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Nature-lore of the Southern Maori. By H. Beattie.

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In collecting the traditions and place-names of the Maori of Otago and Southland I have gathered a great mass of information, some of which has recently been published elsewhere. There remains, however, a considerable quantity of material which has never been printed, and some of this relating to nature may be of interest. It must be understood that I am not trying to deal exhaustively with the various phases of this extensive subject, but simply to record what the southern Maori have occasionally said to me about it. The Maori gave me some nine hundred place-names hitherto unrecorded by the pakeha, and it was while giving these names that they mentioned the following facts. Where the terms “North” and “South” are used, reference is made to the districts north or south of Timaru, Canterbury.

The Kanakana, or Lamprey.

The general name for the lamprey is piharau in the North and kana-kana in the South. One of my informants said that there are at least four different kinds of kanakana, or, if counted as all one species, the Maori had names for them at four separate stages or at different sizes. These names are—(1) Te-ika-tukituki-wai; (2) te-ika-totoe-wai; (3) matua-iwi-papaho; (4) te ru. Some rivers might have all four kinds, and other rivers fewer. They went up certain rivers only, and they shunned others for no apparent reason; but evidently something in the water, either in taste or in plant or animal life, or in the situation of rocks, &c., attracted or repelled them. My informant added that the kanakana would not come up the Karoro Creek, but swarmed up the Molyneux River, whose mouth is about two miles distant. They proceed up the rivers until they find their passage barred by rocks, and to these rocks they cling with their sucker-like mouths and are easily caught. One of my informants combated the statement that the kanakana lived on whitebait, saying that its food was the kohuwai, a green mossy growth which adheres to the rocks.

The most famous of the spots where the Maori assembled every October and November to catch the lampreys was Te Au-nui (Mataura Falls). Only certain hapu (families) had the right to fish there, and each family had a strictly defined pa (fishing spot), the right to which had been handed down from their ancestors. The names of some of these pa were (1) Wai-kana, (2) O-te-hakihaki, (3) Rerepari, (4) Mataniho-o-Hukou, (5) Mupuke-a-Rahui (6) Otautari. The names of the others are forgotten.

The falls on the Pomahaka River named Opurere were also a celebrated kanakana fishery. An old man tells me that the people used to go there every October and November, and after catching all they could they would return to their homes to plant potatoes. There were six pa (fishing-

allotments) at Opurere, and, beginning from the south side, the names were (1) Mataniho-o-Muka, (2) Tu-kutu-tahi, (3) Te-awa-inaka, (4) Patu-moana (this is a small island), (5) Rau-tawhiri, (6) Te Rerewa.

Other places at which kanakana might be caught were Te Rere-o-Kaihiku (Kaihiku Falls), Hehetu a small fall where the Orawia runs into the Waiau, Waipapa-o-Karetai, on the Silverstream, and elsewhere.

It must not be thought that persons entitled to take the lampreys from a certain section of rock could proceed to do so at haphazard. It was a matter that had to be gone about with karakia (incantations) and due observance of time-honoured customs. Each of the falls was protected by a guardian taepo * (spectre), and if a person offended against tradition, woe betide him. The taepo of the Mataura Falls was a magic dog. It was explained to me as a rock which stuck out of the water about where the Mataura Freezing-works are, and, although it looked like a rock at ordinary times, to one who was guilty of desecration it would miraculously change, and appear as an ogre possessing a dog's head, paws, and body, but with a fish's tail. The luckless wight who saw it thus was doomed to disaster unless he could invoke powerful charms to ward off the evil.

The taepo of the Pomahaka Falls was also an uncanny thing to provoke. It frequented the tiny island known as Patu-moana, and took the shape of a giant eel. These spectres did not trouble those who proceeded to take the kanakana in the correct manner as prescribed by ancestral usage.

To supplement what the Maori told me about the kanakana, I may add that the late Mr. N. Chalmers, of Fiji, writing to me in 1910, said, “I reached Tuturau in September, 1853. This was in the kanakana season, and I was much interested in the way in which the Natives caught the lampreys. On the top of the falls there are—or were at that time—three large potholes about 6 ft. deep, and full of stones. These were cleared out and strong stakes put in each; then as the kanakana came crawling up and clinging to the rocky wall of the falls the Maori, leaning on the stakes, reached out their hands and, grasping the fish, put them in the korari eel-pots handy. It took them only about ten minutes to fill one pot, when another took its place. The superstition of the Maori is very marked, for Reko told me that if an enemy or any one threw a firestick into the falls, then the kanakana would desert the locality; so, needless to say, I was very careful to avoid hurting their feelings… When I was at Hokanui in 1858 I had a stockman called George, a Sussex man, who came to the house one afternoon with a face as white as a sheet and swearing he had seen an eel at least a mile long at the Longford (now Gore). I got on my horse and went with him, and when I saw the phenomenon I was not surprised at his statement; for I saw a column of kanakana more than a mile long, swimming in a round mass exactly like a large eel, so beautifully were they keeping a circular shape.” Mr. F. L. Mieville, who stayed at Tuturau in 1854, writes, “The natives were very good to us and supplied us with potatoes, also kanakanas much resembling leather with a strong flavour of train-oil—they were dried and very hard.”

The Maori Dog.

The question of who introduced the Maori dog to New Zealand has aroused discussion at various times. Maori tradition says that some of the canoes which came here from Hawaiki A.D. 1350 brought dogs; but some people consider that the inhabitants of New Zealand before that time had dogs. Thus in the story of Kopuwai (one of the oldest legends in the South Island annals—it must be much over a thousand years

[Footnote] * ? taipo. Williams says taepo is not used by the Maori.—Ed.

old) we are told he had a pack of ten two-headed dogs. Be that as it may, we know that when the pakeha came to New Zealand they found Maori dogs extant. In Otago and Southland these dogs roamed the interior, living on the countless flocks of native birds that thronged everywhere. The animals made inroads into the runholders' flocks and were hunted down and exterminated. Some white men considered that these dogs were descendants of ones liberated by Captain Cook or of those that had got away from the whalers, but there is no doubt whatever that they were genuine Maori dogs. They had woolly hair, sharp-pointed noses, pointed ears, and never barked, the noise they made being a long, melancholy howl. According to European observers, some of these dogs were pure white, others black-and-white, and others fawn. The Maori called them kuri, and several places in Otago and on Stewart Island bear names reminiscent of these animals. Asked concerning these dogs, two of the old Maori said the kuri was usually of a black-and-white colour, and another old man said they were often reddish-tan. One said, “It had long hair, a bushy tail, a short, sharp nose, and a small head. They were very wary, but could be caught by tying up a bitch (uha) and leaving it, when the wild ones would come round it. These dogs were in New Zealand long before Captain Cook came, as our traditions show; but when they began to run wild I cannot say.”

Another said, “The kuri was the Maori dog. The reason why one lot of Maori came to New Zealand was because some of them who were not high-class people stole a dog and ate it. Through this they were forced to leave Hawaiki. Before the pakeha came our people used to sometimes castrate (whakapoka) these dogs and then fatten and eat them. They had long hair, and their skins made fine mats called topuni, and rugs. When I was a boy I remember a fine kuri belonging to a native called Koati in Westland. It had a big body and short legs A man named McDonald bought it as a curio for £2; but he tied it up and it jumped the fence and was strangled.”

Another said, “I never heard how the kuri came to New Zealand. The skins were cut into strips and made into rugs. I once saw a kakahu (garment) made of them—it was a taniko cloak. Its colour was white and black, and some of the hair had been stained red with dye from a tree like the miro but whose name I forget.”

A shepherd speaking of wild dogs on Knapdale Run in 1858 said, “A family of red ones seemed to frequent the lower flat, while those on the upper flat were yellow.”

The question of the kuri, or Maori dog, still requires much investigation.

Lizards And Tuatara.

Having read that the Maori had a superstitious awe of lizards, I asked about them, but got little satisfaction. One old man said, “I know three kinds of lizards. The one which lives in the cracks in rocks is karara-papani, the greenish one is called kakariki, and the common one is karara-toro-pakihi. I know nothing of the tuatara.” Another said, “The kind of lizard known as mokakariki was perhaps so called because its colour was like the plumage of a parrakeet. The general name was karara. I have never seen or heard of tuatara down here, but I have seen a lizard about 2 ft. long. It was on top of one of the Hokanui Hills and, because I had had a bad dream the night before, I killed the karara with a big stone, lit a fire, and burnt it. It was the biggest lizard I ever saw. A wise old

man told me afterwards that it was a good job I had killed and burnt the lizard and so stopped any evil coming to me because of my dream. Some of the old Maori used to eat lizards. You could tame them for pets so that they would come when their names were called and they would lie and sleep alongside you. One such pet, Te Horo-mokai by name, was kept at Motu-kai-puhuka (village near Kaitangata), but it was lost, and although it was seen later eating tutu it was never caught again.” Another said, “Tuatara were down on Auckland Island, and Mrs. Cameron, of Riverton, got two from there. They had fins on their heads and backs. I reckon the Maori had been down there before the Europeans came, and had a look round but thought it no good and never settled there.” My last informant on this subject stated that legend averred that at Mason's Bay, Stewart Island, some people saw tuatara eggs and broke them; the tuatara came after them and they killed it. The names of two small islets in Lake Wanaka commemorate lizards—viz., Taki-karara and Te Pae-karara. “Only the big kind of lizard was called karara” (see Trans. N.Z. Inst., vol. 7, p. 295).

