hawke's Bay Society's district. In 1924 changes to boundaries were made as a result of pressure from the Tourist Department, and to enable stocking and ranging to be carried out conveniently from the Department of Internal Affairs' establishment at Rotorua.

These areas are now part of the Rotorua Conservancy but arrangements have been made in recent years for Hawke's Bay anglers to fish some of the northern tributaries of the Mohaka river, such as the Ripia and Waipunga, and in 1960, interavailability of licences was gazetted.

Nearly all the major river systems were stocked with Brown trout before the turn of the century, and some with Rainbows about 1900. In his book "Troutfishing and Sport in Maoriland" (1904), Capt. G. D. Hamilton states that the Mangatoro stream, a tributary of the Manawatu river near Dannevirke, was probably the first water to contain trout in the North Island. It was stocked from the author's own hatchery in the early 1870's. The venture was a great success, trout of large size and in considerable numbers soon appearing in the rivers. There are also records of a release of Brown trout in the Taharua, a tributary of the Mohaka in the Rangitaiki Plains area. These were brought down from Auckland by dray in 1878. All early reports indicate that these introductions were highly successful, and continuous stocking has been carried out by the Society right up to the present day by a variety of methods.

Through the years thousands of young fish at the fry stage have been liberated at as many points as possible; also large numbers of fingerlings and yearling fish, a proportion of which have been marked or tagged for later identification have been released where conditions were though to be suitable. For a short period Vibert Boxes were used to introduce trout ova into waters, which were not accessible by vehicles, deerstalkers and trampers assisting in these projects.

To date, the Society has had no accurate means of assessing the direct value or otherwise of its fish-stocking policy. In recent years the system has been, not as is commonly thought a direct contribution to the anglers' catch of fish, but more as an insurance against depletion by various causes, such as floods.

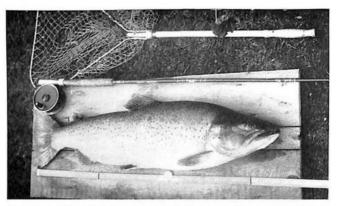
By observation and results recorded in anglers' diaries, there are indications that at least some of the liberations are unnecessary and wasteful, and could, in fact, do more harm than good by unnaturally increasing the numbers of a particular age-group of fish to the stage where they have insufficient food and overcrowded habitat.

On the other hand, angling in Hawke's Bay, generally, is still of a high order, by world standards. Therefore changes should be made, only after careful investigation and a thorough study of fish populations, available food, and environment.

The Society has recently ordered an Electric Fishing Machine, and when this comes into use, it should prove to be of great benefit in assisting to formulate future fishery management programs.

All Hawke's Bay rivers are subject to severe flooding, but appear to have the ability to recover their character quickly, without adversely affecting the stock of fish. One exception to this is the Esk, which is soon to be the subject of special investigation by a Marine Department Technical Fishery Officer.

Generally speaking, the keen and competent angler can expect good sport in Hawke's Bay rivers and lakes, with few blank days; and he can enjoy his fishing in pleasant surroundings and under ideal conditions.



Brown Trout, 18lbs, caught in the Tuki Tuki, October, 1967, by L. E. Cooke, Hastings

A Guide to Hawke's Bay Angling

The first requirement for a potential angler in Hawke's Bay, is, of course, a licence to fish; and if he is not familiar with the district, a good map of the proposed area of operations. Suitable maps can be obtained from the Automobile Association, or the Lands and Survey Department; and the Acclimatisation Society or one of the Angling Clubs would always be pleased to advise on the state of the rivers, where, and when to fish, and to suggest the type of tackle, lures, or flies to use.

The following is a general description of the waters available at the present date. Much of the water is accessible from public roads, but enquiries should be made, when there is any doubt, and where permission is required to cross private property. This privilege has seldom, if ever been refused and it is hoped that the anglers of the future will maintain the good reputation, that has been gained for them in the past.

Mohaka River

The head-waters of this excellent trout river are in the Rangitaiki Plains area, south of the Napier-Taupo Road, and the river proper is formed by the meeting of the Kaipo and Oamaru rivers, which rise in the Kaimanawa Ranges, near Lake Taupo. From its source at 2500ft. above sea level the Mohaka drops through a series of steep bush-clad gorges in the short distance of sixty miles down to its mouth in Hawke Bay. It is really ideal trout water—fast, turbulent, and not yet affected unduly by an accelerated runoff in the upper reaches by the clearing of native bush. The bed of the river consists mainly of large roundish stones and boulders, not unlike the upper Tongariro, and provides well-aerated holding water for fish, and a plentiful supply of bottom-feed. From Paka-ututu downstream there have been some agricultural and forestry developments, and in the lower stretches of the river there is an increasing deposit of silt and pumice.

Owing to the mountainous nature of the country, access to the river is limited to a few points. These are—through Poronui Station (no access at present); at Pakaututu; the Hot Springs Road, Puketitiri; at the Napier-Taupo Road bridge upstream; or down the Glenfalls Road; from the Forestry at Waiteri at the end of the Pehokura Road and Willowflat. At few of these points can any long stretch of water be fished without crossing the river, which is fast and in some cases the crossings are deep. Thigh waders can be used to fish a limited amount of water, but the most suitable gear is a pair of shorts, as well as some sort of footwear with non-slip soles. Although affording some protection from the cold, waders limit the anglers' activities to the shallower and slower reaches of the river.

Above Pakaututu, Brown trout appear to predominate, many ranging from 5 to 8lbs. These are typical river-dwelling Browns, from the northern part of the North Island, and differing from the Manawatu and South Island Browns. The body is dull grey with a few large pink spots.

However, below Pakaututu, and for nearly all the river downstream, Brown and Rainbow are present in roughly equal numbers, but as usual, the Rainbow is easier to catch. These Rainbows have excellent fighting qualities, and no liberties can be taken with them. Good tackle, plenty of line, and a certain amount of skill are required to land them successfully in this fast water. They usually range from 3 to 7lbs., but sometimes many small fish are in evidence.

Spinning or thread-lining has been a popuar method of fishing in the Mohaka, and it has advantages in some respects, as more water can be covered without the angler actually standing in the river. Wind does not affect casting, and the shorter rod is more convenient, where quite often the back-cast has to be considered. Spoons may be used—copper or black are good on a dull day—silver or brass on a bright day—but lightly weighted wet flies such as Black Spider are very effective, as also are Taupotype lures, such as yellow or green-bodied Leslie, Mrs Simpson, or Hairy Dog. There is very little noticeable surface-feeding, and dryfly fishing is usually difficult, but for the angler with plenty of time and patience, it is worth trying. Green or Brown Beetles may be fished dry, and March Brown is another good fly.

The best months appear to be November through till the end of March, especially if the river is at its normal or low summer level. The Rainbows lie deep in the pools, or over a ledge in the early season, but are more active in the fast runs later on. Browns can usually be taken in quieter shallow water, and can often be successfully stalked.

The Hawke's Bay Acclimatisation Society has a well-equipped hut for use of anglers at Glenfalls, off the Napier-Taupo Road, and arrangements for its use can be made through the secretary.

Tributaries of the Mohaka, well worth fishing, are the Makeno, Makahu, Ripia, Puneketoro, Inangatahi, Waipunga and the Te Hoi. Enquiries regarding access and conditions for these streams should be made before setting out on an extensive fishing trip.

An attempt has recently been made by the Society to establish Quinnat Salmon in the Mohaka river. Small liberations of salmon fingerlings (or parr) and fry have been made at Pakaututu in a tributary, but to date no return of mature fish has been recorded. But time will tell, although recent findings indicate that the seatemperature off our coast may be too high. It is understood that further research is being carried out in U.S.A., the aim to propagate a strain which is tolerant to higher sea temperatures. If this

enterprise is successful, Hawke's Bay anglers may yet be fishing for salmon, the dream of many fishermen since the early days of the Society.

Ngaruroro River

The extensive high country catchment of the Ngaruroro and the development around its tributaries make the Ngaruroro more susceptible to flooding and slower to clear than any of our other river systems. It rises to the west of the Kaweka Range and is join ed by sizable streams from the Burns and Wakarara Ranges. Above Whana Whana conditions are rather similar to those pertaining in the Mohaka river, and the same advice regarding equipment and tackle would apply. The Ngaruroro is essentially a Rainbow trout river, and the fish commonly grow to a large size in the upper waters, where fishing pressure is light. Fish from 10 to 15lbs, have been taken from here by anglers, who were prepared to brave the elements and travel into the mountains.

The river is not as fast as the Mohaka, but in some places it is considerably deeper. Great care should be taken as there are stories of a wall of water rushing down the river in conditions, where there is a cloudless sky. This phenomenon, though rare, can make the gorges impassable, necessitating an extended trip across country for any angler caught unaware.

Kuripapango is the only point from which easy access to this part of the river is possible, but there are several air-strips available by arrangement. No doubt helicopters will open up more good fishing spots in the not too distant future.

Below Whana Whana the river opens out and runs through a shingle bed anything up to a mile across, its actual course irregular, and in places it divides into a number of small streams. From this point down to the sea, access is comparatively easy from roads, which flank the river on both sides.

The river is not usually clear enough to fish until mid-October, or later, and then for perhaps short periods only, until summer. During this part of the season there is almost certainly a run of fish from the sea, and it is common to see small shoals of fish, weighing about 1lb., between Pakowhai and Mangatahi. These are young silver fish, which can provide good sport, and are suitably sized for the frying-pan. At this period, too, there are also a few larger well-proportioned fish, and scale-readings taken from some of these show that they have been to sea.

During the summer the Rainbows move further up the river to cooler water, and it then pays the angler to fish the deeper holes and backwaters. Occasionally the trout move out into the rips to feed perhaps in the evenings. Very few fish stay in the lower



A mixed bag, Whana Whana, February, 1956
A. A. Fulton, B. Kyle, H. A. Watt

reaches of the Ngaruroro during the summer, as the water temperatures rises to near 70°, and there is also a heavy growth of weed.

There are no hard and fast rules about fishing in the Ngaruroro, and the Rainbows are not fussy feeders. In the early part of the season, and when the water is not too discoloured, a spoon or dark fly is effective; and as the river clears and drops its level, a good lure to use is a light coloured streamer or hair fly for fish seen smelting in the rips. Later, a Ewe-wasp, Tamati, or Rabbit fly fished deep could tempt the Rainbow.

The Taruarau is an important tributary at the top end of the river, and the Ohara, which joins the Ngaruroro at Whana Whana, is a delightful and easy stream to fish, either up from the confluence or from Big Hill or Mangleton Road Bridges. For the approach, light tackle and more care are required, as the fish are easily put down in this smaller water.

Although the Ngaruroro does not always yield big bags, much of the river is conveniently close to Napier and Hastings; and if it is in good order can provide a few hours of enjoyable fishing with sometimes unexpected results.

Tuki Tuki

The Tuki Tuki rises in the Ruahine Ranges of Hawke's Bay and has a catchment of 936 square miles.

In its journey of 61 miles to the sea, the river is joined by numerous excellent fishing tributaries in the Central Hawke's Bay region, the largest, the Waipawa River. Below Tamumu, the Tuki Tuki is joined by several minor streams, none of which contributes to the fishing, but they greatly add to the discharge of the Lower Tuki Tuki, especially in time of flood.

From its source, the river flows in a south-easterly direction over a predominantly shingle bed to a point approximately $1\frac{1}{2}$ miles below the confluence of the Waipawa; and from there it turns to flow generally north-east to the sea, a deviation being the sharp south-east turn into what is known as the Gorge, a short length of river not far from Middle Rd, between Havelock North and Patangata. From above Tamumu to below Moore's Rd, a peculiar feature of the Tuki Tuki is the presence in many places of a bared papa bottom. This unusual nature of the strata forms a series of long rapids ending in deep pools and rips, which flow out over shingle to the next rapid and so on.

With few exceptions the river flows in one course, and in many places is lined with willows. Below Te Mata on the left and below Moore's Rd to the right, catchment control work has been carried out and the river is stop-banked to the sea. The lower reaches are at times subject to the full force of flooding from higher up. In comparison with a normal midsummer flow of 180 cusecs (cubic feet of water per second) a monstrous flood of 140,000 cusecs was recorded at Waimarama Bridge in 1917.

The most devastating flood of recent times occured in 1938. That year the spate of the rivers in flood totalled over 250,000 cusecs, a discharge that had a marked effect upon fishing in the following years. Since then high "peaks" of flooding have occurred in 1949, 1953, and 1956. However in the last ten years, no floods greater than 55,000 cusecs have been recorded; and correspondingly, the adverse effect on bottom fauna has not been as great. Therefore food recovery has taken place rapidly, and consequently the fishing has been good.

The Tuki Tuki has always been considered a Rainbow river, with fish of excellent fighting quality, weighing between 1½ and 3½lb. As well as Rainbow, Brown trout are scattered throughout its entire length, and some large fish of up to 15lbs. have been caught in its waters in recent years. These fish, according to scale readings by the Marine Department, had probably lived in the lower reaches most of their lives, where sea food was in abundance.

At certain times of the year, shoals of mullet can be seen in the river, from the sea to above the Gorge. Even the veteran angler never ceases to be surprised at the presence of the mullet in the Tuki Tuki.

In winter, when the river carries a large volume of water, and early in the summer fishing season, threadliners experience good angling, especially when the whitebait are running in the Haumoana and Tennant's Bend areas.

Typical spoons used on the river include: "Z" spinners, Glimmy, Copper and Red, Quick Spinner, Little Blank, Devons, small Flatfish, Articulated Trout, and, of course, the fly-spoon. Until the weed appears, usually in November, the thread-liner and the Taupo-type lure fisherman are quite at home on the Tuki Tuki. Successful lures are the common Taupo-type, sizes 6 and 8. Leslie's Lure, Split Partridge, Rabbit, Tiger Ross, Smelt, (various colours) Mallard and Yellow, Hammill's Killer, Grey Ghost; and at night, Red or Black Fuzzy Wuzzy.

One successful method of fishing is to cast across and slightly upstream, allowing the line to belly. As the line straightens out, start retrieving in the usual way. Another is the use of a floating line and a smelt lure in October and November, when the fish are feeding on inanga and smelt.

In recent years in the spring there has been a noticeable increase in rising and nymphing fish in the lower reaches. Numbers of nymphing fish have appeared in the daytime, often increasing to a "mad rise" in the evenings. The rise is not always consistent,

and deteriorates earlier in the season in the lower reaches, but is more prolonged up river. Because the river flows through grassland, the brown beetle contributes an important part to the evening rise. In late October and November, the dry fly angler can use the imitation beetle to good advantage.

Flies suggested are:

Nymphs Sizes 12-16—Hare's Ear, Hare and Copper, Tup's Indispensable and Mayfly.

Small Wet Sizes 10-14—March Brown-male and female, Red-Tipped Governor, Coch-y-Bondhu, Black Spider and Peveril of the Peak.

Dry Sizes 12-16—Pheasant Tail, Royal Coachman, Blue Dun, Greenwell's Glory and Beetle.

From December on, the fish appear to move from the lower reaches, upstream through the Wildlife Refuge, Horseshoe Bend, and the Gorge.

The higher water temperatures of mid-summer, recorded in some places at over 70°F, bring floating weed, which gradually builds up in the shallows as the river recedes, and spreads out thirty feet or more from the edges in a great slimy yellow-green mass. With the weed comes insect life in the form of water bugs and snails, on which the fish readily feed.

When the river is in this weedy condition, many anglers consider it unfishable, but a rewarding method of fishing is to use a floating line and a nymph or dry fly. With the cast greased to within a foot of the fly, cast directly upstream, whether fishing to a rising fish or fishing "blind". On hooking a fish, immediately bring it downstream with the current, keeping below it at all times. In doing this, work the fish in towards the weed at the edge, and once the weed is over its head, the trout usually gives up the struggle and can easily be netted. Polaroid glasses are necessary to see the fish. Because of the weed, heavier casts are a temptation, but fine casts should be used, especially in bright conditions. One angler, who was forunate enough to catch seventy fish for the season, caught fifty of them by this method in the weedy period.

During periods of high temperature the fish congregate in the cooler parts of the river - - - notably in deep holes at the bottom of rapids, under willow banks, and in spring-fed parts where cool water filters through the shingle. If the river undergoes a fresh in March, and clears, good fishing on the nymph and small wet fly can be obtained in April, especially between Patangata and the Waipawa Junction.

Some of the favourite fishing places are: Tennent's Bend, with access from Tennent's and Moore's Rds on the Haumoana

side; Te Mata at the back of Havelock North; Yucca Flat, Horseshoe Bend, Morea, and Rochfort Rd woolshed off the Elsthorpe Rd, above the Waimarama Rd bridge; the Cabbage Trees, the Gorge, the Papanui Stream mouth, Patangata, Shag Rock, and Tamumu from off the Middle Rd; and the Waipawa Junction from Walker's Rd off the Waipawa-Pourere Rd. There are good camping and picnic spots at most of these places. The river is in easy motoring distance from Hastings and Napier, with excellent hotel and motel accommodation in both cities, and also at Havelock North, at Patangata, and at Waipawa.

Tutaekuri River

The Tutaekuri is the smallest of the three main rivers flowing over the Heretaunga Plains into the sea, but nevertheless provides excellent fishing throughout the season. Unfortunately, in the last six years or so, the lower reaches from Redcliffe Bridge to Brookfields Bridge have suffered from the effects of the removal of shingle and spoil for road-building.

Some of the larger fish caught in this stretch of the river have been in the 8 to 12lb. range. Many local anglers are of the opinion that these large fish are sea-run, and even the 2½ to 6lb. fish give the same impression. The question of sea-run fish has still to be proved, but there are many factors, which have come to light over the years and which verify this supposition. The average weight of a fish taken from the Tutaekuri would be 2 to 3lb.

This river and its tributaries, of which the Mangaone is the most popular and easiest of access, provide some thirty miles of fishing. It has a shingle bottom and is wadable throughout. The Donald can also provide excellent fishing, especially early and late in the season, but this stream requires more effort to reach.

The stretch below Redcliffe appears to produce the heaviest fish, both Brown and Rainbow. It can be fished successfully with fly and spinner, some of the most popular flies being Blue Dun, Wickham's Fancy, Red-Tipped Governor, Coch-y-Bondhu, Bradshaw's Fancy, Red Palmer - - - all fished both up and down-stream.

Dry fly can also prove rewarding, especially during the flight of the brown beetle, and particularly in the evenings during the summer. Dry patterns of the above flies would be a reasonable selection. Nymph fishing also has a following; a few suggested would be: Hare and Copper, Tup's Indispensable, Greenwell's Glory, Black Nymph and any of the Mayfly Nymphs.

A selection of lures should include Parson's Glory, Rabbit, Dorothy, Partridge, Hammill's Killer, Mrs Simpson, tied with either yellow or red body. Spinners, which can prove successful are Fly Spoons, particularly when the whitebait are running - - small "Z" spinners, Abu Reflex, Veltic, Toby and Daffy Spoons.

Access to the lower Tutaekuri is easily obtained from Brookfields Bridge, Guppy Rd, Taradale, and Redcliffe Bridge. In dry weather it is possible to drive a vehicle on the riverbed over the stretches mentioned.

In the early part of the season, October and November, it pays to fish the fast water, especially the top of the runs as well as the holes. But as the waters get warmer, the runs prove less productive.

From Redcliffe Bridge to the confluence of the Mangaone, at Dartmoor, the river flows over a wide shingle bed, and from year to year meanders from one side to the other. As the bed is fairly well covered with willows, the river twists and turns, forming good holes and lies. Useful flies and spinners suggested would be the same as for the lower reaches. Access can be gained from Omarunui Rd, Springfield Rd and Dartmoor Rd, all with various tracks winding through the willows to the river.

Above the confluence with the Mangaone, the bed of the Tutaekuri is very open, and under normal conditions does not hold a big head of resident fish; but beyond the Mangatutu Junction good fishing can be obtained.

The Mangaone reserved for fly-fishing only, can produce excellent fish for the whole season, but especially in October, November, March and April. But in the intervening months the weed can become a problem, unless fished small and dry. Access to the Mangaone is restriced to two places, Darmoor Bridge and Rissington Bridge, all other approaches being through private property.

Maraetotara Stream

This is one of the smaller trout streams in the Napier-Hastings area of the Society's district. Its total fishable length of approximately 15 miles is fairly well stocked with Brown trout, which range in size up to 8lbs. or over, but the average would be in the vicinity of 3½lbs.

Willow trees grow in profusion along the banks, making it a fairly awkward stream to fish on account of over-hanging branches and the large number of snags encountered in the water. Although these are a hindrance to the angler, they are of undoubted value in the conservation of fish.

In spite of the above obstacles, the angler, especially if he is an "up-stream artist", can take home some worthwhile bags.

The beauty of the setting of the Maraetotara stream is in itself an attraction, and wildlife is comparatively abundant in the upper reaches. During the season, the song of the tui, the grey warbler, and the shining cuckoo may be heard; and quite often, the kingfisher, the world's best fisherman, can be seen diving into the water, and returning with a prize in his beak. From where it joins the sea at Clifton to well above the bridge on the Hastings-Napier-Waimarama Road, the Maraetotara stream is fishable. Although the fish are not so numerous in the lower reaches, some good ones are to be seen in the deep holes, close to where the river meets the sea at Te Awanga. Access is through private property for its whole length.

