

ART. XXXII.—Maori Forest Lore: Being some Account of Native Forest Lore and Woodcraft, as also of many Myths, Rites, Customs, and Superstitions connected with the Flora and Fauna of the Tuhoe or Ure-wera District.—Part II.

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HARAKEKE (*Phormium tenax*).

THE *harakeke*, or flax, as it is commonly termed, has never obtained to any great extent in Tuhoe-land, on account of its being essentially a forest district. Only the inferior varieties of flax were here found growing, and the better varieties were only obtained by means of cultivation. The varieties which produce the better grades of fibre are alluded to as *whitau* (sometimes *hitau*), while those which contain poor, weak, non-durable fibre are termed *harakeke maori*, or common *harakeke*.

The following are the names of the varieties of flax known to the Tuhoe Tribe, which people seem to have imported some of the better varieties from the Waikato, for purposes of cultivation, about six generations ago:—

1. *Oue*.—This variety produces the best fibre, much prized in former times for the manufacture of the better class of garments. It was not indigenous to Tuhoe-land, but was cultivated.

2. *Pari-taniwha*.—Produces a good fibre, which, however, requires to be steeped in water when scutched, or it assumes a reddish colour. After being soaked a while it is taken from the water and hung up to dry and bleach.

3. *Wharariki*.—Sleeping-mats and such things are made from the green, unscutched leaf.

4. *Rataroa*.—Produces a fibre of medium quality.

5. *Ngutu-nui*.—Nets and snares are made from the leaf of this variety.

6. *Huhi*.—An inferior variety. Grows in swamps.

7. *Tutae-manu*.—An inferior fibre.

8. *Awanga* (or *Aoanga*).—Variegated variety.

9. *Taneawai*.

10. *Ruatapu*.—Formerly looked upon as being *tapu*, as its leaves, or fibre, were used in dressing the hair of chiefs.

11. *Tukura*.—A swamp-growing variety.

The *rataroa* variety is also known as *motu-o-ruhi*.

Shortland speaks of *rongotainui*, *motuorui*, and *mangaeka* as being the names of varieties of flax (*Phormium*). The latter name is applied by the Tuhoe people to the brownish-yellow strips of flax-leaf inserted in certain Native garments, and which colour is produced by exposing the strips to the heat of a fire. Such a garment is also termed a *mangaeka*. Shortland, however, speaks of the word *harakeke* as though it were a specific term for a single variety of flax, whereas it is essentially a generic term, embracing all varieties.

The *awanga* variety is used in making baskets and mats. Colenso gives *tamure* as another name of this variegated variety. *Te rau o Papoua* is said to be a term applied to growing flax, while *te rau o Huna* describes the fibre

when scutched and prepared for use. Hence the former term is applied to a rough cape (*pora*), and the latter to a fine garment of dressed fibre.

Local Natives say that an edible variety of flax formerly grew at Tieke, in the Rua-tahuna district. The leaves were dark-coloured, with reddish edges. The base of the leaves was eaten. This plant has disappeared. In this connection, I take the following from a newspaper item: "Mr. McGregor said that there is an edible variety of flax in the Taupo district. It is called *kopakipaki-ika* by the Natives. The main root grows to a great length. It is white in colour, and resembles celery outwardly. It has a sweet taste, which is a contrast to the bitter taste of the ordinary flax."

Natives profess to know two sexes of the *oue* variety of flax. They state that the leaves of the male plant are more pointed than those of the female plant. The latter leaves are shorter, and do not give so long a fibre. The edges of leaves of the female plant are a light-reddish colour (*puwhero*). Leaves of the male plant have reddish streaks, called *kakaka*, in them, as you see light-coloured streaks in a leaf of *toi* (*Cordyline indivisa*). The fibre produced by the female plant is white and soft, that of the male is somewhat harsh and has a reddish tinge (*ma puwhero*).

The Natives, in former times, often planted the commoner varieties of flax near their dwellings, as the leaves were much used in the manufacture of small baskets to hold cooked food, which baskets were used but once. The varieties producing better fibre were planted usually at the edges of cultivation-grounds. A plant would be divided and the fans planted out in the fourth month of the Maori year—i.e., in the spring. It was considered necessary to put two plants in each *whawharua* or hole dug for the purpose. It was unlucky to plant an odd number (*Mehemea ka kehe, he aitua*)—the plants would not flourish. Such a flax-plantation is termed a *pa harakeke*. The ground around the plants was kept clear of weeds. Any old leaves were cut away so as to promote a more vigorous growth in the plant; also, if the young leaves were considered too numerous, some of them would be cut out. Long rows of cultivated flax were seen at Aotea by early settlers.

The withered outside leaves of a flax-plant are termed *pakaraha*. The half-dressed *hukahuka* or thrums of a *pokeka* (rough cape) are known as *pureke*.

In former times the Maori had some curious ideas regarding flax. When making a flax-cultivation—i.e., setting out plants to form a *pa harakeke*—the planter was careful to note what particular wind was blowing at the time; for when the flax was grown, and it was desired that use be made of it, then it was considered to be necessary to cut the leaves when the same wind was blowing as when the flax was planted, otherwise the fibre in the leaves would be found to be of a very unsatisfactory quality—short, weak, and brash. And if a person went to the owner of such a flax-grove and obtained permission to take some of it for his own use, his next question would be, "*He pehea te hau i rumakina ai taua harakeke?*" (What was the wind when that flax was planted?) And if such wind was not prevailing at the time, then he would wait until it did before cutting the flax. Now, if a person went to steal some cultivated flax, he would try the condition of the fibre in a few leaves. Should the fibre prove to be poor as to length and quality, he would know that he had gone a-thieving during the wrong wind. Hence he would wait until the wind changed, when he would try again. When he found that the flax gave a long, strong, desirable fibre, he then knew that he had hit upon the right wind—the wind that obtained when the flax was planted.

A somewhat similar superstition to the above seems to have obtained in regard to the mandrake-plant. In Lang's "Custom and Myth" we read, "In digging the root," Pliny says, 'there are some ceremonies observed: first, they that go about this work look especially to this—that the wind be not in their face,' " &c.

When the fibre of flax is prepared for weaving into a fine garment it must be carefully looked after. There are many dangers abroad in connection with the art of weaving: for instance, if that fibre be left at any spot where a person might step over it, it is a most reprehensible act of carelessness, inasmuch as the fibre would never take the dye well if a person had stepped over it.

When flax-fibre of the better grades is being prepared for the making of garments it is deemed extremely unlucky to throw the refuse of the leaves into a fire, for if that refuse be burned, then all the flax in the grove from which the leaves were taken will be spoiled. They will become *kakara wera*—that is, the tops of the leaves will die first, then the whole leaf will become affected and die. I once heard an old Native woman exclaim peevishly, "*Kua kakara wera katoa taku pa harakeke i te mahi a te wahine ra*" (My flax plantation has been ruined by this woman). On inquiry I found that the offending person had begged some of the flax, and had burned the refuse of the leaves after she had taken out the fibre. You will doubtless be relieved to hear that these restrictions, &c., pertain only to the higher-class varieties, those termed *whitau* or *harakeke muka*, and not to common varieties (*harakeke maori*).