The Maori Rat.

Some people have expressed abhorrence of the idea of eating rats, but my Maori friends were careful to explain that the Maori rat was an altogether different creature from the filth-eating European rat. The Maori rat was a fruit-eater and a cleanly animal. One old Maori told me that once a party of white whalers was wrecked in the West Coast Sounds and walked overland. They were glad to eat the Maori rats, which were then feeding on the fruit of the kowhai, and were big and fat. “Long Harry,” one of the party, told my informant that the rats were “very good.” My informant added that some of these rats had hair like the opossum, and that the general name for the rats was kiore, but one kind was called pouhawaiki. Another old man said the Maori rat was not found on Stewart Island, although it was plentiful on the mainland. It was a fruit-eater, and was snared. An old song mentioned that Tawera, near Oxford, in Canterbury, was the best place to go if one wanted a feast of kiore (rats). A well-informed kaumatua (elder) said that the Maori rat was called kiore-tawai,

and was once very plentiful. It was grey, but not like the colour of our present rodents. It would not eat flesh, but only fruit and berries. Pouhawaiki, he said, was the name of the introduced, or European, rat.

Near the mouth of the Molyneux is a bank called Te Rua-koi, which I was told meant “a hole made by the rats.” When they were fat the Maori would go and dig them out. My informant was certain that was the correct name of the locality, and that the getting of the rats out of their lairs was why it was so named. Another Maori, well versed in nature-lore, said he had never seen the Maori rat (kiore maori he called it), although a very old white settler had told him of seeing it many years ago in that district. According to what he had heard, this rat liked to live in mossy places in swampy ground. It made holes in the moss, and the nest was known as rua kiore. That this creature existed before the pakeha came he knew from tradition; also the ancient name of a creek near, Otaraia was Tapiri-kiore, which meant “two rats walking together.” In fact, there were two creeks with this name. Leaving Poupoutunoa (Clinton) and going through the Kuriwao Gorge you come to Tapiri-kiore-tuatahi (tuatahi = first), and then to Tapiri-kiore-rahi (rahi= big). Then you cross Te Kauaka-o-Waipahi (the ford of the Waipahi), and go on to Te Au-nui (Mataura Falls).

The pioneer runholders on the Waimea Plain found “futtahs” (whata = storehouse) left by former Maori inhabitants. These whata were erected on the top of two stout, high posts, each of which had a nick round it about 18 in. from the ground to prevent the rats from getting up to the provisions, so evidently the Maori rat had some sort of predilection for Maori food, notwithstanding it was reputedly frugivorous.

Settlers of the late “fifties” speak of the plague of rats that overran Otago, but I presume these were European rats. On the subject of the kiore, or Maori rat, like that of the kuri, or Maori dog, we could do with much more information.

The Mutton-birds.

The titi (mutton-bird) is a favourite item of food with Maori and pakeha alike. The edible qualities of this bird were, I was told, unknown to the Waitaha and Kati-Mamoe Tribes. It was the. first two Kai-Tahu visitors to Ruapuke who discovered that the pi-titi (young mutton-birds) were good eating. Ruapuke was then uninhabited, and these two chiefs, Potoma and Rerewhakaupoko (two of the titi islands are named after them), visited it, and on the small adjacent island of Papatea saw rua (holes) and inserted their hands and pulled out the plump young titi. It is said that they preserved the mutton-birds and some human flesh in alternate layers in a poha (bag) made of rimu (kelp), and that those to whom it was given as a kaihaukai (gift of food) relished it exceedingly. This was, as far as can be ascertained, about two hundred years ago, and since then he poha-titi (a kelp bag) has always been the receptacle to hold these birds, fat being poured over the contents and acting as an efficient preservative.

A very old Maori said to me, “March is the season for mutton-birds, and I went after them many years ago although I have never been inland after weka. Titi was the general name for mutton-birds. but a small kind was called koruri, and there were other kinds whose names I cannot recall.”

Another said, “There are three principal kinds of mutton-birds. The chief one is a black bird, and is simply called titi; another kind is black-and-white, and is called titi-wainui; and another kind is titi-ariki. This is a grey bird, and is very scarce.”

Still another remarked, “I know no legends about the titi and its catching, killing, or preserving. A small kind is called korure, and the kind known as wainui is rather rare.” This informant went on to say that some of the larger titi islands were divided into manu, or bird-preserves, for different families. For instance, on Herekopare Island there were five manu—viz., Te Tihi, Kuri, Te Upoko-o-Tamairaki, Hotunui, and Te Ahi-o-Pere.

There was evidently some etiquette observed about taking the titi, as an old and respected-Maori of the South received his name from the following circumstance. It was the rule that one party arriving on an island before the other parties entitled to do so should wait until the arrival of all before starting operations. In” this case the first party caught some birds at once and were roasting them when another party came. High words led to blows, and my informant's mother joined in the melee with a kohiku (a skewer or stick used to roast birds before a fire), and in consequence when he was born a few months later he was called-Kohiku Titi.

I was told that the general name for the islands round Stewart Island was Mai-ko-kai, meaning that they were places to come to for food. (Perhaps this name should be Mahika-kai.)

Eels (Tuna).

An old Maori said to me that there were three kinds of eels that he knew. The horepara is a light green, with white belly and white underjaw, and is good for eating. The arokehe is a) black eel, with big head, strong jaw, thick skin, and does not taste very good. Owing to the thickness of its skin another name for it is kirirua (” two skins” or “double skin”). The tunapou is still bigger in the head than the arokehe and tapers to a very small tail. It has the same kind of skin as the kirirua, and is not eaten by the Maori but thrown away when caught.

All or nearly all fish spawn in salt water, may informant thought, but he was not so sure of eels. Lots of eels are cast up on the bars at the mouths of rivers, and the old Maori would say these were aged breeding-eels, which were done. It was only breeding-eels which came down to the sea and then

went back up the river. When they came down to spawn you would not see them unless they were cast up on the beach. This was about June. You could catch them in the rivers from August to May, but not many in the latter month, as it was too cold for them. In the town of Wyndham there is a lagoon called Pipi-a-Manawa, and it is fed by a spring called Matatiki, and he remembered old Tangatahuruhuru telling him this spring was a winter retreat of the tuna (eels). You could see the hole in the ground from which the spring came, and it was almost blocked with eels in winter, the reason being that spring water is warmer than river water. In the Otu Creek just before it enters the Mataura River there is a hole which is another winter resort of the eels. They used to congregate thickly in that spot, and if you threw in a stone they would swarm out in great agitation. There was a season for catching everything, continued the old man, but eels could be caught the whole year round in some places, although from a food view the best time to catch them was from Christmas-time to February, as the flies were not so bad then, and the eels could be dried (tauraki). Hang them up for three weeks, then put in aumu (earth-oven), cook, and put into a poha (kelp bag), which can be bound with totara bark and flax, and there you have your delicious eel-flesh preserved for an indefinite period.

Eels from the rivers, continued my informant, are not so good as those from the lakes, as the flesh is not so firm. The eels in the lagoons were all right if one just wanted a few eels for daily use, but there were not enough eels in the lagoons, as a rule, to make it worth while to fish for them for preserving purposes. The lakes known to the Maori as Roto-nui-o-Whatu and Kaitiria—but now called by the white settlers Lake Tuakitoto and Lake Kaitangata—were great eeling-places, but to be truly successful one had to be careful to say the right karakia (invocations) before starting operations. The eels were usually caught in eel-pots (rohe-wainui), the basket or cage part of which was called hinaki. A smaller kind of eel-pot, called hinaki-kanakana, was used for catching kanakana (lampreys); and, strange to say, eels will not go into this, and, vice versa, kanakana will not go into the ordinary eel-pots. There was one kind of net to catch one size of eel, as a rule, but there was another mesh which could be used to catch all sizes. Eel-pots were sometimes made of flax in the South, as it took a lot of work and manipulation to make them of the toraro vine.

All the foregoing information was from one man, but I have still three further notes. One man said, “At Manawapore (Upper Mavora Lake) there is a stone eel-trap. Old Rawiri told us, if we went there, to block

the end, to lift the stone and take out the eels, then go up forward and lift the next stone door and take out more eels. It is a very old trap, and is partly natural and partly made.”

Mr: James Cowan collected the following note from southern sources: “At Little Mavora (Hikuraki) there is an artificial stone hinaki with a door for eels to get in. It was built by the old Ngati-Mamoe” people—they put a stone cover on. The two notes evidently refer to the same “stone eel-pot,” but its discovery has never been reported by white men.

