

1933.

NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY.

PUBLIC DOMAINS AND NATIONAL PARKS OF NEW ZEALAND

(ANNUAL REPORT ON).

Presented to both Houses of the General Assembly by Command of His Excellency.

SIR,—

Department of Lands and Survey, Wellington, 1st August, 1933.

I have the honour to submit herewith a report on the public domains and national parks of the Dominion for the year ended 31st March, 1933.

I have, &c.,

W. ROBERTSON,

The Hon. E. A. Ransom, Minister of Lands.

Under-Secretary for Lands.

REPORT.

PART I.—PUBLIC DOMAINS.

At the 31st March, 1933, the total number of public domains administered under the provisions of Part II of the Public Reserves, Domains, and National Parks Act, 1928, was 759, covering a total area of 75,230 acres. Forty-one of these domains are administered by the various Commissioners of Crown Lands, 269 are controlled by local authorities acting as Domain Boards, while the remainder are under the management of local Boards appointed from time to time. The Lands and Survey Department exercises a general oversight over all these reserves, and assists the controlling Boards in various directions to administer our public domains in the best interests of the general public.

The work of setting aside new domain areas to provide for the recreation and enjoyment of the public always receives its fair share of attention, and during the year eleven new domains, covering a total area of 68 acres, were reserved and brought under Part II of the Act. Boards were appointed to control ten of the new areas, and arrangements will be made in due course for the care and management of the other one. Additions totalling some 270 acres were also made to nineteen existing domains.

Brief mention may be made of a few of the more interesting new reserves set apart during the year. After protracted negotiations, and with the assistance of the Thames County Council, an area of 5 acres 2 roods 39 perches at Tapu Flat on the Thames—Coromandel Road was acquired as a public domain and placed under the control of the County Council. This piece of land is one of the very few flat areas on the beautiful Thames coast that is available for public use, and as it is a favourite seaside resort for people of the district its acquisition is a matter for congratulation. Another valuable area, the acquisition of which presented considerable difficulties, was a piece of exceptionally fine bush land at Warkworth. In this case it was necessary to operate the provisions of the Public Works Act, and the Warkworth Town Board co-operated with the Department in the acquisition of the land. Matters in connection with an area of 10 acres at Dargaville in use as the main recreation-ground of the town were placed on a proper footing during the year. This area had been transferred to the Crown many years ago as a public reserve, and on the representations of the Borough Council steps were taken to change the reservation to recreation purposes, and to make the land a public domain. At Aongatete an area of 1 acre was donated to the Crown by Mr. F. Earl as a recreation reserve. The Department arranged for the necessary survey, and on completion of transfer to the Crown the land was made a public domain and placed under the control of a local Domain Board. The first public domain on Stewart Island was constituted during the year at Half-moon Bay. The domain comprises a reserve vested in the Crown under section 16 of the Land Act on the subdivision of certain property, together with an area donated by the Presbyterian Church authorities, and a further area purchased by the Crown to complete an adequate reservation. The Stewart Island County Council has been appointed as the controlling Domain Board.

Areas of some 23 acres at Parikino and 12 acres at Taumarunui were purchased by the Wanganui River Trust Domain Board as additions to their domain, and titles in favour of the Crown were duly issued. In addition, an area of nearly 1,200 acres of Crown land on the Wanganui was proclaimed as a public domain under the provisions of the Wanganui River Trust Act, 1891. The land was unsuitable for settlement, and to permit the felling of the bush would have spoilt that particular stretch of the river from a scenic point of view. The action taken had the effect of placing the area under the control of the Wanganui River Trust Domain Board.

Orders in Council were issued appointing fifty-four Boards to control domains for further terms, while ninety vacancies on sixty-eight Boards were filled by the appointment of suitable persons nominated by the residents of the various districts concerned. Additional members were appointed to the Te Teko, Orewa, Harihari, and Garth Domain Boards. Nine gentlemen were appointed to

control the Horowhenua Lake Domain pursuant to the provisions of section 2 of the Horowhenua Lake Act, 1905, and section 97 of the Reserves and other Lands Disposal and Public Bodies Empowering Act, 1916.

Three Proclamations were issued under subsection (9) of section 12 of the Land Act, 1924, adding certain pieces of closed roads to the Urenui, Kaitaia, and Knottingley Park Domains.

Other documents issued included Warrants authorizing the erection of public halls on the Rangiwahia, Victoria, and Kohinui Domains, and an Order in Council uniting the Waihirere and Gray's Bush Domains as one domain.

Several sets of new by-laws were approved during the year, and permission was granted for the setting-aside of a camping-ground within a domain.

Permission was granted to fourteen Domain Boards to increase the charges for admission to their domains on special occasions during the year.

Further progress was made in the matter of placing the leasing of domain lands on a uniform footing, and the position is now on the whole much more satisfactory than formerly.