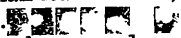
The term *makuhane* is applied to short, brash flax-fibre, the same being weak and easily broken: "*Ka mahia te muka, na ka kotihe. Na te makuhane i wheraka ai.*"

In former times long trumpets were made of flax by winding the green half-leaves in a spiral manner. They lasted merely so long as the material remained green. They were called *tetere*.

Some old Natives state that flax was introduced into New Zealand by the Matatua migrants, which is presumably an error.

Leaves of the flax-plant, or strips of such leaves, were often used in certain rites of former times. When a person performed the rite known as *matapuru*, in order to preserve himself from the arts of witchcraft as directed against him by persons known or unknown, he first of all obtained some strips of green flax-leaf, which he tied round his body and limbs, perhaps three or four round each, in divers places. This tying-up process is termed *ruruku*. He then recited an incantation to avert the shafts of magic. This peculiar usage was often followed by persons visiting a distant village, when doubtful of the disposition or intentions of the people thereof. It would be carried out shortly before the travellers arrived at such village.

When about to have the *wai taua* rite performed over them, the warriors of a war-party took off all their clothing, and each man tied a half-blade of flax round his waist. Under this belt in front each man thrust some green branchlets of *karamuramu* (*Coprosma*), which thus formed a sort of apron, which was known as a *maro taua*. The officiating shaman, or priest, then took a strip of green flax-leaf and walked into the water (stream or pond) wherein the rite was to be celebrated. He tied a knot in the middle of the flax line and placed it in the water. If a stream, then the knot was placed up-stream. The priest stood between the two ends of the flax—i.e., in the bight of the line—while reciting his charms or spells. *Ka kua he kuaaha tangata taua harakeke* (That flax is likened to the thighs of a person).

Again, when a Maori priest was called in to attend a sick person, one of his acts was to proceed to a clump of flax, where he pulled out one of the young leaves. If a screeching sound was made by the leaf as it was drawn out—a not uncommon occurrence—that was looked upon as a good omen: the patient would recover. This flax-leaf was placed upon the body of the patient when the priest repeated the charms by which he drove out the evil spirits, the cause of the man's illness. These malevolent demons were supposed to leave the sick person's body by way of the flax-leaf: hence, in this connection, it was termed an *ara atua* (demon-path). 

In modern times various preparations from flax have been used as medicines by the Natives, for diarrhoea and other ills. In cases of difficult menstruation in women a peculiar decoction is administered: it is made by boiling four pieces of flax-root and four pieces of a plant known as *aka taramoa*. For this complaint these materials must be taken from the east side of the plants, otherwise the medicine will possess no virtue whatever. In making a medicine for any other complaint the materials may be taken from any part of the plants. The roots of the *huhu* variety of flax are roasted and chewed as a cure for constipation.

#### SCENTS.

Under the above brief heading we propose to give a few notes anent the various scents used by the Maori in former times. These scents were various aromatic leaves and gums, used for the purpose of imparting a pleasing odour to persons or houses. Some were utilised wherewith to scent oil, which was then used to anoint the body. Fragrant leaves of various trees and plants were used for this purpose.

The sense of smell possessed by the Maori is certainly keen, though they do not appear to object so strongly to foul odours as do we. The term *kakara* is usually employed to denote fragrance—any appreciated odour; while the expression *haunga* would be applied to any smell not appreciated. The word *kakara* is also used as meaning “savoury,” as when applied to food.

The items used as scents in former times by Natives of the Tuhoe district were obtained from the following trees, shrubs, &c. :—

- Koareare*; syn., *rauikawa*. *Panax Edgerleyi*.
- Tanguru-rake*. An *Olearia*.
- Kotara*. Probably *Olearia Cunninghamii*.
- Tarata*. *Pittosporum eugenioides*.
- Pua-kaito*. *Celmisia spectabilis*.
- Kopuru*. A moss.
- Karetu*. *Hierochloa redolens*.

There are other shrubs, plants, &c., that provided aromatic leaves for the dwellers in other districts, but the above are the items that obtain in Tuhoe land. Of these, the *kotara* and *pua-kaito* are found only at Maungapohatu, in the Tuhoe district, while the *koareare* and the *tanguru-rake* are found only on the high ranges.

The leaves of the above trees, &c., as also those of the white *manuka*, were used in various ways. They were often enclosed in small bags or sachets, usually made of bird-skin with the feathers left on, which bag was suspended from the neck and hung down on the wearer's breast. The skin of the *toroa* (albatros) was prized for this purpose. The aromatic gum of the *tarata* tree was also placed in such sachets. Not only are the leaves of this tree most fragrant when crushed, but the gum that exudes from the

wounded trunk has also similar properties. It is obtained by making an incision in the bark and wounding the trunk, thus causing it to bleed. The gum, on being exposed to the air, soon solidifies, and is removed. It was often used for the purpose of imparting a pleasant odour to oil used for toilet purposes. The oil used was obtained from the berries of the *titoki* tree (*Alectryon excelsum*) and from the fat of the wood-pigeon. Sometimes this oil was scented by placing in it crushed leaves of white *manuka*, or of the trees and plants enumerated above. A calabash of such oil scented with gum (*pia tarata*) was termed a *taha tarata*. The skin of a *pukeko* or other bird would be dipped in this oil and then rolled into a ball with the feathers outward. This was known as a *pona tarata*, and was suspended from the neck of the wearer. It was a somewhat greasy neck-pendant.

Chaplets of the fragrant leaves, twigs, &c., were sometimes worn by women, and the sleeping-places or houses of persons of rank or of distinguished guests were occasionally strewn with these aromatic leaves. The *kotara* and the *pua-kaito* were sometimes transplanted and grown near the Native hamlets.

A gourd of scented oil used for anointing the hair was termed a *taha koukou*, from *taha*, a calabash, and *koukou*, to anoint. In an old Native song we find the following:—

He wai tarata ra  
Me patu kia kakara  
Kia ingo mai ai.

The last line explains one of the principal uses of scents the wide world over—viz., to attract the opposite sex. Women often wore belts made of the fragrant *karetu* grass. The flax belts which were made double were often filled with odorous herbs. Hence we see in song,—

Tu ake hoki, E hine  
I te tu wharariki  
Hai whakakakara mo hine ki te moenga.

We will now turn our attention to the fauna of the Tuhoe district—or, at least, that portion of it that entered into the domestic economy of the Natives of these parts.