Another old man speaking about eeling said, “A fine place to get eels is at Miki-oe, near Dr. Menzies' old run, near the Mokoruta River, now miscalled Mokoreta. It is a spring and creek where the eels go in the winter-time because the water is warm.”

A large number of place-names in Otago and Southland perpetuate the ancient Maori love for the toothsome tuna. There are a number of places called Kaituna and Waituna (eel-stream), one of the latter being in the West Coast Sounds region. A lagoon near Gore is called after a man, Tunarere; and Taieri Lake, in central Otago, was named after a chief, Tuna-heketaka. Of nomenclature which does not bear its significance on its face two names occur to me. A tributary of the Waiau is Kaipurua Creek, and I was informed the name meant a pair of eels eating at one bait or “two eels on one bob.” Murikauhaka was an ancient village at the old mouth of the Mata-au (Molyneux), and I was told the name means—muri, “the end”; kauhaka, a hole in a bank where an eel has its quarters.”

The figurative name for the Canterbury seaboard is Ka Poupou a Te Rakihouia, because that chief, over a thousand years ago, erected posts and built pa-tuna (eel-weirs) at the mouths of the rivers. These weirs were continued until comparatively recently, but I have no description of them as yet.

Mr. F. L. Mieville, writing of his experiences with the Maori in Otago in 1853 and 1854, says, “The Maoris have a very good way of cooking an eel. They clean it, but do not skin it. Like them, I now think it is a great mistake to skin an eel. Next they impale it with a stick pointed at both ends, running it through from the tail to the head. The stick is then stuck slantingly into the ground close to a good fire, and when one side is cooked the other is turned. The eel is then served up—i.e., the stick is placed upright in the earth amidst seven or eight Maoris, and each one pulls off a bit with his fingers.”

The Small Fry.

The season for whitebait (paraki) was October and November, said an old Maori wise in these matters. The patete was another kind of whitebait, and was good, to eat after it leaves the sea, but as it proceeds up the rivers inland it picks up stones and gets rubbish inside and is then no good for food. Waharoa (long mouth) was a big kind of whitebait. You could catch it with a hook baited with a worm. It had bones and its flesh was coarse. Mata was the very small whitebait, and it was caught with Maori nets (kaka) which were sometimes a chain long. Inaka is the name of the little minnows—they are black, with white bellies. My informant reckoned they came down to the sea to spawn, as Wai-whakarara, near the mouth of the Molyneux, was a great place to catch them. If not caught before spawning they were no good, and would go up the river again in long columns, leaving the water white with spawn at the mouth of

the river. The name of the crabs in inland creeks is papaka, and of the crayfish koura. “The native trout, known to the settlers as cockabully, is called kokopu, and the mountain-trout is called kokopara,” said my informant, adding, “both these fish are various-coloured, but they are of different shapes.”

Another of the old men said, “The correct name of the cockabullies is kokopara. They are still to be found in the creeks at Stewart Island.” In the early days of Otago settlement the name of this fish was spelt “kokobula,” or sometimes “cockabulla.” I have a note, “Mata-inaka was a lagoon near Waikouaiti where the Maori got very small whitebait; hence its name.” A fish called puaihakarua, which was caught in some streams, I have no particulars of, nor of a small fish called ikamaru.

Sea-fish.

An old Maori said to me, “Our name for the barracouta is maka, and the proper name of the place the white men call Titri is Kaimaka (to eat barracouta). We caught these fish with a rod (matere), using a jigger (pa) worked with string (tau). When the flesh of the maka was preserved by drying it was called moe. The jigger was made of wood, and whenever possible of towai wood. One of the best places in Otago to get this kind of wood was at a bush called Oreheke, north-west of the Tapuaenuku Range—now called Tapanui—and near the head of the Pomahaka River. This bush was full of towai timber. On days when you cannot see a barracouta, and you are getting no bites, use a towai jigger and you will get plenty of fish. The reason for this is because a particular bird once settled on this tree; but I do not know which bird it was, nor the story about it.”

Another old Maori, in speaking of sea-fish, said, “We called the blue cod, rawaru; rock-cod moeanu; red cod, hoka; ling, rari; soles, whose jaws are more bent than flounders, horihori; butterfish, takakaha; white-fish, tarakihi. The name of the falls in the Owaka River near the township is Taheke-aua (Mullet Falls). The reason of the name is that the mullet (aua) ran up the river from the sea until stopped by the falls, and that was a great place for catching them.” A stream near Taieri Lake was Te Awa-kai-aua (eat mullet), but I do not know why it was so named.

I have a note, “At Moeraki the fish principally caught are hapuku (groper), rawaru (blue cod), and mangaa (North Island name of barracouta),” but I am sorry I omitted to get details of ancient fishing methods or of the huge flax nets of pre-European days.

Seals and Sea-lions.

In regard to the larger denizens of the sea, the southern Maori name for seals generally was pakake; the fur-seal was kekeno; the porpoise, terehu; the sea-leopard, rapoka; and the sea-lion, whakahau. A number of place-names in the South reveals the Maori interest in these mammals, such as Whakawai-pakake (to entice seals), Tangi-pakake (when the mother seals were killed the young ones would tangi and shed tears), Ara-kaki (the path of a female seal), &c. One old man said, “The two

hind flippers of a seal are called ka-kautaua, and two rocks near Ruapuke are called this name because of their shape." Another said, "The bight below Lord's River, Stewart Island, is called Pupuri-kautaua (Hold on to the flipper) because here a chief named Kahu surprised a whakahau (sea-lion) and caught hold of its flipper and held on till his men could kill it. He

was a big, powerful man, but it must have been a young whakahau or he could not have held it." Another narrates that when a boy he copied some white boys and made bow and arrows, and he got into sad trouble for shooting an arrow into a poha of kekeno flesh suspended to the roof. The poha was opened, and he says the seal-flesh made good eating, although fat. The Maori method of killing the seals, &c., is said to have been by clubbing, but more particulars would be welcome.

Whales in the South were called kewa, and the traditions frequently mention them, chiefly as miracle-workers; but the Maori would occasionally find stranded whales, when they would enjoy a course of whale-flesh.

Bird-hunting.

So much has been written about the sparing and catching of birds by the Maori that the collector will not say much on the subject except to add a remark or two made by, the old people.

The southern Maori trained their kuri to catch birds such as weka, kakapo, and tokoeka. The last-named bird I was told had big "paws" (toes) and was able to kick the dogs, so there was a certain knack in catching them. In catching woodhens (weka), the art, as I understand it, was for the huntsman to entice the woodhen near enough for the dog to seize without letting the bird whakakeokeo or alarm the rest. Keokeo is the short sharp cry of the weka when alarmed, and to prevent it the hunter would turutu, or imitate the cry of the bird, and so coax it quite close, when the dog would spring at it; but not many of the present Maori have been weka-catching. Weka were also captured with a noose.

Wild ducks were snared in the creeks with a flax net or snare, called the kaha. I was also told that a Maori who was a fast swimmer could catch moulting ducks, which in common with unfledged young are called maunu. An old and respected white settler tells me that in 1859 he was invited by the Maori at Henley to take part in a "duck drive" on Lake Waihola. They started out at daybreak in canoes and dug-outs, and rounded up great numbers of young and moulting paradise ducks unable to fly. They ran these maunu into a corner and slew them with waddies. They returned in triumph to the "kaik" with six or seven hundred birds, cleaned them, and hung them up in rows, to be subsequently stored in the whata (food-storehouses). My informant added that one of the best feeds he ever had was an eel taken out of the whata one day he chanced to call.

Ducks, said one of my informants, were caught in long nets, into which they swam, and the more they struggled to withdraw their heads the tighter the mesh became on their necks. He had never heard of the Maori swimming under the birds and pulling them down by the legs, as was done in some parts of the world. There was no need to do so, as they were so plentiful, and they were very tame and would come close to you. There were no guns to scare and make them afraid and wild, and all the killing of them done by the Maori was done quietly and orderly.

Another said that the place-name Pomahaka should be Pou-mahaka, meaning posts to which the snares for catching ducks were attached.

The season to catch weka, said one old man; was from April to July, when they were fattest; after July the birds became thin. Sometimes the Maori would go out at night and blow (or whakataki) on flax held between the lips. If two weka had been answering each other this call would bring them. Two birds calling each other were called puhuka, or

weka-puhuka. The cal of the male bird was slow—tore, tore—but when the call was quick and agitated—tore, tore—that was the female bird. The former was called toa (a toa-tautahi was a fat male weka) and the female bird was called uwha

I have a further note to the effect that there is a kind of woodhen on the islands round Stewart Island known as miuweka.

One of my aged friends said he could go into the bush and get kaka by the drinking-trough method, or the rush-hut and decoy-bird method, or by the aid of ordinary manuka spears. He could get tui, pigeons, parra-keets, &c., in the same manner; there was no fuss, and no one need starve if he knew the bush-lore. I neglected to get fuller details from him, but hope to do so later on.

Experiences of Weka-hunters.