In common with other tenants, numbers of lessees of domain lands found that the rentals they had contracted to pay were too high, having regard to the returns obtained, and statutory authority for the review of domain rentals was obtained by the passing of section 13 of the Land Laws Amendment Act, 1932. Under the provisions of this section concessions to tenants of domain lands were granted in fifty-one cases up to the 31st March, 1933.

The Reserves and other Lands Disposal Acts of 1932 and 1932-33 dealt with several matters affecting public domains and requiring special legislation. A closed street which could not be dealt with without special authority was added to the Te Kuiti Domain, and a piece of closed road in the same position to the Pirongia Domain. Certain payments made by the Te Ngutu-o-te-Manu and Waikouaiti Domain Boards to members of those bodies were validated after full inquiries had been made into all the circumstances. Authority was provided for the use for general domain purposes of certain trust funds held by the Uawa Domain Board. Effect was given to an arrangement entered into between the Christchurch City Council, the Christchurch Domains Board, and the Corporation of Canterbury College, whereby in consideration of the College granting a right-of-way through portion of the Canterbury Museum property to provide access to the new Art Gallery, a small portion of 9.5 perches of the Botanic Gardens was vested in the College as an addition to the museum-site. The reservation over the Guthrie Domain of about 20 acres in the Rotorua District was cancelled, and the land made available for Native-land development purposes. Provision was also made for the setting-aside of a certain area of Native land as a public domain in lieu of the original domain. The Waihou Domain Board was granted authority for the raising of a bank overdraft for the purpose of erecting public conveniences on the domain. Provision was made for the leasing under special conditions of portion of the Kawhia Domain. A portion of the Westport North Beach Domain was added to the adjoining Westport Colliery Reserve. In this case the land dealt with was formerly portion of the Colliery Reserve, but was in 1923 set apart for domain purposes by means of special legislation. The controlling Board took but little interest in the domain and allowed a number of residences to be erected thereon. It was therefore decided that the land should be re clothed with its original reservation in order that the Department might be in a position to grant proper titles to the persons who were occupying houses on the area.

PART II.—NATIONAL PARKS.

No new parks were constituted during the year, but two small areas were added to the Arthur Pass National Park. One area comprises 79 acres of bushclad land above the railway tunnel, and contains the Punchbowl Creek, one of the scenic attractions of the park. The other, of a little over 2 acres, is situated on the flat adjoining the main road, and is to be allocated by the Board for the purposes of a motor-camping ground and picnic-site. Both areas were formerly railway land, but the Railway authorities generously agreed to their Proclamation as Crown land in order that they could be added to the park under section 71 of the Public Reserves, Domains, and National Parks Act, 1928.

The term of appointment of the Arthur Pass Board expired in September, 1932, and a new Board was appointed by Order in Council dated the 14th November, 1932. The personnel was increased to give representation on the Board to the New Zealand Institute, the Federated Mountain Clubs of New Zealand, the Railways Department, and the lessees of township sections at the Pass. The new Board comprises sixteen members, and in accordance with section 75 of the Public Reserves, Domains, and National Parks Act, 1928, the Minister appointed the Commissioner of Crown Lands as Chairman.

The various Boards continue to perform most valuable service to the Dominion. Their activities have been seriously curtailed by lack of finance, and in this connection it is a significant fact that it has been found necessary to apply for participation in the proceeds from various art unions. Nevertheless a great deal of useful work has been carried out by the Boards, and assistance has also been given by various mountain clubs and other associations, who take a keen interest in the welfare of these parks. It is hoped that as soon as the general financial position of the Dominion improves it will be possible to provide for a reasonable annual appropriation for the purposes of national-park administration.

Evidence is accumulating to show that some effective steps will have to be taken to counter the detrimental effects of housing animals within the parks. Some thousands of goats have been destroyed in the Egmont Park; but the total extermination of these animals cannot be effected without further funds with which to carry on the work. At Arthur Pass deer and chamois are damaging the mountain flora, and deer are becoming established in the forest on the western portion of Tongariro Park. Red deer are fairly numerous in portions of the Sounds National Park, while there is need for investigation into the effects of moose and wapiti in that region. The Department is convinced that deer and other plant-eating animals must be recognized and dealt with purely as a menace to our national parks and reserves, and not as a means of providing sport for a few persons or as an attraction for tourists. The welfare of the native flora must be the first consideration at all times.

Extracts from the annual reports of the Tongariro, Egmont, and Arthur Pass National Park Boards are appended hereto.

APPENDIX.

REPORTS OF NATIONAL PARK BOARDS.

TONGARIRO NATIONAL PARK BOARD.

(W. ROBERTSON, Under-Secretary for Lands, Chairman.)

Meetings of the Board were held in Wellington on 1st September, 1932, and 10th March, 1933, to deal with the general business of the Board. In addition, meetings of the special committee set up by the Board to consider claims arising out of the Ruapehu Mountain disaster and other special accounts were held on the 14th April and 1st July, 1932.