For fishing the Maraetotara, the best methods to employ are either nymph or dry fly. Maraetotara Browns will rise freely to a floating fly well presented, and they will also take a nymph very well at times, even during the early morning. In the evening a good idea is for the angler to take up a position on the eastern side of the stream, in readiness for the rise which usually takes place about half an hour before dark.

Flies suggested to use at this time are Twilight Beauty Dry, or a Brown Beetle fished as a nymph.

Central Hawke's Bay

In this area there are two main river systems, which converge three miles down stream from the township of Waipawa, to become the Tuki Tuki proper. The Makaroro, carrying the greatest volume of water, rises in the Wakarara Range and joins the Waipawa river, which flows from the Ruahines, a few miles west of Tikokino. Eighteen miles further down, the Waipawa is joined by the Mangaonuku, which is mainly spring-fed, with a fairly constant flow, not subject to bad discolouration or excessive flooding.

The upper reaches of the Makaroro and Waipawa rivers are in steepish country, but the water is seldom too deep to wade in comfort. Fishing here is inclined to be inconsistent, but usually better in the early and late parts of the season. There appears to be a population of large resident Rainbows well up the Makaroro-Bawa junction the river opens out and flows over a wide bed of shingle and stones, providing good, easy-accessible fishing for 28 miles down to the Tuki Tuki. The fish are mainly Rainbows from 1 to 3lbs., and this water fishes well at most times. Lures and spoons may be used, but light tackle is advisable when the river is low and clear. In a very dry season much of the water in this stretch disappears below the stones; but to date it has not been necessary for the Society to salvage fish.

The Mangaonuku is a truly fine trout stream; it has a good substantial bottom, which never scours, and which is endowed with a good supply of bottom-feed, providing first-class hatches of fly, and a good rise in the evenings. To the uninitiated this stream gives a completely negative impression during the day. The angler may wander for hours along its banks, and never see a fish; but with the approach of dusk, fish rise abundantly, and despite the number of rods fishing this small water, an adequate

head of fish appears to be maintained, nearly all of good size, and providing excellent sport.

The fact that the water flows through the grasslands of the plains induces a plentiful supply of Brown Beetle; and the fly fished dry seems to fish well through most of the summer season. Other patterns of flies and nymphs are as suggested for the district, but emphasis should be placed on the necessity for a cautious approach, and equipment should be fine, and of good quality to avoid disappointment. It would be unwise to fish this water without a landing net.

Nearer Waipukurau the Tuki Tuki and its tributaries, the Makaretu, and Marakeke, the Tukipo and Black Creek have provided good fishing for the last half-century, at least, excepting for periods when flooding has been particularly severe. The upper Tuki Tuki and Makaretu are snow-fed from the Ruahines, while the remaining three rise from springs on the plains.

These small streams are unusual in that they produce a good head of both Rainbow and Brown trout, ranging in weight from 11 to 7lbs, and usually in excellent condition. All of these streams have good shingle bottoms with plenty of insect life, this applying particularly to the snow-fed streams. The Tuki Tuki and the Makaretu higher up are not so well endowed, and fish well only in the early and later parts of the season, or nearer spawning time; but lower down good daylight and evening fishing are obtainable. The smaller streams fish much better in the evenings, and do not lend themselves to either lure or fly during the day. The angler, who is really keen, will find that the evening fishing produces by far the best bags of larger fish in all these waters; particularly the specialist, who fishes the top of the water with a small dry fly, or, who, when the time is right, is prepared to use a nymph. Lure fishing plays an important part, and at various times of the day will take a proportion of fish; but "fine" and "small" have been proved to be the best passwords to success.

It should be mentioned that 12 years ago, these waters were stocked with Browns, the ova having been obtained from Tasmania by the Acclimatisation Society. The progeny have spread through the entire upper Tuki Tuki system. Specimens have been taken up to 5lbs. as far downstream as Tamumu. These particular Browns are superb fighters, colourful and clean, and a worthy addition to a bag of Rainbows.

For the angler, who is strange to any water, there is always the problem of flies. When he shifts from one locality to another, there is always that element of doubt, as to what type to use. To help overcome this, here are a few suggestions, which have been tried and proved successful over the years by experienced anglers of the Central Hawke's Bay district. Dry Flies: Red-Tipped Governor, Hardy's Favourite, Greenwell's Glory, Brown Beetle, Black Spider, Black Gnat, March Brown, and Pheasant Tail, sizes 12, 14, 16.

Wet Flies: Red-Tipped Governor, Hardy's Favourite, March Brown, Purple March Brown, Peveril of the Peak, Heckham Peckham, and Bradshaw's Fancy, fished on a floating line. Sizes 10, 12, 14. Peveril of the Peak is particularly effective for evening fishing, if dressed lightly and fished slowly.

Nymphs: March Brown, Copper Nymph, Stone Fly Nymph, Hare's Ear, Blue Dun and Tup's. Sizes 12, 14, 16.

Lures: Hammill's Killer, Hairy Dog, Parson's Glory, Mrs Simpson, Matuku, Dorothy and Hair Fly. Sizes 8, 10.

Spoons: Of one's own choice.

For those, who have difficulty with small flies after dark, the technique of fishing a Mrs Simpson or a Fuzzy Wuzzy on a floating line has produced many a large fish. Both of these flies should be fished just under the surface, slowly and without drag, with hooks of fairly heavy wire.

The district is served by good roads, and most of the favoured fishing spots can be reached within half an hour from either Waipukurau or Waipawa. The Central Hawke's Bay Anglers' Club, whose services are always available, extends a welcome to those wishing to fish in this highly profitable area.

Southern Hawke's Bay

The Manawatu commences its 100-mile journey slightly to the north of Norsewood, where a number of small streams from the Ruahines and several spring-fed creeks converge. It flows gently through the rolling pastoral country of Ormondville, Dannevirke and Woodville down through the rugged Manawatu Gorge to empty into the sea on the west coast near Foxton. The entire system, with the exception of one tributary, the Makuri, has always been good fishing water for Brown trout.

For the first twenty or so miles through Ormondville and Makotuku the Manawatu is a small stream, the bed being a mixture of clay and stones with a succession of pools linked by small rapids, the banks lined with willows in many places. There are a few fish in most of these pools, enough to make a leisurely trip worthwhile if the angler is prepared to be patient and use light tackle.

At Timber Bay, a short distance south of Dannevirke, the Manawatu is joined by the Tamaki, which flows down from the Ruahines carrying large quantities of shingle when melting snow brings a fresh. The nature of the river changes dramatically at this junction. The steep banks associated with its earlier course disappear, and the bed of the river opens out into long shallow flats with a few deep pools, interspersed with stable rapids over stones and small boulders. From Timber Bay to the Gorge there are about 25 miles of excellent and easily accessible trout water. About a mile down the Oringi Road from Dannevirke is the well-known Horseshoe Bend, an area where the fisherman may choose his reach according to the direction of the wind. A short distance from the Bend itself ,a track leads across the paddocks to the Dannevirke Anglers' Club Hut. This popular amenity was made possible through the generosity of the late Peter Barron, who made the site available; and the Acclimatisation Society has, from time to time, assisted financially with its maintenance.

Generations of anglers have come from near and far to fish the Manawatu at Oringi; and over the years they have been well-rewarded. The Brown trout of the Manawatu are good fighters generally, and if they lack the spectacular acrobatic qualities of the Rainbow they will, on light tackle, give a good account of themselves. Anglers from the Rainbow country further north are apt to say that the Brown is shy, temperamental, and even downright unco-operative. The Browns may be more fastidious in their eating habits than their greedy cousins; but in the Dannevirke-Woodville area there are probably more than a dozen fishermen, who consistently take between 100 and 200 Browns from the Manawatu each season.

The trout rise well to fly on the Manawatu during the months October to February, and sometimes this activity of the fish is quite spectacular. Undoubtedly the most productive method of fishing is the dry fly, fished up-stream. The best rise is in the evenings, usually continuing till well after dark.

Recommended dry flies are:— Coch-y-Bondhu, Red-Tipped Governor, March Brown, Pope's Nondescript, Red Spinner, Wyckham's Fancy and Blue Dun, tied on size 12 to 16 hooks. During the day there are sporadic rises, and indications at times that the fish are feeding below the surface. When this is evident it is worth trying a nymph, slightly weighted, fished up-stream.

Three miles south-east of Woodville at Ngawaparua, on the main Wairarapa highway, the Manawatu is joined by the Mangatainoka. This is a particularly productive and easily accessible stretch of water. With the addition of the Mangatainoka, the Manawatu assumes much larger proportions, and is suitable for all kinds of fishing. Though many trout are caught on minnow or spoon, fly-fishing is still probaly the most popular and productive method to use. If there is no rise small wet flies or Taupo-type lures, such as Hairy Dog and Craig's Night-time, (size 6 to 8) fished after dark with a sinking line in the deeper pools, can produce good results.

Woodville anglers are especially fortunate in that when the Manawatu is discoloured, the Mangatainoka may be clean, and vice versa. In fact Southern Hawke's Bay anglers regard themselves as particularly lucky in living in that part of Hawke's Bay Province.

Lake Tutira

The lake offers all types of fishing, and has become very popular since the Winter Licence was introduced. Some good catches have been taken trolling, or by casting to rises from a moving boat. Thread-line fishing is fairly popular, and there are many spots around the lake, where this can be indulged. Every angler has his favourite time for fishing, but night fishing with a wet fly is most rewarding.

One angler, who has recorded his catches for many years, has found, that of the average 100 trout taken per season only 1% were Browns. Yet one year, when fish were stripped, 70% of the fish netted were Browns. They are obviously there, but elusive.

There are indications, that, as in some of New Zealand's larger lakes, the Rainbows tend to shoal in Tutira. They normally spawn in the headwaters of Sandy Creek, which is at the northern end of the lake, but when this is not possible, due to the large numbers, they also attempt to spawn in the lake itself. On one occasion at sunrise, an angler, after taking eight fish during the night, saw a shoal of at least sixty fish milling around in a small area. That was in October, and the fish were at their best. Apparently the gravel bottom of this beachy spring-fed area appealed to the fish as suitable for spawning.

Tutira entices the night fisherman, particularly to the environs of Sandy Creek. Taupo lures are popular, and a favourite fly is an all-red fly, Tutira Rajah.

Most anglers hope to get a few fish on their trips to the lake. To assist them, this advice is offered. After casting, retrieve the line very slowly until the cast is touching the rod-tip ring, and then gently lift out the fly—but be prepared, fish often take at this stage.

The lake weed is a problem to anglers, but it provides haven for many forms of trout food. The growth-rate of Tutira fish compares more than favourably with trout from other waters; one tagged fish, weighing 3½lbs. taken in May, 1961, was liberated in August 1960, as a 5-inch fingerling.

THE FISHING YEARS, 1930-1940

The years 1930 to 1940 were dominated by the earthquake of February, 1931, and the floods in the days following 23rd April, 1938, with consequent serious damage to trout stocks. The earthquake eliminated most, if not all, of the delightful fighting fish in the Esk river, which had been a wonderful stream for anglers, young and old. Before that time many a good bag up to the limit of 25, was taken on small wet flies such as Red-Tipped Governor and Purple March Brown. On one occasion the bag of a highly satisfied angler contained 24 fish, ranging from 1¼ to 1½lb. all taken on fly. Yet 10-pounders were found dead in the silt brought down by landslides in the 'quake era. For reasons that are not at all clear all attempts to restore that grand fishing have failed; and the few fish that survived the upheaval were later decimated by the Anzac floods in '38.

The story of the earthquake is well known, but few will have any conception of the vast power let loose by the floods. With rainfall for three days, totalling 11 inches at Hastings, 16 at Eskdale, and 28 at Tutira, Northern Hawke's Bay took the brunt of the deluge. The Esk Valley was wrecked, and vast areas of land elsewhere were laid waste. In the Te Hoe stream, a tributary of the Mohaka, an earth-dam, estimated to be 250ft. high, when formed by a landslide during the earthquake, was washed away. The resultant colossal wall of water denuded the Mohaka of the major portion of the trout stock below that point.

Central Hawke's Bay had worries, too, and there were fears for the safety of Waipukurau during those days of incessant torrential rain. To the angler the effect of the flood on the Tuki Tuki was all too obvious, and it was rare indeed to find fish in the middle and lower reaches.

But calamities or not, many anglers found grand fishing earlier in this decade. In the central areas, the tributaries of the Tuki Tuki provided the sport, while the lower reaches gave even bigger fish to Hastings and Napier anglers. The latter were also served well by the Ngaruroro and the Tutackuri, as well as by the Arapawanui, which, though fished lightly, carried a large number of Rainbow. It, too, met the fate of the Esk.

In order of preference, the most popular methods of fishing for the predominant Rainbow would have been lure, fly-spoon, and small wet fly. Lures tied with hair and Matuku feathers accounted for most of the big fish up to 8lb. and more. There was a limited amount of spinning, and an occasional dry-fly man might be seen, but the practice of nymph-fishing was almost unknown. Dependant on the area, the average bag would range from 1½ to 2½lbs. The variety of the Rainbow species most prolific at this period, was Salmo irideus, (so named by Gibbons about 1850) a fish distinct from the now predominant Salmo gairdnerii, which appears to be migratory, a much debated subject.

By present-day standards, angling pressure was light, but there was a ready enthusiasm, so necessary, when it is remembered that many anglers had only bicycles to get them to the rivers, and to bring home the catch.

Record of Trout caught by Mr I. W. N. Mackie in Central and Southern Hawke's Bay in the years 1913-16.

Centr	al H.B. Days	fished	Brown	Rainbow	Total
1913	October 1	7	18	70	88
		0	14	3.5	49
		1	1		1
1914		0	13	12	25
	February	3	11	3	14
	March	3 8	8	26	3.4
	April	1		4	4
	October 1	8	2.5	26	51
		8	49	14	63
			2.2	7	29
1915	January	5	15	4	13
	October 1	8 5 5 5	15	138	143
	November	5	22	2.2	44
		4	17	113	130
1916	January	4		38	38
South	ern Hawke's B	lay			
1913	October	2	3.5		3.5
	November	1	23		2.3
	December	3	6 5 16		6
1914	January	2	5		5
	November	2	16		16
	December	3 2 2 3 1	28		35 23 6 5 16 28 2
1915	January	1	2		2
1916	January	5	44		44

Central Hawke's Bay rivers: Tuki Tuki, Waipawa, Makaretu, Mangaonuku, Black Creek, Marakeke, Tukipo, Mate.

Southern Hawke's Bay rivers: Manawatu, Mangatoro, Totara Creek.

Wildlife Refuges In Hawke's Bay

The following notes on the history and purpose of Wildlife Refuges in Hawke's Bay refer only to those areas specifically declared Wildlife Refuges under the provisions of the Wildlife Act, 1953. It is pointed out that, in addition to these, there are in Hawke's Bay many other Wildlife Reserves, registered under other Acts, such as the Reserves and Domains Act, 1953.

LAKE TUTIRA

This is probably the best-known refuge in the province. It also includes Lakes Waikopiro ard Orakei. The late H. Guthrie-Smith, who first leased Tutira Station from the Maoris in 1873, preserved the lakes as a sanctuary for wildfowl from the early days. The birds most commonly seen are Black Swan, Mallard, Grey Duck, Black Teal, Pukeko and Australian Coot and Dabchick. Tuis, Bell-birds, and Native Pigeon frequent the neighbourhood as do other species of native birds.

TUKI TUKI RIVER

The Chambers family, who owned five miles of the Tuki Tuki River upstream of the Waimarama Bridge, declared this stretch of the river as a bird sanctuary in 1916. The birds concerned are mainly ducks and swans.

TE MATA PARK

This area was declared a domain by the late Mr M. S. Chambers. It includes Te Mata Peak and some of the surrounding land. Some Pheasants are found in the lower plantations, but other species of wildfowl are not common.

ORENHAM ESTATE

This is a small area of swamp which was set aside in 1951, as a duck-breeding area, on a property on Harris Road, Woodville.

HORSESHOE LAKE, ELSTHORPE

This is a small lake in the Elsthorpe district, declared a Wildlife Refuge in 1957, to protect a colony of Grey Teal; and it also serves as a duck-breeding area.

HARTREE'S PROPERTY AT PUKETITIRI

An area of bush on the property owned by the Hartree family, at Puketitiri, has been fenced and set aside as a native bird reserve. Species commonly seen are Pigeons, Tuis, Bell Birds, and smaller birds such as Grey Warblers.

WESTSHORE PONDS

After the earthquake drained the Ahuriri Lagoon at Napier, two shallow ponds were left at Westshore, adjacent to the present Westshore Motor Camp. These have developed as one of the finest refuges for migratory and wading birds in the country and were declared a Wildlife Refuge in 1958. Over 70 different bird species have been recorded. It is also widely used by ducks and swans.

SPIT AT MOUTH OF NGARURORO RIVER

For many years there has been a Tern colony on the spit at the mouth of the Ngaruroro River. In 1956 it was reported that these birds were being disturbed by picnickers and their dogs. The area was therefore made a Wildlife Refuge.

BACKWATER AT MOUTH OF TUKI TUKI RIVER

This area was made a refuce in 1958, to protect waterfowl such as Waders. In view of the proximity of the Haumoana Township, this refuge has diminished in value, and is soon to be converted to a Closed Game Area.

RAKAUTANU FOREST

In 1960 Mr H. R. Holt made over an area of mainly exotic trees to a Trust to preserve for the district. It was declared a Wildlife Refuge to protect the native bird population, mainly Tuis, Pigeons, Bell Birds and Grey Warblers.

The numerous properties declared as "Closed Game Areas" are not included, as these are of lesser importance, and can be revoked at the request of the property-owners concerned.

Ahuriri Wildlife Refuge

Though the Ahuriri Wildlife Refuge is generally considered to consist only of the ponds behind the Westshore Motor Camp, it does, in fact, comprise a far larger area. It embraces as well, all the water, both salt and brackish to the west of the new Westshore Bridge in Pandora Road, up to the pumping station on the outfall channel. This expanse of water, salt marsh and dry land, with a total area of 400 acres, supports an amazing number of bird species of several distinct groups, not only of birds native to this country, but also of many migratory birds from Asia and North America.

The Refuge has some unique features uncommon to many others, not the least of which is its proximity to a city. The main north highway, the boundary to Napier in the west, cuts through the Refuge area. Approximately 150 acres of tidal channel and mudflat are actually situated within city limits, the remainder of the area, 250 acres, lying just outside to the north-west, its two main ponds adjacent to the road and only three miles from Napier's chief Post Office.

From the birds'angle the Refuge offers an ever-changing habitat, due to the ebb and flow of the tides. It affords the opportunity for some species to breed; for others to feed, or to rest during migration; or to swim, to dive or to play. And in the shallow brackish pools along the fluctuating, seasonal shoreline, aquatic flies and insects breed in millions, providing a food supply necessary for so many wildlife species.

Of the waterfowl, Mallards are the most common, followed closely by Shoveler, Black Swan, Paradise Duck, and Grey, in that order. Small numbers of Grey Teal, Dabchick, and even Canadian Geese have been recorded. Of the native birds, not on the Game list, the most common is undoubtedly the Pied Stilt, which has greatly increased in recent years. Also in the Refuge are four species of Shag, and of course, the Gulls, mostly Black-backed but with a number of Red-billed and Black-billed. Others present are the Caspian Tern, White-faced Heron, Reef Heron, Pukeko, and Bittern. White Herons and Spoonbill generally appear during the winter.

The largest group frequenting this ideal haven, and to the ornithologist the most interesting, is the Waders. Of this order, five breed in New Zealand, and the remainder in the high latitudes of the Northern Hemisphere. The New Zealand species are the Banded Dotterel. Black-fronted Dotterel, Pied Stilt, Oyster-catcher, and Wry-bill. The latter is unique in being the only bird in the world to have its bill turned to one side.

Of the thirty-eight species of migratory wader to visit New Zealand, twenty-four are represented at Ahuriri. Some do not come every year, but those species that do visit annually arrive from September onwards, and depart in May. The largest bird in this latter group, the Bar-tailed Godwit, is also the most numerous, between five and six hundred arriving each year, and with about fifty remaining right through the winter. Other common species include the Golden Plover, Turnstone, American and Siberian Sandpiper, Curlew Sandpiper, and the smallest migrant of all, the Red-necked Stint, about the size of a lark.

In all, a grand total of seventy-two species of bird has been seen at the Ahuriri Rufuge.

Some idea of the importance of the area may be gauged from the fact that a number of extremely rare birds has been seen on this refuge for the first time in New Zealand: Black-fronted Dotterel and Lesser Yellow-legs; a number of others, too, have been seen here for the second or third time in this country: Japanese Snipe, Little Whimbrel and Least Sandpiper.

The Hawke's Bay Wildlife Trust, inaugurated in 1966, has under an arrangement with the Napier City Council, now taken over the management of this whole area and will in the near future begin to develop it.

