



Forest and Bird

Issued by FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND Incorporated



PIED SHAG

NUMBER 50.

Issued Quarterly

NOVEMBER, 1938.

FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND (Inc.)

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FOREST AND BIRD CONSERVATION.

NEED OF ACTIVE NATIONAL POLICY.

IT has been said of New Zealanders that they are a peculiar people, over-prone to accept as facts whatever they are told or read. This accusation can be said to be near the mark in regard to the conservation of forests and wild life. Some few years back we were frequently told by those in charge of forestry matters that New Zealand led the world in forestry. Nay, even the then Prince of Wales was induced in some way to hold up this country as a model in forest practice. But what has been the outcome to date? Some hundreds of thousands of acres have been planted, mostly in the exotic insignis pine or radiata, the timber from which is certainly useful for such purposes as boxing for concrete work or fruit cases and similar needs, provided always that the plantations are not so far distant from the place of utilisation as to make the cost of transport prohibitive, but it is not of a nature suitable for much else.

On the other hand, our native forests have been slaughtered by very unscientific methods, regardless of their necessity for protection purposes; in fact, this primary need received scarcely any consideration until recent years, when the plea was first made by the Forest and Bird Protection Society, but to this day adequate areas for the protection of our food-producing lands have not been officially set aside.

Since its inception the State Forest Service has employed few specially trained officers. In fact, not more than two such have ever been in the service as far as can be ascertained. Yet we hear of the necessity for scientific forestry, silviculture, etc., and it is feared that most people take such statements as indicating knowledge. Now warnings such as the Esk Valley floods and other disasters are sounded as indicating what may be expected in an ever-increasing volume as the result of the depletion of the natural plant covering on watershed lands.

Fifteen years ago the Forest and Bird Protection Society pointed out the failure in New Zealand of wild-life administration, especially in the enforcement of the various Acts relating to it. To-day we repeat the accusation, which is supported by reports of the shooting of native pigeons and other breaches of the law which continue to come from many districts in both the North and South Islands. Numbers of pigeons are shot in localities which are particularly favourable for their increase in the natural course.

A strong public feeling has been awakened for the need of efficient conservation of New Zealand's unique plant and bird life. Unfortunately many people, when they hear the extensive lip service which is given to the subject, think that all is well. The truth is just the opposite. Action, long over-due, is still delayed. The poaching of native birds will continue, game and fish stocks will go on lessening, and erosion and floods will continue to exact their devastating toll, until a proper national policy is formulated and put into operation.

The Maoris practised conservation of both tree and bird with excellent results. The North American Indians and most other aboriginal races had their conservation laws and enforced them; New Zealanders have laws on paper and seem to be content to go no further. After all, perhaps they really are a peculiar people.

FOUR PROBLEMS.

FIGHT TO SAVE ALBATROSS CHICK.

Bird-protectors have to move in a mysterious way their mercies to perform.

Problem No. 1: A ground-nesting bird, a very large and unusual bird, comes to breed on a foreshore headland. Its nest stands at once in great danger from the inquisitive and from the vandalistic. Shall the bird-protectors take the public into their confidence, and appeal to people's sense of good conduct? Or shall the bird-protectors try to prevent knowledge of the nest, and thus avoid the rush and crush of sight-seers?

Problem No. 2: When the bird-protectors have decided to make an effort at secrecy, their first job is to silence the press. This can sometimes be done, locally. But when newspapers in other cities publish, through local correspondents, stories of such a rare nesting event, the local newspapers naturally demand equal or greater publicity.

The bar against secrecy having been thus broken down, no further effort at suppression is of any value. It becomes known then that thoughtless or barbaric people have driven away two out of four pairs of royal albatrosses that were courting on a coastal hillside on the northern tip of Otago Peninsula, that stone-throwers have broken the nest and the single egg of the third pair, and that the fourth pair have left behind a single chick, whose natural

destiny is to sit on the hillside for many months before flight, if the inquisitive and the vandals will allow him to sit there.

Problem No. 3: The lone chick having become such a popular "story" that he is seldom alone, the third problem is how to protect him. The answer is: a man-proof fence. As the ground is a public reserve, with friendly lighthouse keepers and a friendly Harbour Board, a plan for a fence, approved by the authorities, is made without great difficulty. It is believed that, with a fence and warning notices, the chick can be protected from the public for the remainder of its infancy; and that there will be less occasion for one of its unofficial protectors to stand-by on Saturdays and Sundays, when the sightseers mostly congregate.

But there is always a but—that leads up to:

Problem No. 4: which is a problem of money. The fence will cost about £50. The local bird-protectors, prodigal of time as well as money, are not daunted. They will face the job. But can the rest of New Zealand allow them to do it at their own cost in cash as well as time? Is it not a duty—a privilege—for other bird-protectors to help?

The Hon. Secretary of the Otago Branch of the Royal Society of New Zealand, Mr. H. D. Skinner, writes to the Forest and Bird Protection Society of New Zealand: "We are fortunate in having the sympathy and active co-operation of the Otago Harbour Board and its staff in measures which will lead to the exclusion of unauthorised persons from the whole of the Taiaroa Head reserve on which the albatrosses are attempting to form a colony. This can be done by erecting a barbed-wire fence and gate," etc.

The attempts of the birds to found an albatross colony at the spot have been in progress for at least eighteen years, and eggs have been laid, but yahoos have intervened. Mr. George Simpson wrote in June to the Forest and Bird Protection Society: "The chick is lying out in the open (on a much-used path when people are about) and if it is interfered with by irresponsibles, or is unnecessarily crowded round when the parents return to feed it, the chances of its survival are small. That the

Royal Albatross on Nest at Otago Heads.

Photo courtesy L. W. McCaskill.]



young bird has been saved is entirely due to the voluntary precautions of the resident staff and Mr. L. E. Richdale, who is making weekly visits."

It seems to be in order that New Zealanders elsewhere than in Dunedin should contribute to this work of protection and back the efforts made by the albatrosses themselves over many years, undeterred by the incredible stupidity of the general public.

Ed. Note.—The Forest and Bird Protection Society has opened a subscription list in order to reimburse those who have lent the money for the cost of a man-proof fence across the neck of the isthmus, where the albatrosses are endeavouring to establish a nesting ground. We feel sure many will take pleasure in assisting these roamers of the sea. We shall acknowledge all contributions.

THE ALBATROSS CHICK

The sole survivor after eighteen years attempt by Royal Albatrosses to breed at Tairua Heads. Will this bird be permitted to live and join its fellow roamers of the sea?