A conference was also held on 1st September, 1932, with representatives of the Federated Mountain Clubs of New Zealand to discuss safety measures in mountain-climbing.

POLED ROUTE BETWEEN OHAKUNE MOUNTAIN HUT AND CHATEAU.

The poled route along the bush-line between the Ohakune Mountain Hut and the Chateau Mountain Track at Lower Scoria Flat is becoming more popular with mountaineering parties.

Further work on this route has been carried out—viz., mile-posts 8 ft. high, have been erected along the line from the turn-off to the Ohakune Hut, and signs have been placed on these poles indicating the distance to the Chateau. The four hundred poles which line the route were examined and left securely in position. Two hundred of these are of beech timber, and will require to be replaced with silver-pine poles. The distance from the Chateau to the Ohakune Mountain Hut has been measured and is $5\frac{1}{2}$ chains short of fourteen miles. The distance from the Chateau to the turn-off at Lower Scoria Flat is three miles.

A track for horse traffic was cut through the bush for half a mile on the southern side of the Mangaturuturu Valley. A small bridge is required before it is fit for use.

The further sum of £11 9s. out of the Mayor of Auckland's Searchers' Fund which was kindly donated to the Board was used in helping to defray the cost of these works.

ROADWORKS.

Excellent progress has been made in the construction of the Scoria Flat Road. One and a quarter miles has been metalled, another mile constructed, and the grade outlined for another half-mile.

WINTER SPORTS AND EXCURSIONS TO THE PARK.

The following clubs have kindly submitted short accounts of visits by their members to the park during the year under review, and extracts from these accounts are quoted:—

Ruapehu Ski Club, Inc.—The Ruapehu Ski Club, Inc., held its twentieth annual winter sports excursion to the Tongariro National Park from 19th to 30th August, 1932, when eighty-five members took part. The meeting was an outstanding success, snow and weather conditions being excellent, and the event was quite a red-letter one in the history of the club and of winter sports in New Zealand.

The visit of the Australian slalom champion, Mr. T. W. Mitchell, of the Ski Club of Victoria, and of Mr. S. G. Tennant, a member of the Ski Club of Great Britain was an added attraction, and their reputation as skiers drew a large number of spectators for the championship events, when expectations were fully rewarded, Mr. Mitchell's performance in the slalom being especially outstanding.

The fourth annual contest for the New Zealand Amateur Ski Championship was run from 24th to 26th August, and the meeting was held for the first time in co-operation with the ski sub-committee of the Federated Mountain Clubs of New Zealand, but the full organization fell to the Ruapehu Ski Club, which, as on previous occasions, invited each of the other club parties present to appoint a representative to act with the sports' committee.

A party of thirteen members visited Mangatepopo Hut during Labour Day week-end (October, 1932), but on account of the unfavourable weather conditions the only trip made was to the south crater of Mount Tongariro. However, some of the members who were able to remain longer made an ascent of Mount Ngauruhoe and a tour of the summit of Mount Tongariro.

Other members made private visits to the park, both at Christmas and at Easter.

Tararua Tramping Club, Inc.—August, 1932: The annual winter-sports trip of the Tararua Tramping Club, Inc., to the Tongariro National Park was held from the 20th to 30th August, 1932. On this occasion members of the Hutt Valley and Manawatu Tramping Clubs combined with the Tararua party.

Excellent weather conditions were responsible for one of the most successful visits ever made to the National Park. The party concentrated on the ski-ing, and were fortunate in being able to ski on every day of their stay. Most of the party had received considerable benefit from preliminary week-end practices held on the local ski-ing grounds, near the Kime Memorial Hut, in the Tararua Ranges behind Otaki, and the park trip capped a very successful season.

Interspersed with the ski-ing, tramps were arranged to the various scenic viewpoints, of which there are many in the park. Motor-trips enabled members to visit other well-worth-while places, such as the Ketetahi Hot Springs, Tokaanu, and Wairakei. One party travelled to Mangatepopo and climbed Ngauruhoe. The climb commenced at 8.30 a.m. and the crater was reached at 3 o'clock in the afternoon, six hours and a half climbing-time being required. The weather conditions were excellent, but steps had to be cut all the way, the ice proving so difficult to cut that one of the ice-axes was broken. Great activity was observed in the crater, from which smoke was issuing instead of the usual sulphur stream. Fresh banks of sulphur mud were being ejected and were forming a new crater wall inside the main crater. From the summit, White Island in the Bay of Plenty could be seen, while the party could also distinguish clearly Lake Taupo, Wairakei, and Egmont.

Christmas, 1932: A large party camped for ten days at the Piripiri Junction on the Waipakihi River (lower down known as the Tongariro and after leaving Taupo as the Waikato). The river camp was situated at one of nature's beauty-spots. The river flows through a deep gorge valley with heavily forested banks, and is especially beautiful when seen so close to the barren tussock country. The camp was at the foot of the Kaimanawa Ranges to the east of the Waiouru-Tokaanu Desert Road and the National Park, and was within three hours of Waihohonu.