As well as permanently preserving the Refuge for native and migratory bird species, the Trust plans to make provision for bird-watching stations, display areas for the Kiwi and other ornamental birds, improved nesting conditions and the rearing of some rarer species in captivity.

In doing so it hopes to encourage as visitors not only the ornithologist, the bird watcher, study groups and the tourist, but also members of the general public.

Bittern Pukeko Blackbird Redpoll Chaffinch Rook Cirl Bunting Sandpiper, Curlew, Long-billed Curlew Least Pectoral Dabchick Sharp-tailed Duck. Terek Grev Skylark Mallard Paradise Shag. Shoveler Black Litle Black Dottrel, Little Pied Banded White-throated Black-fronted Snipe, Japanese Dunnock Sparrow Egret, Little Spoonbill, Royal Fantail Starling Godwit, Stilt, Pied Bar-tailed Stint, Red-necked Black-tailed Swallow, Welcome Goldfinch Swan. Goose, Canada Black White Greenfinch Gull. Tattler Black-backed Black-billed Teal, Grev Red-billed Tern, Caspian Hawk, Harrier Fairy White-fronted Heron. White-winged Black Reef White Thrush, Song White-faced Turnstone Kingfisher Warbler, Grey Knot Whimbrel. Magpie, White-backed Asiatic Little Mynah White-eye Oystercatcher, Wrybill

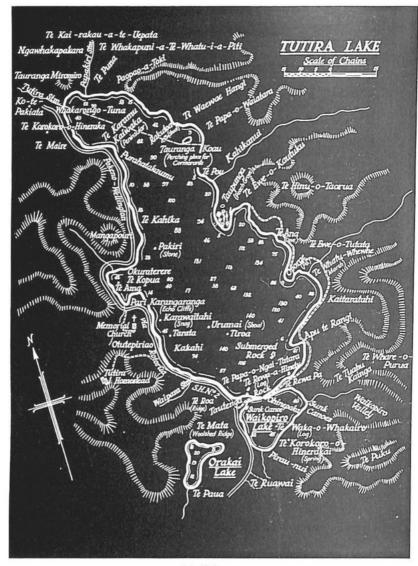
Black Pigeon, Rock

South Island pied

Pipit

Plover, Golden

Yellowlegs, Lesser



Lake Tutira

Lake Tutira

In the whole of Hawke's Bay it would be difficult to find a more beautiful locality than Lake Tutira, a spot steeped in history and in legend; a spot that today, besides offering refuge for thousands of wildfowl of many species, is a popular angling, and camping resort. Actually there are three adjacent lakes forming an area known as Tutira Domain, which is administered by a Domain Board. constituted in its present form in 1964. Orakai, the smallest lake, is situated about 10 chains north-west of the main highway, but it is obscured from the road by a low-lying ridge.

The first glimpse of the Domain is gained by a traveller on approaching Waikopiro, the second largest of the three lakes. This placid, willow-bordered and sheltered sheet of water prepares the onlooker for the glistening expanse of Tutira beyond, a breathtaking view indeed.

These sentimental willows themselves have a history. They were planted by the late H. Guthrie-Smith as cuttings propagated from the original weeping-willow tree that, at one time, on the Island of St. Helena, grew near and hung over Napoleon's tomb. (Napoleon's remains later interrred in Paris at "Les Invalids.")

Many of the majestic willows are now old, some are dead, and some have fallen; but the hundreds still remaining, stand as monuments to their planter, truly a man of vision and understanding, and one who did so much towards the preservation of this scenic gem, one of New Zealand's foremost wildlife havens. North and just beyond Waikopiro Lake, a side road leads off to the right, into an area set aside for a camping and picnic ground. Near the lake shore is a low hill-Tautenga, from where it is possible to see almost the whole length of Lake Tutira itself. This two-mile length of water with a total area of 500 acres and averaging half a mile in width, wider at its southern end, is situated by road less than 30 miles from Napier city. It nestles on the floor of a wide, sheltered valley, 500 feet above mean sea level and has a maximum depth of 140 fcet. The lake's shallower waters are situated mainly at the narrower northern end.

The western edge along which the main road continues is bordered by an almost unbroken line of willows their trailing branches reaching right down to the water. Rolling hills form a back-drop to this scene, and low intervening ridges, covered in man-made plantations of pine, wattle and gum, hide the Tutira homestead, where the late H. Guthrie-Smith lived for so many years.

Guthrie-Smith was a man of many accomplishments. He was a keen naturalist and a clever wildlife photographer. His book "Birds of the Water, Wood and Waste", published in 1911, and profusely illustrated with his own black and white studies of birdlife on and around the lake, is still sought after by ornithologists.

Another book "Tutira", the story of a New Zealand Sheep Station, published in 1921, besides exemplifying his acute sense of observation of natural phenomena, also portrays him, as no mean Maori scholar, well versed in the history and legend of their race.

In this book he records the day-to-day happenings on his 61,140-acre sheep run; the physical changes in the countryside brought about by the introduction of sheep, cattle, goats and horses; the change in the landscape due to earthquake and flood; the effects of changing habitat on wildlife; and the effects of introduced species, both fauna and flora, on the basically virgin country.

Guthrie-Smith was also a botanist of repute and in "Tutira" portrays, by means of excellent line drawings, an almost complete record of the many species of plant-life that flourished on his "run" at the turn of the last century.

Further reference to his early records show that over the last 100 years Lake Tutira has been changed by time and the hand of man to such an extent that descriptions of it, as it was before the advent of Europeans, make it almost unrecognisable today.

Where once lay vast areas of swamp, herds of cattle now graze on dry land drained by man; where once stood acres of tall flax, tilled fields now flourish; bush and manuka-covered hills and slopes have given way to sheep pasture, as have the foot-tracks of the Maori and early settler given way to formed and paved roads of more recent times.

And it was Guthrie-Smith himself, who was responsible for a major change in the fauna of the Lake waters. In the earyl 90's he introduced trout to the Lake, by taking advantage of the fact that a shipment of fontinalis ova had arrived in Hawke's Bay from America by paddle steamer. Taking delivery of a case of the ova at Tangoio he carried it to the Lake, balanced on his saddle-bow. From time to time as he passed over one of the many small streams on his journey, he dipped the case in the cooling

waters, and thus arrived with the ova in good order. But unfortunately this first attempt at trout acclimatisation in Tutira was not successful.

Since that first attempt with fontinalis ova, many liberations of both rainbow trout and brown have been made. The earliest liberation of which records are available probably took place prior to 1920. These fish soon became acclimatised, but propagation by natural means is still today not very successful, because of the lack of a good spawning stream. The only stream of any size is the Papariki (generally known as Sandy Creek) which enters the Lake at its northern end. Although spawning trout in numbers do run up this stream for about two miles, there are few holding pools, and the mortality rate of hatched ova and despoiled redds is high. In its upper reaches the stream is little wider than a small drain, and being subject to floods and siltation, it is not the ideal spawning ground. However, continued stocking over the years has, to a large extent, more than compensated.

As a boy in Scotland, Guthrie-Smith had had some little experience in pisciculture and his subsequent observations in his book "Tutira" on the phenomenal increase and heavy weights of trout, wherever they were successfully established in the early years of acclimatisation, are interesting.

"The superlative rod-fishing of the 90's, and of the first 10 or 15 years of the 20th century has receded almost to normal conditions. Nowadays (approximately 1920) a heavy basket is as difficult to obtain in the rivers of the Dominion as in the waters of the Old Country. This state of affairs will be ameliorated when we cease to breed from ova of non-resident fish, and when we revert, as far as possible, to local sources of supply."

In this statement Guthrie-Smith showed that he, even at this early date of trout acclimatisation, was fully aware of the distinction between migratory and non-migratory fish of the same species.

He goes on to state, "Trout have for many years been coasting the shores of New Zealand and running up the rivers. In the Waikoau, for instance, fish, which are practically estuarine trout, have from time to time been snatched or speared, fish quite dissimilar to the proper resident river trout. The little Moeangiangi Stream, reaching the sea two or three miles north of the Waikoau, may also be cited. It has never been stocked, yet up its brief course fish, from the Pacific have run. It might have been thought possible that river trout in the Waikoau.

washed out in the floods from Tutira Lake had taken to the salt water and later returned to spawn. Beyond controversy, trout in the Moeangiangi have entered virgin water direct from the ocean."

Below the slope of Tautenga, at the water's edge, lies the historic rock to which the early Maoris tied their canoes. Skirting the shore line, a few yards out, in either direction, are beds of water-weed with waving masses of oval leaves and feathery fronds, anchored to the bottom by long slender thread-like stems.

An ancient legend tells of a sunken long, Te Rewa-a-Hinetu, which lay on the Lake bed a short distance from the rock, Tautenga. The position of this log shifted from time to time, due to storm and wind and sometimes it disappeared altogether, but the Maoris foretold coming events by its location in relation to the rock. When the log was visible it was a sign of plenty, and when it was not, it indicated a period of poor crops and scanty food supplies. If it happened to move toward Tautenga and came close to the rock, it signified a death in the local tribe.

About 10 chains east of Tautenga a narrow spit of land separates Waikopiro from Tutira. In the early days these two lakes were joined by a bog swamp—now consolidated—and when the lake level was high the two were sometimes joined by water.

Each tongue of land running into the swamp from opposite sides was once the site of a pa, Tautenga on the near side, and Te Rewa on the far.

An unmetalled road continues around the shore for about a mile, sometimes passing under groves of willows, and at other times climbing over sloping ridges that extend from the skyline down to the water's edge.

The silence is often broken by the harsh scolding of a kingfisher, annoyed at any intrusion into its domain—a darting streak of azure blue in the sunlight as it flees, its nesting hole high up in the trunk of a rotting tree. A tattoo on the water heralds the departure, from a sheltered inlet, of a fast-flying Black teal, a species of diving-duck now becoming rare, the noisy efforts of its feet paddling furiously on the surface giving it sufficient momentum to become airborne. Then with wing movement nearly too rapid for the eye to follow, the teal skims the Lake, like a jet-propelled rocket, finally landing far out, braking with lowered legs and extended webs in a splash and surge of water.

All along this shore are many spots where anglers can cast from the Lake edge, and in some places it is possible to wade. Farther on is a deep-water bay and the promontory of Apu-te-rangi. This was a sacred place and legend records that nearby lay a deep underwater cave. It was considered dangerous to be found in this area after dark, and no Maori would willingly take his canoe anywhere near. Even today the deep water looks black and sinister.

Around the corner from Apu-te-rangi is an area of lake with a clear papa bottom. This is a favourite swimming place, free from weed. The numerous cracks and crevices in the papa bottom make it also a favourite lie for brown trout, and a Leslie lure or a Lord's killer fly, fished deep and slow while wading, often reaps a handsome reward. It is possible for fish weighing anything up to 6 or 7 lbs to be taken here during the day.

Across the bay to the right, stands out the pine-covered promontory of Oporae. To observe this old pasite at close quarters it is necessary to follow the track past the Scinde Angling Club's huts. These were once the summer camp buildings for the Hawke's Bay Children's Home. On the landward side of the pa, stretches a wide open, grass and rush-covered flat, sloping down to a shallow bay. Here at times when the weed growth is not too prolific, good fishing for browns can be enjoyed from the area where a drain (once a watercourse) joins the lake. During the hours of darkness the trout feed close into the shore, and a very short line fished in water only a foot or so deep can often be most effective.

At the point of Oporae, where it is hard to imagine once stood the pa (except for the remains of old earthworks vaguely visible) the water is shallow, and rock ledges provide excellent cover for fish. It is not easy to cast from shore as the trees overhang the water, but many a good trout has been taken from here by trolling from a boat.

Here and there, where a deep-worn track or a farm road cleaves the side of a hill the remains of ancient Maori middens protude from the bank. Piles of broken shell, splintered bone and fire-coloured cooking stones, now covered in some cases with many feet of topsoil, mark the spots.

Adjacent to Oporae is a shallow bay, which was the gathering place of kakahi, a freshwater mud-mussel. The Maoris considered this shellfish a delicacy and especially suitable for the ailing and young children.

An interesting feature of the kakahi is the way in which it transports itself from place to place when in the larvae stage. The minute organisms attach themselves to the fins or body of small freshwater fish, and drop off when a suitable mud bottom is found, where they grow to maturity. The track along the shore beyond Oporae passes several low bluffs surmounted by native shrubs and tall pine trees. Beyond them is a sheltered, bushfringed cove, one of the few remaining where native softwood trees grow down to the Lake edge. Here a green sward of grass extends back a few yards from a beach of fine shingle.

Blackberry bushes are fast taking charge, overgrowing and choking out the undergrowth of fern and manuka. Moreporks, Tuis. Fantails, Kingfishers and an occasional Native Pigeon frequent a grotto at the head of this cove, and they can often be approached to within a few feet. Grey Duck and Mallard can sometimes be surprised and flushed from under the overhanging willows.

One sure method of distinguishing between Teal and Duck on Tutira is to observe their methods of take-off from the water, when disturbed. The Teal need a running start but the grey and mallard appear to leap vertically into the air, as with straining wings and outstretched necks, they streak away quacking in alarm. Another distinction is the cry of the teal which sounds more like a "peep" than a "quack."

The water off this short extent of shore, shelves steeply, and weed beds, a few yards out, line the edge like a ribbon, but leave a strip of clear water near the beach. The deep water limits are marked by a weeping willow on the left and by a stand of bullrushes on the right. With the aid of thigh boots, it is possible for anglers to fish in the deep water beyond the belt of weed.

In places there is little room for a backcast to straighten out, but a roll or steeple-cast will overcome this difficulty and make it possible for the fly to land out where the trout lie. More than one angler has snagged an overhead branch or a clinging bramble in this delightful but frustrating fishing spot. The excellent fish to be had with perseverance, however, more than compensate for the occasional loss of terminal tackle. When the fish are not rising, a cast along and parallel with the outside of the weed bed, allowing the lure to sink deep, is the right method to employ, especially if the retrieve is slow and in short pulls.

One Tutira angler, who used to camp around the corner in Taupanga Bay, often fished the grotto cove at first light. Many a time he returned to camp well before the full light of day with a brace of trout, often one of each variety. Of the two, the brown trout was his favourite table fish, and there is no doubt that, whether served either fresh or smoked, a well-conditioned Tutira brown with its rich, orange-coloured flesh, does make a temping dish.

Trout in all waters have definite feeding patterns and those in Tutira are no exception. This pattern may vary according to the weather, or from place to place and season to season; but the occasional fish can be caught at almost any time on the Lake with spoons and lures, especially when trolling. The most fruitful hours during mid-summer lowever, are at dawn and dusk with sometimes a short period at midday.

The bay itself, nestling under the hill of Taupanga and sheltered from the north and east, has good fishing water and can be fished from shore.

All signs of the old pa on the crest of the ridge have long since disappeared, and only a few very old pines and gums mark the site. Gone also are the peach and cherry groves that once flourished under Maori cultivation on the gentle slopes leading up to the higher hills beyond.

A short distance around the shore from Taupunga a small creek, now choked with weed, enters the Lake. Kahikanui, as it was known by the Maoris, was once a small but free-flowing stream that meandered through swampy ground and drained a valley in the hills to the cast.

Gradually (and right up to recent times until it was cleaned out) this stream had become silted up. For years it consisted of little more than a series of semi-stagnant and weed-choked pools, but it did harbour fine specimens of Kokopu. These small fish, members of the Galaxias family, some of which are native only to New Zealand. are scaleless, and light transparent brown in colour, with green-grey mottling and darker vertical bars showing up clearly towards the tail fin. The Giant Galaxias (first discovered in a lake near Dusky Sound in 1775 by a naturalist from Captain Cook's ship "Resolution") grows to a maximum length of approximately 18 inches, Tutira kokopu, a member of the same family attains only half this size. It frequents slow-moving water and hides under banks, logs, watercress and weed. Normally, it is sluggish in its movements, but when fished for with live

bait and light tackle, it puts up a strenuous fight for a short period. The kokopu is easily caught by hand in shallow weed-covered drains and pools, and needless to say, it was a prime food among the early inhabitants around the Lake. The young of the kokopu are termed creshwater whitebait (in some localities, mountain whitebait) and are almost identical with the young of the Inanga (true whitebait) which ascend the rivers from estuarine waters. They can be netted in a similar manner and have a genuine whitebait flavour when cooked. Small shoals of these fish in the bait stage can sometimes be seen lurking in the shelter of an overhanking bank on the lake edge, but never in great numbers.

From Kahikanui Creek northwards the next feature is the steep spur of Te Pou, from where it is possible to see the first glimpse of the mythical floating island of Tauranga Koau.

When seen from successive vantage points along the main highway on the opposite side of the Lake, the illusion, that the island does appear to move, is heightened by the changing background of light and shadow on the broken country beyond.

This island was originally only a bare, low reef of rock, just visible above the lake surface, and as its name implies in the Maori language, was a resting or perching place for cormorants. The early Maori, realising the advantages of an all-round water protection from sudden attack, gradually converted the bare reef into a fortified pa. Large quantities of spoil were laboriously ferried from the mainland, about 200 yards distant, and eventually an intricate pallisading of huge logs completely surrounded this man-made sanctuary.

Despite its seeming impregnability however, Tauranga Koau was captured or sacked by raiding parties more than once before it was finally abandoned. All signs of human occupation have disappeared long ago, and now stately poplars tower above a jungle of saplings, fallen trees and coarse grasses.

Up until a few years ago this island was a nesting place of dozens of Black Teal. There they were safe from most predators, except the water rat that sometimes robbed nests; and the occasional harrier hawk, when the eggs had hatched and the young ducklings were out and about.

Unfortunately, with the large increase in the number of Black Swan, now permanent residents on the lake, the Teal have suffered a severe set-back, the swan having having almost completely ousted the former occupants from their favoured nesting place.

According to W. A. Gunn, a well known Tutira identity and former honorary Fisheries and Wildlife Ranger, who lived in his home on the Lake shore from the middle forties for approximately 16 years, the census of swan in 1960 was 254.

Since that time this number has increased still further but in the opinion of Gunn, who has made a comprehensive study of the birdlife on and around the Lake, there is insufficient feed to sustain a much larger population.

Although the hand of man has played such a large part in moulding the Tutira landscape, Nature, normally slow with its ever-changing pattern, has in the last 40 years contributed towards two sudden major changes, particularly at the northern end of the Lake.

The earthquake of 1931 was instrumental in raising by several feet the Lake bed and a large area of swampy ground along the lower reaches of the Papariki Stream. Then in 1938, when 27 inches of rain fell over a period of four days, the resulting flood covered more swamp-land with thousands of tons of silt; and ultimately, this once meandering stream was confined to a more direct course.

At one time the water from the Papariki did not enter the lake at all, but lost itself in the swamp, from where it slowly seeped into the Tutira Stream (the Lake's outlet). Now that the inflowing water is confined to a more definite channel to the Lake, all silt is deposited there instead of in the swamp. Consequently, this end of the Lake is becoming more shallow each year.

A wide fan of silt around the mouth of the Papariki (Sandy Creek) now extends well into the Lake, and where it shelves to deep water is a favourite angling spot, particularly for night fishing. Indeed, it is so popular at times it has been likened to the famous "picket fence" of Waitahanui at Taupo. Although Tutira is well stocked with brown trout, few are caught, except by anglers who excel in the technique required to hook this elusive fish. Anglers' bags comprise predominantly the Rainbow, but whether Brown or Rainbow the fish are nearly all in excellent condition.

Since the advent of aerial topdressing, the weed beds in the Lake have flourished. This is only natural as quite a large percentage of the fertilizer dropped from the air on the surrounding hills must, through the agency of water run-off, eventually find its way into the Lake.

Early in the 1960's the growth of oxygen-weed over a period of several years was so prolific, that trout were dying through lack of oxygen in the water. An even worse scourge to the once crystal-clear waters of Tutira is the advent of plankton bloom. This phenomenon makes itself evident during the hot summer, resulting in the waters becoming cloudy and nauseous. Tutira Lake is not unique in this. Most shallow lakes and lagoons are now plagued with this annual proliferation of plankton growth.

Although the control of weed and plankton can be accomplished by use of chemicals and water-aerating machines, the remedy is so expensive that few local bodies could attempt it.

Experiments are now being conducted in which grass and silver carp are the controlling agencies. Within limits this method has been successful overseas, but, due to possible long term adverse side effects, perhaps not yet apparent under New Zealand conditions, the Marine Department has not committed itself to any large-scale trial.

Great changes in the landscape, that have no connection with either flood or earthquake have also taken place in and around Tutira Lake in the last 150 years. H. Guthrie-Smith in his book "Tutira" records these changes, and in particular, the change in the Maori way of life around the Lake. He describes how Maori tribal wars temporarily ceased for several generations, because of the Missionary influence extending over the whole country from the beginning of the 19th Century.

No longer was it necessary for the Maori inhabitants to live cramped up in fortified pas, from where they emerged at daybreak to tend their gardens, to return for protection at dusk. Gradually, under the new feeling of security, the Maoris moved out from their confined quarters and established much more roomy and convenient living places called kaingas. The more picturesque fighting pas with their ornamental pallisades fell into disrepair, eventually to be abandoned entirely.