Winter being the best season to catch the weka, the parties who went inland then sometimes had rough experiences. I was told of one tragedy of the long-ago through this cause. A man named Weka, his wife Nuku, and their two children set out from Tuturau up-country on a weka-hunting expedition. They camped on the hill on which East Gore is now built, and here the woman busied herself gathering taramea (spear-grass) from which to extract scent (kakara). Resuming their journey, they went to Nokomai, but much to their disappointment theweka were scarce, so, under the shadow of the mountain called Karu-a-hine, Weka made a pahuri (shelter) for his wife and family while he went on to Kimiakau (Arrow River) and Kamuriwai. (My informant said, “Kamuri-whenua is the pakihi (plain) from Oamaru to the Waitaki but not across that river, while Kamuri-wai is the pakihi near Foxe's (Arrowtown) on the Arrow.”) This was a noted weka ground, and he had fair

success and started to return, but was delayed several days by a violent snowstorm. He crossed the Kawarau on a moki and struggled through the deep snow to Nokomai. There was no trace of his wife and children, but when the snow melted a bit he found their dead bodies. With some difficulty he buried them and sadly came down-country. Camping on the hill between the Mataura and Waikakahi (Waikaka) Rivers, memories of his wife gathering the taramea came over him and he composed a song, which is still preserved. From this circumstance the hill is called Onuku in memory of her. Weka continued his journey to Tuturau, where, it is said, he died of grief shortly after.

Another aged Maori told me of a party, among whom was Rakitapu, his informant, who went weka-hunting, their objective being Okopiri, a wooded gully north of Heriot, I was told. There were no runholders there then. The party were on the Otuparaoa Mountains one fine moonlit night, when all of a sudden snow came on. It proved to be an exceptionally heavy fall, and the weka-hunters had a rough time. That snowfall is now known traditionally as Kaipahau, a name which implies that the party, or such of them as sported whiskers, ate the snow off their beards. It was in July, the month that the weka are fattest, that this great snowstorm occurred.

A noted place for getting weka was Mikioe, up the Otamatea (now called Otamita, or Otamete) in the Hokanui Hills. Here there was a clump of mikimiki shrub, of the berries of which the weka are fond. I was told that miki meant the shrub and that oe denoted the shedding of its berries or leaves. My informant once saw some weka so eager to get the berries that they had clambered on to a matted mass of mikimiki and were perhaps 2 ft. off the ground. The sight interested and amused him.

It is said the Maori named the woodhen from its cry, “we-ka, we-ka”; but a European who is well acquainted with the birds renders this cry as “kea-week, ka-week.” This is just another illustration of the difference between Maori and pakeha ideas in regard to onomatopoeia.

The Weather.

The foregoing accounts of the rough weather sometimes experienced by the Maori in winter afford an appropriate opportunity of giving some stray remarks made to me by the old men. One said, “Our word for spring is kana; summer, raumati; autumn, kahuru, a word meaning ‘ten,’ or ‘plenty’; and winter, makariri, which means cold. The old people did not like the winter. If snowflakes came they would shiver and say ‘Kai te oka te huka’ (The snow is falling). We used the word huka for snow generally, huka-wai for snow and rain or sleet, huka-taratara for hail, huka-nehunehu for fine dry snow, huka-kapu for flakes of snow, kopaka for ice, ua or awha for rain, and the name for frost I cannot recollect.”

Another said, “The mountains north of Gore are called Te Rau, and when the natives of Murihiku heard thunder from the north or north-west they said that was Te Rau praying for snow, and if the

thunder was from the south-west they said that was Hautere (Solander Island) praying for snow." My informant added that he had heard the green tui or koparapara chattering that morning, and that this was not a good weather sign. The koparapara is the bell-bird (korimako, or makomako, in the North). The Maori also foretell the seasons by observing trees and plants, but I have no particulars of this.

Maori traditions tell of great floods in the Aparima, Mataura, and Clutha Rivers, and debris was found by early white settlers at a height which has never been approached since. A vast flood in the Clutha is known as Wai-mau-pakura (" Water which carried the swamp-hen "—so called because it swept many nesting-birds out to sea), and at the recent Rivers Commission the date was surmised to be 1800. The question arises, Was the climate wetter before European settlement ?

Birds.

My Maori friends did not have very much to say about the avifauna. One remarked, "In days gone by the bush swarmed with native birds; now we see scarcely any. We had the kakaruai (robin), miromiro (tomtit), titakataka (fantail), tatariki (canary), a very small bird without a tail called titiripounamu (rifleman), kakariki (parrakeet). We had a black bird with red wattles, koka (native crow), and a bird with a yellow-mark over its back, tieke (saddleback). Both these birds had beautiful notes— they could whistle like a man. Then we had two birds which came only in the summer, the pipiwharauroa (shining cuckoo) and the koekoea (long-tailed cuckoo)."

Another said, "Our name for the tui was koko. Away behind Seacliff Asylum there is a bush called Potae-rua, and a creek there is Waikoko (Tui Stream). Our trees fruit about six weeks later than the North Island, and the tui are fat in April and May. A man could hit them with stones [sic] and fill his basket; hence the name of that place. A ridge between Waikaro and Te Akaroa, near Measly Beach, is Paekoko, which means 'the tui's resting-place.'"

One of my old Maori friends went to the Wakatipu diggings in 1862. He says, "When in Moonlight Gully my dog caught some big moreporks in the rocks there, and we called the place Kohaka-ruru (nest of more-porks). These birds were not the small bush-owls known as ruru, but the bigger open-country ones known as ruru-whenua. They were big and fat, and when cooked the whole party ate them, and they tasted so good that even the white men smacked their lips over them." I have never heard of the Maori eating owls except this instance, it being generally supposed they regarded the bird with a good deal of awe. A place-near Colac Bay is Ruru-koukou ("the cry of the morepork"—ruru being the bird and koukou its call).

In securing Maori nomenclature I ascertained that many place-names in the South are reminiscent of birds. The native lark is pioioi, and the name of Dunback Hill is Te Awapioioi; the native quail was called koreke, and a range of hills between Milton and the sea is Whatu-koreke; the kingfisher is

kotare, and a hill near Nuggets Point is Taumata-kotare; the teal duck is patake, and a creek near Invercargill is Te Awapatake; the seagull is karoro, and an island in the Mataura River above Gore is Pokai-karoro; the parrakeet is kakariki, and a place near Charlton was known as Pokai-kakariki, while a beach near Fortrose is Kakariki-taunoa; and so on.

One of the aged men said to me, “There used to be a small bird at Roto-nui-a-Whatu (now called by the white people Lake Tuakitoto). It was about the size of a redbill (torea), and had a white breast and a black back. We called it pouakakai, but its European name I do not know.”

The common name of the swamp-turkey in the South was pakura, and a swamp near Balfour was called Kai-pakura (to eat swamp-hens). The bird was also called pukaki because of a habit it has of stretching up its neck when alarmed and so bulging its throat. The North Island name of this bird is pukeko, and how often has one heard it said, “Look at those awful Southerners massacring the beautiful Maori language ! Fancy them corrupting the word pukeko into pukaki !” This is not so; it is only one of the numerous instances where northern and southern names differ.

The native pigeon is a celebrated bird in southern estimation. My Maori friends laid great stress on its connection with the story of Maui. It is commonly called kereru, but is also known as kukupa. When Maui was a boy he went down into the underworld to find his father, and he painted his mouth and legs red and put on a white maro, or kilt, and transformed himself into a pigeon. One of my informants said, “The white on the breast of the kereru is the napkin, or maro, Maui was wrapped in as a babe.” Maui in the shape of a pigeon flew on to the handle of the ko (spade) of his father, who spoke to the bird; but all it could do was to nod its head and answer, “Ku, ku.” Any one familiar with the bird knows the way it wags and nods its head—this is in memory of Maui— and all it can say is what Maui answered his father, “Ku, ku.”

Speaking of Maui reminds me that legend says it was the mirth of the titakataka (fantail) which caused his death. One of the old men said the word titakataka meant “flitting about,” and the bird was so named because of its restless disposition. The correct name of Akatore, in Otago, is Aka-torea, and it means “the harbour of the redbills (or, oystercatchers).” The North Island form of the name would be Whanga-torea. The southern Maori used the ordinary manuka to make bird-spears, and I have a note that the clump of manuka called Pokai-kakariki, near Charlton, was celebrated in this connection.

The Moa.

As a rule, my informants frankly admitted they knew nothing about the moa. One man, however, said the last moa was killed on the Waimea Plains about five generations ago, and gave some very plausible details. There is just a possibility that one of the smaller kinds of moa may have survived long after the big birds became extinct, or that a very large kiwi was killed, but I do not place absolute reliance on the tradition.

One man said, “Just a few chains below the Mataura Falls is Te-kohaka-a-moa (the nest of the moa). It is a round depression on a flat rock, and the old people thought it resembled a moa's nest. They also found moa bones about it. Near Clinton is the hill Te-kohaka-a-pouakai (the nest of the pouakai). The pouakai was one of the kinds of moa that lived in this land. A small sea-bird is now called pouakakai: but do not mix the name. The pouakai has not been seen for many generations; the pouakakai is quite common yet.” From this it appears that the southern Maori recognized that there were different species of Dinornis.