Some of the party stayed at the Waihohonu Hut for a short time and climbed Ngauruhoe and Tongariro on the first day. Ngauruhoe was climbed by the direct route from Waihohonu and the return made by the Tongariro Saddle, the weird and beautiful Red Crater, the Green Lake, and the Oturere Crater Track. On the following day an assault was made on Ruapehu. The mountain was clear above the 7,000 ft. mark, and after climbing Te Heu Heu a visit was paid to the Crater Lake. Crossing the crater, the party then climbed the main Tahurangi Peak of Ruapehu. The return journey was made by the Te Heu Heu ridge of ascent.

Patutu (5,625 ft.) and Waipakihi Trig., in the Kaimanawa Range, were also climbed. On the grassy slopes below Patutu traces were seen where kiwis had been feeding.

At no very distant date no trip to the National Park will be complete without a visit to the Waipakihi River scenic wonderland.

Other Visits: During the year other members visited the Ohakune, Waihohonu, and Whakapapa sides of the National Park and also stayed on the Ketetahi face of Tongariro, from which point ascents were made of Ruapehu, Ngauruhoe, and Tongariro, as well as a tramp to Tokaanu by way of Roto Aira and the Pononga Saddle of Pihanga.

The Alipne Sports Club, Inc.—Organized extended tours to the Tongariro National Park have included a winter sports trip to the Chateau and a Christmas - New Year camp at Whakapapa. Both trips were highly successful, and much credit is due to the leaders for thorough organization and competent leadership of the parties.

HONORARY RANGERS.

In addition to Mr. R. Cobbe, Manager at the Chateau, Mr. T. A. Blyth, of Ohakune, and Mr. L. Young, of the Chateau staff, have been appointed honorary rangers of the park. The services of these gentlemen in the capacity mentioned is much appreciated.

WARDEN'S REPORT.

Mr. John Cullen, I.S.O., Warden of the Park, in his annual report remarks as follows:—

"During the year a tussock fire which started in the Military Reserve north of Waimarino Township spread to the National Park area and destroyed about half a mile of the outside of the Moturoa bush on its northern face. This bush has fared badly from tussock fires, as the southern side was badly damaged by fire over three years ago and a few years previously another fire destroyed a part of it.

"Native-bird life is still on the decrease within the park area. Stoats, weasels, sparrow-hawks, and cats in the wild are mostly responsible for this decrease."

WILD LIFE.

In view of the increased interest taken by students, by the public, and by visitors from other lands in the primitive wild life of New Zealand, it is of the utmost importance that where areas can be preserved in order to show typical portions of New Zealand in its pristine condition, this should be done. The natural method of effecting this, which at once suggests itself, is that the areas within the boundaries of the various national parks, sanctuaries, and reserves at present existing in New Zealand should be devoted to this work of preserving portions of typical New Zealand for all time.

In giving effect to the provisions of the Tongariro National Park Act, 1922, and its amendments, it is the policy of the Board to preserve the flora and fauna of the park in its natural state and it is pleasing to record that this policy is strongly endorsed by the New Zealand Institute as will be seen by reference to the Transactions of the Institute, Vol. 58, at page 5.

The following notes have been compiled by Mr. G. V. Hudson, F.E.S., F.N.Z.Inst., Mr. W. R. B. Oliver, F.L.S., F.Z.S., and Mr. W. H. Phillipps, F.L.S., and the thanks of the Board to these gentlemen for their interest in the matter is recorded.

The botany of the park has been fully dealt with in the following publications, viz.: Report by Dr. L. Cockayne on a Botanical Survey of the Park (Parliamentary Paper C.-11, 1908); Report by Mr. E. Phillipps Turner on a Botanical Examination of the Higher Waimarino District (Parliamentary Paper C.-11, 1909); Handbook on the Tongariro National Park (James Cowan, F.R.G.S.), Chapter VII, on the Plants of the Park, being contributed by Mr. B. C. Aston, F.I.C., F.N.Z.Inst.

The Maori history of the park is also fully dealt with in Mr. Cowan's book.

Insects (by G. V. Hudson, F.E.S., F.N.Z.Inst.).

Owing to its great extent, suitable altitude, and general accessibility, the National Park is undoubtedly the best site for studying alpine and sub-alpine insects in the North Island. In such a locality one naturally misses the Tussock Ringlet butterfly (*Argyrophenga antipodum*), so common in most localities in the South Island where tussock-grass abounds, also the two strictly alpine butterflies *Erebia pluto* and *E. butleri*, the former found plentifully on nearly all the southern mountains above 5,000 ft., but the very absence of these species is of great interest, as indicating the dispersal of all three butterflies from an antarctic centre.