Towards the end of last century the Maori population began to shift away from inland lakes to coastal areas. This was general over the whole country, due mainly to a shrinkage in the population and a desire to live in the warmer climates of coastal regions.

Soon Tutira was deserted except for a few solitary residents, and visitors interested in hunting or fishing.

The last great change was brought about when the area surrounding the Lake was leased from the Maoris in 1873, and gradually converted into a sheep run. The advent of sheep, cattle and horses soon speeded up the slower changes normal to any landscape. Sheep grazed the hill slopes and terraced them in a maize of tracks; cattle consolidated the swamp land, trampled the fern and chewed out any palatable native herbage. Deep worn trails began to appear, and erosion accelerated a hundred-fold.

As late as 1873 the palisades of some fortified pas, deserted long before the more convenient kaingas, were still standing, but few signs of early Maori occupation now remain.

From the island of Tauranga Koau to the northern end of the Lake the shore line is comparatively uninteresting, hills, once manuka covered, extending right down to the Lake edge. The eastern shore being harder of access has however, a much more varied, prolific and undisturbed native wildlife population.

The Lake environment more accessible, because of proximinity to a road or track, has become the haven for introduced species better accustomed to living in closer harmony with man.

Naturalists and anglers alike find much to interest them on and around the lake. Many an angler fishing at Sandy Creek has had his curiosity aroused by a booming noise coming from the swamp adjacent. The "boom" can be likened to the noise caused by the expansion of a sealed and empty oil drum heated by the midday sun. It is hard to believe this "boom" is that of a bittern, another bird becoming more rare as the years go by. Today, very few people ever see this handsome wader (the matuku of the Maoris) outside a glass case, much less see it in natural surroundings. Its feathers along with those of the kiwi were prized for adorning flax shoulder-cloaks. When fishing in the shallows and becoming alarmed, or when in hiding, the bittern freezes

into a living statue, with spear-pointed bill directed skyward, and beady eye unblinking; a characteristic pose to represent a broken stick or a snag projecting above the mud.

Probably the greatest attraction on the lake for most visitors is the majestic Black swan. This introduced bird (native to Australia) which first reached Tutira about the 1880's, has found an environment entirely to its liking. The "clap, clap, clap" of swan wings beating the water as the huge birds taxi into the breeze prior to becoming airborne is now a familiar sound in the Domain. So, too, is the muted, whistling call of swan passing high overhead in perfect "V" echelon, as evening falls.

No finer sight can be seen at daybreak than several swan, after feeding all night in some sheltered bay, paddling full speed ahead, in line astern, out to the deeper water of the lake. They look for all the world like Mississippi steam boats with bow waves and trailing wakes as they glide over the glass-smooth surface.

The Black teal (scaup) often referred to as the "Gentleman of the Lake" is a most playful and interesting bird to watch. It feeds on the bottom, reached by prodigious dives of long duration. A teal will rise to the surface many yards from where it went down after a dive lasting longer than the average person can hold a breath. Guthrie. Smith records counting as many as 800 to 900 teal on the lake when he first leased Tutira, but the population has now declined to little more than a score.

The only spawning stream in the lake catchment is the Papariki. This water is closed to anglers, but even with this protection it is still vulnerable to human poacher and predatory shag. Subject as it is to flash flood and with insufficient shingle bottom to provide enough spawning redds, this small stream is totally inadequate for restocking the lake by natural means. It does, however, provide a convenient and handy source of stripped ova and milt for hatchery purposes.

The lake's only outlet is situated barely five chain away from where the Papariki Stream enters. Geologists state that this was not always so. According to them the original outlet was at the southern end, where the lake water escaped down a deep valley to join the Waikoau River. Today the confluence of the lake's more recent

outlet at the northern end with the Waikoau, is approximately four miles above where the ancient southern outlet once joined the same river. The geologists point out where huge landslides came down from the high escarpment above, effectively sealing off the southern exit. The present outlet gradually developed as the lake level rose behind the huge earth barrier.

The outlet stream between the lake and the road bridge is called the Tutira. Below the bridge it is named the Maheawha until it joins the Waikoau. The lake outlet was a favourite eel stream with the Maoris; and Guthrie-Smith in "Tutira" shows a map giving the location on less than 16 eel weirs on this half-mile stretch of water. The weirs were designed to bar progress of eels and lead them into traps or "hinakis", from where they were collected.

To the average person eels look alike, but the Maoris recognised three varieties at Tutira, two in the lake and one in the stream. Of the lake-dwellers, "riko", bronze in colour, and largest of all three, was seldom caught. The common smaller lake eel was named "tatarakau", the creek one, "pakarara". The Maoris found that the lake eel, when sun-dried, would keep for many weeks, but the creek eel only for days.

It is interesting to note that whereas the early Maoris observed the genetic differences of three varieties, zoologists recognise only two species of fresh-water eel in New Zealand.

From this ancient eeling ground at the northern end of the lake, the main highway skirting the shore resolves itself into a scenic drive, along which many motorists stop either for refreshment or photography; or merely for the joy of contemplating Nature at its best.

The views from some of the elevated vantage points are superb, and none more so than that from the Memorial Church, situated above the bluff of Pari Karangaranga. From here may be seen the Bay of Kopua, a raupo-fringed sheltered haven for numerous waterfowl.

Who wouldn't go to Church on a fine Sunday morning to view this lake-land panorama from the landscape window behind the altar—a shimmering sheet of water, rippling in the sunlight; the soft greens of weeping willow and darker pine; lazing duck and graceful swan peacefully at rest; the rising hills beyond, capped by fleecy cloud and mirrored in the still water of a sheltered bay?

Roadside traffic does not appear to disturb the birds—some feeding inshore and under overhanging willow; others with head tucked under wing drowsing the hours away. They take little notice of man or vehicle.

The absence of grazing stock has allowed a thick belt of vegetation to flourish between the road and water. Much of the recent growth of shrub and tree, both native and exotic, is partly due to the extensive planting program instituted by the Tutira Domain Board. Here in this belt of luxurious greenery many of the water birds have their nests and raise their young.

One of the most strikingly beautiful of the birds to be seen around the Lake is the pukeko, plumaged in its coat of indigo-blue, with long red legs, short flicking tail, white underneath, heavy arched beak and bright red eye. Elegance personified while on the ground, the pukeko, once in the air has an ungainliness which has to be seen to be believed—its wings laboriously flapping and long red legs trailing behind. It is seldom found far from swampland, lake, raupo or similar cover, and prefers to feed on low lying grass fields adjacent to such places. The grass fields verging the Tutira stream are a favourite haunt.

As the road proceeds south, it reaches first the woolshed, and then the driveway to the present Tutira homestead, high up on a hill and not visible from the road. It is in a perfect setting, sheltered, with lawns, gardens and trees encompassing it, the higher hill behind the perfect back-drop.

On this steep hillside behind the homestead stands a remarkable area of native bush. Before 1900 it did not exist, but at about the turn of the century some 15 acres of bracken-covered hillside were fenced off to keep out stock.

Apart from a belt of macracapas planted later for shelter along the lower boundary, nothing was purposely done to encourage regeneration of native trees. No seeds were sown, no young seedlings planted. Yet gradually, manuka grew in the bracken, which acted as a seed-bed and nursery. The manuka flourished and reached maturity,

but in doing so choked out the bracken. Soon native softwoods (broadleaf, whitywood and fivefinger) began to appear in the manuka which also, in turn, had to give way. the quick-growing softwoods gradually formed a green canopy at 20 to 30 feet above the ground. Then to complete the regeneration cycle, seedlings of the slower growing hardwoods (totara, matai and rimu) began to make themselves evident, poking out above a carpet of ferns on the moist floor of the young forest.

In time, native pigeons, that had disappeared from Tutira when the last of the old bush was burned off years before, began to return. Tuis, bellbirds and other indigenous species, seldom seen for several decades, also returned and multiplied.

It is an illustrated lesson in botany, and in regeneration in particular, to walk into this bush today. The story is still there to be read how nature if only left free to do so will re-clothe areas despoiled by animal and man. Remnants of the bracken fern still exist on the perimeter, but the tall manuka is now dead—some lying on the forest floor and some still standing, supported by a mass of living foliage.

This unique example of forest regeneration and reestablishment of wildlife habitat in a little over 40 years is a symbol of Tutira today. May it stand as an inspiration to those wishing to follow in the footsteps of H. Guthrie-Smith, the man who made it all possible.

AFFILIATED CLUBS

Scinde Anglers' Club, Napier

The club was formed after a meeting called by Mr Alec Gilchrist in 1953. Fourteen anglers attended the meeting, and Mr Gilchrist was elected first president. Today, membership stands at about 100, 26 of whom are lady or junior members, and all are eligible to compete for any of the Club's trophies.

Fishing competitions and field days are held at frequent intervals throughout the season. Members' families are always invited to these functions, which are held in a picnic atmosphere.

The trophies fished for each season are the Driberg Cup for most fish, the Boatwood Shield for the heaviest fish; the William Organ Memorial Shield for the heaviest fish taken during the Club's annual visit to Taupo; the Jack Howell Memorial Trophy for the heaviest fish caught in Hawke's Bay waters; the McMahon Memorial Cup for the winner of the annual casting competition; and the Scinde Memorial Shield for the highest aggregate of fish on field days.

Inter-club visits are an important feature, and over the years many enjoyable outings have been had with the Dannevirke, Hastings, and Wairoa clubs. Each year Scinde club combines with the Wairoa club for weekend trips to Waikaremoana, to decide who will hold the Crouch Shield.

In September, 1962, a learners' day was conducted at the Acclimatisation Society's Game Farm pond, where instruction was given in casting, water-safety, and fly-tying. This has now become an annual event.

Apart from angling, the Club is involved in many other activities. It helped to build the Society's anglers' hut at Glenfalls, on the Mohaka River, and also planted many trees around that property. Each year, too, it helps the Society with its Wildlife and Fish Exhibit at the Hawke's Bay Spring Show, at Tomoana. The Scinde members were responsible, too, for the renovations and extensions of the meeting-room at the Game Farm—the kitchen and sinkunit, particularly useful adjuncts. For this voluntary effort the Acclimatisation Society offered the Scinde Club, free of charge, the use of the building for meetings. In no small

way has this gesture saved the club financially, and thus indirectly kept the annual subscription at a minimum.

Further assistance at the Game Farm during the years has included the building of fish-races, the tagging of fingerlings, and the releasing of fish in the Hawke's Bay rivers.

During 1965, a lease of the Randall House huts on the shore of Lake Tutira was obtained. After many working bees by members, the huts are now in splendid order, and are being enjoyed by members and their families. The access road to the huts has been repaired and metalled, making possible an increased area of the lake shore to the public for picnicking and camping.

This Club is most appreciative of the Acclimatisation Society's management and its staff's efforts in keeping the Hawke's Bay rivers and lakes stocked with fish. Many anglers cannot remember when these waters fished better. Three years ago, one of our members, Mr J. Lockyer, landed a 10½lb Rainbow in the Tukituki. This year, another of our members, Mr L. E. Cooke, landed a 14½lb Brown from the same river, while at about the same time, Mr R. Steel landed a 9½lb Brown from the Tutaekuri.

The general opinion of the Scinde members is that the success and continued popularity of the Club, are, in no small measure, due to the cordial relationship existing between it and the Hawke's Bay Acclimatisation Society.

Heretaunga Shooters' and Anglers'

Established in Hastings in 1954, by an enthusiastic small group of sportsmen, most of them members of the Acclimatisation Society, the Heretaunga Shooters' and Anglers' Association began to operate with forty-two members. Today the membership stands at one hundred and twenty-five, with three-quarters of the members holding both shooters' and anglers' licences.

Broadly, the aims of the Association are as follows:

- To promote the increase and conservation of Wild life habitat.
- To assist in the development and conservation of wildlife habitat.
- To safe-guard the rights and interests of licensed Shooters and Anglers.
- 4. To foster and co-ordinate the outdoor and social activities of its members.

ACTIVITIES

CLAY-BIRD SHOOTING

The strength of the Club undoubtedly lies in its Clay-Bird shooting program. Shoots are held regularly each month, and often twice. As many as seventy shooters have attended a single shoot. The Association is fortunate in having the use of ideal grounds, made available in Irongate Road, through the generosity of one of the members.

COACHING YOUNG MEMBERS

Perhaps one of the greatest contributing factors to the steadily increasing membership of the Club is the readiness with which senior and experienced members devote both time and effort to training younger members in shotgun shooting and fire-arm safety.

COMPETITIVE SHOOTING

Apart from the annual competition for Clay-Bird shooting among the Association members for the Knapp Memorial Cup, the Club holds shoots with the Central Hawke's Bay Shooters' Association for the Wing Shot Shield. Clay-Bird and rifle shoots are also held with the Hastings' Deerstalkers' Club for various trophies.

ANGLING

There is a keen interest in angling among members in the quest for the heaviest fish with the added incentive of the Anglers' Shield for the member landing the heaviest fish of the season. (Not that any angler would admit that the sublime moment of landing his fish could be increased by anything as extrinsic as a reward. Ed.) During this last season, the heaviest fish were two Brown trout, one from the Mohaka, 6lb 13½oz, the other from the Ngaruroro, 6lb 10oz.

EELING SHIELD

An annual competition is held between the Heretaunga members and the Scinde Anglers' Club. Over the years, many eels have been caught weighing over 20lbs, the most popular areas for catching them being the Tuki Tuki and the Tutaekuri. On one memorable occasion a 26lb old fellow was gaffed in the Ngaruroro, some of his weight being due to a full-grown water-rat in his stomach.

SOCIAL ACTIVITIES

The annual Duck Dinner is one of the highlights of the Club's social fixtures. This centennial year, one hundred and eighty members, their wives and friends attended the function.

Film and Slide evenings, plus pertinent talks of sporting interest are organised to follow the regular monthly meetings. One of the most popular this year was a talk given on the dates of the introduction of birds, fish, and other game into this country.

Finally, finance. Due to the general capability of its members, the Association is financially sound, and is always ready to assist in any way in the affairs of the Hawke's Bay Acclimatisation Society.

Hastings and District Anglers' Club

The Hastings and District Anglers' Club takes this opportunity to congratulate the Hawke's Bay Acclimatisation Society on reaching its centenary. The standard of angling in the Hawke's Bay rivers reflects the work done by the Society in stocking the rivers through the years.

The present facilities achieved by the Society are directly responsible for the formation of our Club. There had been two previous anglers' clubs in the Hastings district, the Heretaunga Anglers' Club, and the Karamu Anglers' Club, but both went into recess many years ago.

In August, 1965, Mr J. Townsend, the current President, convened a Public Meeting, the aim of which was to found a Club catering for the interests of anglers. The attendance at the meeting indicated the interest of local anglers in the proposition. The Club was formed, and named the Hastings and District Anglers' Club. It has since become an Incorporated body, and has gone from strength to strength. Membership stands appropriately at 100, this centennial year.

In addition to arranging for excellent speakers at monthly meetings, the practical aspects of angling have not been neglected, and instructional meetings on general fishing techniques are included in the annual program.

The enthusiasm of our lady members, and in particular of our junior members adds to the atmosphere of camaraderie, which pervades the whole Club.



Ahuriri Lagoon, pre-earthquake, 1931

Ahuriri Lagoon Shooters' Association

Prior to the 1931 earthquake, the Ahuriri tidal lagoon or Inner Harbour, as it was then called, was a vast expanse of open water stretching from the Onehunga hill to the north, and southwards to Wharerangi. Widespread swamplands extended along the northern and southern shores, and both Quarantine Hill and Wharerangi Cemetery were then marginal islands. The centre-piece was the Watchman, an island, around which yachts sailed, and still a feature of the later farm landscape.

There was no airport, no Lands and Survey Department or Harbour Board Farms, and the town shooters built their huts where Holt's Mill now stands. Their theme song was "Here they come", as wave after wave of black swan swept in from the open water. Bordering the Taradale Road was the Rifle Range, so low-lying that rain combined with a high tide put all but the mounds under water.

The limit bags were 25 for Grey duck and for Black swan, while the Mallard and the Paradise were protected.

Areas adjacent to the lagoon were Pakuratahi and Tangoio, famed for good shooting. It was at the latter on one occasion that two guns shot 240 ducks in one day. Flax Bay, in the 1920's was considered to be one of the best shooting areas in the Inner Harbour, but to reach it from Napier meant either rowing across the open water, or going under sail if the wind were right.

With the drying up of the Inner Harbour, the popular shooting spots decreased, but at first only gradually. One veteran shooter relates how he shifted over the successive years from a hut by the Rifle Range at Holt's, to Wharerangi Swamp, then to Park Island, and finally to Hawker's Bay, all notable shooting localities. In addition, sportsmen could obtain good shooting at Te Awa (now within the City boundary), at Marewa, and at the Inner Creek (at the rear of the industrial area of Onekawa).

There were few restrictions. Keen shooters shot all night, and walked, rowed, or sailed, and occasionally biked to and from their huts. Shooting on the water was legal, and the smoke cloud from the guns often had to clear before the sportsmen could see what they had hit.



Ahuriri Lagoon, post-earthquake

Licences cost 10/- and a box of 25 cartridges 2/6.

Those were the days!

Then the earthquake. 3rd February, 1931.

The sea-bed rose, the water poured out of the swamps and out of the Inner Harbour, the islands suddenly found themselves transformed into hills, surrounded by dry land, and a dense pall of smoke and dust hung over the ruins of Napier.

But rehabilitation in all spheres was soon set in motion, and there was plenty of work for the Slump unemployed. Almost immediately, men with barrows and carts laboriously began to build stop-banks that would keep out the tidal water. But inside the stop-banks, there were still shallow swamp areas, where duck came in at dusk, and where swan flew overhead. Gradually the stop-banks were completed with deep internal drains, while a pumping system cleared off the last of the surface water. Where a few years before, sailing yachts heeled in the wind, fences were built, and new roads formed.

The Ahuriri area was closed for two years to all but the stop-bank builders and the draining gangs. Even in those days vandalism was a problem when so much equipment lay scattered about. Working conditions were not congenial in the mud and slush, and even though jobs were scarce, the overseers would often find, when the weather turned squally, that they were without a gang. One such foreman, now one of Napier's best known shooters, habitually took his gun to work, and in the event of no gangers turning up, would be overjoyed and go off shooting.

Once the construction work and drainage neared completion the shooters were again allowed on the Lagoon, then shrunk to a narrow strip following the line of the hills. But access from the Napier side was across Lands and Survey Department and Harbour Board properties. Imagine the dismay of the shooters when they were notified that access would be permissible only by foot. Nevertheless for several years the resentful sportsmen had no alternative but to walk their weary way from the main road, across country to the Lagoon, a distance anything up to two miles, often, of course in the dark.

After repeated requests bona fide licence-holders were given permission to use push-bikes over the internal roads, and on the stop-banks. But ill-feeling still existed between the groups. Shooters were accused of vandalism, and officials were accused of intolerance. Early in 1940, a crisis occurred, initiated from another direction though,—the Commissioner of Crown Lands closed the Lagoon to all shooters.

The immediate re-action to this move was a meeting of more than a hundred shooters in a Napier hall, to challenge the right of the Commissioner. A unanimous decision was made to shoot on in defiance of the law.

On the opening morning of the following shooting season, Constables Waldon and Williamson, Napier, accompanied by Mr J. Grant of the Lands Department, appeared on the Lagoon. Simultaneously a large number of shooters suddenly realised they had business elsewhere. Those who remained and stuck to thir guns were warned by the Police to discontinue shooting. But the warning fell on deaf ears. The police, at first disconcerted, then took the line that they had done their duty, they had warned the offenders. In point of true fact, the Law then enjoyed a little light refreshment with the law-breakers.

In a few days, Messrs H. Fenn, T. Fenn, L. Rodda, A. Page (Senr), K. Spiller, F. Jane, J. McDougal, and R. Fluety were summoned to appear before the Magistrate. Their defence was so impressive that the Magistrate reserved his decision, in what then became a test case. But ultimately the defendants were convicted and were ordered to pay a fine each of £2/1/6 the receipts for which became treasured possessions.

The Lagoon remained closed until 1943, when, through the combined efforts of Mr Barnard, M.P. for Napier, and the Hawke's Bay Acclimatisation Society, the shooters were allowed back on the Lagoon. Once again the situation slowly deteriorated, the Government Departments and the Harbour Board growing more restive, and the shooters more determined.

In 1960 Mr E. Mortenson, an Ahuriri veteran shooter and Mr Ken Francis. then Chief Ranger of the Acclimatisation Society, realised that unless something were done immediately, the Lagoon might again be closed to shooters—forever. The logical solution seemed to be the formation of an Association of shooters, which would control the

shooting, would discipline the unruly or irresponsible, and would thereby placate and gain the goodwill of the Harbour Board and the Government Departments concerned with Ahuriri Lagoon. But the greatest opposition to the scheme arose from the shooters themselves, who emphasised that they would not submit to any type of Association control. The Government Departments and, to a lesser extent the Harbour Board welcomed the plan, and the Commissioner of Crown Lands told the initiators of the Shooters' Association that if they could set up a workable scheme he would back them. True to his word, he co-operated fully, and years later he was able to state that the Ahuriri Lagoon set-up was the best of its kind in New Zealand.