The late Tare-te-Maiharoa, than whom there was no greater authority in recent years, was positive the moa was extinct when the Maori came, a.d. 1350. They were killed out in the South Island by the Waitaha, who called the birds pouakai. The name moa was given by the latest comers who saw the bones lying about. “The Moriori of the Chatham Islands,” said Tare, “were related to the Kati-Mamoe, but left New Zealand very long ago.”

This accounts for the poua bird of Moriori traditions. It is simply the moa of New Zealand, which was probably on the point of extinction or already extinct when that people left this country. The last Maori note I have on the moa runs, “I have heard a song which says the moa was killed out by karakia (tau-whaka-moe-tia) because it was a dangerous bird, but how long ago I cannot say.”

Insects.

I understand that the question has recently been raised whether the flea was brought into New Zealand by European ships. I did not know of this inquiry in time to ask my Maori friends what they knew of the matter, but may say that on Ruapuke Island there is a place known as Te Awatuiau (Flea Channel). Shortland in 1843 said tuiau was the southern name for the flea, the northern name being puruhi. One old man noticed a statement that the Maori name of the mosquito was waeroa, and said to me, “Its name in the North might be waeroa, but in the South it was always known as keroa.” Noticing some insects as I was conversing with an old Maori, he supplied me with the following names: “Our name for the bluebottle-fly was rako, and for its eggs and maggots iro. Spiders were pukau-werewere, and grasshoppers tukarakau. The daddy-long-legs' name was te tatau-o-te-whare-o-Maui (the door of the house of Maui), but I do not know how it got this name. A green kind of butterfly, a sort of cricket, was called kikiwaru, while the black and spotted butterflies are mokarakara. [He pronounced this mokalakala.] Then we used to have pekapeka (bats) in plenty, but I have not seen any of them for a long time.” The sandfly was called namu, and there is a place near

Waiau mouth called Kai-namu(eat sandflies) because these pests were so numerous as to get into the mouth with the food that was being eaten. I have a further note that in the South the name of the ant was upokorua.

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Mushrooms.

One of my informants said, “One of the raids made by the southern Maori northward is called Kai-whareatua. It is not the name of a fight but of a war expedition, and Tare Wetere te Kahu was in it. The Southerners had gone up to fight the North-Islanders and were returning, when they ran ashore, and were wrecked at the mouth of the Rakitata River. In the capsize all the food was lost, and the party found mushrooms and ate them. Hence the origin of the name Kai-whareatua (eat mushrooms). The word whareatua means a ‘devil house’ and that is the old Maori name of the mushroom.” Another old man remarked, “Tare Wetere was in the Taua-iti raid on Te Rauparaha, but I do not think he was at the Kai-whareatua raid, as, according to my information, it was before his time.” This opens up the interesting question, Were mushrooms indigenous or introduced ? I consulted a lot of New Zealand works without result, and I asked old settlers. One says that probably mushrooms were native, as they were to be found in the early days among the tussocks in the backblocks, but others consider that they will not grow without horse-manure. This belief Chambers's Encyclopaedia classes as unreliable, and says that mushrooms were found growing over nearly all the world a very fine edible variety being native to Victoria, Australia. If this be so, why not in New Zealand ? It is said that although the North Island Maori have plenty of names for fungi growing on trees they have none for field fungi—at least, so I understand. I therefore interrogated my aged Maori friends in the South, with the following results:—

“Yes, there were mushrooms, but I forget their names.”

“The name of the mushroom was whareatua, but I cannot say if they were here before the pakeha came.”

“Mushrooms were not here all the time. You could see them only in their season. Their Maori name was whareatua.”

“There were three kinds of mushrooms. One was very small and thin in the bush and was called harore, and the others were called whareatua and were all sizes up to almost as big as a hat. One of these kinds was good to eat. Another thing like mushrooms was called weho, and was also good to eat. They all belonged to the ground. The Waitaha people brought fern-trees and fern-roots to eat, but no one brought the mushrooms. Another thing to eat came out of the ground after thunderstorms. It was called poketara. You would come out in the morning and see it. It was a round-like ball, and sometimes almost as big as a small football. It was wonderful how it grew so

quickly. It had to be eaten at once—after a day it was no good. It could be cooked on the fire and tasted like a mushroom."

"The whareatua was a mushroom on a long stalk and with a deep body. I am not sure if it was here before the white people. The poketara was a big, round thing, a sort of mushroom, but it had no opening; it was all covered. It lasted only a short time, and then it would go into dust. I do not know the history of the raid known as Kai-whareatua."

"Whareatua was the name of the mushroom. I do not know who brought them to New Zealand, but they were all over the country. They were like an umbrella in shape, but in late years I have seen what is a new sort to me, with thick stems and bunched tops, and for which I know no name. It is said the poketara comes down in thunderstorms. It has no opening at all, and is white and round. When it becomes old the stuff inside turns into a powder and blows away. It sometimes grows as big

as your two fists together, but some remain quite small. There was also a small, round thing about the size of your thumb, white or somewhat darker. An old fellow said it was good to eat, but I cannot think of its name. I once tried it. I placed it in a whena (roll) of bush flax and cooked it in an umu (oven). It had no taste, and was soft like a jujube."

This represents the information I gleaned about fungi. The/poketara is possibly our "puffball," but that, and other queries, is now presented for discussion.

Fern-trees and Fern-root.

Mention of the southern Maori eating mushrooms leads me on to the question of how they wrested an existence from Nature, whose moods are sterner down here than in the more enervating North. They say the kumara did not flourish farther south than Banks Peninsula, but a northern opinion that they must have subsisted mainly on fern-root and fish did not meet with the approval of one old Maori, who told me that by the system of kaihaukai they could exchange titi (mutton-birds) and other things for kumara from Canterbury, and even get taro and hue from the North Island. In regard to the natural produets of Otago he said, "We had different kinds of fern-trees. The mamaku was not in this district, although it was over on Stewart Island; but we had the poka, wheki, and katote. The leaves of the poka are white underneath, the katote leaves are green on both sides and softer, while the leaves of the wheki are very rough and its stem very black. The iho (heart) of the katote is good to eat, but that of the others is bitter. I remember that three of us had a good feed of the heart of a katote at Opiriao (Sandy Bay, near Catlin's). Perhaps katote heart might make good jam—it had a sweet taste.

“Our name for fern-root was aruhe, and the leaves of the fern were called rau-aruhe. I remember once, at the south end of the Koau on Inch-Clutha, at a place called Pekeihupuku—the ihupuku was a big kind of seal and peke means its shoulder—eating fern-root. It was during the big flood of 1868, and we went back to the reserve and got fern-root and beat it on a big stone with a piece of iron. In the old days it was beaten with sticks and wooden clubs. When it was mashed we picked out the fibres and ate the rest, and it tasted good. It used to be mixed with whitebait, these tiny fish being beaten into it; the name of the resulting mash was kohere-aruhe. Mr. Hay, an early settler, used to eat fern-root occasionally, both when he was among the Maori and at his own home.”

Relative to eating tree-ferns, one of my informants related, “In the whaling days the brig ‘New Hampden’ was wrecked at the Bluff. She was known to the Maori as ‘Kai-mamaku’ (to eát fern-trees) because once she ran into Te Ana-hawea (Bligh Sound) for shelter, and, food becoming short, the crew went ashore and cut some mamaku, which they ate.”

Some localities were renowned for the excellence of the fern-root growing there, one such place, I was told, being Pau-upoko, near Port Molyneux.

Various Foods and Drinks.

The old Maori who spoke to me about fern-trees and fern-root continued, “But we had another vegetable food too, and that was thekauru, the cooked root of the ti (cabbage-tree). Sometimes these trees had a side shoot, and that was the proper kaur; when it was taken the tree did not die, as it did if its root (more-ti) was taken. If the kauru you were eating

was called more-ti you would know it was from that root only. Sometimes the people would leave a bit of the root in the ground and in a few years another tree would grow in its place. The root could be cooked at an open fire or in an umu (oven). In the old days the umu in which the kauru was baked was often called a puna-ti, puna meaning a hole and ti being the cabbage-tree. It would cook quicker at an open fire, and its rough skin prevented it from charring, but it did not taste its best unless placed in an ipu (basin) and soaked in flax-honey (wai-korari). Or the kauru could be taken and laid flat, and the flax-honey dripped on it, when it would absorb it. Then if you were travelling and were thirsty you could up-end your kauru root and let the moisture trickle down your throat. This was called unu-wai-korari, and it was a good sweet drink.

“Another food of the ancient times was prepared like this: Secure some kelp (rimu), the same as that dried for the poha-titi, and take it up-country to a place where tutu is plentiful. Gather tutu berries and put them in a putoro, a small flax bag very closely woven so that the seeds of the tutu cannot get through. Squeeze the bag, and the juice comes through and forms a good drink, called waitutu. Take an ipu, or wooden trough, put the kelp and tutu juice in it and boil by putting hot stones in. You can tell that the kelp is boiled enough by poking a stick into it and it falls to bits. Leave it till it is cold,

and the result is a black-coloured jelly, called rehia, which was often eaten by the aid of an akapipi (mussel-shell).