The large group of night-flying moths, comprised in the family Noctuidae, is very well represented, although not in evidence in the daytime. In addition to quite a number of rare species, the following novelties have been discovered in the National Park since 1930: *Leucania paraxysta*, *Aletia sapiens*, *Melanchra pelanodes*, and *M. tetrachroa*, the last named being one of the most beautiful noctuids found in New Zealand, and so far represented by only a single specimen. Of the less sturdy-looking Geometers, many beautiful species and varieties abound. Two gaily coloured day-fliers are common on hot sunny days, *Notoreas vulcanica* and *Lythria perornata*. The former has blackish forewings and bright orange-red hindwings, and the latter orange-yellow forewings, barred with black, and orange-red hindwings. Of the more strictly nocturnal Geometers *Tatosoma nigra* is another unique form, only known from Whakapapa, and the varieties of *Epirrhantis alectoraria*, found on the lower slopes of Ruapehu, are alone approached in beauty by those from Mount Egmont. *Micro Lepidoptera* are well to the fore, and include a local species of *Gelechia*, *G. lapillosa*, which may be seen basking in the sunshine, on boulders in the bed of the Whakapapa stream, where its wonderful protective colouring almost defies detection. Amongst Coleoptera found in the National Park, a very large *Mecodema*, not yet determined, occurs under stones on Ruapehu, at 4,000 ft., and two extremely rare and handsome Longicorns, *Blosyropus spinosus* and *Pseudosemnus amabilis*. The last named is now apparently extinct in the Wellington District, although formerly sometimes met with there.

Dragonflies are well represented by the rare *Diplacodes bipunctata*, and *Aeschna brevistyla*, the four commoner species, found almost throughout New Zealand, being also abundant in suitable places. The beautiful lace-wing flies, *Stenosmylus incisus* and *S. citrinus*, the latter running into fine varieties, occur at Whakapapa, as well as the much smaller and rarer *S. stellae*, also variable.

Many fine species of Tipulidae (Daddy Long Legs) are peculiar to the National Park, and these have been described by Dr. Alexander, the well-known American authority on these insects.

Birds (by W. R. B. Oliver, M.Sc.).

Most of the bird-life of the park is found in the mixed forest on the lower slopes of the mountains. The beech forest, especially the upper portion where the mountain beech is dominant, is poor in animal life and in flowers. Here birds are not common. The open places—tussock grassland, mountain scrub, and desert—have their special kinds of birds, but a few species only are found.

Within the boundaries of the main portion of the reserve the largest area of mixed forest is on the western side in the vicinity of Erua. On the south-western side there are on the Ohakune Track two detached pieces of the park entirely covered with high rain forest mainly of podocarps, but also including some red and silver beeches. These areas are easily accessible, and here one finds a number of bush birds. Quite common are the tui (*Prosthemadera novaeseelandiae*), whitehead (*Mohoua albicilla*), rifleman (*Acanthisitta chloris*), North Island tomtit (*Petroica toitoi*), pied fantail (*Rhipidura flabellifera*), grey warbler (*Pseudogerygone igata*), morepork (*Ninox novaeseelandiae*), shining cuckoo (*Lamprolaima lucidus*), long-tailed cuckoo (*Urodynamis taitensis*), and pigeon (*Hemiphaga novaeseelandiae*). All these birds were seen during a single trip from Ohakune to the mountain hut and back. In their survey of the part Dr. L. Cockayne and Mr. E. Phillips Turner note the following additional bush birds: North Island robin (*Miro longipes*), silver-eye (*Zosterops lateralis*), bush hawk (*Falco novaeseelandiae*), blue duck (*Hymenolaimus malacorhynchus*), bellbird (*Anthornis melanura*), kaka (*Nestor occidentalis*), and red-fronted parrakeet (*Cyanoramphus novaeseelandiae*). Dr. Cockayne records that a few North Island wekas (*Gallirallus greyi*) were seen on the south side of Ruapehu.

In the mountain beech forest the bush birds are much less frequently seen than in the mixed forest lower down. On the eastern dry side of the mountain are patches of mountain beech forest at lower altitudes than on the western side and here, according to Dr. Cockayne, the North Island kiwi (*Apteryx mantelli*) is stated to occur. Some species of introduced birds penetrate far into the forest. The chaffinch was seen at the forest limit, 4,500 ft., near the Ohakune Hut.

In the tussock grassland the New Zealand pipit (*Anthus novaeseelandiae*) is common. Also occasionally seen is the harrier (*Circus approximans*). A sea-bird, the red-billed gull (*Larus novae hollandiae*), which is common on the lakes to the north of the park, is said to breed on the lava rocks above the Blue Lake on Tongariro, while the banded dotrell (*Charadrius bicinctus*) is found on the upper open slopes of the mountains.