[Photo courtesy J. Scott Thomson.]



LITTLE MEN OF THE SEA.

(By Hugh Ross.)

THERE was a storm raging outside, but by the time the huge green rollers crashed on the rocky shore of the little bay their might had been reduced to nothing worse than an angry swirl.

In the open sea a penguin appeared on the crest of a wave in order, one might have thought, to take stock of his surroundings. He was reputedly short-sighted, yet he either saw the formidable towering cliffs against whose buttresses the waves pounded furiously, or else—and this is more likely—he had been there before, because he turned off and headed directly for the bay.

Kelp swirled along the shore-line of the bay, which was very low, sloping gently upward to merge with the virgin bush. Here and there were little creeks up which wavelets frothed to hiss angrily round and round over gravel and sea-shells.

In one of these creeks the penguin suddenly appeared. Gently swimming he allowed a wave to propel him on to the shingle; then, fearful of being drawn back by the strong under-tow he hastily scrambled up the rocks and made awkward way along the bed of a wide boggy creek.

Following a trail well defined by the feet of fellow-travellers, the penguin waddled steadily onward. He cut a quaint figure, this dignified little "bird-man," what with his absurd walk and almost human demeanour. His whole attention was taken up in avoiding misstep on greasy twig and slippery slope—a mistake which might very well send him tobogganing beachward with loss of dignity.

Presently he left the gully and by vigorous use of feet, flippers and bill clambered up a surprisingly steep slope to a piece of flat ground, where he took up residence under a large, very dense lawyer-bush. Fellow-birds gave him welcome in loud, shrill cries, but used vicious beaks to keep him from approaching too close.

He was a very handsome fellow as he stood on the dark-brown peat. He stood nearly two feet high, was white from throat down, with bluish back and white-edged flippers. The back of his head, from eye to eye, was yellow merging into brownish red at the back of his neck. His heavy, formidable beak was red on

top and white underneath. The eyes were three distinct colours, pale red around the edges, pale cream and black in the centre. From eyes to beak and throat the pattern was greenish yellow with black stripes. His feet were flesh-coloured.

He mated with a female bird as handsome and large as himself. The pair were very sleek and in perfect condition as they settled down to the business of rearing a family. Under the lawyer bush in the soft fibrous peat they scratched a very shallow hole into which they bundled a few leaves and small twigs. Two eggs slightly larger than average domestic hen eggs, white with perhaps the faintest hint of green, were laid in the makeshift nest. In brooding the hen appeared to crouch over the eggs rather than sit on them. The other bird remained at sea all day, but always returned at night.

On hands and knees I crawled under the evil-smelling bush. Penguin, quite unafraid, crouched over the eggs and watched my advance calmly. I paused at a safe distance; I knew that a penguin was far from speedy on land, but should it decide to attack I might be too slow in retreating out from the clinging affection of that lawyer bush.

Unfortunately, penguin's nest was fully fifteen miles from my home. To visit the nest took me a full day. Part of the journey I was able to make by motor-cycle, but there were hours of foot-slogging along a muddy cattle track through the wet bush. The date was the later part of August, which left the days none too long, and to find one's way back by torch-light was impossible. As a result there were two husky chicks, clad in wool resembling down, occupying the nest when next I returned. They appeared very helpless and had an old bird forming a highly effective guard over them.

I returned several times in the months that followed. As the young birds grew stronger both parents apparently sought food for them. I several times found the young alone, and although I waited till four o'clock I saw no signs of the old ones. By March the youngsters were fully fledged, complete even to the elaborate colour scheme. Indeed they struck me as being even more gaudy than the mature birds.

BIRD FORTRESSES.

BARBED WIRE AND BLASTED TRACKS.

BIRD-PROTECTION work in New Zealand must use all weapons at its disposal—propaganda, persuasion, fines, barbed wire and explosives. The last-mentioned sounds fantastic, yet it is one of the weapons of the defensive war which bird-protectionists must wage.

Propaganda we have always with us. Educational progress among the people is sufficiently evident. The cause of vandalism is not recruiting from the young population as many graduates as used to be recruited. And even confirmed old vandals are moving a little nearer to the light.

In some cases education is slower among the learned than among the ignorant. The intelligentsia is still prone to demand its museum pound of flesh. If this merely meant a pound of flesh for a few local museums, the collecting demand on birds and on their nests and eggs would be measurable; but the collecting demand seems to cover an exchange system between the world's museums. In other words, preserved plants, birds, dried animals and ethnological specimens are the currency of museums which are notoriously lacking in cash. Besides that there is ordinary commercial collecting. This is not a peasant industry, as in some countries in Europe. It is an industry carried on chiefly by the most cultured class—for it is unlikely that the gentlemen concerned would admit any lower status.

Irresponsibles who go out to shoot something are in another class, and among them sharp fines have some educational value.

Bird-protection by exclusion of trespassers is a policy that has obvious limits. It is not practicable to fence off large areas, and there are limits to the restricting of personal liberty of movement. Bird-protection cannot be oppressive of large public rights, but it has no punch in it if it dare not defend particular localities, where the advantage of seclusion for wild life is pre-eminent, and where the curtailment of people's liberty to enter is comparatively negligible.

Within this definition comes the attempt to exclude unauthorised persons from entry to the places on Otago Peninsula where penguins breed and where albatrosses are trying to breed.

"The bay in which the last surviving colony of penguins on the Otago Peninsula is situated" is privately owned. The Otago Branch of the Royal Society of New Zealand has informed the Forest and Bird Protection Society of New Zealand that the owner, Mr. D. McG. Reid, is willing to dedicate the bay as a reserve. The bay "consists of a ring of cliffs protecting about five acres of sandhill and talus. The cliffs can be descended at one point, and one of the headlands can be passed at low water. The committee has expended £6 in making the cliff track impassable by blasting, and intends to block access round the headland by a fence about 15ft. in length, consisting of three vertical railway irons set in concrete and linked with pig wire. The maximum cost of making the penguin colony secure is estimated at £25, and financial help for the Society will not be amiss."

It seems that the bay where these penguins breed is the bay where a vandal was caught not very long ago and fined £50.

In the same district the energetic Dunedin people are endeavouring to protect a colony of about six hundred white-fronted shags which inhabit a cliff-face on the open sea. Some time ago the south end of the colony was cleared by rifle fire from a neighbouring point.

Shag-killers rarely distinguish between species. In any case, the evidence against the trout-eating species is quite inconclusive. How many men are there in New Zealand who are competent to make a stomach analysis, and to identify partly digested contents?