"Waitutu was a good refreshing drink, although sweet. I remember once at Tuturau another Maori and I had a good drink of it. We held the putoro over our heads and wrung them and let the juice drop into our mouths. I never heard of any other drinks among the old people except waikorari, waitutu, and water. Besides the foods I have described we had berries of various kinds, such as the hua-kotukutuku (fuchsia), which were eaten raw, and mako berries, which came in their season. I also remember long ago eating snowberries in the Hokanui Hills. I think our name for them was tapuku."

Near Colac Bay is a small lagoon called Okoura, and I was told it was named after a man who was killed there. Bulrushes grew in the lagoon, and their roots were gathered and eaten with the flesh of Koura. Bulrush-roots were called ko-areare; they were mashed and formed an article of diet with the old-time Maori.

An old Maori said to me, "In the North Island the fuchsia-berry was called konini, but down here both tree and fruit bore the same name—kotukutuku."

I have a further note that a berry which grows in swamps is called te rerewa, but I cannot say if it is edible.

The Tuturau Reserve.

Recently I was at the Tuturau Maori Reserve to see my old friend Mrs. Gourlay (Toki Reko) laid to rest in the burial-ground there. That evening Mr. Gourlay, a European, a keen observer of nature, told me some of the methods he had seen the Maori at Tuturau adopt in getting food. He has been fifty years in the district, the last forty-five of them in his present location, and following is a summary of his information.

In rain or high winds the pigeons kept low in the bush, and the Maori speared them with bird-spears made of manuka or horoeka (lancewood). The end of the spear was sharp-pointed and burnt hard, and seemed to go right through the birds if skilfully thrust. There was nothing attached to the spear.

Ducks were snared by placing nets across streams at the height to intercept the birds' heads as they swam along. One morning Mr. Gourlay saw a duck and all its brood caught in one. Some years ago he got his wife to make him an old-fashioned net for snaring ducks, and it was quite efficacious. There was no fuss nor worry with the snare—the gun was simply not in it with the noiseless net.

The Maori used to go down to the swamp at Menzies Ferry and catch matuku (bittern) by laying snares for the birds' feet on the paths they had made through the rushes. The bitterns made a booming noise at times, and the Maori said the birds did this when catching eels. The Maori caught pukuki (swamp-hens) in the same manner.

He had never seen, or heard of, the Maori catching kotuku (white heron), as that bird was so rare, but it could no doubt be caught in the same way as the bittern.

Snares were also laid on the feeding-flats of the paradise ducks at certain times. When the birds were moulting and could not fly the Maori would get into the swamps after them and run them down.

He had seen the Maori catch tui by covering a pool with branches, leaving an open space for the birds to drink. Snares were set round this open place and tui a-plenty were bagged in a good season.

To catch kaka, a square, 8 ft. by 10 ft., say, was thatched over, the fowlers waiting underneath with a decoy kaka. The cries of this bird brought many others, and as they settled on the corner posts the snares affixed thereto made them captives. These were not killed at once, but added to the collection below. The bird could gnaw through green flax, so their legs were fastened with dry flax amid an appalling din. When enough were caught the birds were killed and preserved in kelp bags. To save the fat for this purpose the birds were cooked in a wooden trough with hot stones. Weka were often cooked in the same way.

Various Birds and Fishes.

Weka (woodhens) were caught by the familiar red rag and snare method. The snarer sat still, and, as he caught each bird he bit the back of its neck to kill it and threw it behind him. This saved him wringing its neck, and was not only quicker, but it did not alarm or disturb the other birds.

The Maori also killed the titi(mutton-birds) by biting the neck. There was a knack in catching them. He had heard that these birds would tear your hands to pieces with their beaks and feet if you tried to wring their necks.

Kiwi were never at Tuturau, although they had frequented the Hokanui Hills. He had heard it said that the Maori would wait behind trees, and as the bird came pecking along he would hit it on the head with a stick.

By the Mataura River, in the South Wyndham Bush, there used to be a shaggery, and he had seen a Maori bring away about two or three hundred young shags caught just before they were ready to fly. The big birds were too rank to eat. The Maori would not touch hawks—they were probably too rank also.

In regard to fish, the Maori caught kanakana (lampreys) in the river at Tuturau. They built a wing-dam of logs, stakes, branches, and scrub across the river, except for a few feet where the "pot" was. The dam was anchored with big stones and the material woven with flax so as to stand-big floods in the river. He had seen a "pot" 8 ft. wide by 3 ft.

or 4 ft. deep, and when full of lampreys it had taken as many as six people to haul it out. It was made of fine flax, with vines as bows to strengthen it. This dam was quite close to the kaika, and during many years the people did not go to the falls at all, as they could get all the kanakana they wanted so handy.

He had seen a Maori put an eel-pot in the Upoko-papaii Creek and get as many eels as his horse could carry—probably 2 cwt. of eels. The Maori also caught eels with bobs (mounu). These were made by sticking strips of flax through rushes (wiwi) and threading worms (noke) on. Eels cannot wriggle fast on dry grass, so this was spread by the fisher, and as the eels took the bob they were hauled on to the spread grass, where they were seized and threaded through the gills on to a flax line ready to be carried away. He had seen old Pi catch eels by hand. The spring was blocked with tussock (patiti), and the water was to her hips, but she caught the eels round the gills and handed them out one by one. The eels the Maori ate were not the silver-bellies, which they thought too poor, but the big black fellows.

The Maori did not like the kokopura, as it had too many bones. Koura, or crayfish, were caught by turning over the stones in creeks, and they were roasted on the embers. Kakahi, or fresh-water mussels, were found in some streams.

In the Mataura River at certain seasons the Maori would net patiki (flounders) on the beaches. Mata (whitebait) were caught in baskets of flax very finely woven. Inaka (minnows) were caught at the falls, and were spread on flax mats and sun-dried. When properly done they would last a long time.

The kiore, or native rat, was nearly cream in colour, and was caught with a bent stick and loop. The rat would chew a string to get at a bait, and this released the stick and the loop caught them. They were rolled in mud and baked in the fire, the mud bringing the skin off. Most Maori would not touch the pouhawaiki, or European rat.

Tuturau was a very rich kaika in the old days. The bush swarmed with birds and the creeks with fish; but, strange to say, the proper fern-root did not grow here, being brought from Otama and Tokanui. It was dug with the Maori spade. This was of wood, about 5 ft. long, and had a sort of scoop at the business end and a stick stuck out on one side for the foot of the digger to press. They were square at the end, and dug fairly well, being very vigorously used; in fact, Mr. Gourlay thought that many an English spade would break if the same energy was used on it.

When he came to the reserve half a dozen trees were held to be sacred. These were all matai (black-pine), and it was perhaps because of the edible berries on them that they had been originally "tapu-ed." You could shoot or spear pigeons on them, but you must not put an axe near them. Pikiraki was the name of the red mistletoe on the tawai (beech); but the white mistletoe on the rata was called puawai. The Maori at Tuturau got mud from a swamp at Waimumu, and this made an excellent fast black dye.

When eels were put out to dry and rain threatened, a shelter of tussock or ti leaves was thatched over them. This shelter was called an uhi. One kind of whata (storehouse) was built up high, and you went up an arawhata(ladder) to reach it.

He would eat Maori preserved food even if it had mildew on it, as it would cause no harm; but food preserved by Europeans was apt to go

bad quickly and might poison any one not careful. The Maori food was naturally cured, kept well, and tasted sweet and good.

The above is the essence of Mr. Gourlay's information; but a granddaughter added that she had recently visited the Bay of Plenty and noticed the following differences between the names of shell-fish there and in Southland. What is called the pipi in the South is there called kuku, and what they call pipi is like a cockle, only with an oval shell and flatter, and they dig in the sand for it as the tide goes out. This shell-fish is called toheroa in the South. There is also a big, heavy shell like a very large cockle, which is called kuakua in the North Island, but down round Foveaux Strait is known as whakai-a-tama.

A pakeha who was brought up at Riverton writes, "Eels were taken with a spear. The fishermen waded and sought for the fish by poking about in the silt with their bare feet. When an eel was located by the Maori's toe it was immediately secured with the spear, which was unerring in Maori hands. The Maori also used eel-pots in capturing their winter's food-supply. These traps were made

of manuka sticks, bound together with whitau (scraped flax), and made in cylindrical form, about 5 ft. long; a netting of prepared flax, with an opening in the centre, was placed at each end of the cylinder. The two nets were attached to each other by means of a flax cord passing down the centre of the eel-trap. The fish, attracted by a bait of worms, pork, flesh, or fish of any kind, suspended midway in the eel-pot, were led by the sloping net to the entrance, passing in and becoming prisoners. The eels, after capture, were cleaned and dried in the sun, and then stored away for future use."