A species of mutton-bird is said by Dr. Cockayne to be very common, "flying near the camp at night, and uttering strange cries. It nests in deep holes, honeycombing the loose ground of the shrub-steppe and old lava slopes and river-banks." This bird is probably the mottled petrol (*Pterodroma inexpectata*) of which I have seen portions of a specimen found on the eastern side of Ruapehu.

Fishes (by W. J. Phillipps, F.L.S.).

The chief native species observed in rivers of National Park are the bully (*Gobiomorphus gobioides*) and a species of Galaxias, probably identical with the kokopu of Lake Taupo and known to science as *Galaxias brevipinnis*.

The bully is a small gobioid fish with relatives among the coastal gobies of the rock pools, all being commonly called cock-a-bullies, which term is simply a corruption of the Maori kokopu. Bullies live in most streams and rivers of New Zealand and are an important factor in the economy of all fresh waters. Trout devour them with avidity, and numbers have been much reduced in some localities. Bullies are probably most important as mosquito and sandfly control agencies in streams and rivers, as they devour large numbers of larvæ annually, and it appears that the mosquito and sandfly populations around lakes and rivers have a direct relationship to the numbers of these fish in the waters.

The kokopu is a food-fish formerly greatly esteemed by Maori populations. It is a scaleless fish living under overhanging banks and diving in the mud at the least sign of alarm. Like most of our fishes belonging to the same genus, it appears to be largely dependent on natural conditions remaining unchanged. Any destruction of bush on the hillsides and resultant floods or destruction of natural shelters, such as overhanging banks, and floods, may cause the fish to disappear altogether. Food eaten is largely surface life which drops from or is dependent on surrounding vegetation.

A scientific survey of the exact native fishes in the park is a matter of importance to a study of fresh-water biology in New Zealand. The introduction of rainbow trout has altered the aquatic conditions in some localities. I think that the native fishes of the park should be rigorously conserved, and reports on their relative abundance obtained at intervals.

Deer.

Applications for permits to shoot deer in the park are received from time to time, and it is the policy of the Board to decline such applications. The action of the Board in this connection must not be construed that the Board is in any way favourable to the protection of these animals. It is desired, however, to ensure that any shooting within the park boundaries should be carried out if possible by officers of the Board. It will be appreciated that in a public park of this nature the greatest care must be exercised in the use of firearms.

It is recognized, however, that a move in the direction of eradicating these animals from the forests of the park may have to be made in the near future. There appears little doubt that deer are becoming established in the forest on the western portion of the park. The migration is from the Kaimanawa Ranges, where they are reported to be fairly numerous. They are also established in the forest enveloping Pihanga Mountain and Kakaramea, which lies to the north of Lake Roto Aira.

The whole position is being carefully watched, as the Board fully realizes the grave danger these animals are to the forests.

EGMONT NATIONAL PARK BOARD.

(T. C. LIST, Chairman.)

The continuation during the past year of the duties of the administration and conservation of the area comprised in the Egmont National Park has again been a source of anxiety to the Board, owing to the general economic conditions and the very drastic curtailment of its finance. The work possible on the limited income has been practically negligible, and the position of the Board at the end of the year did not leave any funds available for work the Board considers necessary, and the uncertainty as to what revenue would be available for the following year again necessitated a serious curtailment of the policy of the Board in the carrying-out of its responsibilities in relation to the reserve.

The absence of finance has necessitated continued curtailment of the work of destroying the goats in the reserve, which has had to be restricted to the amount of the special subsidy for this purpose, £31 4s.

During the year 312 goats were destroyed, bringing the total to date to 5,432 since this work was started five years ago.

The destruction carried out has assisted the rejuvenation of the Native forest, which was very seriously menaced when the work of destruction of goats was commenced, but the absence of funds has greatly curtailed the possibility of the total extermination of the goats which was contemplated by the Board when the destruction was commenced. Until the goats are exterminated they will continue their destruction of the young trees, and thus retard the Board's work of preservation of the native bush. The Board looks on the extermination of the goats as of vital importance to its work of conservation of the forests, but is powerless from lack of funds.

Local Committees.—During the year the various local committees have again co-operated with the Board in every way in catering for visitors to the reserve and in the preservation of the bush and the maintenance of the roads and tracks.

North Committee.—The prevailing financial stringency is shown in a diminution of £256 in the road tolls and park fees collected.

During the year two special grants from art unions were received, £1,200 for the purchase of the hostelry complete, from the New Plymouth residents, who had built and equipped it at a cost of £6,500, and £1,000 for the resealing of the tarred road to the hostel. The old houses have been repaired, and generally this resort is very well equipped to cater for the travelling public when times improve.

South Committee.—As in the case of the Board, this committee is handicapped through lack of funds, but with the money at its disposal excellent work has been done. With the assistance of unemployed labour all the tracks at the Dawson Falls Hostel have been put in very good order. New tracks have been opened up, and everything has been done to cater for tourists and alpinists. The old house was removed some time ago to a site nearer to the hostel, and the old house is fitted up so as to give excellent accommodation for campers and climbers. The hostel, although reasonably comfortable, is urgently in need of extensive repairs or total rebuilding, but, as there are other urgent matters requiring attention, this cannot be done at present owing to lack of funds.