#### LIZARDS.

The generic names for lizards are *ngarara* and *moko*. The following is a list of the various kinds found in Tuhoe land:—

*Tuatara*. *Sphenodon punctatum*.

*Koeau*.

*Moko-ta*.

*Moko-kakariki*. ? *Naultinus elegans*.

*Mokomoko*.

*Moko-tapiri*.

*Moko-papa*.

*Ngarara-papa*.

*Moko-parae*.

} ? *Naultinus pacificus*. These three names are applied to one and the same species.

The last-mentioned (*moko-parae*) is possibly a duplicate name for one of the preceding species. Again, *ngaha* was given as another name for the *mokomoko* by one Native, while another states that *ngaha* is a generic term, and includes the *mokomoko*, *moko-parae*, &c.

The *tuatara* was the largest of these lizards, and it was the only species that was eaten by the Tuhoe Tribe. It is said to have been numerous on the mainland in pre-European days, and certain places were famed for the number of these lizards they produced. Such places were Wai-o-hau,

Tawhiu-au, and Mount Edgecumbe. The latter hill is known as Pu-tauaki to the Maori. An old saying has it, "*Ko Putauaki te maunga, he ngarara tona kai.*"

There was no superstitious feeling among the Natives in regard to the *tuatara* and *mokomoko*, but it was deemed an evil omen to see any of the other species of lizards.

At the present time the *tuatara* seems to have been exterminated on the mainland, and is in this district only found on the Rurima rocks, off Matata. It is there found, say the Natives, often living in holes in the ground or rocks wherein the *kua*, a sea-bird, nests. Speaking of this bird, a Native said, "*He iro nona a te tuatara*"—meaning that the bird produces, or is the origin of, this singular lizard.

At page 152 of vol. v of the "Transactions of the New Zealand Institute" is an account of the Moutoki Islet of the Rurima Group, wherein Captain Mair describes the haunt of the *tuatara*, and states that two Ure-wera lads who accompanied him showed no signs of superstitious fear of the *tuatara*.

The lizard known as *koeau* to the Tuhoe Natives is probably the same as the *kaweau* of other tribes. Colenso states that it was known as *tuatete* in some districts. Local Natives describe it as being larger than the green lizard (*moko-kakariki*), as being light-coloured, and as living in the ground in winter-time; also, that it stands high up on its legs, the under-part not sagging down on the ground as with other lizards. The body is also thicker than in other species. Mehaka tells me that the body of this *koeau* looks as though it were covered with a fine fur or down, and compared its appearance to that of a newly-born kitten. It is said to be about 9 in. in length. Another Native says that it is marked *he mea whakairo*, adding that, "When seen it is an evil omen; disaster follows" (*Kia kitea, he aitua, he kaupapa tahuri*). It is also an evil omen to see the feces of the *koeau* about your dwelling, or on your path when travelling, for that lizard represents the spirits of your dead relatives, who thus send you a sign to join them in the underworld.

The *koeau* (sometimes called *koea*) is said to be extremely nimble, and could easily escape should any person endeavour to catch it—which is, however, the last thing a Native would think of attempting. If you take your eye off it for a moment it will have disappeared when you look again. It seems to have lived much on forest-trees. Tuhoean bushmen say that the *iro*, or embryo, of the *koeau* was sometimes found in *rua kaka*—holes in trees wherein the *kaka* parrot nested. It is a whitish or light colour at this stage. The *koeau* grows as large as a small *tuatara*, and grown specimens are of a reddish (*puwhero*) colour.

The Native who gave the above notes added, "It is a very bad omen to see a *koeau*. Te Rangi-ua saw one, and, observe—all his elders have died."

The *moko-ta* is said to be another name of the *moko-kakariki*.

The *moko-kakariki* is the common green lizard. An old Maori myth has it that this lizard originates from the bird called *kakariki*; that when the eggs of this bird are hatched out the portion of egg-matter left in the nest develops into an *iro*, or maggot, from which is developed the green lizard.

The *mokomoko* is a small dark-hued lizard with a long tail. Buller gives the scientific name of this species as *Tiliqua zealandica* in the "Transactions of the New Zealand Institute," vol. ix, page 319.

The *moko-tapiri*, also known as *moko-papa* and *ngarara-papa*, is said to be found in forest country, in holes in trees, &c. A carved representation

of this species on the large house Te Whai-a-te-motu, at Rua-tahuna, shows it of a short, squat form. It is said to be of a mottled colour. One very old man stated that it is about 4 in. or 5 in. in length, has a rough (*whewheke*) skin, and is light-coloured. Natives state that this lizard is the parent of the small cuckoo (*pipiwharauoa*). Another authority says that a kind of maggot found under the young chicks of the *tike* bird in the nest develops into the *moko-tapiri*, which differs much in appearance from the *moko-kakariki*, and is much feared by the Maori people.

The *moko-parae* is said to be another name for the *moko-kakariki*.

The *tara-kumukumu* is said to be a species of lizard somewhat resembling a *moko-parae*, but it may be a marine creature. It has an unpleasant habit of afflicting mankind, and any complaint that causes a swelling in the region of the thighs is attributed to it. This lizard is never seen now. It is sometimes confused with the *kumukumu*, a sea-fish, but the evidence is not clear.

Lizards are said in Maori myth to be the offspring of one Punga, who was a descendant of Tangaroa; hence the term *te aitanga a Punga* (offspring of Punga) is applied to reptiles. It is also applied to very dark-skinned or ugly, ill-favoured persons. The immediate offspring of Punga were Tu-te-wehiwehi, Tu-te-wanawana, and Kumukumu, the latter being a sea-fish. In Maori fable the latter adopts the ocean as its home, while the two former, representing lizards, keep to their land home. Hence the lizard said to the *kumukumu* (gurnard), "Go on your way to the ocean, but soon I shall see you caught and cooked for food." "Not so," remarked the latter, "but I shall see you destroyed by fire when the fern lands are burned." The lizard replied, "No one will injure me, for all will fear me on account of my appearance."

Lizards are sometimes seen in the Native wood-carvings. One is so seen on a *parata* on a food-store known as Te Hau-o-puanui, at Rua-tahuna. In this case a lizard is hanging from the mouth of a carved human head, as though it were to replace the tongue. The tail of the lizard is in the mouth, while the fore part of the body, the fore feet, and head hang down below the chin. In the house Te Whai-a-te-motu, hard by, is the carved figure representing an ancestor named Kahu-tarata, which has a lizard hanging from the mouth in the same way. This ancestor is said to have been a noted eater of lizards.

"*Ko Putauaki te kainga, he ngarara tana kai*" (Putauaki is the place where reptiles are eaten). This is an old saying applied to Mount Edgecumbe and its environs, on account of the scarcity of food there. *Tuatara* were formerly collected for food, placed in baskets, and taken alive to the village, where they were cooked and eaten. "If women of the party ate of the *tuatara* they would suffer for it, and probably perish, for they would be assailed by many lizards of that species." So sayeth the Maori.