A task worthy of scientific investigation, with the backing of the Department of Internal Affairs, would be reliable stomach analyses and a fair statement of the guilt or innocence of shags and hawks, having regard to their war not only on trout but on trout enemies (such as eels), and not only on game birds but on their deadly enemies, rats and mice.

This, so far as trout fishing and game shooting are concerned, would be the businesslike method. As it is, license holders' money is being spent by guesswork, and in some cases absurdly, such as in the paying of bounties on species of shags which do not frequent rivers.

THE PIED SHAG.

Phalacrocorax varius. (Maori name: Karuhiruhi).

(By R. A. Falla.)

IT is a comparatively easy matter to subdivide the Shags or Cormorants of New Zealand into two groups of species which frequent respectively inland waterways and sea coasts. The marine species may be further subdivided into those that are oceanic, generally nesting on outlying islands and feeding in deep water, and those that are coastal, inhabiting bays and estuaries. The Pied Shag is typical of the last-mentioned group.

It is a conspicuous bird in its greenish-black plumage relieved by the dazzling white of its under parts. Its habit of roosting in trees overhanging water makes it a familiar sight in many parts of New Zealand, especially on stretches of indented coastlines washed by warm water. North Auckland and the Bay of Plenty, the Marlborough Sounds and Stewart Island are the regions in which it is most plentiful.

Its food consists mainly of fish of every marine species, but it is not one of the shags with which Acclimatisation Societies need be concerned in regard to the problem of shags and trout. Complaints have been made by sea fishermen, however, and in one case investigation has been made by the Marine Department regarding the effect of Pied Shag colonies on the flounders of the Kaipara Harbour. This investigation showed that small flounders formed a considerable portion of the food of the shags in that area. It did not, however, give any indication of the actual effect of the number of flounders taken on the total stock or the welfare of the flounder population. The conclusion reached by the Chief Inspector of Fisheries was that the flounder population of the Kaipara fishing grounds is probably no longer at its maximum, having been considerably depleted (by the fishing industry)* and that the depredations of a large shag population must therefore be a considerable drain on the supply of marketable fish. He took a reasonable view that "facts are required in the first place and slaughter only so far as is justified by the facts." Those interested in the welfare of native birds have a right to demand that full and satisfactory investigation should be made in every case before there

is a decision to attempt the extermination of any native bird, and in this particular case might also reasonably demand that continuous effort should be made to restrict and alter the destructive methods of fishing which will ultimately reduce the flounder population irrespective of whether shags are present or not.

There is no need at the present time to fear the extermination of Pied Shags, as these birds show a tendency to move from areas where their nests are in danger. In this respect they differ from the more primitive and relatively stupid Spotted Shag.

There is also a fairly long nesting period, which enables the birds to build new nests and rear young after an early attempt has met with disaster. The nests are untidy but quite strong structures of sticks. Three or four eggs are laid and the young birds are hatched without any covering of down. The down eventually grows in a pattern of black and white, resembling that of the old birds. The young are fed on fish, partly digested and taken from the throat of the parent bird to the accompaniment of much squealing and excited vibration of the nestlings' bodies. When fully feathered the young leave the actual nest and perch about for some weeks on the neighbouring branches. At this stage they are sometimes still fed by the old birds, and their own attempts to fly down to the water and learn to fish are somewhat desultory. Indeed, if the impulse to do so is not strong, some young birds may sit about and become thin as a result of starvation when their parents cease to feed them. Probably, however, this occurs only when some accident has befallen the parent.

The first year plumage of the young bird is slightly mottled on the neck and under parts.

Pied Shags, Rurima, Bay of Plenty.

[Photo courtesy Bernard Sladden]



* Parentheses inserted by the writer.

THE URGE OF THE PAST.

(By J. Pattison, R.A.O.U.)

(Reprinted from Bulletin No. 24.)

Man and the domesticated animals of to-day retain many tendencies that belong to or are inherited from ancestors of the long, long ago. Domesticated animals have come from wild animals, and man himself was once a wild animal. Both demonstrate the survival of savage instincts and tendencies which were helpful in the dim and distant past.

When we see the domesticated dog turn round and round on the hearth rug preparatory to lying down, we see him reproducing a useless process, one which is without utility to-day, but which was useful to his primordial ancestors when they wished to make a comfortable bed among tall prairie grass or reeds. Similarly, the domesticated cow wears daggers on her head which are of no use whatever to her to-day, but rather a disability under her altered environment, but were useful to her wild ancestors in defending themselves and calves from the attacks of wolves, dogs, tigers and all the larger carnivora. Mankind also shows savage survivals which, no doubt, were helpful in the long ago, but to-day are regarded as useless, atavistic and immoral. Stealing, cheating, revenge, lying and the desire for war and the killing of every living thing were necessary in the eons behind us.

The primordial man was possessed of crude weapons, and had a continual struggle against nature in procuring his food. Hunting birds and animals became an instinct with him. This long-continued practice survived down to very recent times; that being so, one can understand how difficult it is for man to cast it off. It is this urge of the past that causes men such as Zane Grey, Captain Mitchell, and many of the wealthy men of England and New Zealand, to take pleasure in the killing of Swordfish and Mako and other sharks in the Northern waters. It is this savage survival which impels anglers to kill fish in our lakes and rivers, and gunmen to shoot both native and imported birds. No consideration is shown to the animals, fishes, or birds by those who desire to slay for pleasure.

When we read of those of high and low degree going out to shoot duck, quail, swans, pheasants and other beautiful birds, just for the joy of destroying, we can certainly regard the

advance of civilization as being very tardy, and that of altruism as exceedingly slow.