At first the Acclimatisation Society was wary of giving recognition to the newly formed Association, as its functions appeared to constitute a rival administration. Fortunately Mr Lionel Harris, then a Society Council member, was ungrudging in his support and encouragement, and accepted the office of the first President of the Ahuriri Lagoon Shooters' Association.

Gradually the sceptical shooters of the Old Brigade began to appreciate the fairness of the Association proposals, and the complete lack of favouritism in the allocation of stands and huts. Those few who took administrative office on the Association's Management Committee simply to further their own interests soon found such positions carried more responsibilities than privileges, and faded out. Today, with a membership of 140, a constitution, a printed rule-book, permit cards, insurance cover, and a hut, for each member, plus official recognition from the Commissioner of Lands, the Harbour Board, and the Acclimatisation Society, the Assocation stands as a monument to the determination and forethought of a small group of sportsmen.

For shooting purposes, the Lagoon is divided into four sectors, each supervised by two delegates, who are also members of the Committee of Management. Before each season representatives of the Committee meet the Commissioner and the Secretary of the Harbour Board to discuss arrangements for the forthcoming season. All members of the Association are then circularised and advised of changes, if any. The President and Committee are elected annually, and all vacant huts are allocated by open ballot to persons domiciled within the Acclimatisation district boundaries.

It would seem that the turbulent history of the Ahuriri Lagoon shooting has succumbed to sound administration by the shooters themselves, and to recognition of the power of their rangers within their ranks. The Acclimatisation Society, in return for the substantial licence fees received from the Lagoon shooters, makes an annual grant towards the cost of ranger supervision.

The Association probably reached its crowning achievement, a few years ago, when, at a Conference of Crown Land Commissioners the club was described as being the best example of Departmental-sportsmen cooperation in the Dominion.

Acclimatisation Society's Exhibit at the Hawke's Bay A. & P. Spring Show at Tomogna

Probably the activity that the public, in general, associates with the Acclimatisation Society is the comparatively recent innovation of its Wildlife Exhibit at the Spring Show held by the Hawke's Bay A. and P. Society Show at Tomoana, Hastings.

In 1956, a keen group of sportsmen, composed of members of the Acclimatisation Council, plus volunteer helpers from both the Heretaunga Shooters' and Anglers' Club, Hastings, and the Scinde Anglers' Club, Napier, obtained permission and space for a display of Wildlife. A permanent building was erected by Club members, the A. and P. Society supply building materials free of charge.

Originally the exhibition was organized by Messrs J. C. Greene, S. H. Heighway, and J. B. McIntyre; but for the last ten years, Mr A. C. Russell has been responsible for this particular facet of the Society's public relations.

Efforts have been made to vary the exhibits each year, but in general, there are always both Rainbow and Brown trout in different growth stages—from fry to fingerlings, to some quite large fish. The tagged fingerlings always provide added interest and provoke questions from the uninitiated. Large glass tanks, supplied with a continual supply of artesian water, house the fish over the Show period.

Other fresh-water fish shown in tanks are perch and carp. Included, from time to time, are New Zealand's small fresh-water cray-fish or koura, the delicacy on which the trout, originally introducedinto Lake Taupo, thrived so well.

The eel tanks have a perennial fascination all of their own, Karamu creek holding the honour of supplying the largest specimens.

In the past, one of the displays allied to Fish, was that of examples of angling gear—rods and reels, flies and other artificial baits, such as spoons, minnows and a variety of unusual lures.



The Society's Annual Exhibit at the Hawke's Bay A. & P. Spring Show

BIRDS IN CAGES.

Above the fish tanks permanent cages for live birds are set on long platforms. Measuring approximately 4ft x $2\frac{1}{2}$ ft x $2\frac{1}{2}$ ft, these cages house a large variety of native and introduced bird-life—various species of pheasants, plus partridges, wekas, pukekos, keas, brown and Californian quail.

In addition to the live birds, there is a fine collection of mounted varieties—a blue heron, kiwis, ducks, pheasants, shags, a bittern, bush falcon, tuis, native parakeets, chukors, quail, red-legged partridge, an Hungarian partridge; and last but not least, two most beautiful examples of the taxidermist's skill, two huias and a pair of life-like stoats.

Mounted Brown and Rainbow trout weighing up to 16lbs, add to the interest of this section.

Miniature Ponds

Miniature ponds, alive with Mallard and Paradise ducklings, as well as cygnets always seem to provide a holdup in the seemingly never ending line of spectators. Children, deaf to parental entreaty, will stand entranced for hours, if the impatient queue will let them. Even the display of dangerous fire-arms, usually the small boys' first appeal, must wait for the ducks on the ponds.

Another regular feature is that of the miniature models of natural habitat for waterfowl. Pamphlets are available too, on this subject, and if their advice is put into action, the improved surroundings should encourage increased population of waterfowl.

Since the kiwis have now been taken over by the Hawke's Bay Wildlife Trust, the Acclimatisation Society's Game Farm has lost one of its main attractions. It may well be that the Acclimatisation Show exhibit, for years most popular, judging from the long queues, will develop into a miniature Game Farm, a pocket-size reproduction of most of the activities of any Acclimatisation Society, and in particular, of the achievements of our own, the Hawke's Bay.

Some Licence Facts and Figures

Though not complete and guaranteed correct, the following lists show the variations in licence fees throughout the years.

Game Licences		Fishing		Licence			
	£	s	d		£	s	d
1866	5	0	0	1887	1	0	0
1867	2	10	0	1899	1	0	0
1879	2	10	0	1917	1	0	0
1885	1	1	0	1939	1	5	0
1893		10	0	1952	2	0	0
1903	1	0	0	1963	2	10	0
1938	1	10	0				
?		10	03				
1955	2	0	0				
1966	2	5	0				
1967	2	10	0				

Hawke's Bay Acclimatisation Society licence figures for the last five years.

	Gam	e Licences	Fishing	Licences
1963-1964	2741	£5482	2569 (1613)	£7797
1964-1965	2704	£6760	2558 (1685)	£3610
1965-1966	2749	£6185	2476 (1858)	£3543
1966-1967	2880	\$14400	2896 (2139)	\$8044
1967-1968	3016	\$15080	2933 (2069)	\$7797

Hawke's Bay shooting licences reached a record this season '67-'68, beating the previous record figure for the year before, by the sum of \$680. The 1966-67 licence figures, compared with the total for New Zealand, \$199,297, indicate that Hawke's Bay Acclimatisation Society was responsible for 7% of the total licence revenue, and stood fifth in the list which was headed by Auckland, \$57,846; next Wellington, \$22,686; next Rotorua, \$19,225; fourth Otago, \$15,290; Hawke's Bay, \$14,400; sixth Southland, \$12,680.

(The number of shooting licences sold does not include interavailability endorsement sales.)

Fishing licences for this season, though numerically greater than in '66-'67 total less financially. In the fishing figures the larger number includes all types of fishing licences: Whole Season, Half-Season, Monthly, Weekly, and Day Licence: The figures in brackets refer to Whole Season only, for Men, Women and Juniors.

In a paper on "Current Developments in the Industry; Significance and role of Freshwater," given by Mr B. T. Cunningham, Deputy Director of Fisheries, Marine Department, on the occasion of a Victoria University Seminar, in May, 1968, he quoted some figures of interest to anglers. In an appraisal of angling, in general, during the 1951-52 season, figures produced showed that anglers that year spent 1½ million hours fishing, taking one million fish, averaging 2½lbs. in weight.

Further figures for 1957-58 season revealed that about \$4,000,000 was spent on Angling—Acclimatisation Societies' Hatcheries and stocking of rivers and lakes; licences, gear, and equipment, used principally for angling; travel and accommodation, and other costs incidental to angling (Licences amounted to only \$152,000 of the \$4,000,000.)

The comparison of Hawke's Bay Acclimatisation Society fishing Licence fees with the total for New Zealand for the 1966-67 season indicates that Hawke's Bay contributed 2.6%.

Dominion figures for annual revenue for licences for year 1962-67.

Shooting		Fishing		
1962-63	\$155,343	1962-63	\$224,000	
1963-64	\$171,038	1963-64	\$268,000	
1964-65	\$187,055	1964-65	£270,000	
1965-66	\$193,530	1965-66	\$280,000	
1966-67	\$199,297	1966-67	\$305,000	



Morning bag from Poraite swamp, near Ahuriri Lagoon, 1956 B. W. Lindeman and H. K. Stevenson

Game Birds of Hawke's Bay

Grey duck. Parera. (Anas supercilliosa).

The Grey duck was one of the bird species discovered in New Zealand by the naturalists. J. Banks and D. Solander, of the "Resolution" during Captain Cook's second voyage, in 1773. Although considered a native bird of this country, it, with allied sub-species, does inhabit many South Pacific territories as well.

Along with the early settlement of New Zealand came many recreational interests of the Old World, and ranking high among these was the pursuit of waterfowl. The pioneers soon came to rely on the Grey duck, which was a bird of fair size, and present in large numbers, as an important item in their staple diet. The sportsmen, too appreciated this bird for the fine wing-shooting it afforded.

Within Hawke's Bay the Grey duck soon became the main-stay of the shooting fraternity, and held this position up to the late 1940's, after which time, the introduced Mallard duck to some extent, in certain areas, usurped its supremacy. The Grey is an excellent sporting bird, easy to decoy; and its ability to utilize a wide variety of habitat, makes it available to most sportsmen. Its stamina, allowing it to travel long distances (several banding returns proving fights of over seven hundred miles) enables it to avoid the depletion of its numbers due to local climatic conditions. This characteristic makes the Grey so valuable in Hawke's Bay, a Province in parts given to prolonged periods of drought. Unfortunately, the very reason that makes the Grey so desirable as a sporting bird is also responsible for its gradual decrease in numbers. Many Hawke' Bay shooters could testify to the ease with which the Grey can be decoyed to the gun, the crudest imitations being sufficient to bring the birds within easy range of the Hunter. One of the simplest decoys was constructed from dry flax sticks, (the flower stem of formium tenax) tied in short bundles and grouped together to represent a raft of duck. With methods similar to this, many large bags were taken by shooters in the past.

Obviously many factors contributed to the gradual decline in the Grey ducks' numbers. By the 1940s, however, by which time the newly-introduced Mallard had so increased that it shared the shooting pressure, the Grey

duck because of this, earned a partial reprieve. With the successful establishment of the Mallard in Hawke's Bay, further problems arose for the Grey—the matter of competition between species for similar ecological niches began to develop.

Because of similarity in appearance between the Grey and the Mallard species, a similarity accentuated in the early morning and late evening, the time when most shooting takes place, the Protection for the Grey, mooted at one stage in the history of the Society, was found to be impossible; and likewise undesirable, as there were, and are, in Hawke's Bay, many areas in which the shooters are dependant solely on the Grey for their outdoor sport.

Another reason for the decline of the Grey as a separate entity, is that cross-breeding between the Mallard and the Grey is becoming increasingly evident. Although the Mallard predominates in size, aggressiveness, and cunning, paradoxically, it is the Grey drake which breeds with the Mallard duck.

It would seem, therefore, that the Acclimatisation Society's policy of retaining, developing, and creating, where possible suitable habitat for the Grey duck can, at the present time, be the only sound policy for arresting the decline of this, one of our most prized native sporting birds.

Shoveler duck. Tete Kuruwhengi. (Spatula rhynichis)

The Shoveler ranks second to the Grey duck in importance in our native game bird population. The species is not confined to New Zealand, and is quite common in Australia.

In the early years the Shoveler was present in large numbers throughout Hawke's Bay, and many are the stories of shooters claiming large bags of this duck. Like the Grey Duck, the Shoveler preferred large expanses of water, and with the reduction of such habitat in recent years. plus heavy shooting, this bird, too, has suffered numerically. Happily, for its preservation the Shoveler is easily recognisable by shooters, which fact makes it possible for the Acclimatisation Society to control the depletion of this species by regulating bag limits. It is with some confidence we can feel that the little Shoveler will be with us for many years, and will continue to add colour and variety to sportsmen's bags.

Paradise duck. Putangitangi. (Casarca variegata).

On first sighting the Paradise duck in Dusky Sound, Captain Cook called it the "Painted Duck," perhaps a more appropriate name for the largest and most colourful of our native game birds. Although related to the shelducks of other lands, this member of the Casarca family is found only in New Zealand.

It is regrettable that the Paradise duck population seems to be diminishing over the last ten years. The reason for this could be explained by land utilisation rather than by shooting pressure. With the more extensive farming now practised in the Bay, the Paradise has tended to move into the back country of the Province, and it is heartening to know that it still exists in fair numbers in the Taihape and Gisborne hill country. It is doubtful whether the average shooter would hold the Paradise in high esteem as a sporting bird, for unless shot while young, it is rather tough. Should it become rare, most sportsmen would miss the beauty of this bird, its distinctive markings and plaintive call so part of the pageantry of the shooting scene.

Swamp Hen. Pukeko. (Porphyrio melantus).

The Swamp Hen or Pukeko, as it is more commonly known, is a New Zealand member of the Rail family, and is found with closely allied species in Australia and Tasmania.

From the sportsman's point of view, the pukeko is not highly thought of as a game bird. Indeed he is regarded rather as the villain of the swamps, his preference for duck eggs and ducklings earning him that title. But despite his faults, the Hawke's Bay pastoral scene would be poorer and less amusing without the pukeko. A bird of infinite curiosity, cautious yet bold, the pukeko captures the eve with its striking plumage; and many a shooter sitting in a mai mai during that part of the day when duck are not flying has been entertained by the Swamp Hen's antics. For many years the shooting season for pukeko was longer than that allowed for duck; and the tendency for the shooter to concentrate his efforts on the pukeko over this extended time, has caused a drastic reduction of their numbers in some areas. Because of concern by the Acclimatisation Society for this state of affairs the pukeko has now received the benefit of a curtailed season, and a reduced bag limit has been imposed. The Department feels that there is adequate legislation provided for out-of-season shooting to cope with the occasional cases of damage caused by a pukeko population build-up in certain areas.

The pukeko destruction of grain crops in particular causes much annoyance to farmers. One land-owner with three stacks of oats on his property adjacent to Hatuma Lake had the eave of a stack torn off in one day by pukekos. He applied to the Internal Affairs Department for a permit, which, when granted enabled a party of 30 shooters to eliminate some of the marauders. But exercising their characteristic cunning most of the birds escaped to the protection of the raupo cover in the lake proper. To outwit the thieving birds, the farmer was forced to protect his stacks with sack covers.

Mischievous though the pukeko is, no true sportsman would wish to see this colourful relative of the takahe harassed to the point of extinction by unrestricted shooting.

California Quail (Lophortyx Californica brunnescens)

This quail originated in the humid coast region of California, from the northern border to Santa Cruz county. Ever since the Californian quail was introduced into New Zealand it has multiplied prolifically. In fact, at one stage, about 1890, consignments were frozen and exported to England. But the population varies in both the North and South Islands. Hawke's Bay, where quail, at one stage abounded, cannot boast a high population today, except in the higher uncleared marginal country, where reasonable sport is obtainable.

As an upland sporting bird, the Californian quail is hard to equal. It sits tight in cover, and is not readily flushed without the services of a good dog. Once flushed it flies with great speed, and fast accurate wing-shooting is necessary to bring it down.

The Acclimatisation Society has in the past years made several efforts to re-establish the Californian quail. One experiment was the releasing of wild quail, which were trapped in the Taupo area, and transported to Hawke's Bay to augment the existing small coveys. But results were disappointing. Probably changes in land usage, the use of poison for rabbits, and the greater use of insecticides have

been indirectly responsible for the decreasing population. However the state of affairs for quail in Hawke's Bay is being watched, and improvement in its availability is promised.

Brown Quail (Synoicus ypsilophorus Australis).

The Brown quail was first introduced from Australia in 1866; and like the Californian variety went through a period when it was plentiful, later becoming scarce because of rabbit poinsoning and the burning-off of bush-land.

In the northern parts, Hawke's Bay has small areas, where these birds may be found, but because of the size of the quail, and the few in a covey usually 4-6, the Brown quail is not thought highly of by some shooters, though the speed of flight and the fast rise to the gun have special appeal to others. As this species frequents the same habitat as the pheasant, the few Brown quail taken by sportsmen are usually incidental.

Mallard duck. (Anas platyrhynchos)

The Mallard, a bird of the Northern Hemisphere, is distributed widely from the Arctic Circle to the Equator. Attempts were made to introduce the Mallard in 1867, but it was not until the middle 1940's that the Hawke's Bay Acclimatisation Society began to receive reports from shooters that the Mallard was obviously increasing in the Province. In a surprisingly short time, the Grey duck, whose supremacy in the game world had been taken for granted for so many years, had to give place, by very weight of numbers to the Mallard.

Many Hawke's Bay shooters have learnt that to succeed in out-witting the Mallard, they have had to alter drastically their approach to duck-shooting. To be effective, any decoys used for Mallard must be life-like imitations; further, they must be positioned with care, so that their arrangement arouses no suspicion. If duck-calls are used, they must be employed with great skill, and must transmit the correct message to the quarry.

The Mallard frequents small overgrown creeks and mud-holes, and shooters wishing to stalk this bird, should be as careful in their approach as if they were hunting deer.

It has often been suggested that the Mallard frequently interbreeds with the Grey duck. From research on this subject being investigated at the Government Mount Bruce establishment, results so far seem to indicate that although inter-breeding does occur where mixed populations are high, and living in close proximity, it is not the normal pattern for these two species to cross-breed in the natural state. On the other hand the Mallard does freely interbreed with the domestic duck. This would account, to some extent, for the wide variation of colour and type met with in the field.

Though most sportsmen regret the diminishing numbers of Grey duck in the Province, the successful acclimatisation of the Mallard has become an acceptable alternative.

Partridge (Peradix cinerea)

In 1958 the arrival of 150 Hungarian partridge eggs by air from Denmark, signified another important step in the history of acclimatisation in New Zealand. Not that the partridge was unknown here. As far back as 1864 English (Hungarian) partridges were imported, but the venture, and about 10 subsequent trials by various Acclimatisation Societies were not really successful. In 1874 the Hawke's Bay Societiey received 15 partridges in the "650" bird importation, but nothing is known of their later history.

But compared with the haphazard choice and care of imported birds in the early days of acclimatisation, the 1958 project was a model of preparation. On arrival the eggs were sent to the newly appointed Breeding Farm at Bulls. There they were hatched, and it was not long before partridges and their eggs became available to Societies with suitable habitat.

The Hawke's Bay Society was fortunate in already operating an efficient Game Farm, so was able to turn immediately to rearing and releasing partridges throughout the District. In spite of the fact that the partridge are still in very small numbers, in 1968, this venture shows promise of success. After all, Mallard duck took from 1867 until the late 1940's to establish themselves here in any numbers. Information from overseas indicates that the Hungarian partridge has always been slow to adapt itself to new surroundings. But in parts of Canada and the United States the acclimatisation of the partridge has taken only about 20 years, and good bags are quoted.

Pheasant (Phasianus colchicus; torquatus; Mongolicus; versicolor).

The very name, pheasant, stirs the blood of most keen shooters. The instinctive cunning of the bird, the spectacular burst from cover when flushed then the brilliant trophy obtained after a successful, but rarely easy hunt, are all factors, which can combine to provide the ultimate in a day's shooting.

Pheasants were first introduced into New Zealand from England in 1842. A Mrs Willis, initials and address unknown, imported a cock and three hen pheasants. Within the next two years two other colonists were responsible for the shipment of a few more pheasants. All three importations belonged to the English Black-neck sub-species, the most common to be found in England at that time.

In 1852 and 1856, Ring-neck pheasants from China were brought into the country—a bare statement full of undertones for the imaginative reader. This unspecified number of birds apparently without passports, was legitimately increased by twenty in 1874, and four in 1975, when the Wellington Acclimatisation Society imported them.

The Japanese pheasant (versicolor) may have been included in one of the early introductions, for though no record exists of its arrival in New Zealand, some of its genetic characteristics appear today. In an endeavour to improve the size of pheasants by cross-breeding, the Mongolian variety was introduced in 1920.

Descriptions of the four purebred above-mentioned species:—

English Black-neck. (Phasianus colchicus).

A smallish dark-coloured bird, weighing about 3lbs.

Chinese Ring-neck. (Phasianus torquatus).

The cock bird has the conspicuous wide white band around the neck, a light-coloured spangled breast, and usually weighs $3\frac{1}{2}$ to 4 lbs. Both male and female are much lighter than the Black-neck.

Japanese pheasant. (versicolor).

The Japanese pheasant has predominantly dark shiny green plumage, and is highly prized by the shooter. It is regarded as a hardy bird, and there are several established colonies in some of the particularly rough high country round about Titiokura in Hawke's Bay.