"*Ko te kekerewai, ko te tuatara nga kai o Wai-o-hau*" (*Kekerewai* and *tuatara* were the foods of the Wai-o-hau district), said an old Native to the writer. The former is the small green beetle found on *manuka* bushes in summer.

Lizards were sometimes selected as guardians of property or places in former times, presumably on account of the dread the Natives had of them. In some cases a lizard would be located on a tree much frequented by birds, in order to guard it against poachers; or one was stationed near the forest *mouri* in order to protect or guard the same. In giving evidence in the Rau-ngahe Block case Te Kaha said, "Te Purewa had a *tutu* (tree on which birds are snared) at Te Rua-ngarara, near Taumata-miere. A stage was

made among the branches of that tree, and a lizard was kept at its base. Hence the place was called Te Rua-ngarara (the reptile's den)."

Lizards were often selected or looked upon as the form of incarnation of a god or demon. Thus the god Peketahi, of whom Te Purewa was the human medium, appeared in the form of a lizard. Another such demon, known as Te Hukita, appeared in the form of a *mokomoko*; while Tamarau, a deified ancestor who possessed the power of flying, is represented by a *koeau*.

#### INSECTS AND OTHER "SMALL DEER."

The generic terms for insects are *manumanu* and *ngarara*. In Native myth they are said to be the offspring of Punga, of whom we have already spoken—albeit some insects, &c., are credited with having other and apparently more immediate progenitors. Thus the mosquito and sandfly are said to be the grandchildren of Te Hekapona and Te Monehu, while the *purerehua* sprang from Pu-te-hue (origin of the *hue*, or gourd), the *kihikihi* from Hikawaru, the *puwerewere* from Katipo, the *ngaro* from Moenga-nui, its offspring being Iroiro (maggots). Earthworms originated from Panewharu, whose younger relative was Mokoroa; the next born was Whiti, and the next Tea. The enemy of these was Tangaroa (fish). The *anuhe* sprang from Nuhe. It was Nuhe who saw the fine markings of the *tawatawa* (mackerel), a descendant of Tangaroa, and forcibly took some of those markings for himself: hence the fine appearance of the *anuhe*. These marks are compared to certain patterns of tattooing. The *anuhe* and *toronu* are said to descend from the heavens—probably because their origin is not clear to the Maori—when they appear in great numbers on *kumara* plants.

We give below an incomplete list of Native names of insects, earthworms, &c., as collected in this district:—

- Anuhe*; syn., *hotete*. A species of caterpillar.
- Awheto*. *Cordiceps robertsii*.
- Hihue*. Hawk-moth.
- Huhu*. ? *Prionoplus reticularis*.
- Kahukura*. Butterfly.
- Kapowai*. Dragon-fly.
- Katipo*. A spider.
- Kekerengu*. A bug or beetle.
- Kekerewai*. Small green beetle seen on *manuka*.
- Kihikaha*. Cicada.
- Kikahi*. Cicada.
- Kowhitiwhiti*. Grasshopper.
- Kuharu*. An earthworm.
- Kurekure*. An earthworm (*Tokea esculenta*, Benham).
- Manumanu*. Generic term for insects.
- Moka*. Caterpillar.
- Moko-roa*. A grub found in *houhi*, *mako*, and *kaiweta* trees.
- Moko-tawhana*. A caterpillar.
- Mu*. Probably a species of spider.
- Namu*. Sandfly.
- Ngarara*. Generic term for insects, lizards, &c.
- Ngaro*. Generic term for flies.
- Ngata*. Slug, leech.
- Noke*; syn., *toke*. Generic term for earthworms.
- Noke-tai*. A species of earthworm.
- Ngoru*. A species of earthworm.
- Ngutara*. *Cordiceps robertsii*.
- Pakawere*. Winged grasshopper.
- Papaka*. A species of beetle.
- Pepe*. The *huhu* at one stage of development. ? Moth.



- Pihareinga*. Cricket. Said to be an introduced species.  
*Pokorua*. Ant.  
*Pokotea*. An earthworm (*Tokea uriweræ*, Benham).  
*Popokoriki*. } Ants.  
*Popokorua*. }  
*Purerehua*. Generic term for moths, and possibly includes butterflies not brightly marked.  
*Puwerewere*. } Spiders.  
*Pungawerewere*. }  
*Ro*; syn., *we*. The mantis.  
*Tai*. (See *Noke-tai*.)  
*Tarao*. An earthworm (*Rhododrilus edulis*, Benham).  
*Tarapoa*. A large moth.  
*Tataka*. (See description of *huhu*.)  
*Titi-pounamu*. Katydid.  
*Toke*. Generic term for earthworms.  
*Toke-rangi*. *Rhododrilus besti*, Benham.  
*Toronu*. A species of caterpillar.  
*Tuiaru*. A species of midge.  
*Tunga*. A grub.  
*Tunga-rakau*. } (See account of *huhu*.)  
*Tunga-rere*. }  
*Tungoungou*. The larva or chrysalis of the *huhu*.  
*Tutaeruru*. Some winged insect.  
*Waeroa*. Mosquito.  
*Wharu*. A species of earthworm.  
*Weri*. Centipede.  
*Weta*. An insect.  
*Whe*; syn., *ro*. Mantis.  
*Whih*. A species of earthworm.

A foolish or foolhardy person is compared to a moth that flies into a fire.

If many moths are seen around a fire at night, such is deemed a good night for eel-fishing.

The *awheto* is known to us as the vegetable caterpillar (*Cordiceps robertsii*; also, apparently, known as *C. hugelii*). In its living state it is known as *ngutara*. When it burrows into the earth and there dies it is termed *awheto*. These creatures are collected and burned and used to make a black tattooing-pigment. The *huhu* is classed as a *purerehua* by Natives: it is the hawk-moth. The larva or chrysalis of this species is found underground, in which state it is called *tungoungou*. When it acquires wings it is found upon the white blossoms of the *hue* or gourd-plant (but not on those of pumpkins). Natives state that it thrusts its proboscis down into the flowers in order to draw up the liquid found therein, and that it received its name from this act (*hi*, to draw up).

The *huhu* is a grub found in such timbers as *rimu*, *matai*, and *kahikatea*, which it attacks at the first sign of approaching decay, as when one of these trees has been scorched by fire. In its grub state this creature is known as *tunga-rakau*; when it ceases to bore, remains in a cell, and casts its skin, it is termed *tataka*. When its legs and wings are formed, though still white, it is known as *pepe*. When it emerges from the tree or log and flies about, a brown cockchafer, it is called *tunga-rere*. In its grub state this species is prized as an article of food.