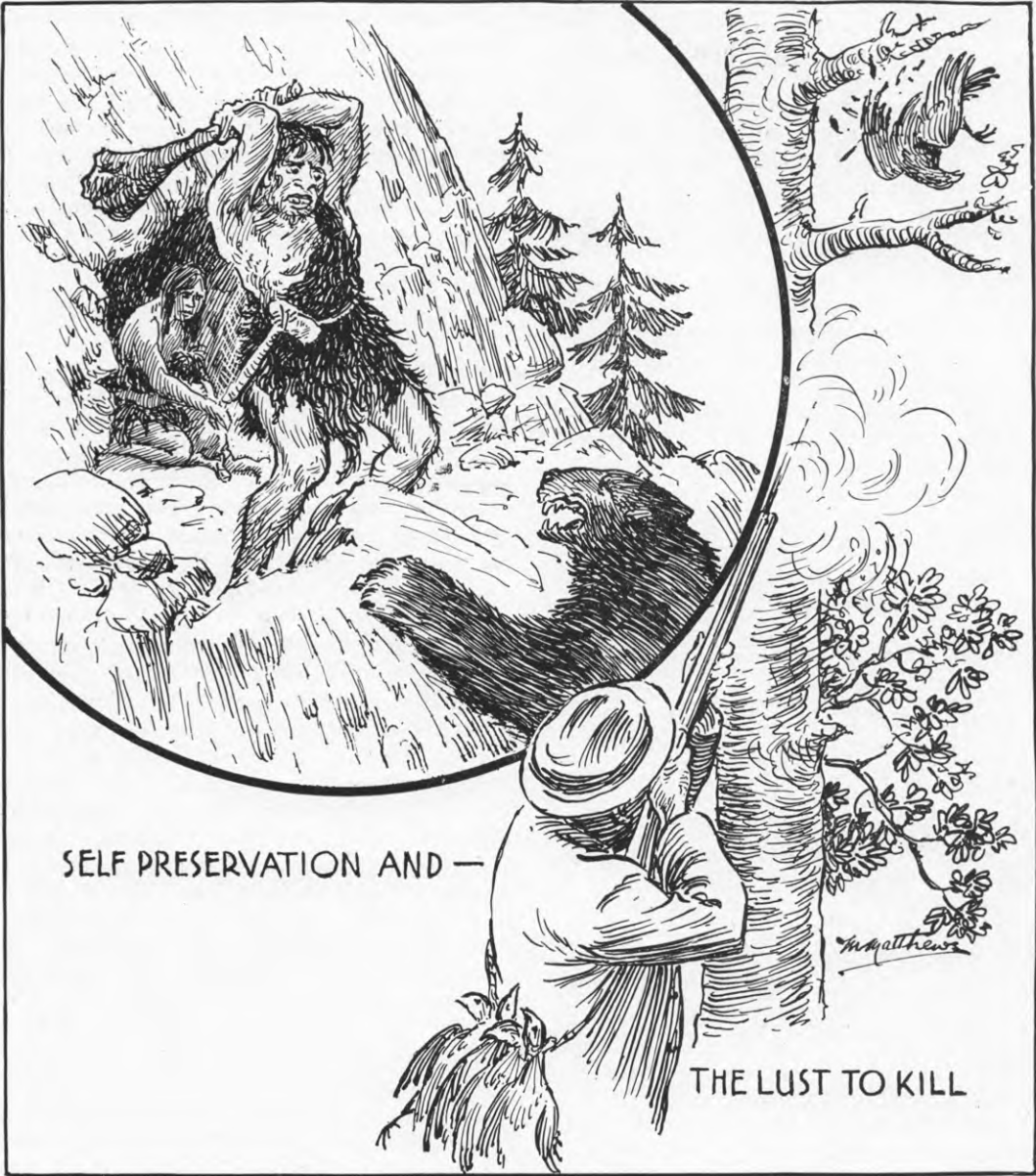
The gun clubs are at times given permits in our fair Dominion to shoot shags and hawks. I protest against this permission, seeing that both hawks and cormorants are part and parcel of the whole purpose of nature, and when man interferes for selfish and commercial reasons, the balance is destroyed and untold disasters follow. Birds of all kinds, whether of the water, wood or waste, were more plentiful in New Zealand when hawks were numerous—that is, fifty or sixty years ago.

Hawks are extremely useful; they kill rats, mice, and the young of introduced stoats, weasels and ferrets, thereby helping nature to achieve its equilibrium. Shags destroy weak and diseased fish; they also keep our streams free from fungus and eat crabs, crayfish, young eels and small trout. In most of the streams that have come under my observation, where cormorants are plentiful trout are also plentiful, and are moreover bigger and in better condition.

The instinct of sympathy in the higher peoples appears to be much weaker than many of the primeval instincts—for instance, the hunting and fighting instincts. Charles Darwin says: "Sympathy beyond the bonds of man, that is humanity to the other animals, seems to be one of the latest acquisitions. The very idea of humanity to animals, one of the noblest with which man is endowed, seems to arise from our sympathies becoming more tender, and more widely diffused, until they are extended to all sentient beings. As soon as this virtue is practised and honoured by a few it spreads, through example and instruction, to the young, and eventually becomes incorporated in public opinion."

Surely there is something nobler in life than the wounding and killing of defenceless birds and beasts. Cannot these alleged "sportsmen," anglers and shooters achieve fame in some better and nobler way? Ethically, I have always understood that man's mission in life is to eradicate suffering and pain, both from the animal and human kingdoms. Imagine a

MAN—HUNTER AND WARRIOR—
ANCIENT AND MODERN.



man's sole objective in life being the purpose of seeing how many beautiful living things he can destroy or maim! Some of the men and women that are part of human society are very proud of this primordial urge to slay, so much so that they have themselves photographed along with the defenceless creatures that they have destroyed, and have the pictures appear in the illustrated papers and magazines, thus proclaiming to the world their vanity and their primordial lust to kill and destroy.

It has been said that civilization is a train. It drags along with it a great many things that rightfully belong to the past—not only vestigial instincts, but also vestigial customs, beliefs and institutions. The gladiatorial contests of ancient Rome, the bear-baiting of four centu-

ries ago, the cock-fighting of fifty years ago, have passed away on account of the growth of human sympathy. In America, and in many countries, pigeon and live bird trap shooting stands condemned, and Continental bull-fighting is decaying. Let us hope the shooting of birds and the taking of our big game fish, for the sole purpose of giving pleasure, will shortly give way to a public humanitarian spirit that will condemn any practice or sport that entails suffering to the lower animals. In the words of Howard Moore, "It is of vast advantage to us to be able to recognise these vestigial features in order that we may more skilfully disentangle ourselves from them, and, at the same time, definitely turn our backs on them in our efforts to advance to a better world."

AMERICAN EXAMPLES. HAWK MOUNTAIN AND SHAG GORGE

THE battle for wild life has reached a much more elaborate stage in the United States than in New Zealand. Here, the sleeping giant, Public Opinion, stirs uneasily in his sleep. In America he is up and doing.

In America the conservationists and bird-lovers and plant-lovers and friends of wild life fight over a wide front with many regiments (that is, with many societies) and control large and growing funds. In New Zealand there are just a few live societies and not much money—but the battle is the same.

In America they have the American Nature Association, the Wildflower Preservation Society, the American Forestry Association, the National Association of Audobon Societies, and the Emergency Conservation Committee, to mention only a few. The last mentioned, the E.C.M., set a classic example with regard to protecting birds of prey—an example which should give New Zealand shag-destroyers and hawk-destroyers ground for second thoughts.