Plant-life.

Strolling through the bush and clearings one day with a venerable Maori, he gave me the names of a few of the plants. The shrub known to the white people as the pepper-tree is called ramarama; that known to the northern Maoris as koromiko is known in the South as kokomuka, while the bush-lawyer is named tataraihika, and a kind of bramble is tataramoa. The cutty-grass of the settlers was to the southern Maori known as matoreha, the biddy-bid as piripiri, and the nettle as okaoka (the island Pukeokaoka, near Stewart Island, simply means "Nettle Hill." The common native grass, he said, was called ma-uku-uku, the native mountain-grass pouaka, and the ordinary swamp-rushes wiwi.

The southern Maori say that the patiti, ake-rautaki, and other vegetation growing on the Takitimu Mountains have a peculiar scent of their own. A visitor took some to an old Riverton chief, who sniffed at it and said "Ah! 'tis Takitimu." A legendary account says that the celebrated chief Tamatea brought these plants from Hawaiki in his canoe, Takitimu, twenty-two generations ago, and that he planted them on this mountain-range.

Kohuwai, also known as kohuai, said one of my informants, is a green sort of weed or moss in the bottoms of streams, and a small creek between Waikawa and Chasland's is called Wai-kohuwai because of its bed being so covered with this moss.

After the Europeans introduced smoking the Maori would smoke a weed called kopata. They would, said an old man, make a bowl for a pipe out of wood, insert as a stem a reed of pukakaho, and puff away. This kind of smoking was called tiniko. Over at Stewart Island there is a plant called punui with a leaf like a pumpkin. A boy dried and smoked

this leaf, and, gravely added the narrator, his mouth was turned inside out. These leaves deceived another lad, too. He came from the North, and when he saw the leaves thought he was going to feast on pumpkins, but he was disappointed.

Haumata was the name of what are now called Maori-heads, said one old man, and upoko-takata was the name of a plant, possibly the snow-grass of the early settlers. Papaii was a kind of spear-grass, and the name is perpetuated in Upoko-papaii (“Sam's Grief,” near Tuturau). Pukio was the Maori name of “niggerheads,” and there is a stream beyond the Waiau known as Wai-pukio. The grass-tree was called nei in the South, and Mantell, writing in 1852, says they formed so constant a part of the “mosses” or vegetation in swampy valleys—comprising mosses, lichens, sundews, grasses, shrubs—that the Maori called these mosses nei also.

Legend says that the pikiraki was the last plant remaining in the kit of Tane, the forest god, when he sowed the forest. He looked at it tenderly and said, “I cannot let my last child lie on the ground,” and that is why it is a parasitic plant perched high up on the big trees, a kind of mistletoe with red flowers.

The common bush fern is turokio; another kind of fern is the piupiu, and it is said the kakapo (ground-parrot) will bite it off at the base and hold the frond over its head to shield itself from observation. And this leads us to an interesting bit of folk-lore.

A Folk-tale.

The kakapo and the toroa (albatross), said my informant, had a dispute as to who was to be “boss” of the land, and finally they agreed to decide the question by a test. They were to take turn about at hiding, to see which had the greater success at finding the other. A piece of open land with very little cover was selected, and the toroa hid first, but his white plumage was too conspicuous and he was found almost at once. “I will hide again,” he cried, “and this time you wonn't find me.” But alas for his hopes ! his opponent found him with very little trouble. Then the kakapo took his turn at hiding, and lay down on a bare place with a piupiu fern over his head. Search as he might, the toroa could not find his wily rival until the latter laughed aloud, the sound disclosing his whereabouts. “I will hide again,” he said, “on that bare patch over there, and this time you won't find me.” The cunning bird again used piupiu to avoid detection, and again the toroa, search as he might, failed to discover his rival. He flew backwards and forwards over the place as low as possible, but all to no purpose—his quest was in vain. Having been so unsuccessful, the other birds decided that the toroa was not a fit and proper bird to dwell on land, so in deep disgrace he was banished to the wide oceans and there he is now to be found.

Potatoes and Introduced Plants.

Potatoes, introduced by Europeans, were early grown in the South, for in the late R. McNab's Murihiku we read that in 1813 there was “a field of considerably more than 100 acres which presented one well-cultivated bed, filled with rising crops of various ages, some ready for digging, while others had been but newly planted.” This was inland from Bluff Harbour, and it was also recorded that “a spike nail would buy a hundredweight of potatoes” from the Maori. One of my old Maori friends said,

“Horeta was the name of the old variety of potatoes which the whalers brought. A black variety was called, I believe, mangumangu in the North, but we called it tatairako in the South. A potato which was veined inside was named ropi, while our name for the Derwent was pikaukene.” I was also told about Te Puoho's raiders reaching Tuturau in 1836—“It must have been about Christmas, for the early potatoes were just ripe enough to eat and the invaders had a fine feed after their starvation trip.”

The early settlers in Otago found “Maori cabbage” growing wild. The Maori gave me the name of this as pora, and further said that a kind of turnip had grown wild in Central Otago, their name for it being kawakawa.

One old Maori said, “In 1869 I was eeling at Longford (now Gore) and was engaged to help harvest 30 acres of oats. Among it I saw a jaggy plant and I wondered what it was. It was the first time I had ever seen thistles.”

An old settler tells me the “Maori cabbage” was simply a degenerate swede turnip. The leaves were turnip-leaves; the body was a thin wiry root and uneatable—it was the leaves which were eaten. From the description of the kawakawa it is surmised to have been kohlrabi growing wild but not yet degenerated.

Shell-fish.

I did not get very much information about shell-fish, although we know that, judging by the middens left by the Maori, such were eaten with avidity. The correct name of the Waikaka River, I was told, was Waikakahi, so called because of the number of kakahi, or fresh-water shell-fish, in its waters. The names of salt-water shell-fish are perpetuated in the place-names Hakapupu (in northern dialect Whanga-pupu—“periwinkle Harbour”) and kaipipi (“eat shell-fish”—the kind usually called the cockle). Hakapupu is the Maori name of Pleasant River, near Waikouaiti, and Kaipipi is at Stewart Island. A kind of mussel (kutai) is mentioned in one tradition as furnishing the relish (kinaki) for a cannibal feast. The eating of the pawa or paua (mutton-fish—a univalve) is also mentioned in the history. One of my informants said there was a thread in the limpet(kaki), and this was said to represent the line which Maui was using when he fished the North Island out of the deep.

One old Maori mentioned oysters, and he thought they had been brought by Captain Howell to Port William, and from there had spread to Foveaux Strait. The story runs that about 1839 Howell brought over some sacks of oysters from Australia as a treat to his men at Riverton, but adverse weather compelled him to toss the sacks overboard off Bluff, and that this was the nucleus of the extensive bed, there now. I should like to know if oysters propagate sufficiently fast to render this account feasible.

Paints and Dyes.

Looking through my notebooks, I see casual references to paints and dyes, but really so little it is scarcely worth mentioning. One of the old Maori said that, some of the people who came on the Arai-te-Uru canoe, about twenty-seven generations ago, were skilled workmen—at cultivating the kumara, at carving, &c. One in particular brought red paint with him, but in exploring the land he dropped it in the hills east of Lake Kaitangata, and hence those hills are famous to this day for yielding the haematite stone from which the Maori got their red paint. It is said that

one of these hills bears quite a big hole made by generations of Maori in search of maukoroa (also known as horu—red paint). One old man said, “The Kati-Mamoe used to put red paint on their faces. They knew only two paints—maukoroa (red) and a blue paint whose name I forget. The red paint and the hoaka (stone used as a grindstone) were brought to this land from Hawaiki.” I am sorry I did not get a description of how the paint was made. I was also told, “Maraki is a red-yellow clay found at Waikouaiti and used for seaming canoes.”

An old woman said, “Kiakia is the name of a creek at Woodside, near Outram, and it runs into Lee Creek. It is so called because of the kiakia which grew there. The kiakia is a small bush-like spear-grass or grass-tree, and the Maori went there to get it. They soaked it with the bark of the pokaka tree and a dye resulted.”

“There is a swamp near, Paterson's store at Port Molyneux called Tukoroua,” said another of my informants, “and that little spot is famous for the dye it produces. The Tukoroua Swamp is the only place in South Otago where the proper kind of paruparu, or black mud, for dyeing whitau (prepared flax-fibre) can be found. The mud found elsewhere would turn the whitau red or rusty looking, but the Tukoroua mud made it a beautiful black. You could wash it with the best soap and you would never get that black out. Such a reputation had this place that people would come down from the North to get their mats treated with the dye from this swamp.”

A creek in Southland is called Opani because on its banks the Maori got earth suitable for making red paint (pani), and the name of the hill north of Kaitangata where the red ochre was procured is Te-horo-maukoroa. I was told that a tree called makatoatoa was no good for timber and that the Maori extracted the sap from its bark for dye, but I do not know what its European name is.

Introduced Animals.