Butterflies are called *kahukura*, though possibly the name is applied only to bright-coloured species. The *katipo* is a species of *puwerewere*, and is found on the coast, but apparently not inland. It is often found about *tauhinu* scrub. Its bite is much dreaded, and seems to cause considerable pain. The Native cure for *katipo*-bites is to hold the afflicted person over

a fire which is made to give forth much smoke, the process being known as *whakapua*. They were also often laid in a stream, so that the body was covered with water.

The *kikahi*, or *kihikihi*, or *kikihitara*, is the cicada or singing-locust. Said an aged Maori to the writer, "I will give you the song of a certain people of this world: those people are the *kihikihi*. They are an exceedingly numerous people. During the *waru patote* (eighth month of Maori year) those people cling to their ancestor, Tane-mahuta (settle on trees), and sing lustily. Here is the song of those people:—

"Kaore te waru nei  
Ka piri au ki a Tane-mahuta  
Ki toku tupuna  
Tu takere! Tu takere! Iere nui au  
Kohiti ko Makaro, iere au  
Popo nunui, popo roroa, ko wa e aha atu  
Na Tane ano au i awhi ki tua te arorangi  
Ka whiti mai ko te iwa  
Ka hoki au ki raro ra ki tona kainga  
Maua tahi ko taku taina ko Nuhe  
I tonoa iho nei ki tona tungane, ki a Rongo  
Hei manawa mona  
Koia ka tumoumoutia—ha!"

The cicada is treated in Maori fable as the personification of slothful carelessness, and the ant as the emblem of industry and forethought.

#### *Fable of the Ant and the Cicada.*

The *pokorua* (ant) said to the *kihikihi* (cicada), "Let us be diligent and collect food during the summer, that we may retain life when the winter arrives." "Not so," remarked the cicada; "rather let us ascend the trees and bask in the sun on the warm bark." Even so, the ant laboured at collecting and storing food for the winter. The cicada said, "This is true pleasure, to bask in the warm sun and enjoy life. How foolish is the ant, who toils below!" But when winter came, and the warmth went out of the sun, behold, the cicada perished of cold and hunger, while the ant, how snug is he in his warm home underground, with abundance of food!

As the cicada clung to his tree, rejoicing in the warmth of summer, he sang,—

He pai aha koia taku pai  
He noho noa  
Piri ake ki te peka o te rakau  
E inaina noa ake  
Ki te ra e whiti nei  
Me te whakatangi kau i aku paihau.

The following is said to be the song sung by the industrious ant:—

Hohoro mai e te hoa  
Kauaka e whakarua ara ra  
Ka turua ta te popokorua  
Rawe noa tangata ki whakahauhau—c  
Ki te keri i te rua mo te ua o te rangi  
Mo te makariri wero iho i te po nei—e  
Me te kahi mai ano i te kakano—e  
Hai ora mo tamaroto, kia ora ai—e.

The term *purerehua* (also *purehua*) is applied to moths generally, and perhaps also to butterflies of quiet colouring. Some species of *purerehua* were formerly eaten by Natives. The *mokorua* is a grub found in *houhi*, *mako*, and *kaiweta* trees. The *mu* is said to be a form of spider.

The *namu*, or sandfly, is a relative of the mosquito, according to Maori fable. They are descendants of Haumia and Te Hekapona, and children of Te Monehu (*monehu*, syn. *mokehu*, young shoots of the common fern, *rarauihe*). Other such descendants are the *ro* and *puwerewere* and other such insects. Namu-iria, a son of the *namu*, stole the *hau*, or vital essence, of Tu (god of war and origin of man), for which he was slain by Tu. Hence the sandfly people declared war against Tu—that is, against man. They still assail man in this world. They are exceedingly strenuous in their attacks upon man. The mosquito fears but two things—wind and smoke. The mosquito said to the sandfly, "Let us wait until evening before we attack man, lest we be slain. Then we will attack him, and I will buzz in his ears." But the sandfly would not consent to this. He said, "Though myriads of us be slain, yet will we give battle in the light of day. Though we perish, what matters it so long as we shed the blood of man?" Even so they went forth, and were slain in their thousands. The mosquito observed this, and said, "I told you to wait until nightfall. Now see how you have suffered."

E ki ana ahau, e taku tainaina  
Waiho kia ahiahi ka haere ai taua  
Ki te riri i to tuakana  
Ki rawa atu au : Waiho kia maru ahiahi  
Hei wheowheo i ona taringa.

Such was the song of the mosquito to the sandfly, and to which the latter replied,—

He ahakoa, e taku tuakana  
Te mate ai au  
I ana toto ka pakaru kei waho—e.

(And you, O mosquito, when you assail man at night, will be smoked to death.)

*Noke* and *toke* are generic terms for earthworms, of which a good many kinds have special names.

The *papaka* appears to be a kind of beetle.

The *toronu* is a kind of caterpillar which formerly infested the *kumara* plants, and gave considerable trouble to the neolithic agriculturalist. A day was set apart by the sorcerer priests for the destruction of this pest. It was brought about by means of a rite known as *ahi patu toronu*. You might like to know how it was that the crops of man came to be assailed by these pests. When the *kumara* was first obtained by mankind it was stolen by one Rongo-maui from Whanui (the star Vega), who seems to have been the custodian of that prized tuber. In a spirit of revenge, Whanui sent Nuhe (*anuhe*), Moka, and Toronu down to earth to destroy the *kumara* cultivated by man. These are the three species of caterpillar that prey on the *kumara* plants.

The *tutaeruru* is some form of winged insect, perhaps a beetle, which flies around in the evening with a booming sound. This species and the *kekerewai* were sometimes called the *manu a Rehua*. They were both eaten in former times.

In some districts *tapapa* is a lizard-name, but which species it applies to I cannot say.

#### MOLLUSCAN FAUNA.

I have collected a good many forms of land-shells in the Tuhoe district, the specimens being examined and named by Messrs. H. Suter and C. Cooper. They are of small size, with the exception of one, known as *pipiko* to the

local Natives, which is found up to about  $\frac{3}{4}$  in. in diameter. I will not annoy the guileless reader with a list of the above names.

The fresh-water shell-fish of this district are not numerous. The *kakahī*, or fresh-water mussel, is plentiful in Wai-kare Moana, and is also found in ponds at Te Papuni, Ruatoki, &c., but is not numerous elsewhere. These formed an article of food formerly, but are very insipid. *Unio zeledori*, from a pond at Te Papuni, has a very thick, heavy shell, that district containing limestone, which is not seen west of Maunga-pohatu. *Unio menziesi* (Gray), from a lagoon at Ruatoki, has a thin, fragile shell. Specimens obtained at Wai-kare Moana do not seem to be the same as *Unio waikarensis*, described by Colenso. The latter are light-yellow, and larger than those collected at the lake by Mr. Lucas and myself.

The *koura*, or small fresh-water crayfish, is not found in the Tuhoe district, so far as I am aware, save at Te Houhi.