East Committee.—During the year £1,500 was received from art-union funds to enable this committee to liquidate its liabilities incurred in upkeep of the houses on the east side of the mountain and the formation and metalling of a road through the reserve to about the 4,000 ft. level, which has been opened and metalled, and provides easy access to the higher levels on the mountain and also to the Mangonui Hut and ski-ing track, with ample parking-room for cars at the plateau to which the road gives access.

West Committee.—With no funds and but a very limited revenue from fees and tolls, this committee has been unable to do more than generally supervise the house and surroundings. Arrangements have been made for unemployed labour for necessary repairs to the first mile of the main track up the mountain from this house.

Afforestation.—The absence of finance has caused very serious restriction on the amount of work done in the plantations of the Board (over 300 acres) as the only possibility its finance permitted was the intermittent use of unemployed labour from time to time which has enabled partial clearance of trees and fire-breaks. The Board is at the present time faced with the necessity of work on the replacements of trees and further clearing of plantations and fire-breaks which it cannot pay for and its failure in this respect is greatly increasing the risk of the loss of the plantation by fire, but, having no funds, the Board is powerless.

Conclusion.—The members of the Board and the various committees have during the year been much perturbed at the absence of finance—which is having a very serious effect on the power of the Board to carry out the duties of its trust. The supervision and opening to the public of the 87,000 acres of bush and mountain, and the provision of the necessary facilities for the enjoyment of visitors becomes an impossibility when funds for payment of the Board's clerical and ranging staffs are non-existent, and the work of the Board is restricted to one or two men for two days a week on unemployment basis. The members of the Board have felt that it is a great misfortune that the work which has been done in past years for the conservation of the park has now to be permitted to slide back because the Board has not the income necessary to provide for ranging, destruction of goats, clearing of trees and fire-breaks, which are more than ever important to protect this great national asset, which is both a health and holiday resort of great attraction and a source of great enjoyment a nature-lovers and those who enjoy alike the majesty of forests and the freedom of the open.

The Board wishes to record its appreciation of the work of the alpine clubs of the various portions of the reserve, which is helping the younger generation to an appreciation of the beauty of the reserve and the great enjoyment to be found in snow sports, as well as in tours in the reserve and gatherings at the various resorts at which accommodation is available.

ARTHUR PASS NATIONAL PARK ROAD.

(W. STEWART, Commissioner of Crown Lands, Christchurch, Chairman.)

I have the honour to submit a report on the third complete year since the Board was constituted. Activities on the part of the Board naturally have to be restricted because of the limited finance available, but, nevertheless, improvements have quietly proceeded. Several projects that would have commended themselves to the Board and that, no doubt, would have been adopted in normal times have had to be dropped, but there is nevertheless ample evidence of the progressive and protective influence that the Board has exercised since its inception.

Personnel.—During the year the term of office of all members expired by effluxion of time, and a new Board was constituted. All the members of the previous Board were reappointed, save George Harper, Esq., O.B.E., who at his own request retired. A very cordial resolution expressing the appreciation of the Board for his services was adopted. The personnel was increased by three. Professor Arnold was appointed to represent the New Zealand Institute; Mr. E. S. Brittenden, the Railway Department; Mr. W. A. Kennedy, the township lessees; and Mr. G. G. Lockwood, the Christchurch Ski Club. All these gentlemen are prominent members of the institutions they represent and bring to the Board table very considerable experience of the area administered by the Board and of the various spheres of its activities.

Meetings.—The Board met on two occasions. The first meeting was again held on the 3rd June at Arthur's Pass. The meeting was well attended, and perfect weather enabled much inspection work to be carried out. The site of the hut being erected by the Ski Club was inspected, and various matters requiring attention in the township were attended to. The next meeting was the first of the new Board, when the new members were welcomed and the committees appointed.

Township.—There is no denying the improvement of the township by the gradual removal of unsightly structures and the clearing of rubbish. The area was thoroughly inspected by representatives of the Health Department at the request of the Board's officers, and a clean bill was given. One new residence of a highly desirable type has been erected and several permits have been issued for alterations and additions. The main township has been provided by the Board with street lights and arrangements made with the Railways Department to keep on the yard lights for the benefit of the southern subdivision. The hall owned by the Board seems to be increasingly in use. There is a strong recommendation from the Ranger that a piano should be furnished and thus make the hall more useful for entertainment purposes.

The Tourist Traffic was substantial during the winter. The Railways Department ran ten excursions and carried 2,515 passengers. The excursions were all favoured with good weather, and the outings proved very successful. The Board still fosters the hope that the Department will yet agree to make a surcharge for the benefit of the Board's funds, and thereby enable the Board to improve and add to the facilities already available to patrons of the excursions. During the holiday season the park was well patronized by holiday-makers.