One or two of my Maori friends casually mentioned some of the animals introduced into this land. It is well known that the southern Maori call the mouse hinereta (henrietta) because a vessel of this name (“Elizabeth Henrietta”—1823) introduced these little creatures to their notice, but why they call a cat naki I could not ascertain.

Some of the old people are not pleased with the introduction of vermin to Maoriland. They blame the ferrets, weasels, and stoats for largely helping to kill out the native birds, and the fact remains that although Stewart Island has been settled by white men, with their dogs roaming about too, for many years, bird-life is still fairly plentiful. Thus in 1918 in Oban, the principal settlement, I saw the kereru, or native pigeon, and heard the weka, or woodhen, calling. One old man said that if any one attempted to take vermin to Stewart Island he hoped he would be caught; and he further expressed the bloodthirsty wish that the delinquent would be slowly done to death in boiling oil.

It is generally conceded that Captain Cook introduced the pig to New Zealand, but the late Tare-te-Maiharoa told me they knew the animal traditionally, and they called it poaka. He said it was mentioned in the history very far back. I have read that poaka is a corruption of the English word "porker," but against this we must remember that those Polynesians who had pigs when Cook visited the South Sea islands called

the animals puaka. A European who went pig-hunting with the Maori in the "fifties" says their custom was to get astride the pig and stick it upwards.

Detached Information.

I find I have a collection of stray notes which I do not seem able to incorporate with the other sections of this paper, so will include them here.

Koura.

The crayfish found in inland streams and in the sea were both called Koura, as far as I know. A stream north of Gore is Kai-koura (to eat crayfish) and Wai-koura is quite a common place-name. The Maori had a peculiar method of treating crayfish. They would place them across a stream of fresh running water as tight as they could pack them, having them so fastened they could not escape. After they were dead some time the crayfish were, I understand, taken out and dried. A small creek in the gorge of the Taieri River near its mouth was described to me as a place where crayfish had been thus treated in the old days. A place near Tautuku is called Hiri-koura, and I was told it meant the place where crayfish were fastened. The usual meaning of hiri (or whiri) is to plait or twist.

Kaio

(or, as called by the northern Maori, ngaio) is a well-known curiosity—half plant, half animal—that was eaten by the Maori. Wharekaio is the name of a beach and landing-place near where the "Tararua" was wrecked, near Fortrose. My informant said, "The kaio fastens one end of itself to the rocks and the other end is like a spud. You take this knob and soak it all night and eat it." A European

who has boiled and eaten them says, “They taste like a boiled egg flavoured with oil, and have a very good flavour. The taste must, however, be acquired.”

Nets.

Although I have very little information about nets, I append the few items gleaned. Lovell's Creek was known to the Maori as Tuakitata, after a kind of fishing-net. This style of net (tata) was made in the shape of the cockle-shell called tuaki. Other kinds of nets were called kaka and houka, whilst two kinds of snares for netting birds were called mahaka and here.

Primitive Appliances.

When the southern Maori finally abandoned their old methods and adopted European ones I cannot exactly say, but here are some notes concerning the Maori at Tuturau in the “fifties.” In 1852 old Reko was working at a pine log, 25 ft. long, with a stone adze, trying to hollow out a canoe. Then he got an old chisel from some white man, but was not making much progress, and finally two Europeans completed the dug-out for him. In 1853 Mr. Chalmers left Tuturau with Reko and Kaikoura on an exploring trip, the white man carrying a gun, and the two Maori had eel-spears and a stick about 6 ft. long with a big fish-hook tied to one end. They carried no provisions, but lived on the country they traversed. The three walked the whole trip in paraerae (sandals) made of flax and cabbage-tree leaves, the latter far and away the more durable. In 1854 old Reko would go eeling with a large-hook tied to his wrist and lying on the palm of his hand so when his hand felt an eel he had only to pull it forward to have the eel hooked. Writing in 1854, Mr. Mieville says, “Old Reko scorned matches, and had a light from his firesticks nearly as quickly as I did. He rubbed a pointed stick in a groove in another stick. I never could get fire, but the Maori does so at once.”

Maori Cooking.

One of my informants said he greatly preferred food cooked by the old Maori methods to those introduced by the pakeha, although he had not enjoyed the former for years now. European cooking, he said, took the strength out of flesh or fish, whereas the umu, or earth oven, preserved all the natural virtue and flavour. What better than to wrap the food in nice green flax-leaves and let it steam in an umu? He considered even the method of toasting food before a fire on a Kohiku or stick was preferable to frying in a pan or roasting in a stove. Some of the superstitions connected with cooking continued after the white people came, and the operation would be done outside, the women who had been cooking changing their dress before coming in and eating.

Preserving Food.

The same Maori went on to draw my attention to the excellence of Maori methods of preserving food. Anything cooked was called paka, and you could get paka-weka, paka-titi, and so on. These birds have been cooked and then preserved in their own fat. The great receptacle for these preserved foods was kelp which had been made into the familiar poha. My informant considered

that kelp possessed some special quality in preserving the taste of what it held, and said he had heard there was a proposal to send butter away in kelp bags. He thought if such was done the butter would keep its taste and quality better in hot weather than under the present system.

Not all food was preserved- in the foregoing manner, some being dried uncooked. The hapuku, or groper, was sometimes cut into strips and treated this way, the flesh being then called maraki. One' old man gave me some maraki to chew, but my tastes were not sufficiently educated in what pleases the Maori palate for me to ask for a second helping.

The Maori Quail.

One of my informants mentioned the Koreke, or Maori quail, but unfortunately I omitted to ask how the Maori caught them. These birds were teeming in Otago when European settlement began, and it is hard to realize the countless numbers of them that existed; yet when the diggings broke out this beautiful bird vanished as if it had never been. An old settler who has eaten dozens of them says he never found berries inside them; they had no gizzards, and apparently lived on beetles and insects.

Bob Fishing.

One of the old Maoris mentioned catching eels with a bob. Some frayed strips of flax were attached to a stick, and large worms were threaded on the flax strands, which were looped up, and then the baited mass was dangled in the water. If a tug is felt the fisherman flicks out the eel before it can disentangle its teeth from the bob. I have not learned whether the Europeans copied this from the Maori, or vice versa, but somebody may be able to supply the information.

Medicinal.

An old Maori said to me, “A good remedy for colds and sore throats is to steep goai (kowhai) bark in boiling water and drink the infusion. It has to be taken fresh, as it will not keep, although perhaps spirits would act as a preservative. The bark is taken only from the sunny side of the tree, and its removal does not kill the tree. My neighbours and I all keep a stock of the bark handy.” A well-known Maori remedy for diarrhoea is the leaves of the Kokomuka, or New Zealand veronica, and it is used by both races now. It is said that in the old days the Maori who suffered from toothache—a rare complaint among them—stuffed the gum out of

the flax into the holes in the offending molars as a palliative. According to a southern Maori, a water-plant called the runa was applied to the skin of sufferers from ringworm. It is said to be a sort of water-lily, and the Wairuna Stream derived its name from it.

The ancient people of the South Island, said one Maori, were skilled in the use of shrubs and herbs. They had known a cure for consumption, but now it is so much needed the shrub cannot be found—the white man's fires and cultivation seem to have destroyed it. This shrub is said to have grown on the Canterbury Plains.

I was reading lately of a herb, called “dortza,” which the American Indians asserted would cure influenza, pneumonia, and incipient consumption. Tests by medical men were to the effect that it had done remarkable work in many cases

The claim by southern Maori that they had once known such a herb seemed to me a noteworthy one, and the fact was told to me years before the fame of dortza got spread by the Press.

The Old Order Changes.

A thoughtful old full-blooded Maori, in saying adieu to me last time I visited him, remarked, “The Maori knew how to gather his food from of old, and it suited him, and he raised a vigorous race. Look at him now! There are few middle-aged and few young people! Why? It is largely ignorance of food-values. It takes a lot of food to maintain a Maori in health. In the old days he could eat as many fish and birds as he wanted, and all beautifully cooked in the earth-ovens. Using European foods, he does not know how much to use, or how to cook it properly. He eats it half-prepared or in insufficient quantities, and by not keeping his strength up throws the way open to consumption and wasting diseases. The hope of the Maori is education. The old people had not learned through generation after generation to be farmers or roadmakers and they could not settle to work as the young can. I always urge the young to learn to read and write and get knowledge. A young woman in the ‘kaik’ had a little boy ill and gave him coastor-oil; and this not working quickly enough, she gave him Epsom salts. The boy became worse, and a friend raised the money to take the boy to a doctor, who said the two medicines combined formed a poison, and that if the boy had not been brought then he would soon have died. The doctor gave a corrective remedy and the boy recovered. In the same way I reckon want of knowledge is causing many Maori to eat wrong food or to prepare it wrongly and so to slowly poison themselves, or, at any rate, to undermine their constitutions. I have often told the people this, but my words have received little attention. ' It is impossible to go back to native foods, as these have been mostly destroyed by civilization, so the people must read the proper books to learn how to thrive on the proper European food. The Maori girls should all be taught housekeeping, the proper value of food and how to cook it, as I am convinced this is the only way to save our race.”