The fish found in the rivers and streams of the district are eels, *kokopu*, *marearea* (syn. *inanga*), *titarakura*, *papanoko*, and the *upokororo*. The last-mentioned has now disappeared. Duplicate names of some of these species, as also names of varieties (from a Native point of view), will be found in a previous article on "Food Products of Tuhoe-land" in this journal.

#### THE KIORE, OR NATIVE RAT.

The *kiore maori*, or native rat, is said in Maori tradition to have been imported into these isles from Polynesia by the early migrants who settled on these shores, and was not an indigenous animal. These small creatures furnished a considerable amount of food to the forest-dwelling Native tribes in former times, their flesh being highly esteemed. The *kiore maori* is said to have been a clean and even fastidious eater—unlike the introduced rats—and hence its flesh may well have been very good eating.

Many persons stoutly maintain that the old Maori rat is still with us, has not yet died out; but it seems probable that they mistake the black introduced rat for the old-time *kiore*. A writer in the *Canterbury Times* newspaper states that enormous numbers of Maori rats appeared in the northern part of the South Island in December, 1884. These creatures cannot have been the *kiore maori*, but must have been the black rat alluded to above, or some other introduced species. I have never heard that the native rat ever appeared in such migrant swarms.

The above writer refers to his native rat as *Mus exulans*, and says, "The *kiore* is smaller than either of the two rats introduced into the colony by Europeans, and the female is somewhat smaller than the male. Their average weight is about 2 oz. The fur on the upper portions of the head and body is brown finely mottled with dark-grey. The sides of the body are lighter, and all the under parts, including the chin and the feet, are dirty-white. The species is found throughout Polynesia. In New Zealand it is sometimes called the 'bush-rat.' The proper name is *Mus exulans*." This article seems to have been taken from a paper by John Meeson, B.A., published in vol. xvii of the "Transactions of the New Zealand Institute." He states that the following species of rat are now (1884) found in New Zealand: (1) *Mus decumanus* (Norwegian rat), which has driven away the *kiore maori* into remote districts, if it has not exterminated it altogether; (2) a species of *Mus rattus*; (3) a smaller species (Professor Hutton's *Mus maorium*). The writer believes that the migrant swarm of 1884 consisted of the third species (*Mus maorium*), and that this was the old-time *kiore*

*maori*, though this statement scarcely agrees with his remarks (see *supra*) on *Mus decumanus*. Mr. Meeson thinks that there may have been two species of native rats.

Dr. Buller's *Mus novæ-zealandiæ* (Trans. N.Z. Inst. vol. iii, page 2, 1870) had "fur above bluish-black." This he claims was a specimen of the old *kiore maori*, or native rat. But this description seems to fit a bluish-black bush-dwelling rat now found in the Tuhoe or Ure-wera district, and which the old Natives say is not the old native rat, but one introduced by Europeans. My local information on this subject was obtained from two old men of the Tuhoe Tribe—Tutakangahan, born about 1830 or 1832, and Te Puia Nuku, who seems to be some years older. They both belong to cannibal days, both saw the old *kiore maori* in their youth, saw it die out, and the two introduced species overrun the land.

Diefenbach, writing in 1843, said, "The indigenous rat has now become so scarce . . . that I could never obtain one."

Tamarau Waiari, an old man of the Tuhoe Tribe, who was born in 1830, said that the old native rat disappeared in 1838 from the Ure-wera district. Though all the old men state that it rapidly disappeared after the imported species reached this district, yet it is improbable that it was exterminated in the space of one year. It may have been last trapped or last seen in 1838, or the imported rats may have first invaded this district and commenced to wage war against the *kiore maori* about that time. Anyhow, all agree that shortly after the arrival of the imported rats in this district the trapping of the native rat was given up, so scarce had they become.

Judge J. A. Wilson states that the *kiore* was unknown to the original Polynesian people of New Zealand; that it was not imported until the arrival of the last migration. This seems highly probable. It appears, however, that rat-bones have been found mixed with *moa* bones in the South Island, and also in a subfossil state.

The two species of rat found about my own primitive camp in the Tuhoe district, and which are bold and troublesome in winter-time, are the grey Norwegian rat (so called) and a bluish-black rat which I take to be *Mus rattus*. The former appears to be an omnivorous creature, and eats leather, with relish apparently, at times, and has of late made a hearty meal off an Angora-hair saddle-cinch.

Mr. Taylor White speaks of the *kiore maori* as being of a grey colour, and smaller than the so-called Norwegian rat (Trans. N.Z. Inst., vol. xxvii, 1894).

In vol. xxviii of these Transactions, page 3, Professor T. Kirk says, "The place formerly occupied by the Maori rat in the North Island is now so fully occupied by its old enemy the black rat as to afford a striking instance of complete replacement." The above writer states that the *Mus maurium* of Hutton is the old-time native rat, or *kiore maori*, and that it still survives at various places, north and south.

The origin of the rat, according to Maori myth, is as follows: "The origin of the *kiore maori* was one Hine-mata-iti, daughter of Pani (the parent or producer of the *kumara*, or sweet potato)." So said Old Pio of Ngati-Awa, of Te Teko, born about 1824. Again, he says, "The first fire-given by Mahuika to Maui was the little finger (*to-iti*) of her left hand. That *to-iti* represents Hine-mata-iti, who was the *matua* (parent) of the *kiore*." And again, "The ancestor of the *kiore* was Pani-tinaku—that is to say, a female child of Pani's. Her descendants are the *kiore*, who are a very numerous people. The reason of their being assailed (by man) was because

they began to steal the grandchildren (offspring) of Pani-tinaku—that is, the *kumara*.” And again, Pio says, “*Tenei iwi te kiore, ko Hine-mata-iti.*”

The Rev. R. Taylor, in “*Te Ika a Maui*,” gives *Hinamoki* as the creative parent, or origin, of the rat. We shall mention this term again.

We give below a list of Maori names for rats :—

*Hinamoki.*

*Matapo.*

*Moke.*

*Muritai.*

*Pou-o-hawaiki.*

*Tokoroa.*

*Hamua.* Given by John White.

*Maungarua.*

*Riroti.*

*Kiore.* Generic term.

} These names are known to the Tuhoe Tribe.

} Given in Williams's Dictionary.