The story is told in "Natural History" by Donald Culross Peattie, who writes that "the belief that all birds of prey are pests has been utterly disproved; most are actually beneficial to rodent control." According to this writer: "At Hawk Mountain, in Pennsylvania, local rifle gangs tried to clean the sky of lofty-flying falcons, eagles, and ravens as they skimmed above the rocky peak on their yearly migration.

Out of its slim funds, the Emergency Conservation Committee bought Hawk Mountain

and declared it the first sanctuary ever set up for birds of prey."

When will New Zealand reach the stage at which there will be an "Emergency Conservation" body with the cash and courage to buy up the forested river-gorges where, in mountainous surroundings, shags have their rookeries, their nests in the tall tree-tops, shot at by all and sundry, for the sake of an Acclimatisation Society's eighteenpence? Not till Public Opinion, the uneasy giant who stirs in his sleep, shall arise and put on his whole armour.

In America they have tapped the great reservoir of feminine enthusiasm. Women's clubs are not mere tea-drinkers, and they hear the call of the wild. For instance, "Paradise Key, in Florida, was the most beautiful everglade island in the country, the outpost of some of the rarest of tropical plants. The various proposals for disposing of it included turning it into an experimental station, a cornfield, a site for a bungalow town, grounds for a palace hotel, a sportsman's club. Instead, the Women's Clubs of Florida bought it and presented it to the State, to be left as God made it"

It will be a new step in New Zealand's culture, when women generally become bird-conscious and nature-conscious to the point of doing something about it.

And Acclimatisation Societies will be one step nearer grace when they realise that predatory species are not one of nature's blunders.

BIRD PROTECTION.

The immediate aim of bird protection is the rescue of rare species which, from one cause or another, have fallen into danger of extinction, and the defence and encouragement of bird-life generally. The ultimate aims are the speedy re-establishment of the balance of Nature and the gradual restoration (so far as it can be effected) of the lost confidence between birds and man.

The future is always determined by the past, and in the history of birds and bird protection we have found a growing scientific interest in birds accompanied by a growing destruction of them in the name of Science, Sport, Business, and the rest of the new gods. These changes have facilitated, and even demanded, the increase of the more adaptable parasitic kinds at the expense of the rest, but the destruction, by its extent and callous barbarity, has been the principal means of reviving the bird-loving spirit as a counterblast. At a time when the bird-life of the country, though far from being depleted, is, nevertheless, impoverished and distorted by the loss of most of the predatory and more significant kinds, the side of protection has overtaken in strength the party of destruction. But for want of energy, initiative, organisation, and, above all, a considered idea of what it means to do, it has accomplished practically nothing of vital importance.

COLLECTORS VERSUS RARE BIRDS.

It has been laid down that the immediate aims of bird protection are the rescue of the rare species which, for one cause or another, have fallen into danger of extinction, and the defence and encouragement of bird-life generally. There are several species which this first danger threatens most urgently at the present moment, and all of them are species with a very limited breeding range as a general rule and usually with an uncommon number of foes to reckon with. They suffer not only from the common risks of flood, fire, and famine, which affect birds of all kinds, but from the deliberate selective persecution of humanity. All men, from the head-hunters of Borneo to the most exalted and omnipotent millionaires, are susceptible to the curse of wanting to possess something rare or unique. It is not by any means a modern curse, but its worst manifesta-

(From "Birds in England," by E. M. Nicholson)

tions are almost all modern. The system of collecting, which harasses and decimates our scarcest birds, is no isolated thing, but part of a vast freemasonry, which has this single general rule to guide it: that not the beauty, or size, or antiquity of an object determine its price, but simply its comparative scarcity. If it is plentiful it may be as beautiful or ancient as it likes but it will be practically worthless. In a unique possession ugliness does not matter. I do not propose to discuss the abstract question of whether all collecting is bad; I merely have to drive home, for the last time, the truth that, not only does collecting inevitably result in arranging many birds on a price list, but it inevitably makes the rarest birds the most valuable, and because the rarest birds are most valuable it is most profitable to kill them or plunder their nests, and because there is such a tempting price on their skins and eggs these birds are continually being shot and robbed, and will go on being shot and robbed, in defiance of protection until either they or the egg-collectors are stamped out. That is the inevitable decision; we must choose between our egg-collectors and our rarest birds, for we cannot keep them both much longer.

ENEMIES OF BIRDS.

There have been more grouse lost through disease than the peregrines which would have averted it would ever have taken. More pheasants fall victims to rats than the slaughtered owls and hawks which would have destroyed these vermin could ever have accounted for. The killing off of insect-eating birds of omnivorous kinds is notoriously followed by a visitation of noxious insects which makes the farmer long to have them back again.

I am not sure that to many misguided Nature-lovers it would not be more cause for wonder that the removal of persecution was not immediately followed by a plague of "vermin." Seeing that some birds make a practice of killing others, they cannot for the life of them believe that if these "bird foes of birds" are not systematically slaughtered by man they will not soon succeed in killing off the rest altogether. Their faith in the competence of Nature to look after herself is lamentably weak, for they do not

understand her ways. They remind one of the old farmer who loitered all day by the railway in sight of a tunnel, expressing fresh astonishment every time a train, approaching at full speed, managed to aim true for that little hole in the hill, and escape destruction by a hair's breadth. Disaster seems inevitable only because the laws which prevent it are not understood.

The clogging, all-destroying oil, which condemns sea-birds to a cruel death by the thousand, is not a greater menace to bird-life than the policy of "scientific protection." Fortified by the pretence of a fabulous knowledge of birds, which they are very far from possessing, a few second-rate ornithologists have launched this pseudo-scientific dogma that the more destructive birds must be judiciously persecuted, and foisted it on plenty of enthusiasts as the ideal to work for. They have even persuaded certain good naturalists to give it their qualified support.

Man's deliberate interference with Nature, for whatever reason it is attempted, is, in nine cases out of ten, disastrous and unjustifiable. The aim of protection should be to restore the balance and automatically to sweep away those abuses of the over-abundant species which are the sole excuse for scientific protection. I do not suggest that we should never interfere with Nature at all. But any policy which involves a steady, calculated interference with Nature is wrong and must be unsuccessful. If Nature is thwarted in attaining a balance by one method she will adopt another, and the alternative being less natural will almost certainly be less favourable to man than the first state of things.