Mongolian pheasant. (Phasianus Mongolicus)

The Mongolian pheasant, larger than any of the other pheasant species in the Dominion, weighs usually over 4 lbs. It is rather similar to the Ring-neck, but the white neckband is not so pronounced, and the general toning is rich bronze.

Although they are still to be found true to type in New Zealand they have interbred to an extent, that the most commonly seen pheasant in the wild state resembles the Ringneck, but is somewhat darker in colour, and a little smaller than the purebred.

The history of pheasant in Hawke's Bay follows the pattern similar to that of other importations of upland game birds in New Zealand. During the latter part of the nineteenth century much burning and clearing of the bush was carried out in Hawke's Bay, the resultant secondary growth of scrub and weeds, plus an abundance of insects providing suitable living conditions for pheasants. Therefore, following liberation they quickly multiplied in numbers. There are records of good pheasant shooting up into the late forties, in Central Hawke's Bay; to the west of Hastings off the Taihape Road; at Puketapu and Rissington, as well as in most of the northern parts of the District.

In the last thirty years many thousands of pheasants have been reared at the Game Farm, a successful climax to the introduction of this bird in 1868, when the Society purchased some which the Auckland Acclimatisation Society bred in the Domain. Since then many and varied schemes have been employed by the Society in its efforts to satisfy upland game-shooting members. In addition to the systematic breeding begun at the Game Farm in 1925, under the supervision of the Curator, Mr F. D. Robson, other means used to increase the pheasant population were the giving of eggs to farmers with suitable

habitat on their property to ensure successful rearing; the pen-breeding scheme, and the day-old-chick scheme.

Nevertheless, there is no place in Hawke's Bay, where pheasants could be said to be numerous (except at the Game Farm) There are isolated areas, to the north and west of Napier, where they breed in the wild, and maintain a small static population. There are also a few birds scattered through the orchard and cropping areas of the Heretaunga and Ruataniwha Plains, and particularly where maize is grown. South of Waipukurau pheasants are very scarce, and have almost disappeared in recent years.

The high and continually increasing costs of maintaining a large pheasant breeding stock—the hatching, rearing, feeding, and of liberating require a major proportion of the Society's revenue. One research officer claimed that the cost of every pheasant shot was equal to the price of two licences. Many are the occasions in private and in public when the pheasant policy of the Society is hotly debated.

Possibly more success could be achieved in increasing the pheasant population, if recent research were put into practice, and further study were made of the particular requirements of the Hawke's Bay District.

Black Swan. (Cygnus atratus).

Black swan, native to Australia, from where they were introduced into Nelson in 1864, are now spread widely over the North Island and the South. Their increase on Lake Ellesmere, in particular, was rapid—in 1871 a mob of over 300 was counted on a small lagoon at the mouth of the Halswell river.

As early as 1875 the Canterbury Acclimatisation Society had swan declared as native game; but in most other areas where they had become established, complete protection was afforded until 1895. Due to the birds' phenomenal increase in Westland and the Wairarapa however, this protection was lifted earlier, 1891 and 1892.

As a game bird over the last ninety odd years, the swan has been a marked success, the first recorded in Hawke's Bay being shot early this century. Within a few years the huge expanse of tidal water, known as the Ahuriri Lagoon, west of Napier, became the home of large mobs of swan, presumably as a result of earlier infiltration from Lake Wairarapa.

The real hey-day of swan-shooting on the Ahuriri Lagoon did not eventuate until after the 1931 earthquake. With the consequent raising of the lagoon bed and the subsequent confinement of tidal waters to a narrow stopbank channel, the evening flight of swan began to conform to a habitual pattern. When dusk approached, the birds would take off from their daylight refuge, in singles and in mobs of up to 50 birds at a time. Invariably the flight route would lead them up the outfall channel and into a westerly breeze.

Some would alight to feed in the shallows of Kopaki, and others would fly further afield. Until they reached the pumping station on the channel they remained over a protected area, but from there on they were game for the gunners. "Siegfried Line" it was called, and when the guns opened up on the massed formation of approaching birds, it earned its name. The gunners nearest this boundary line had first chance at the swan, but as each flight continued up the channel, the guns from all the other mai mais would open up. The flights seldom lasted more than half an hour, and more often only for minutes, but always the sport was fast and furious. As the season continued the swan became increasingly gun-shy and grew cunning enough to delay their evening flight, sometimes even until after the regulation time for shooting to cease.

But even on opening night under ideal conditions, few shooters ever shot their limit, for the swan is a high and strong flier, hard to bring down unless powerful winds keep it low and well within gun range.

Deer in Hawke's Bay

The first deer to be introduced into New Zealand, a gift to the Government from Lord Petrie of Essex, England, were released in Nelson, in 1850. These were Red Deer (Cervus elephus). In the next seventy years attempts were made by the Government Tourist Department, Acclimatisation Societies, and private citizens to introduce no less than eight other species.

These latter came from several sources, but although many were native to specific countries or regions throughout the world, most of the stock brought to New Zealand came from English or Scottish game parks.

Importations included Japanese (Sika), Virginian (Whitetail), Red, Fallow, Mule, Sambar, Axis (Chittal), Wapiti, Moose, and even Rusa. At the time of introduction and release of the Rusa in the North Island at "Galatea", the species was wrongly thought to be Sambar or a small sub-species of Sambar.

The Red Deer acclimatised more readily than any other, and by 1920, Red deer herds were well established throughout the South Island, and in the lower half of the North.

The first recorded introduction of Red deer into Hawke's Bay, 1880, was made at Matapiro, by W. Shrimpton, who later released them in the Ruahine Ranges in 1883. But in his book, "Tutira", H. Guthrie-Smith writes, "that a Red stag was seen at Tutira in 1868." This was 12 years before W. Shrimpton's venture, and five years after the liberation of Reds in the Wairarapa, nearly 150 miles distant. The stag joined up with a band of wild horses and remained with them in the vicinity of Tutira for several years.

Guthrie-Smith considered that the stag had travelled from the Wairarapa, via the chain of connecting ranges. If this is correct, it was an impressive journey for a deer barely acclimatised to new habitat. Another theory is that this lone deer may have been taken by persons unknown, to Tutira, as a pet fawn, and later released. More details of the Matapiro Red deer introduction come from T. E. Donne, in his book, "The Game Animals of New Zealand", 1924. The author, as an officer in the Government Tourist Department, and also in a private capacity, was directly concerned with the introduction of many game animals into New Zealand. Part of a consignment of deer from Invermark, Scotland, was released near "Bushy Park", (Palmerston, South Island), then in the possession of the late Mr Gordon Rich. During a visit to "Bushy Park", Mr Rich's son-in-law, W. Shrimpton, "Matapiro", observed how well the deer were thriving, and intimated that he wondered how they would respond to Hawke's Bay habitat.

Mr Rich jokingly, told his son-in-law that he could have some, if he could catch them. Taking up the challenge, W. Shrimpton eventually trapped three animals, a yearling stag and two hinds. They were secured in crates, shipped to Napier, via Port Chalmers, and finally were confined in an enclosure at Matapiro, 1880. The following year two more hinds arrived from "Bushy Park", the small herd eventually growing to 11 animals before they were released in the Ruahine foothills in 1883. Within a few years deer were widespread over the Range.

Two other species of deer were introduced into Hawke's Bay early in the 20th century. In 1905, six Sika deer (cervus manchuricus), three stags and three hinds, donated by the Duke of Bedford, from Woburn Abbey, were liberated on Mr W. N. Smith's sheep run, Taharua Station, (now known as Poronui) near Rangitaiki on the Napier-Taupo road.

An earlier introduction of Sika, near Oamaru in the South Island, in 1885, was a failure, but the small herd established in Hawke's Bay, slowly became acclimatised to its new habitat. Unlike the Red deer herds, which spread rapidly and widely, the Sika remained confined to a comparatively small area for the next 30 years. But today, the alert and dainty Sika are widespread in the Kaweka and Kaimanawa Ranges, and can also be found in the fringes of the Ruahines, Waikaremoana forest, Urewera National Park, areas adjacent to Taupo, and the eastern confines of Tongariro National Park.

The Sika have apparently found habitat to their liking in the central North Island; and trophy-hunters have, over recent years, taken many magnificent heads (several measured by the "Douglas" system score between

200 and 213) which, in comparison with others of the same species overseas, rank second to none. Whereas the standard of Red deer heads has shown a general decline over the last 40 years, Sika trophies are better than ever.

The second species introduced in 1905 by T. E. Donne, again acting as agent for the New Zealand Government, was the Mule or Rocky Mountain "Blacktail" deer (odocoileus hemionus). Five in number, these deer, imported from Santa Fe, California, were released at Runanga, Tarawera, 20 miles south-east of Taupo.

From time to time over the years, the Mule deer were reported as having been seen, but there is no record of one ever being shot, and recognised definitely as one of this species. K. A. Wodzicki in "Introduced Mammals of New Zealand", 1949, states "a few were reported some years ago in the Tarawera area, but no confirmation of their existence is at present available." Apparently this introduction of a deer species was unsuccessful, and there are doubts in 1968, that any "Muleys" still survive.

The supervision and control of deer in Hawke's Bay came under the jurisdiction of the local Acclimatisation Society which issued stalkers with the necessary permit to hunt Red deer only. A licence, dated March, 1930, the last year in Hawke's Bay, when deer were afforded even partial protection, authorises the holder, on paying the sum of £2, "to take or kill Red deer, stags and hinds", from 15th March to 20th May|.

Earlier licences issued in Hawke's Bay cost £3 for a season, 25th March to 30th April. The limit for the season was three stags with a minimum head of 10 points. In some Districts the licence fee was as high as £5, and the limit set at two stags. Metal tags, issued with a licence, had to be attached to the antlers of any head taken; and it was illegal to be in possession of a stag's head without a metal tag so affixed. Under the licence system the hinds had complete protection for many years.

During the period of total and partial protection, Red deer, in particular, flourished to such an extent that they became a problem. They were competing with run-holders' stock for grazing on high country pastures, and farmers complained of the damage caused to fodder crops. As

the deer increased, erosion, already begun by the overgrazing by sheep of the unstable mountain lands, then accelerated to alarming proportions.

Something had to be done to check the exploding deer population, a situation resulting from over-protection in the early years. In 1930, protection of Red deer was entirely removed, and the Government was prevailed upon to implement a killing-policy by employing teams of shooters. Thousands of deer were shot and left to rot.

During the War years a market unexpectedly began to develop for deer hides. Hunting then became a profitable pastime, with skins bringing as much as 10/- to 14/- per lb., and good skins weighed anything from 5 to 17 pounds.

. . . .

A further divergence from the original aim of shooting deer in New Zealand merely for sport, was the growing interest in deer flesh. Within the last decade the marketing of venison has become a million-dollar industry. Consequently the Departmental policy of deer extermination was able to be relaxed because of private enterprise.

The next stage in the history of deer in New Zealand was that in the Noxious Animals Act, 1956, deer headed the list, a sorry position indeed for a truly noble animal. Sportsmen, in general, hope that in the not too distant future, a policy of deer control, as opposed to extermination, will result in New Zealand's being recognised once again as the Mecca of deer-stalkers, the world over.

Export Deer Skin Figures, 1961-67.

(The New Zealand Year Book, 1968)

1961	65082	\$121,300
1962	62586	\$111,400
1963	61482	\$108,000
1964	55717	\$116,000
1965	78553	\$157,000
1966	73671	\$129,000
1967	73768	\$118,000

Work of Animal Ecology Division D.S.I.R. in Hawke's Bay

by Dr. P. C. Bull

I. INTRODUCTION

The Animal Ecology Division of DSIR was established in 1948 to obtain the biological information needed for the better conservation or control of native and introduced birds and mammals. Most of the work is long-term and aims to find what regulates the distribution and numbers of various animals, to define the nature of any problems they cause, and to seek information which may help in solving these.

As a comparative latecomer to Hawke's Bay, the Division studies the present status and habits of birds and mammals introduced by Acclimatisation Societies and others nearly a century ago. The Division's responsibilities are confined to research, and exclude the routine control of animals and the administration of laws for the conservation or control of wildlife. These are the responsibility of organisations such as the Wildlife Branch of the Department of Agriculture and Pest Control Boards. Research on the conservation of game birds and the control of birds on airports are handled by the Wildlife Branch of Internal Affairs.

Animal Ecology Division's main work in Hawke's Bay has been a detailed study of the ecology of rabbits in and around Gwavas Forest (1950 to 1957), and, more recently, research on birds in relation to agriculture (1965 to present). In addition, Dr K. Wodzicki, a former director of the Division, carried out important studies of gannets at Cape Kidnappers (Wodzicki, 1967a, 1967b). The Division now has a permanent office and laboratory at the DSIR research orchard at Havelock North where four men work on bird problems of orchards and farmlands. Other work of the Division includes studies of mammals and birds in the Nelson district, in the Wairarapa and in the Orongorongo Valley near Wellington.

The results of work in Hawke's Bay on rabbits, gannets and a few other species are already published in scientific journals. but studies of birds in relation to agriculture are mostly still in progress. The nature and purpose of the various studies are briefly outlined below together with an account of some of the more interesting findings.

II. RABBITS

"We can deal first with strangers reaching us from the south, from the Wairarapa and Hastings. From the former—better that a millstone had been hanged about that district's neck, and that it had been cast into the depths of the sea—have come rabbits . . " ("Tutira," 3rd Edition, 1953, p. 349).

Although Guthrie-Smith blamed Wairarapa for the rabbits which were later to over-run Hawke's Bay, he reported (p.357) that the first rabbits to reach Hawke's Bay came from Auckland early in the 1860s, and were liberated on Colonel Whitmore's Rissington estate. These and other rabbits "furtively introduced into Hawke's Bay by ill-wishers to the squattocracy" did not flourish probably because "the numbers liberated were insufficient." main invasion came from the south; "there was no strip of open land from coast to mountain ridge along which during the 'nineties rabbits were not filtering towards Hawke's Bay" (Guthrie-Smith 1953, p.383). Although the first rabbit was seen at Tutira in the early 1880s, the animals did not become numerous until the turn of the century. Further south, however, rabbits had long been a pest, and Hawke's Bay has the distinction of constituting the first Rabbit Board in New Zealand on 5th January 1887 (Wodzicki, 1950, p.110).

In subsequent years babbit Boards and farmers, aided by predators such as cats, ferrets, stoats and hawks, were reasonably successful in holding rabbits at a more or less acceptable level. A shortage of labour during the Second World War, however, necessitated a relaxation of rabbit control and this, perhaps helped by favourable seasons for rabbit breeding, led to such an increase of rabbits that farm production was seriously threatened.

With the establishment of the Rabbit Destruction Council (now called the Agricultural Pests Destruction Council) in 1948, there followed a period of intensive and effective rabbit control throughout New Zealand. The council pressed for all rabbit infested areas to be covered by "killer" boards in which the boards' employees did the work which was paid for from rates on farms plus an equal Government subsidy. The Council also pressed successfully for the suppression of trade in rabbit products, and ensured that boards used the best control methods available.

These measures caused a spectacular reduction in rabbits throughout New Zealand. The magnitude of the decline is shown by records of the numbers of rabbits killed at Gwavas Forest. The Forest Service rabbiter killed 12,494 rabbits in 1946, but by 1948 the figure had risen to 43,000. For the next few years the figures are misleading because many rabbits were killed by methods, such as fumigation, that did not allow the counting of dead animals. However, by 1955 the rabbit population was so low that fumigation or poisoning were rarely used and the 1720 rabbits recovered that year are believed to be fairly close to the number actually killed (Bull 1956).

Since then, there have been several local increases of rabbits in Hawke's Bay, and although these have been swiftly controlled, little further progress has been made towards achieving the Council's avowed objective of total extermination. This lack of progress, the high cost of rabbit control (averaging about \$2.5-million per year over the whole country in the early 1960s), and the accidental poisoning of game and other birds created a demand for control methods that were more effective, safer and less costly. The work of Animal Ecology Division was designed to provide information that might assist in this.

Work in this field, most of it already published, has included studies of reproduction (Watson 1957), parasites and disease (Bull 1964), mortality and movements (Tyndale-Biscoe and Williams 1955, nutrition (Watson 1954a) and methods of determining the age of rabbits (Taylor 1959).

III RESEARCH ON HARRIER HAWKS

The movements of harriers were studied at Gwavas Forest during the early 1950s because this bird seemed an important predator of young rabbits. On the other hand, it occasionally attacks game birds, free-ranging domestic chickens and new born lambs, so Acclimatisation Societies have sometimes offered bounties for the destruction of hawks.

A total of 206 harriers were caught in cage traps and released after being marked with numbered and addressed aluminium leg bands. Within two years 22% of these bands were returned by people who had shot or trapped harriers. Most of the birds that were adult when banded were killed at places less than 10 miles from Gwavas Forest,

but several of the young moved hundreds of miles to places as far apart as Dargaville in North Auckland and Lake Waitaki in Otago (Watson 1954b).

These extensive movements show that purely local attempts to reduce the birds' numbers, can at best yield only temporary reductions in the population; more birds will come in to replace those removed so long as the area provides sufficient food. Mr Watson also found evidence to support the view that harriers are important predators of young rabbits; they also kill rats. These positive values must be balanced against the occasional losses caused by harriers to game birds, poultry and young lambs, and much can be said for conserving rather than persecuting harriers.

IV. INTRODUCED BIRDS

(A) Historical

Following his earlier-mentioned criticism of the Wairarapa district concerning the introduction of rabbits, Guthrie-Smith (1953, p.349) goes on to say "From the Hawke's Bay Acclimatisation Society, on the other hand, nothing harmful has emanated . ." On p.350, however, he states "a number of mynahs (Acridotheres tristis) had been liberated in '77 by the Hawke's Bay Acclimatisation Society". While Guthrie-Smith's statement was doubtless correct at the time it was made, many present day orchardists would classify mynas as very definitely "harmful"! The rook too seems to have been introduced to Hawke's Bay by the Acclimatisation Society (Bull 1957).

Other species mentioned by Guthrie-Smith as introduced to Hawke's Bay, some of them by the Hawke's Bay Provincial Council, include: rooks, magpies, starlings, yellow hammers, goldfinches, greenfinches, pheasants and Australian and Californian quail. Still other species such as house sparrows, hedge sparrows, thrushes and blackbirds found their own way to Hawke's Bay after being liberated in Auckland and Wellington. Guthrie-Smith (1953) gives a detailed account of the arrival and spread of these and other birds.

Today, most of the common birds in Hawke's Bay are introduced species. Some such as the game birds are valued for sport, others such as starlings for insect control, while others again such as rooks, house sparrows and mynas cause damage to field crops and orchards. The increasing

intensity and diversification of agriculture in Hawke's Bay have led to demands for the control of such damage and for research to find safer and more effective ways of achieving this.

(B) Current Research

Research on these problems by Animal Ecology Division began in late 1965 and has continued along three main lines:

- Measurements of the extent of damage to crops to determine priorities for research and how much it is profitable to spend on control.
- (2)Detailed studies of the distribution, numbers, movements, food, reproduction and survival of a few of the more important species such as rooks and mynas. Such information is needed to define the problems, to predict future trends and to suggest solutions. For instance, information on feeding habits may reveal that a bird has unsuspected values in destroying harmful insects; it may suggest how the species will react to changing agricultural practices or methods; or it may help in the selection and siting of baits to give maximum take by the pest species with least danger to other animals. Likewise, information on movements, reproduction and mortality is needed to determine how large an area must be treated with poison, and how quickly the bird population will recover from a given degree of control.
- (3) Testing the effectiveness and safety of various drugs, poisons, traps and scaring devices.

(1) Damage to Crops by Birds

The main kinds of damage are:

- (a) Newly sown seeds, especially cereals and peas, are eaten by house sparrows, rooks and feral pigeons, and sometimes by yellow hammers, greenfiniches and skylarks.
- (b) Maturing crops of grain and peas are attacked by house sparrows and greenfiniches and occasionally by rooks.
- (c) Fruit buds are removed by redpolls and house sparrows and probably by other species as well.

(d) Ripening fruits of all kinds (but generally berries, grapes, cherries and tomatoes) are damaged by blackbirds, thrushes, mynas and white-eyes. House sparrows and starlings damage ripening grapes and cherries, especially in dry weather; goldfinches peck the seeds from ripening strawberries and rooks take walnuts.

Other bird problems include danger to aircraft from flocks of birds such as starlings near airports; the eating and fouling of poultry and pig foods by house sparrows, mynas and rooks; the entry of house sparrows to food processing factories; and the fouling of buildings by roosting pigeons and starlings. Birds such as house sparrows, rooks and mynas that share food with pigs and poultry, may spread animal diseases.

The extent of damage to crops is difficult to measure because it varies from one part of a crop to another and is also affected by the season and locality. A fairly simple sampling technique has been evolved to measure bird damage in ripening grain; the sampling errors are measurable and small enough for most purposes. Depending on the locality, the proportion of ripening grain taken by house sparrows in 19 crops of wheat and barley in Central Hawke's Bay in 1967 and 1968 varied from less than one per cent to around 20%; the average loss was about 5% for both barley and wheat. The birds travelled distances of at least a mile to feed on attractive crops. Tests showed that the remaining grain in damaged ears tended to grow slightly larger than that in undamaged ones, but the extra growth was small and did not nearly compensate for the weight of grain taken by birds.