The *hinamoki* is said by Paitini, of Tuhoe (who was born about the year 1843), to be the name of the old-time Maori black rat. He used the term *pango* to describe its colour, but this term is used to denote dark-brown, dark-blue, &c., as well as black. He stated that the *hinamoki* is extinct, but that a *pango* (black, or dark-coloured) foreign rat took its place. He himself has never seen the old Maori rat; it was extinct before his time—i.e., before he can remember, not necessarily before his birth. Some years after giving me the above notes he told me that the *hinamoki* was a dark-coloured rat, a bluey-black. Williams's Dictionary simply says, “*Hinamoki*, a kind of rat.” This is terse, and, if not sufficient for our purpose, at least shows the cautious mind of the lexicographer. But Mr. Taylor White (Trans. N.Z. Inst., vol. xxvii, page 259) is not bound by earthly rules, and says, “Investigating the structure or composition of *hinamoki*, we find *hina*, grey hair of the head—which would seem to mean white rather than our standard of a grey colour, as of a rat or rabbit. If so, it seems hardly applicable in this case. But *hina* is a personification of the moon, and supposing the original form to have been *mokai*, rather than *moki*, we have ‘*Hina's* pet’—the animal moving about at night.”

This is lovely! But why not carry the matter out to the bitter end—I mean, its logical conclusion? Observe: If the original form of *hina* was *Paraone*, and *moki* but a modern rendering of *kau*, then, on the lines of the above reasoning we have “Brown's cows”—which, after all, may be but an overgrown species of rat. There are endless possibilities in the *hinamoki*. And, besides, I know to my bitter cost that cows do move about at night. 'Twas but Monday se'nnight that, as Parearau sagged down on Tokorangi Hill, they (those cows), with evil in their hearts, did make entry into my truck-patch and work much havoc therein, strolling forth therefrom, as the blushing sun rose, followed by divers potsherds, brickbats, and choice profanity in three tongues. *Kati!* Enough! A truce to these idle jests. Here endeth the *hinamoki*.

*Matapo.*—Old Tamarau Waiari, of Tuhoe, told me that there were two kinds of native rat in former times—the *matapo*, a black or dark-coloured (*pango*) species, and the *tokoroa*, a grey rat. Whether these were two distinct species, or the greyness of the one simply the result of age, it is now impossible to ascertain. Tamati Ranapiri, of Ngatiraukawa, told me that the *matapo* was an old-time native rat, but he did not know the name *tokoroa* as that of a rat.

*Moke.*—Paitini, of Tuhoe, said that the *moke* was a native rat, but some years after said that it was the name of the light-coloured European rat (Norway rat), so that his evidence is doubtful.

*Muritai*.—This was given me by a Tuhoe Native as a name for rats, but he said that it was not used in this district, and that he did not know whether it applied to the native rat or an introduced species.

Akuhata te Kaha, of Tuhoe, says (27th August, 1908), "The *muritai* is the same as the *moke*. This species always travelled along their runs in single file, and closely following each other. The fur was dark-coloured (*pupango*), but not black. *He ahua pupango nga huruhuru o te muritai*. The *hinamoki* was *pango* (black, or dark-coloured)."

*Pou-o-hawaiki*, sometimes *pou-hawaiki*.—Old Tutakangahau, of Maungapohatu, a good authority, said, "I saw the native rat die out in my youth. We called the introduced European rat the *pou-o-hawaiki*. When I was a lad I went with a party to the summit of the main range at Maungapohatu, in order to obtain mutton-birds. On our arrival there we found that a new species of rat had appeared, and had eaten all the young birds." This witness was born about 1830.

Paitini says that the introduced black rat was named the *pou-o-hawaiki* by the Maoris. Mr. White quotes several authorities in his aforementioned paper as to the application of this Native name. Some applied it to the black rat (presumably *Mus rattus*) and some to the old-time native rat, but the best authority (old Tautai, of Taranaki) said it was the introduced European rat. Unfortunately it is not made quite clear as to whether Tautai meant *Mus rattus* or *M. decumanus*. Williams does not give this Native name, but Mr. White has its derivation all fixed up, albeit it was necessary therefor to alter the spelling of the word from its proper form: "*po* = night, *hawaiki* = the far country; and the combination means that the beast was a mysterious visitor from an unknown land shrouded in darkness." Having of late been sadly shaken by *hinamoki* and the identification of the ancient *Pani-tinaku* with Espani (? Spanish), I cannot quite grasp this matter. Was it the beast or the land that was shrouded in darkness, or were they both so shrouded?

*Tokoroa*.—Already referred to (see *supra*).

*Hamua* I know not, except the mention of it in John White's works as a name for rats.

*Maungarua* and *riroi* I have not heard of among Tuhoe.

We will now give a few notes touching upon the old native rat, as obtained from members of the Tuhoe Tribe.

The *kiore maori*, or native rat, nested in hollow trees, and also in burrows in the ground. They came out only at night, remaining in their holes in the daytime. They were more plentiful in *hunua* forests than in those termed *uruora*—that is, they preferred the high-lying forests to those of the valleys or other low lands. Their favourite resorts were the beech forests which occupy the summits and upper parts of the ranges of Tuhoe-land—roughly speaking, from about 2,000 ft. altitude upwards. Their principal food consisted of *hua tawai*, or beech-mast. Great quantities of these nuts are produced by the beech forests of the high lands.

The rats came out of their holes at night, and marched in single file along the *ara kiore*, or rat-runs, to their feeding-grounds. Besides the beech-nuts, they also ate the berries of the *patate* (*Schefflera digitata*), the *para* (? pollen) of the *kahikatea* or white-pine, and some other items. They appear to have been clean-eating creatures, avoiding foul matter, and resembling a squirrel so far as their food was concerned. They became very fat in winter-time, and were then trapped and snared in great numbers by the Natives. They became quite thin in summer-time, and were not taken in that season of the year.

The *ara kiore*, or rat-tracks, made by these small creatures to their feeding-grounds always ran along the summits of spurs, ridges, or ranges, and were often many miles in length, though it is unknown as to how far a colony of rats would ramble from their abode in search of food. They used the same tracks year after year. These tracks are sometimes termed *ara tahiti* (= *tawhiti*), or trapping tracks or runs, because the traps for taking the *kiore* were set on them. These tracks or runs were about 3 in. in width, and were smooth, and padded by myriads of little feet: thus they were quite bare, and void of vegetation. The traps—of which more anon—were set every 3 ft. or 4 ft. along the run. A rat-run might be owned by many different persons, and long ones by different *hapu* or sub-tribes, each person interested having a right to a well-defined portion of the same. Poaching on another's portion was not permitted, and would cause trouble, possibly fighting. As a general rule, among the Tuhoe Tribe these rat-trail privileges were acquired or retained by the female members of a family or *gens*, the males getting the *toromiro* trees (on which birds were snared). When the rats, in passing along their runs, bit off leaves of vegetation and dropped them on the track, then it was known that they were in good condition, fat and plump; hence the trappers would get to work, and the rat season was opened in due form. An experienced trapper, on observing the above-described signs, would say, "*Kua whariki te ara kiore*" (The rat-run is covered). "*Na, kua momona te kiore*" (Then it was known that the rats were fat).