It should be made an article of faith that Bird Protection is the Protection of Birds, not The Protection of Some Birds by Shooting Others. A great hawk flying is an inspiring sight; if we cannot bear to have the price paid in prey which its maintenance requires, we do not deserve to see it.

"Don't forget that if a species becomes extinct something has gone out of the world for ever. Something unique, built up by the slow fashioning of evolution, has been irrevocably destroyed. We maintain museums for dead specimens while we kill off the specimens in the world's museum of life. We blame our ancestors for thoughtlessly exterminating the dodo and the quagga. There will be less excuse for us if we leave our descendants a world further denuded of life's abundance and life's variety."

—Professor Julian S. Huxley.

SOIL SAVING.

NEED FOR URGENT ACTION.

We have heard much about land deterioration, much about erosion, much about misplacing settlers on lands which, owing to their nature, should never have been despoiled of their original covering.

When one comes to look upon the whole as a whole the work of undoing grievous past mistakes and making proper plans for the future does appear to be a colossal one.

The first step, a thorough survey of all the lands in the Dominion with the object of ascertaining their best uses in accordance with the varying conditions of soil and situation, is to be attempted. Straight away will come the problem of displacing many settlers who are on lands which should be in forest or in their original natural condition, as, for instance, the greater part of the tussock country running through the middle of the South Island. All such settlers in the North and South Islands hold their lands legally, and compensation would be necessary.

Then, again, we have to eliminate the vast numbers of trespassing browsing animals in our forests and on our uplands, a work alone which would cost many millions. Verily, the task of undoing those things which we ought not to have done is a truly formidable one. Yet, if we do not tackle the job heroically, we are surely heading towards dire disaster. Our fertile food producing lands will steadily undergo a process of destruction until at last their former great productiveness will merely be but a memory. One wonders whether the New Zealander can really rise to the occasion. At present much expenditure is being put into unnecessary roads while vital national needs do not receive adequate attention. The conservation of our natural resources, such as the soil, is given secondary consideration to subjects like currency, which, after all, is merely a convenience for the exchange of goods.

"People who do not make friends with the birds do not know how much they miss.—John Burroughs.

PRESERVE YOUR BIRDS, ENRICH YOUR COUNTRY

(Extract from lecture by Prof. Fitzsimons, Port Elizabeth Museum, S.A.)

Reprinted from Bulletin No. 12.

In our struggle for food and life we have Nature's helpers. Birds stand in the front rank as our allies, and cannibal insects and lizards come second in usefulness. We cannot stem the assaults of our enemies with poison sprays and other artificial appliances supplemented by useful carnivorous and parasitic insects. The birds alone can turn the scale in our favour.

Man cannot exist upon this world without the active help of wild birds. The only obstacle to his complete conquest of Mother Earth is the insect hordes which effectively bar his way. It is now an even fight between insect and man for victory. Dwellers in cities do not realise the intensity of this struggle for the survival of the fittest.

If we are going to continue resting in fancied security, we shall, for a surety, be upon the rocks. Before the advent of man the balance of nature was quickly readjusted when it, for some reason, was upset. Insects in those days had a hard struggle to live with wild plant life only for food, and active watchful birds on all sides. On the advent of man the lands were tilled and the face of the world was covered with tender succulent crops. In the presence of such a food supply, insect life increased enormously.

Now that is the point. When we increased the food supply of the insect armies did we put the same energy into correspondingly increasing the chief enemies of insects—viz., the wild birds? No! On the contrary, we did most illogical things. We made war on the birds; with gun, catapult and trap we mowed them down. We burnt or otherwise destroyed their leafy shelters and their breeding places.

Yea, truly, we are reaping the harvest of ignorance, brutality and cruelty sown by our ancestors. "As ye sow, that also shall ye reap."

BIRD PESTS.

What about these bird pests? Yes, what about them? The bird pests could be counted on the fingers of one's hands.

Would that I could burn this into your minds—viz.: "It is an urgent necessity for us to take every possible means to not only safeguard our wild bird life, but also to do our utmost to increase the bird population to prey on the

countless numbers of insects which breed and multiply in our cultivated lands." Surely it is obvious that if an army doubles its numbers it becomes essential for the opposing army to be reinforced. Then let us set about it, and double the army of birds which war incessantly on our implacable enemies the insects.

CROPS, FRUIT, FORESTS.

Insects breed on pasture lands and invade the crops, hence the urgent necessity to preserve the birds which frequent those lands. With the succulent food provided by the farmers, insects multiply many millions of times, and, but for the birds, farming would become impossible.

Hosts of birds safeguard our orchards both directly and indirectly, and others police our forests. It is idle and a waste of time to stop to argue and criticise and pretend to examine into the question of the importance or otherwise of bird life.

The bitter experience of other countries is sufficient for us. The Governments are spending money like water to bring back the vanishing bird life to save the people from the results of the inroads of insects, which bring poverty, sickness and premature death to the human race.

RESULT OF BIRD DESTRUCTION.

There is much spade work and great battles to be fought by the human race against the adverse forces of Nature, which retard the spread of the human race over earth's fair surface. Our most formidable and ruthless opponents are the insects. It is now almost an even fight for supremacy, and unless we combine and utilise our forces more effectively and efficiently we shall find it very difficult to secure a livelihood. A few more wars, with the inevitable disorganising of the forces employed against the insect hosts, will result in these enemies getting a strangle-hold upon us. Our race may recover, but many millions will perish of starvation and insect-borne diseases. The fecundity of the insect is tremendous, and a little weakening in our offensive will bring disaster, sure and certain, upon our race. The insects are fighting for possession of the earth. It is now a case of insect versus man. All other forms of

life have been subdued, but the insect still holds its ground, and ever and anon gains considerable advantages over us. The present production of food is not sufficient for the needs of our race. Millions live in a condition of semi-starvation; hosts actually die of hunger. With the increase of the world's population we must have a corresponding increase in food production. By subduing the insects and keeping them in subjection we can provide food in plenty for every human being. At present a large percentage of the world's food supply is devoured by hungry insects. We cannot stem the assaults of our enemies with poison sprays and other artificial appliances, supplemented by useful carnivorous and parasitic insects. Again I say it, and I challenge contradiction—the birds alone can turn the scale in our favour.

ENCOURAGE BIRDS TO BREED.