The number of crops measured so far is insufficient to provide a reliable figure for the total value of the ripening wheat and barley taken each year by house sparrows in Hawke's Bay, but in 1937-8 it was probably of the order of some tens of thousands of dollars.

Similar methods are being tested for measuring damage by house sparrows and rooks to newly sown peas and by goldfinches to ripening strawberries. Precise figures are not yet available, but in one instance damage to peas by sparrows necessitated resowing at a cost of about \$700, and in another the damage caused by rooks to 9 acres of ripening peas was estimated at \$300. The pecking of seeds from ripening strawberries by goldfinches, first recorded from Hawke's Bay about 1963, seems to be increasing and was severe at Havelock North in 1937.

One grower who specialised in producing top grade strawberries for export by air claimed that the damage caused by goldfinches seriously threatened his ability to compete in overseas markets. Apart from the value of the fruit lost (some \$600) the grower was unable to fulfil some of his orders and was threatened with loss of his overseas contract.

Other forms of damage, such as the loss of valuable experimental crops (an entire three acres of sunflower seeds were taken by house sparrows and greenfinches in 1938) and the risk of birds spreading disease cannot be measured in terms of money because they may delay the establishment of new industries or threaten the continued success of existing ones.

Finally, the cost of present methods of control is sometimes very high. For instance, one large company in Hawke's Bay spends about \$4000 per year on ammunition and labour in attempting to keep birds from its vineyards.

(2) Ecology of Problem Species

(a) Mynas

Mynas were selected for special study since they are widely blamed for damaging fruit and for driving away more desirable species such as starlings. The following account summarises some of the interim findings of a study being carried out by Mr P. R. Wilson at Havelock North.

(i) Food

During 1964-65, 100 mynas were shot in orchards and other cultivated areas near Havelock North, and the contents of their stomachs examined microscopically to determine the foods eaten. These birds, collected during all seasons of the year, had been eating both fruit and insects. Berries of black nightshade, a common weed of cultivated areas, was by far the most important of the fruits eaten. but some birds had fed on ripe pears, apples, strawberries and tomatoes. Field observations showed that most of the pears and apples were fallen fruit of no commercial value. but the damage to strawberries and tomatoes was sometimes more serious. The insects eaten included many pest species such as wheat bugs, clover case-bearers, army worms, blow flies (4 species), biting flies, dung flies, whitefringed weevils, cicadas, grasshoppers and German wasps; the birds also took some beneficial insects such as ichneumon wasps which attack caterpillars. Although many

insects were eaten, the numbers taken may represent an insignificant proportion of those present; further work is required to check this.

In winter, many mynas congregate at rubbish dumps, piggeries, and around concentrations of discarded fruit. The myna population might be considerably reduced if more care were taken to limit the amount of food available to the birds in winter. Such measures would include covering dumped garbage, disposal of fallen fruit after harvest and removal of berry-bearing weeds such as nightshade.

(ii) Breeding

Mynas normally nest in hollow trees, holes in banks or under the eaves of buildings, but they take readily to artificial nest boxes where they are much more accessible for research.

Seventy boxes were erected in orchards near Havelock North and provided information on the birds' breeding habits. Laying starts about mid November and continues till March though there is some minor variation from one year to another. Mynas usually had the same mate in successive years and previously mated pairs were more successful in rearing young (often two broods) than were birds that were nesting together for the first time. The clutch size varied from 2 to 6 eggs with an average of 3 to 4, and the number of chicks raised in successful nests was usually 2 or 3 but varied from 1 to 4.

The chicks were often infested with poultry mites and heavy infestations sometimes prevented normal increases in weight and may have caused some deaths. Mynas could be important in spreading these mites from one poultry run to another.

The number of mynas nesting in the research orchard at Havelock North increased markedly from 1935 to 1967, probably because of the extra breeding places provided by the boxes. This suggests that the removal of natural nest sites might assist in reducing the local breeding population and thus lessening the amount of damage in strawberry gardens. Most of this damage occurs early in the season before any young birds have left the nest.

(iii) Banding

A total of 554 mynas were marked with numbered leg bands to find out how far the birds move and how long they live; some also had coloured plastic discs fixed to their wings so that they could be identified without recapture. Over 200 marked mynas have been re-trapped and 52 found dead, (most of them shot or poisoned), and there have been about 3000 sighting of birds identified from their coloured bands or wing markers. Much of this information has still to be analysed, but it s already apparent that the adult birds are long-lived and seldom stray far from the territory around their nests; younger birds have moved distances of about a mile. In winter the birds gather in large communal roosts and sometimes travel more than a mile night and morning between these roosts and the various feeding areas where they spend the day.

Marked birds have also been useful in explaining why some mynas carry much heavier residues of orchard sprays, such as DDT, than do others. Mynas from orchards often have up to ten times more DDT in their bodies than do those from open farmland, though there is at yet no evidence that DDT is an important cause of death in mynas. A few birds from orchards have chicks and eggs which contain very much less DDT than do those of their neighbours. In each instance, observations of the marked parents has shown that they feed outside the area planted in fruit trees and thus are less exposed to DDT.

(iv) Competition with Starlings

Mynas use nest sites similar to those of starlings, and, being larger and more aggressive, they sometimes destroy the eggs or young of starlings and take over their nests. This has caused some concern since, of the two birds, starlings are regarded as the most useful in detroying pasture pests. It should be remembered, however, that although starlings eat many pests such as grassgrubs, it has yet to be proved that they are significant in controlling insect populations.

The study at Havelock North has shown that mynas can seriously reduce the breeding success of starlings where the two species occur together. Although starlings laid 33 eggs (10 clutches) in nest boxes at Havelock North during 1966 and 1967, only 6 young (18% of the eggs laid) left the nests safely. In several instances mynas were seen destroying starlindg eggs or young, and other starlings were driven from their nests before they could lay. Starlings begin laying in October when mynas are still establishing their territories, and at this time the mynas will drive starlings from all boxes near the one they intend using themselves. This aggressiveness declines later when the mynas are busy feeding their young, and then late nesting starlings can sometimes breed successfully in a nearby box.

Nest boxes were also erected at Washpool in 1966 and 1967, and again mynas destroyed several starlings' nests. A total of 93 eggs were laid by starlings (20 clutches) but only 14 young were reared (15% of the eggs laid). By contrast 31 eggs laid by starlings at Maraetotara, where no mynas were present, produced 18 fully fledged young. This gives a survival rate (eggs laid to young fledged) of 58%, which is over three times higher than in the two localities where starlings were competing with mynas.

Although mynas reduce the nesting success of starlings in some localities, the latter can still breed successfully in many other places where mynas are scarce or absent. Further, farmers who wish to encourage starlings can do so, despite mynas, by erecting nest boxes with entrance holes no larger than 13 in diameter; these are adequate for starlings but too small for mynas (Stringer 1935).

(b) Rooks

Rooks are almost confined to Hawke's Bay, southern Wairarapa and Canterbury, and the Hawke's Bay population, which is by far the largest in New Zealand, is spreading quite rapidly. The birds sometimes cause considerable damage to newly sown peas, cereals and pumpkins, and demands for better control of rooks are frequent. On the other hand, the birds eat many insects including some harmful species such as grassgrubs, and they are perhaps useful in removing carrion and in scattering animal dung. The ecology of rooks in Hawke's Bay is being studied by Messrs Purchas and Porter; the work is still in progress, but the following interim results may be of interest.

(i) Food

Although rooks sometimes feed on newly sown crops, the birds spend much of their time feeding on pasture. The stomachs of 105 fledgling rooks collected in Hawke's Bay between October and December 1935 contained mostly earthworms, flies (both adults and larvae), beetles and vegetable matter. Grains of wheat, barley or maize were found in only 25 stomachs, whereas fly larvae occurred in 72, beetles in 83 and earthworms in 89; among the more unexpected items were a few honey bees. Grassgrubs were not present in October, but were found in four of six rooks collected in May and June 1967. Stomachs from adult rooks, collected during all months of the year, are now being examined and will provide information on seasonal changes in the diet.

(ii) Breeding

Rooks nest together in groups, usually in the tops of tall eucalypts or pines, where they are difficult to reach. A recent study by Mr Purchas near Maraekakaho involved climbing to nests some of which were on slender branches about a hundred feet from the ground.

Laying began late in August, with a peak in early September, and clutches varied from 2 to 6 eggs with an average of 4. Only about half the eggs hatched and the production of fully fledged young averaged only 1.4 per nest over the whole season. The regular but brief inspections of nests may have contributed to this high loss of eggs and chicks.

Incubation varied from 16 to 18 days and the chicks left their nests 26 to 29 days after hatching. The chicks increased in weight from about 14g. at hatching to between 300 and 400g. at an age of 20 days and thereafter lost weight slightly.

(iii) Movements

Rooks were caught in large funnel-entrance traps or with a drug which causes temporary immobilisation; they were marked as described for mynas. Subsequent observations of marked birds showed that while adults are rather sedentary, the young birds may wander distances of ten miles or more. Birds marked in the Hastings-Maraekakaho area have been found at Napier airport to the north, at Kereru to the west and near Tikokino to the south. These widely travelled young rooks were feeding among birds from other rookeries, but it is not yet known whether such birds ultimately join local breeding colonies or return to the rookeries in which they were hatched.

Marked adults fed in the general vicinity of their rookery throughout the year, but there were considerable seasonal differences in the areas used. Near Longlands, for instance, the rooks in late summer fed mainly in large flocks in one or two favoured localities, but as walnuts ripened, the birds began to take these and became widely scattered in small groups over the whole area.

In winter, birds from several different rookeries gather together at night in large winter roosts. Each morning, the birds fly to feeding areas around their respective breeding rookeries which may be up to ten miles from the roost; there is a return movement at dusk.

A detailed knowledge of these daily and seasonal movements is very important for deciding the best times and places to lay poison, and where to search for dead birds.

(iv) Distribution

At least 90 rookeries were occupied in Hawke's Bay during the 1937 breeding season and these contained a total of some five thousand nests. The rookeries were scattered over an area of some two thousand square miles extending from near to Tutira in the north to Oringi (near Dannevirke) in the south, and from the coast, inland to the foothills of the ranges.

The birds are still spreading, and at least 16 new rookeries have been established since 1960 in country previously free of rooks. The area occupied by breeding rooks in Hawke's Bay is now some six times larger than it was in 1930 and the rate of spread seems to have increased since 1950. Poisoning, shooting and tree felling at long-established rookeries have sometimes been followed by the appearance of new rookeries in nearby areas previously free of the birds. This suggests that control measures may sometimes accelerate the birds' rate of spread.

The spread of rooks in Hawke's Bay has been mainly to the south and west, but a small colony is now established at Tolaga Bay, over a hundred miles north of any other rookery. Any spread of rooks to the north is a matter for concern since the birds could become a serious problem in the maize-growing areas near Gisborne.

(3) Research on Control Methods

Attempts to reduce the damage caused by birds are invariably time-consuming and expensive; they are often ineffective and sometimes a danger to other animals and man. Work on control measures should follow rather than accompany studies of the ecology of problem species and of the nature and extent of the damage they cause. Occasionally, however, the need for control is obvious and urgent, so control methods must therefore be tested for effectiveness and safety even though there may be no immediate intention of using them on a large scale.

The use of poison is often advocated to reduce the number of the offending birds but, with rare exceptions, the birds killed are quickly replaced by others from surrounding areas. This was well illustrated by an attempt to control sparrows at a piggery near Maraekakaho. Three poison treatments during the winter of 1965 yielded 658 sparrows and this greatly reduced the population.

The few surviving sparrows seemed uninterested in the bait and a fourth treatment killed only 52. The birds remained scarce until the following winter when they again became very abundant and 802 were killed in a single poisoning. This was more than were killed in all four treatments the previous year and demonstrates the short-lived benefits to be expected from poisoning in a limited area. Since bird damage is usually confined to quite small areas, it is undesirable and impracticable to treat large blocks of surrounding country where the birds are numerous but cause no damage. Sometimes, however, the damage is so severe that even a brief respite is worthwhile, and poisoning may then be justified, if it protects the crop until it is no longer vulnerable.

The poison "1080" has sometimes been used successfully against rooks. Birds, however, are fairly resistant to "1080", and the relatively high concentrations required to kill them, together with the long persistence of the chemical in both baits and dead birds, constitute dangers to other animals. Research overseas is now yielding new drugs that are less dangerous, and several of these have been tested in Hawke's Bay.

For instance, alpha-chloralose, the drug used in the trials against sparrows at Maraekakaho, merely causes temporary immobilisation. The drugged sparrows were gathered up and humanely destroyed, while the few other species caught were kept in cages until they had recovered enough to be released. Alpho-chloralose has also proved very helpful in catching rooks for banding.

Preliminary trials of another drug, known as "DRC 1339", suggest that it will be suitable for controlling rooks once it is available commercially. Its main advantage is that it is much more toxic to rooks and their near relatives than to most other birds, and far more toxic to birds than to mammals; it is therefore relatively safe to use. Further, the drug has no effect for several hours, so rooks are not frightened from the bait line. It causes a non-violent death which is seemingly humane.

Finally, in view of the limitations of poisoning, some attention has been given to examining methods of frightening birds from crops and to testing materials for covering small areas of particularly valuable crops such as strawberries. Although many birds soon become accustomed to the explosions of automatic scareguns, these devices are useful for protecting newly sown field crops from rooks,

especially when the crop is vulnerable for only a short period. Even better results can be obtained if the regular explosions of the scareguns are reinforced by occasional shooting. In one instance, the use of a scaregun for two days was sufficient to cause the complete desertion of a newly-established rookery.

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Summary of Protection of Animals Acts

1861-1956

1861

Protection of Certain Animals Act.

- 1. Protection of deer, hares, swan, partridge, English plover, rook, starling, thrush, and blackbird up until 1st March. 1870. After that date these may be taken only during months of March through to July inclusive.
- 2. The Governor could by Proclamation in the Gazette declare any of the aforementioned animals or birds as off the protected list at any time up to 1870.
- Pheasant and quail not to be hunted, taken, or killed, except in March to July.
- 4. Wild duck and Wild goose of any imported species not to be hunted, taken, or killed, except in March to August.
- 5. Penalty for any breach of the Act was a fine not exceeding £20, nor less than £1, in respect of any female animal or bird. (Half the fine was paid to the person instrumental in securing the conviction if the Presiding Magistrate so directed.)

1862 Amendment of Birds Protection Act, 1861.

- 1. Repeal of section 3 and 4 above. The five months open season reduced to four for section 1.
- Repeal of sections 3 and 4. For pheasant and quail the open season reduced to four months, but a closed season proclaimed until 1870 for wild duck and wild goose.
- 3. The first reference to a liceace to catch or kill any animal or bird mentioned in the 1861 Act appears in this 1862 Amendment. The duration of the licence was for 12 months from date of issue. (No specified price of licence).
- 4. Shooting on Sunday of pheasants and other animals is prohibited. Penalty from 10s up to £5 for male, and from £1 to £10 for female killed.

1865 Wild Birds Protetction Act, Amendment of 1861.

 Wild duck, Paradise duck, and pigeons may not be hunted, taken, or killed except during April - July. Penalty for selling animals and birds in prohibited periods, a fine of £2-£20.

1865. Protection of Certain Animals Act.

- 1. In section I in the 1861 Act, the open season reduced to four months, May-August. No season to commence before May until reviewed in May, 1870.
- 2. Pheasant and quail-1st May to 31st August.
- 3. Wild duck and pigeons-1st May to 31st August.
- 4. Prohibition of the importation of foxes, venomous reptiles, hawks, vultures, and other birds of prey. The liberation of same, even though already introduced, and the possession of same after 1st January, 1866, is prohibited.

1866 Protection of Certain Animals Act, Amendment Act.

- 1. "Game" defined—deer of any kind, swan, wild duck and wild goose of any species, hares, pheasants, partridges, grouse, English plover, quail, heath or moor hen, black game. Bustards and animals and birds proclaimed to come under the above Act.
- 2. A licence, costing £5, is required by every person "who shall take, kill, or pursue any "game", or aid or assist in any manner in taking, killing, or pursuing by any means whatever, or the use of any dog, gun, net, or other engine." Penalty, fine of not more than £20. or less than £5.
- 3 Proprietor of enclosed land not required to have a licence in respect of that land.
- 4. Exceptions and Exemptions.
 - a. Taking or destroying hares by proprietor of enclosed ground, or by tenant of lands either by himself or by his direction, or permission on such ground or land.
 - The coursing or pursuing of hares by greyhounds, or by hunting with beagles or other hounds.
 - c. The pursuing or killing of deer with hounds.
 - d. The taking or killing of deer in enclosed lands by any owner or occupier thereof, or by his direction or permission.

5. Licence to sell game, fee £5; licence expires 31st December annually. Failure to procure licence, fine of £20. Sale of dead hen pheasant unlawful. Fine £5-£20.

6. APPOINTMENT OF RANGERS.

The Superintendent of any Province may appoint Rangers, whose duty is to observe and take care that the provisions of the Act within the Province or District for which they are appointed, are complied with; and to lay information against such persons as may offend against the same:

Ranger, Revenue officer, licence holder, owner, landlord, lessee, or occupier of land may demand production of licence. Person required to produce licence on demand, and to permit authorised person to read it, and to copy it, or any part of it. Failure to produce licence, or to disclose name, address etc will result in a fine, £5-20.

Fees for licences, fines, and penalties to be used in the first instance towards defraying the salaries and expenses of rangers, the balance to be handed to the Treasurer of an Acclimatisation Society.

1867

Protection of Animals Act.

Repeal of 1865 and 1866 Acts.

- 1. Acclimatisation Societies may register rules by depositing in the Office of the Colonial Secretary, copy of same, signed by Chairman and three other members. Notification of registration will appear in the Gazette.
- 2. "Game" defined as for 1866, but snipe and antelope are added, while heath or moor game, bustard and wild goose are deleted.
- No indigenous animals or birds are to be included in "game" list, but come under heading, "Native game."
- 4. "Native Game" defined—wild duck, bittern, red stilt plover, wild goose, wood pigeon, teal, black stilt plover, curlew and quail.
- Season for "game"—May, June, July. Season for "Native game"—April, May, June, July.
- 6. Imported birds (not being "game") not to be shot or killed without authority. Penalty, fine not exceeding £10, or imprisonment for one month.
- 7. Ban on Sunday shooting of both "game" and "native game" continues.
- 8. Netting and trapping prohibited.

- 9. Provisions exempting owner of enclosed land from requiring a licence repealed. Penalty, fine not exceeding £20, or imprisonment not exceeding four months.
- 10. Licence to "sell" to expire 7th August (not 31st December.)
- 11. Penalty for destroying eggs of "game", £5.
- 12. Sale of dead pheasant now £20, with no minimum.
- 13. With respect to rangers and their duties, no person under 15 years of age is liable to imprisonment, but he may be privately whipped in the presence of a Magistrate.
- 14. Provision allowed for free "game" licence for officers of the Navy stationed in New Zealand.

1868. Protection of Animals Act, Amendment Act.

- 1. "Native game" season now to be during time appointed by Governor by proclamation.
- z. Repeal of prohibition of shooting on Sundays.
- 3. A licence fee of one shilling to be paid by persons in bona fide occupation of any land, or by persons appointed by him.
- 4. Wood pigeons to cease to be "native game."

1872. The Protection of Animals Act.

- 1. Repeal of sections referring to sale of dead pheasant. Substitution instead, possession and disposition in any manner of dead hen pheasant or dead tui, by holder of licence to sell game made an offence. Penalty, fine not exceeding £20, and concellation of licence.
- 2. Shooting of game in July prohibited.
- Licence to sell game expires 7th July.
- 4. Wood pigeon again "native game".
- Seals may be taken only in June, July, August, September.

1873. The Protection of Animals Act.

in Governor now transferred to Superintendents of Provinces.

- "Game" now includes ptarmigan.
 "Native game" now includes dotterel and tui.
- "Game" season: 1st May to 31st July; between hours of sunrise and sunset.
 "Native game": not to be more than four consecutive months.
- "Game" may be sold up to seven days after close of season.
- 4. "Swivel" gun forbidden for taking "game" and "native game". Penalty not to exceed £20.

1875. Protection of Animals Act, Amendment.

1. Seals may be taken only from 1st June to 30th September. Penalty, fine of £20 for each seal illegally taken. (This is the final mention of seals.)

1880. Animals Protection Act.

Repeal of previous Acts and re-enactments. Powers revert to Governor.

- Interpretation of "take or kill": the hunting, shooting, pursuing, taking or killing of any bird or animal.
- 2. Appointment of persons to issue licences, formerly the prerogative of the Customs Department, and later of the Post Office.
- 3. Licence Fee not to exceed £2.
- 4. Holder of licence to kill or take game may sell to holder of Licence to Sell game, without himself obtaining a licence to sell.
- 5. Fees, fines, and penalties: any balance where no Society exists, to go to the Consolidated Fund.