The Ranger has continued to render the Board and the public much appreciated service. He has shown a keen interest in the execution of his various duties, and has personally conducted small entertainments for the benefit of the Hall Furnishing Account. His annual report will be submitted to the Board. Mr. Warden indicates that his services have been fully availed of for information and advice. The season does not appear to have been so favourable as usual for the park's display of flora. He comments favourably on the presence of officers of St. John's Ambulance on excursion days, and remarks on the gift by Mr. Gasson of a very fine stone seat.

River Erosion.—Abnormal rains during the recent months have caused what appear to the laymen to be threatening advances on the township by the Bealey River. The matter was reported on by the Ranger and a visit of inspection was made by Dr. McKay, Mr. S. C. A. Darby, and Mr. Johnstone (Public Works Engineer). A report will be submitted to the Board, but the substance of it is that no danger threatens in the meantime, and that protective measures do not call for attention. This view is confirmed by Mr. McNair, the District Railways Engineer.

Deer.—Reports are frequently received commenting on the increasing numbers of deer and chamois, and the damage caused particularly by the latter to the native flora. The difficulty is to discover some practicable scheme within the means of the Board to check the menace. Messrs. Wall and McAlpine are appointed a special committee to keep the matter under review and co-operate with any movement to deal with this pest. Whereas the Board used to secure a little revenue from deer licenses, applications have now virtually ceased.

Winter Sports continue to increase in popularity and are ably controlled by the Christchurch Ski Club, which seems to be flourishing. The Board has provided a toboggan run for the amusement of excursionists, and has also undertaken to find £50 to assist in the erection of a mountain accommodation-hut, now in course of erection by the Ski Club. A lease is to be given the club over the hut-site.

Alpine Climbing has proved an increasing attraction. Fortunately, the year has passed without serious accident. It cannot be too much emphasized that accidents very rarely occur to properly equipped and experienced climbers, and the Board hopes that people wishful of making difficult climbs should take full advantage of experienced advice and equipment available in the township.

Publicity.—The Board hopes to co-operate with the Railways Department in some propaganda relating to the park. We are also indebted to the public press for its interest in and support of the Board's efforts. We have been afforded every reasonable facility for publicity. The Board subsidized a page in the *Christchurch Press* which dealt with the advantages of the park.

The report of the Grounds Committee, furnished by Dr. McKay, is submitted hereunder:—

"Toboggan Runs.—A site for the toboggan run was fixed upon near what is known as the Daisy Patch, and the necessary work was carried out under the supervision of Messrs. Lockwood and Ferrier, to whom the thanks of the Committee are due.

"Ski-practice Ground.—At the ski-practice ground work was carried out last month in clearing away all rougher obstacles. Only the more open country was dealt with, but if the space is not sufficient, extensions could be made from time to time if the Board so desires.

"Ski Hut.—The Ski Club have made considerable progress towards the erection of the mountain hut, much of the material being on the ground, while the balance is in the shed at the railway-station waiting favourable conditions for transport. The club hope to see the work completed for use this winter.

"Road-damage.—Floods, the heaviest for thirty years, have considerably damaged the road in Otira Gorge, at Twin Creek, and in the Beech Avenue. The work of restoration has been commenced by the Highway Board, while a foot-track has already been formed over the damaged area, so that visitors can still make the famous walk over the hills to Otira.

"Resting-seats.—The stone seat presented by Mr. Gasson has been completed and placed in position. It is quite an ornament, and reflects credit on the donor. The Ranger has been instructed to build other wooden seats of rustic type to place at various vantage-points.

"Mile-stones.—The committee has arranged with Mr. Gasson to place in position the ten mile-stones he has constructed. They are appropriately lettered, and being of solid concrete should be very durable.

"Beautifying Open Area.—The question of beautifying the flat piece of open ground between the hostel and railway-station has been again discussed. Provided that the Railways Department has no objection, we would suggest the planting of New Zealand mountain beech along the embankment to provide subsequent shelter for the planting of shrubs. Some comprehensive scheme for the laying-out of this area should be drawn up, to which end we suggest that the services be secured of some one skilled in the laying-out of open public spaces.

"Water-rights.—Considerable friction exists among certain of the residents over water-rights, so that it may become necessary for the Board to frame regulations dealing with the matter.

"Fire and other Damage.—During the year there have been no further outbreaks of fire, while there is every appearance that the numerous visitors to the park are observing the regulations concerning the conservation of plant-life.

"Assistance.—The Grounds Committee wish to express their appreciation of the attention paid by the Ranger, Mr. C. E. Warden, to his duties, the zeal he displays in catering for the needs of visitors. Thanks are due to Mr. Johnstone, District Engineer, for the ready manner in which he is always willing to help, and for the valuable advice he gives when called upon."

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