With the increase of insects owing to the ever-increasing cultivation of the soil and planting of orchards and plantations, we must see to it that the wild birds increase in proportion. This we can do by ceasing to persecute the birds, with, of course, the few exceptions which sometimes are apt to become a pest to

individual farmers. We can do much more. We ought to have laws with drastic penalties on anyone killing birds or robbing their nests. To encourage birds to breed and stay around our homesteads and on our farms, we should provide them with surface water to drink and bathe in, and we can with advantage put up nesting boxes in trees, on poles, against the walls of outhouses, etc. Any sort of little box will do, with an entrance hole in the side, or tin cans, jam tins, and other little shelters of various kinds and designs to suit the different species of birds.

PROTECT THE BIRDS.

I would ask you, one and all, to register a vow here and now never to kill or persecute a bird unless you possess overwhelming proof that it is doing you more harm than good. Because one or two species happen to be a pest to you don't allow your anger and indignation to find a vent by murdering other birds. Some people hate all hawks, for instance, because now and then one becomes a chicken thief. Kill the thief, certainly, but leave the others alone to carry on their useful work of waging war on rats and mice.

MAN PASSED THIS WAY.

The hills.

Having nursed their charge through anxious days,

Stretched green fingers to the sun
And basked in the midday haze.

Below them lay the plain,

Fed from an ample bosom when it thirsted,
Sheltered from the winds their slopes withstood
And nourished by their fertile mould.

At work, well done, they smiled
And the trees, who gave the work success,
Received that smile unto themselves.

A man

Looked unto the hills and saw
Not the source from which his harvest came,
But hills and trees whose massive boles
Betokened riches for the taking.
Came the axe and desecration.
Followed the rains and in their train
Flood waters swept the valley clear.
Meanwhile the hills, denuded of their life,
Collapsed in a mass of mire, and brought
Ruin where they loved so well.

—Geraldine Baylis.

DEAD RATA.



TO SAVE THE SOIL.

(By E. V. Sanderson.)

EROSION AND ITS REMEDY—AN EXPERT SURVEY.

A STATE Commission has now been appointed whose work will be to make a general survey of soil and forest conditions in order that steps may be taken to arrest the already serious erosion of steep country in New Zealand. The most damaging phase of this is not so much the scouring away of valuable land adjacent to river banks, bad as this is, but the less noticeable loss of top soil on any land having a gradient. Much of this moving topsoil finds a temporary resting place in the valleys and what little plain country we have, but the finer and more precious clay and silt quickly reaches the sea, as anyone may see by the discolouration of the ocean after rain. This process, originally slight, has been accelerated in an alarming degree since the white man began the work of timber-felling and land-clearing for cultivation and stock raising. Indiscriminate destruction of the vegetative covering on watersheds by milling, fire and grazing animals, both domestic and wild, brought disaster to hill and plain alike, and ruined once safe and navigable rivers.

Reclothing the Country.—The logical remedies must be:—

1. Milling with a view to a perpetual crop;
2. Drastic enactments making fire lighting illegal in many cases where it is now practised;
3. The elimination of grazing animals in forests and on steep slants, and hill country above a certain altitude;
4. The abandonment to nature of all rough hill land which has been wrongfully opened up to settlement, and the exclusion of fire and plant-eating animals therefrom.

Those areas of abandoned land which are reasonably accessible and economically adapted to timber growing could be planted with suitable trees as funds permit. The rest could well be left to nature to heal. This she will do in her own leisurely manner if fire and plant-eating animals are excluded. Where the original forest has entirely disappeared the process of reclothing the soil will commence with an initial growth of what is only too often contemptuously termed scrub, such as manuka,

tauhinu, fern, wineberry, mahoe, and so on. This covering forms a check against excessive water run-off, a protective mat and sponge far more effective than insignis pine and other exotics in which foresters seem to place all their faith. Such a floor covering would hold the remaining soil *in situ* and in time produce additional top soil.

In the course of time larger and larger trees will germinate and prosper, nursed and sheltered by the so-called "rubbish," which is nature's method of fighting against man's stupidity in order to replace her forests and save her precious topsoil that she has taken countless ages to form.

The authorities are to be congratulated upon their recognition of the fact that erosion is the most serious physical peril that threatens the country, and that they have at last set up this commission, which would have been strengthened by the inclusion of practical farmers with a knowledge of high country. The first necessary duty before it is to demarcate the land with a view to putting the various areas to their most economical uses, as originally suggested by the Forest and Bird Protection Society and so earnestly advocated by the press in general. All those who have the national interest at heart will wish the Commission success in their work, in the belief that knowledge and vigour will be brought to bear on the task of saving the soil.



FOREST AND BIRD SOCIETY BADGES.

Metal badges nicely designed in gilt and nephrite green enamel are now being issued by the Society, at the price of 1/6, or in silver and paua shell at 7/6 each. These latter make handsome brooches.

The stock of albums depicting 24 forest-inhabiting birds in colour is now nearing exhaustion. Those wishing to secure copies should therefore make immediate application. Each picture is 9in. by 6in. and is accompanied by an adequate description or lecturette of the birds depicted—Price 12/6 per copy. We have also Xmas Cards depicting Weka, Morepork, Tui or Tomtit in colour—Price 6/- per doz. or 1/- each.

MAORI NAMES OF NATIVE BIRDS.

(Continued from Journal No. 49—August, 1938.)

(m) signifies male; (f) female.

25.—*Cyanorhamphus novae-zealandiae*,
PARAKEET:

Kakariki	Porete
Kakawaiariki	Poreterete*
Kakawariki	Powhaitere
Kawariki	Tatariki
Kawatore	Torete

(*Williams Dictionary, duck)

26.—*Stringops habroptilus*, GROUND PAR-
ROT:

Kakapo	Tarapo
Kakatarapo	Tarepo

27.—*Nesierax novae-zealandiae*, SPARROW-
HAWK:

Kaeaea	Karearea
Kaiaia	Karewarewa
Kaieie	Kauaua
Kakarapiti (m)	Tawaka

(Williams' Dictionary, duck)

28.—*Nesierax australis*, BUSH-HAWK:

As No. 27 and karewarewa-tara.