1881. Animals Protection Amendment Act.

1. Power to vary season for "game" and "native game".

1884. Animals Protection Act, 1880, Amendment Act.

- 1. Power formerly vested in Superintendents regarding damage provision, now vested in Colonial Secretary.
- 2. Rangers' powers extend to encompass all the powers of a constable, within the district for which he is appointed. He may "seize all nets, guns, engines, instruments and devices which are being used or are intended to be used contrary to the provisions of the said Act."

Penalty for obstructing a ranger, fine, not exceeding £10.

1886. Animals Protection Act, 1880, Amendment Act.

- 1. All "game" at large in any district will be deemed to be "imported game".
- 2. The Governor may prohibit absolutely for such time as he thinks fit the destruction of any indigenous bird.

1889. Animals Protection Act, Amendment Act.

- 1. Section referring to swivel guns in 1880 Act repealed. New provision prohibits "swivel guns, punt guns, and any instrument other than a shoulder gun, of which bore does not exceed the size known as Number Ten at the muzzle, and the barrel of which does not exceed thirty-six inches in length. or with any gun exceeding ten pounds in weight".
- 2. Sale of "native game" without licence, prohibited. Licence fees as for "selling game". No sale of "native game" prior to 1st May or later than 1st August.
- 3. Keeping of registers by holders of licences to sell "game" and "native game".
- "Authorized person" for production of licences, now include the Chairman and members of Council of registered Society.
- Godwit season to be during February, March, and April.
- 6. Societies to forward to Colonial Secretary Statement of Accounts, and balance sheet duly audited. Provision to be made for publication once, in newspaper circulating in the district.
- 7. Societies which fail to comply with above after three months from 21st April, not to receive any moneys in respect of fees, fines, and penalties. The Colonial Treasurer not to pay to Society in default, and may pay to some other Society.

1895. Animals Protection Act Amendment.

1. Any Society may not import or turn at large for the purposes of sport or acclimatisation, or as game an animal or bird without the consent of the Minister of Agriculture. This also applies to the importation of insects and reptiles.

- 2. It is the duty of the master, owner, or charterer of any vessel, arriving at any place in New Zealand, to "effectively prevent any snake, scorpion, or other noxious reptile, from being landed in New Zealand, whether in the cargo or otherwise". Penalty, fine of not less than £5 or more than £50.
- 3. Sale of "game" and "native game" may be prohibited where they are not sufficiently numerous.
- 4. Native pigeons may not be taken in 1896, or in every sixth year thereafter. The Urewera and other Maori districts in both Islands may be excluded from this.

1900. Animals Protection Act, Amendment Act.

- 1. The season for native and imported game from 1st May to 1st July.
- 2. Imported or native game may not be exported without the consent of the Colonial Secretary. It may not be held in possession for a greater period than seven days after the close of the season, and whether it is frozen or chilled or not. (Provocative regulations even for predomestic-refrigeration days.)
- 3. From 1901, every third year to be closed season for native pigeon, pukeko, and kaka.

1903. Animals Protection Amendment Act.

- 1. Season for native and imported game (other than deer or godwits) to be from 1st May to 1st July.
- 2. Licence fee for coursing hares (in districts where protected) to be a sum not exceeding £1, conditions to be fixed by regulations.
- 3. Fee for licence to take or kill imported game, other than deer, £1.
- 4. Governor may, on petition of local authority or Acclimatisation Society, declare that weasels, stoats, or any other animals declared by Rabbit Nuisance Act, 1882, to be a natural enemy of the rabbit, and which may have since proved to be enemies of game and poultry, may be killed within district defined by Order in Council.
- 5. New powers:
 - a. Prescribing duties for rangers, mode of appointment and removal from office, and for control of rangers.

- Registration of Societies, regulating formation of new Societies within existing district; re-registering of existing societies, and for dissolution of existing societies.
- c. Mode of keeping books by carrying companies, by refrigerating companies, and proprietors of freezing chambers, and forwarding agents, whether by land or sea, showing receipt and delivery of all packages and parcels containing imported or native game, and for inspection of books by rangers.
- Inspection of freezing chambers or refrigerating works.
- c. Deer shooting season and conditions. Form of licences and regulating or prohibiting the sale of deer, or venison or stags' heads.
- f. Godwit season.
- g. Prohibiting the taking of imported or native game in Public Domains or Forest Reserves.
- Fines for breaches not to exceed £20 in each case.

1907.

Animals Protection Act.

- 1. "Take or kill" and all references thereto includes the hunting, taking, shooting, pursuing or destruction of any bird or animal by any lawful means, whether the animal or bird is actually taken or killed or not."
- 2. A "Sanctuary" means any portion of a district notified or set apart by the Governor, or a place within which imported or native game or both, may not be taken or killed".
- 3. "Minister" means the Minister of Internal Affairs.
- 4. Season for native and imported game to be from 6a.m. on 1st May to 7p.m. 31st July. Where season is restricted, the dates of opening and closing must be notified at least four months prior to 1st May. If a closed season is to be observed notice must be given prior to 10th April. The deer season is to be prescribed by notification.
- 5. The use in lakes, rivers etc of cylinders having greater depth than 2ft 6in, and which are not open at both ends is prohibited.
- 6. Use of metal-patched and metal-cased bullets for deer etc. prohibited, but this does not apply to expansive or mushroom bullets.

- 7. Power to alter licence forms. Licences to sell imported game to be issued by issuing officers of licences to take or kill imported game. Licences not allowed to persons under 16 years of age.
- 8. The year 1910 and every third year thereafter to be a closed season for imported game (other than deer) and native game. (Not the Urewera County and other Maori districts.)
- 9. Godwit season to be February, March, and April.
- 10. Minister may authorize the destruction of imported game and native game doing damage.
- 11. Rules and registration of Societies—registered society to be body corporate. May hold and dispose of real and personal property; and may sue and be sued, and may recover any moneys due to corporation, whether by a member thereof, or not.
- 12. Opossums may be protected.

1908.

Animals Protection Act.

This is a Consolidation (for the purpose of the Consolidated Statutes) of the 1907 Act. It includes in addition, provisions regarding registration of Homing Pigeons. These regulations are similar to those of the existing Act, except that the effect of registration is to place the birds at the disposal of the Government in carrying messages, when the exigencies of the Public Service require the same.

1910.

Animals Protection Amendment Act.

- Use of cylinders prohibited.
- 2. Provisions for closed season every third year **not** to apply to Godwits.
- Native game may be held in possession for periods in excess of seven days after the close of the open season, but only for exhibition purposes. Maoris may possess at any time preserved game known as huahua.
- 3. Authority for the importation of animals for exhibition purposes in Zoological Gardens, or for travelling menageries. Conditions must satisfy the Minister that arrangements made for the safe custody of animals are sufficient for the protection of the public.

- 4. Hares, weasels, or stoats may be destroyed by any person. Operation of this section may be suspended in any district.
- 5. The skins or feathers of any native game may not be exported without authority.
- 6. The destruction, injury, or capture of indigenous birds and robbery or destruction of nests prohibited.

1914. Animals Protection Act.

1. Land may be taken under the Public Works Act as a sanctuary for imported or native birds, or for the breeding or preservation of such game.

1915. Reserves and Other Lands Disposal, and Public Bodies Empowering Act, 1915, (No. 68) Section 125.

 Minister may authorize any Society to take within its district Black Swan eggs, or sell or otherwise dispose of such eggs.

1920. Animals Protection Amendment Act.

- 1. Opossums may be taken.
- 2. The Governor-General may define districts in which it is lawful to take opossums.
- 3. Holders of Opossum licences may not enter on private lands without the consent of the owner or occupier, or on any State Forest or Provisional State Forest without written authority.
- 4. All fees, fines, and royalties from opossums to be paid into the Consolidated Fund. The Minister of Finance may make payment of portion of such fees etc. to any Society or Societies.

1922. Animals Protection and Game Act, 1921-22.

- 1. Every reserve under the Scenery Preservation Act, 1908, shall be deemed to be a sanctuary under this Act.
- 2. Land may be taken by the Governor-General under the Public Works Act, 1908, as a sanctuary under this Act, or as a reserve for the breeding and preservation of imported or native game.
- 3. No person shall use any live decoys for the purpose of taking or killing imported or native game.
- 4. Opossums may not be taken or killed.

- 5. The Governor-General may define areas within which it shall be lawful to take or kill opossums.
- 6. Issue of licences to take or kill opossums.
- Licences necessary to purchase and sell opossum skins. Dealers required to keep registers.
- 8. All fees and fines connected with opossums to be paid into the Consolidated Fund.
- 9. Re-registration of Acclimatisation Societies. A new certificate of registration to be issued on application. Two copies of the Societies' rules to accompany application.
- 10. Every Society registered under this Act shall be a body corporate, with perpetual succession and a common seal.
- 11. No alteration, amendment, or revocation of any rules, unless approved by the Minister.
- 12. Not only must the Minister receive a full statement of accounts etc. but also must every member of the Society.
- 13. The Minister may authorise the taking or killing of animals and later of birds) causing damage to land.

Animals absolutely protected by 1921-22 Act.

Albatross	(8 species)	Huia		
Australian	tree swallow	Kaka		
Avocet		Kakapo		
Bell-bird	(3 species)	Kingfisher	•	
Bittern	(3 species)	Kiwi	(6	species)
Canary	(2 species)	Magpie		•
Creeper	(2 species)	Martin		
Crow	(2 species)	Owl	(4	species)
Cuckoo	(2 species)	Oyster-		
Duck	(100,000 100 0 100000000000000000000000000000	catcher	(2	species)
Auckland Island duck		Parakeet	(7	species)
Blue or Mountain duck		Parson-bird		
Brown duck		Penguin	(10	species)
Grey teal		Petrel	(22	
Paradise	duck	Pigeon		species)
Fantail	(3 species)	Pipit	(4	species)
Fern-bird	(3 species)	Plover	(3	species)
Gannet	(2 species)	Pukeko	2.7	~Peeres)
Grebe	(2 species)	Rail	(6	species)
Gull	(3 species)	Rifleman	, 0	opecies)
Heron	(4 species)	Robin	(5	species)

Duck: Saddleback American black, Sand-piper Canvas-back, Mallard, Shag Mandarin, Pintail, Shearwater (5 species) Wood. (5 species) Goose: Southern Merganser Black brant, Starling Canadian, Stilt plover (2 species) Cape Barren, Stitch-bird Snow Takahe White-fronted. (10 species) Tern Grouse (2 species) Thrush Himalayan thar (4 species) Tomtit Tropic bird (raukura) Moose Partridge (2 species) Warbler Pheasant (2 species) Wood-hen (5 species) Quail (4 species) Wren (3 species) Wapiti Mammals: Long-tailed bat Protected Native Game Short-tailed bat Black swan. Reptiles: Duck: Tuatara Black Teal Native Frogs Grev Protected Imported Game Shoveler (tete, spoonbill or widgeon) Black Game or black cock. Eastern golden plover Chamois Godwit or curlew Deer:

1945.

Axis, Fallow,

Japanese, Mule, Red,

Sambur, Virginia.

The Statutes Amendment Act.

If in the opinion of the Council or of any Board, deer, opossums, or other wild animals on land which is privately owned or occupied, are likely to destroy or damage any trees, shrubs, plants, or grasses, the existence of which may tend to mitigate soil erosion, or to promote soil conservation, or the control of floods, the Council or the Board may report the matter to the Minister of Internal Affairs, who, if he is satisfied that it is desirable so to do may authorize any person to enter upon the land to kill deer, opossums, or other wild animals thereon, subject to such conditions, and during such period as may be specified in the authority.

Knot

Turnstone.

1946. The Statutes Amendment Act, 1946, referring to the Animals Protection and Game.

1. Term of appointment of Rangers:-

- (a) Every person (not being a constable) who at any time after the passing of this Act is appointed to be a ranger in an honorary capacity shall be appointed for such term, not exceeding three years, as the Minister thinks fit, and may from time to time be re-appointed, or may be at any time removed from office by the Minister for incapacity, neglect of duty, or misconduct, or may at any time resign his office by writing, addressed to the Minister.
- (b) Every person, (not being a constable) who, on the passing of this Act holds an honorary appointment as a ranger shall on the 31st March, 1947, be deemed to have ceased to hold that appointment.

1953.

Wildlife Act, 1953

An Act to consolidate and amend the law relating to the protection and control of wild animals and birds, the regulation of game shooting seasons, and the constitution and powers of Acclimatisation Societies.

The Act came into force, 1st April, 1954.

Wildlife Sanctuaries and Refuges were dealt with in great detail, there being fifteen sub-sections referring to Sanctuaries, alone. "All wildlife in any Wildlife Sanctuary shall, while within the sanctuary, be deemed to be absolutely protected."

In the old Act provisions regarding sanctuaries were too restrictive to farming interests. Many areas, which could have afforded refuge to game, could not be so declared without severe restrictions on farming activities. Under the new Act provision is made for the constitution of wild-life refuges, which give considerable liberty of farming activity on the area, and at the same time, give adequate protection to game and other wildlife.

Additional powers were granted to rangers to provide more effective protection of game.

The duties and responsibilities of Acclimatisation Societies are now clearly defined.

Probably the section referring to Acclimatisation Societies produced its greatest impact on the Hawke's Bay Society, which, alone, had stood out against the automatic membership, co-existent with ownership of licence. Opposition both within and outside the Society, plus from the Internal Affairs Department, to the guinea membership fee required under the rules of the Hawke's Bay Society,

had developed through the years. The Department took no co-ercive stand, knowing that the new Act in the making would bring all Acclimatisation Societies into line with one set of rules.

The summarised rule relating to membership sets down that every person, whose permanent place of address is within the particular Acclimatisation district, and who is the holder of a shooting or a fishing licence, and who has reached the age of sixteen years, is entitled, subject to his making written application each year for membership, to become a member of the Society without any further payment.

The Act tabulates the functions of Acclimatisation Societies:—

- 1. The protection and preservation of all wildlife absolutely protected under the Act.
- 2. The prevention of any diminution of numbers or species of game.
- 3. The breeding, propagation, and liberation of any existing species so that their numbers are kept up and increase.
- 4. The issuing of licences and receipt of resultant fees.
- 5. Investigation of reports of injury or damage caused by wildlife.
- 6. The fostering and encouragement in sportsmen of the true principles of sportsmanship.
- 7. To educate the members and the public, in general, on matters pertaining to the conservation of wildlife and freshwater fisheries.
- To prevent the unauthorised release of any animal, or plant.

More details than have appeared in previous Acts, are prescribed for the duties of Rangers. In fact, every ranger has a copy of the section referring to rangers.

The Act contains a comprehensive list of Offences and Penalties, with the amounts to be paid when convicted.

Prior to the passing of the 1953 Wildlife Act legal protection was given only to those birds and animals specifically listed as being fully or partially protected. The 1953 Act changed the emphasis by listing birds and animals which are unprotected or partially protected; all those not listed are assumed to be fully protected.

Unprotected or partially protected wildlife have been classified by the Act as follows.

- (a) Wildlife declared to be game.
- (b) Wildlife partially protected.
- (c) Wildlife that may be hunted or killed subject to the Minister's consent.
- (d) Wildlife not protected except in certain areas and during certain periods.
- (e) Wildlife not protected.
- (f) Noxious animals.

The birds and animals listed are as under:

(a) Wildlife Declared To Be Game:

Black Swan (Cygnus atratus) (except on Chatham Islands).

Canada goose (Branta canadensis), in that portion of the North Canterbury Acclimatisation District that lies to the eastward of the South Island Main Trunk Railway line.

Chukor (Alectoris graeca chukor).

Duck:-

Grey duck (Anas superciliosa) and any cross of that species with any other species, variety, or kind of duck (except on Chatham Islands).

Mallard duck (Anas platyrhynchos) and any cross of that species with any other species, variety, or kind of duck (except on Chatham Islands).

Paradise duck (Casarca variegata).

Spoonbill duck (New Zealand shoveler) (Anas rhynchotis).

Guinea fowl (Numida).

Pheasant (any bird of the genus Phasianus and any cross of any such bird with any other species, variety, or kind of pheasant).

Pukeko (Porphyrio melanotus) (except on Chatham Islands).

Quail-

Australian quail (brown quail) (Synoicus). Californian quail (Lophortyx californica). Virginian quail (Colinus virginianus).

(b) Wildlife Partially Protected:

Gull-

Black-backed gull (Larus dominicanus). Sea hawk (Catharacta lonnbergi).

Hawk-

Bush hawk (Falco novae-seelandiae). White eye (Zosterops).

(c) Wildlife That May Be Hunted Or Killed Subject To The Minister's Consent.

Black Swan (Cygnus atratus) (on Chatham Islands only).

Duck-

Grey Duck (Anas superciliosa) and any cross of that species with any other species variety, or kind of duck (on Chatham Islands only).

Mallard duck (Anas platyrhynchos) and any cross of that species with any other species, variety, or kind of duck (on Chatham Islands only).

Mutton bird (Puffinus griseus).

Petrel-

Grey-faced petrel (Pterodroma macroptera).

Pukeko (Porphyrio melanotus) (on Chatham Islands only).

Shag-

Little shag (Phalacrocorax brevirostris). Pied shag (Phalacrocorax varius).

Weka-

South Island weka (Gallirallus) (on Chatham Islands only).

Stewart Island weka (Gallirallus) (on islets off Stewart Island and in Foveaux Strait only).

(d) Wildlife Not Protected Except In Certain Areas And During Certain Periods.

Birds_

Goose-

Canada goose (Branta canadensis), except in the area described in paragraph (a) above, in which Canada goose is game.

(e) Wildlife Not Protected.

Mammals--

Cat (Felis).

Cattle (Bos).

Dog (Canis).

Ferret (family Mustelidae).

Hedgehog (Erinaceus europaeus).

Horse (Equus).

Mouse (family Muridae).

Polecat (family Mustelidae).

Rat (family Muridae).

Sheep (Ovis).

Stoat (family Mustelidae).

Weasel (family Mustelidae).

Birds-

Blackbird (Turdus merula).

Bulbul: Red vented bulbul (Pycononotus cafer).

Bunting—

Cirl bunting (Emberiza cirlus).

Dove-

Indian (or Malayan) dove Streptopelia).

Finch—

Chaffinch (Fringilla coelebs).
Goldfinch (Carduelis carduelis).
Greenfinch (Chloris chloris).

Hawk-

Harrier Hawk (Sicus approximans).

Kea (Nestor notabilis).

Kookaburra (Docelo).

Magpie (Australian)-

Black backed magpie (Gymnorhina Tibicen). White backed magpie (Gymnorhina leuconota).

Mynah (Acridotheres tristis).

Owl-

Little owl (Athene noctua).

Parrot-

Budgerigar (Melopsittacus undulatus).

Galah (Kakatoe roseicopilla).

Rosella (Platycercus eximius).

White (or sulphur crested) cockatoo (Kakatoe galerita).

Peafowl (Pavo cristatus)

Pigeon-

Rock pigeon (Columba livia).

Redpoll-

Lesser redpoll (Carduelis flammea).

Rook (Corvus frugilegus).

Shag-

Black shag (Phalacrocrorax carbo). Skylark (Alauda arvensis).

Sparrow-

Hedge sparrow (Prunella modularis). House sparrow (Passer domesticus).

Starling (Sturnus vulgaris).

Thrush-

Song thrush (Turdus ericetorum).

Turkey (Meleagris).

Yellow hammer (Emberiza citrinella).

Amphibians-

Green frog (Hyla) Whistling frog (Hyla).

Reptiles—

Lizards-

Skink (family Scincidae). Gecko lizard (family Geckonidae).

(f) Noxious Animals.

Mammals_

Deer—

Axis deer (Axis axis).
Fallow deer (Dama dama).
Japanese deer (Sika nippon).
Javan rusa deer (Cervus timoriensis).

Moose (Alces americana).
Red deer (Cervus elaphus).
Sambar deer (Cervus unicolor).
Virginian deer (Odocoileus virginianus).
Wapiti (Cervus canadensis).
Any other member of the family Cervidae.

Chamois (Rupicapra rupicapra).

Goat (Capra).

Opossum (family Phalangeridae).

Pig (Sus).

Thar (Hermitragus Jemlaicus).

Wallaby (family Macropodidae).

Opossum, which were protected under the 1921-1922 Act are now included in the list of noxious animals under the 1953 Act

1968. Committee of Inquiry on the Organisation of Wildlife Management and Research.

In April, 1968, a Committee of Inquiry on the Organisation of Wildlife Management and Research was set up, under the Chairmanship of Mr J. K. Hunn, C.M.G.

All bodies interested in Wildlife were invited to make submissions to the secretary of the Committee of Inquiry by 31st May. The Terms of Reference for the Inquiry were:—

- 1. To study and appraise the present organisation and control of wildlife management and research.
- 2. To recommend to Government the most appropriate organisation which, in the public interest, would ensure:—
 - (a) co-ordinated advice to Government on wildlife policy and finance.
 - (b) adequate basic and applied research into wildlife and its associated ecology.
 - (c) efficient and economical management of wildlife policies.

As the Committee of Inquiry began to hear Submissions in September, the month in which this centennial booklet went to Press, no further information can be given.