29.—*Circus gouldi*, HAWK:

Kahu	Kahu-pango
Kahu-komokomo	Manutahae
Kahu-korako	Titaka
Kahu-maiepa	

30.—*Sceloglaux albifacies*, LAUGHING OWL:

Hakoke	Whekau
Kakaha	Whekaukau
Ruru-whekau	

31.—*Ninox novae-zealandiae*, MOREPORK:

Koukou	Ruru
Peho	Ruru-peho
Pehopeho	Rurururu

32.—*Hemiphaga novae-zealandiae*, PIGEON:

Kereru	Rupe (large)
Kuku	Tarariki (small)
Kukupā	

33.—*Coturnix novae-zealandiae*, QUAIL:

Koikoiareke	Koreke
Koitareke	Koutareke
Kokoreke	Tareke

34.—*Hypotaenidia philippensis*, LANDRAIL:

Katatai	Moho-tatai
Moho-katatai	Moho-tupereru
Moho-koreke	Motarua
Moho-kura	Oho
Konini (?)	Ohomauri
Moho-pango	Pataitai
Moho-patatai	Popotai
Moho-pereru	Puohotata
Moho-ririwai	

35.—*Cabalus modestus*, MANGARE RAIL:
Matirakahu36.—*Nesolimnas dieffenbachii*, DIEFFEN-
BACH'S RAIL:
Moeriki37.—*Ocydromus earli*, etc., WOODHEN:
Weka Hoa
Wekaweka38.—*Ocydromus brachypterus*, BLACK
WOODHEN:
Weka-pango39.—*Porzana affinis*, MARSH RAIL:

Kareke	Koreke
Koitareke	Kotoreke
Kokoreke	

40.—*Porzana tabuensis*, SWAMP RAIL:

Kuweto	Puewetoweto
Putoto	Totoriwai
Puweto (Pueto)	

41.—*Porphyrio melanonotus*, SWAMP HEN:

Pakura	Rauhara
Pukeko	

42.—*Notornis hochstetteri*:

Moho	Takahea
Mohokeo	Tokohea
Takahe	

43.—*Herodias timoriensis*, WHITE HERON:
Kotuku44.—*Demigretta sacra*, BLUE HERON.

Kakatai	Matuku-tai
Matuku	Matukutuku
Matuku-moana	Matuku-waitai
Matuku-nuia	Tikaka

45.—*Ardetta pusilla*, LITTLE BITTERN:
Kaoriki

46.—*Botaurus poeciloptilus*, BITTERN.
Hurepo Matuku
Huroto Matuku-hurepo
Kaka Matuku-kaka
Kautuku

47.—*Haematopus longirostris*, OYSTER-CATCHER:

Torea Torea-tai

48.—*Haematopus unicolor*, RED-BILL:
Torea-pango

49.—*Ochthodromus obscurus*, DOTTEREL:

Pukunui Turuturuwhatu
Takaikaha Tuturiwhati
Takahikahi Tuturiwhatu
Takaikai Tuturiwhatu-puku-nui
Turiwhati Tuturuatu
Turiwhatu Turuwhatu
Turuatu Tuturuwhatu

50.—*Ochthodromus bicinctus*, BANDED DOTTEREL:

Pohowera

51.—*Thinornis novae-zealandiae*, SAND-PIPER:

Kohutapu Tutaruatu
Kukuruatu

52.—*Anarhynchus frontalis*, WRY-BILL:
Ngutupare

53.—*Himantopus leucocephalus*, WHITE-HEADED STILT:

Poaka Tuturipourewa
Torea Tuturipourewa
Turitiripourewa Tutumata
Turuturipourewa

54.—*Himantopus picatus*, PIED STILT:
Poaka

55.—*Himantopus melas*, BLACK STILT:
Kaki Torea-pango
Tuarahia

56.—*Limosa novae-zealandiae*, GODWIT:

Hakakao Parerara (small)
Kakao Rakakao
Kuaka Ririwaka
Kura Tarakakao

57.—*Tringa canutus*, KNOT:
Huahou

58.—*Megalestris antarctica*, SEA-HAWK:
Hakoakoa Hakuakua

59.—*Hydroprogne caspia*, CASPIAN TERN:
Kahawai Taranui
Tara-a-punga

60.—*Sterna frontalis*, etc., WHITE-FRONTED TERN:

Tara

61.—*Sterna nereis*, LITTLE TERN:
Taraiti Tarateo

62.—*Larus dominicanus*, BLACK-BILLED GULL:

Karoro Ngoiro (young)
Koiro (young) Punua (young)
Kotingotingo (young) Toie (young)

63.—*Larus scopulinus*, RED-BILLED GULL:

Akiaki Makora
Hakora Taketake
Karehakoa Tarapunga
Katate

64.—*Garrodia nereis*, GREY-BACKED STORM PETREL:

Reoreo

65.—*Puffinus gavia*, RAIN BIRD.
Hakoakoa Pakaha

The general name for the puffinus is hakoakoa, or hakuakua.

66.—*Puffinus tenuirostris* and *griseus*, MUTTON-BIRDS:

Hakoakoa Hakoake (large)
Hakuakua Hakoko (large)
Koakoa Totorore
Oii Takakau (large)
Titi Ngungu (small)
Hakeke (large)

67.—*Puffinus cinereus*, BROWN PETREL:
Kuia

68.—*Majaqueus parkinsoni*, BLACK PETREL:
Kuia Toanui
Taiko

(To be continued in February, 1939, Journal.)

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FOREST AND BIRD PROTECTION SOCIETY

OF NEW ZEALAND (Inc.)

APPEAL FOR BEQUESTS.

Is there any cause more worthy of bequests by public-spirited citizens than the objectives of the Forest and Bird Protection Society, which is working wholly and solely for the welfare of New Zealand, present and future? Here is a suggested form of bequest:—

"I give and bequeath the sum of to the Forest and Bird Protection Society (Incorporated), and I declare that the receipt of the Treasurer for the time being of the said Society shall be a complete discharge to my executors for the legacy hereby given to such Society."

The work and record of the Society, the personnel of its membership and Executive are a good guarantee that the best possible use will be made of such bequests.

CALL FOR SANCTUARIES.

The Society would also welcome the responsibility of administering suitable sanctuaries for land or sea birds, provided that a small annuity is added for the payment of a caretaker. *Such sanctuaries could be named after the donor, and would thus be a perpetuation of his name as a saviour of New Zealand's forest and bird life.* It is suggested that such sanctuaries should be administered in a manner to ensure their return to their original and natural conditions as nearly as possible.

OBJECTS.

To advocate and obtain the efficient protection and preservation of our native forests and birds, enlisting the natural sympathy of our young, unity of control of all wild life, and the preservation of sanctuaries, scenic reserves, etc., in their native state.

Affiliated with the Society for the Preservation of the Fauna of the British Empire (Patron, His Majesty King George VI.) and with the International Committee for the Protection of Wild Birds (President, Dr. T. Gilbert Pearson).

Recognising that it is essential for all those who desire to save our Forest and Bird Life to band together, I enclose herewith my subscription of £..... as a subscriber to the Society. I shall be glad to receive the quarterly magazine, "Forest and Bird," without further charge.

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