An ancient saying is, "*Kua kitea a Matariki, a kua maoka te hinu*" (When Matariki is seen, then game is in good condition). This, I believe, applies to the heliacal rising of Matariki (the Pleiades), which would mean that the game-trapping season opened early in June.

It would appear that the Maori noted the heliacal rising of stars as signs of divers events, &c. "The appearance of the Pleiades on the eastern horizon just before sunrise, in June, marked the commencement of the Maori year," says Tutakangahau. The appearance of Whanui on the eastern horizon in the morning was the signal for lifting the *kumara* crop. Whanui is the star Vega.

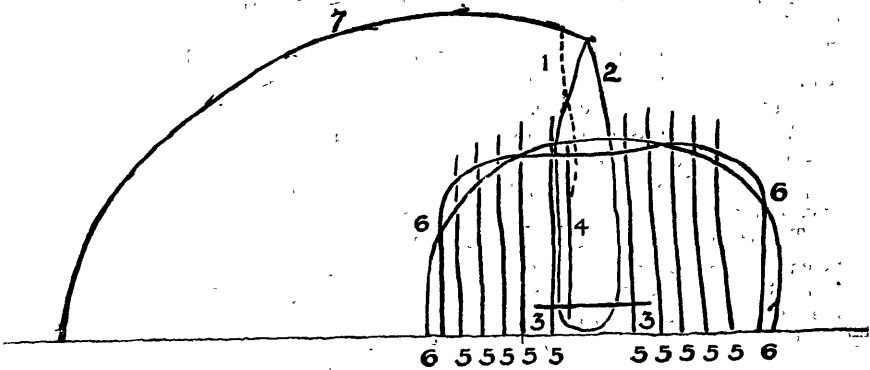
*Kiore* were trapped on the dark nights of the moon. If the traps were set on moonlight nights, then the rats sprung the snares and escaped (*ka turupangatia nga tahiti e te kiore*).

In Taylor's "*Te Ika a Maui*" may be found some notes concerning the *kiore maori*. He gives two of the *karakia*, or charms, used, one of which is a *taitai*, but the translations thereof are doubtful. He also states that the hunting-parties cut tracks for the rats, which tracks were made in a perfectly straight line up hill and down, however rough the country, otherwise the rats would not follow them. I cannot get any old Maoris to agree to this statement, and hence do not believe it. The *kiore* made its own runs, which were assuredly not straight, for they followed the tops of ridges, with all their dips, angles, and sinuosities. Trappers made no tracks for the rats.

The *kiore maori* was taken in two ways in Tuholand—by *tahiti* (trap or snare) and by the *torea* (or pit). Of these, the *tahiti* appears to have been the most frequently used. The most general form of this word is *tawhiti*, but Tuhoe always use the form above given, even as they use *hatai* for *whitau*. Williams gives "*Tawhiti*=a snare, trap." Another form of rat-trap was termed a *pokipoki*. These two forms we will endeavour to describe.



*Tahiti kioe*.—The two *rupe* are first placed in position. These are two pliant wands. One is forced into the ground at both ends, so as to form a small archway across the rat-track. The other is erected close to it, in a similar way, but is twisted round the first one so as to leave a narrow space between them at the top, through which space the two main *turuturu*, or uprights, are passed, as also the loop snare. These *rupe* are usually pieces of *pirita* (supplejack, a climbing-plant). Twining one round the other prevents them from parting or becoming too loose. The two main uprights (*turuturu*) are thrust down through the uppermost space between the two *rupe*, one on either side of the central opening or passage, which passage is on the rat-run. The other uprights are simply stuck in the ground outside but close against the *rupe*, and are placed close enough together to prevent a rat from passing between them. The only space through which a rat can pass is the central one on the track, in which space the snare loop is suspended. The *whana*, a strong pliant rod, usually a piece of supplejack, has one end thrust securely into the ground, and to the other end is attached the *tohe* or looped cord. This small cord is not formed into a



TAHITI KIOE.

1. Aho. 2. Tohe. 3. Kurupae. 4. Taratara. 5. Turuturu. 6. Rupe. 7. Whana.

running noose like that of a bird-snare, but has both ends attached to the *whana* or spring stick, so that the rat is caught in the bight of the cord. Also, attached to the end of the *whana* by means of a string is the *taratara*, a piece of small stick about 4 in. in length, and with which the trap is set. The string (*aho*) or cord is fastened to the *taratara* about  $\frac{1}{2}$  in. or  $\frac{3}{4}$  in. from the end of the latter.

In order to set the trap, the operator bends down the *whana* and passes the *tohe* or looped (doubled) cord down between the two *rupe* until that cord nearly touches the ground, the loop being arranged so that the cord hangs close to the two main uprights on either side and does not obstruct the passage. The trapper then, while holding down the spring stick with one hand, takes the *taratara* in the other, and places it in a vertical position at one side of the open space, near the upright. The projecting upper part of the *taratara* is placed on the opposite side of the *rupe* to that on which the securing-cord (*aho*) is, so that the *rupe* rests in the crotch at X. The trapper then holds the *taratara* in a vertical position while he slips the *kurupae*, a small, short stick, between the lower end thereof and the two main uprights. The



strain on the *taratara* holds the *kurupae* in position until the latter is forced down, and free, by a rat endeavouring to pass over it through the space, and so along his old-time trail. The *kurupae* is near the ground, so that a rat cannot pass under it. When he treads on it, the pressure forces it down, releasing the *taratara*, the lower end of which flies upwards, and the upper end slips away from the *rupe*. Thus the *whana* is released and springs upwards, drawing the looped *tohe* up between the two *rupe*. But Master Kiore is right there in that loop when it is released; hence his body is yanked upwards and jammed against the *rupe*, there still being a certain amount of strain on the loop-cord (*tohe*) and *whana*. The latter cannot become wholly free while there is any body in the *tohe* large enough to stop its upward passage through the two *rupe*.

The strain of the *whana* is primarily on the *aho*, then on the *taratara*. There is the upward pressure of the latter on the *rupe* and the side pressure on the *kurupae*. Q.E.D. The *aho* passes down outside the *rupe*. The *tohe* hangs loosely; there is no strain upon it until a rat is caught and jammed against the *rupe*. *Kati. Kua marama pea!*

No bait is used when setting these traps on the runs or tracks, but a bait is used when they are set away from them, as on the feeding-grounds. The bait used was the fruit of the *patate* tree. It was placed on the ground near the trap, and on the opposite side to that from which the rats were thought to be likely to come.

When a rat was caught by the loins it was able to move to a certain extent, and would endeavour to free itself by gnawing the *rupe* or the snare loop. These *kiore kai apuapu*, as they were termed, should they escape, would never be caught again, say my informants: they became too knowing.

The *waharua* was a rat-trap having two entrances—a double trap, which faced two ways. It was really two traps like the one above described, erected a little distance apart. The side spaces between them were blocked with little fences of upright sticks.

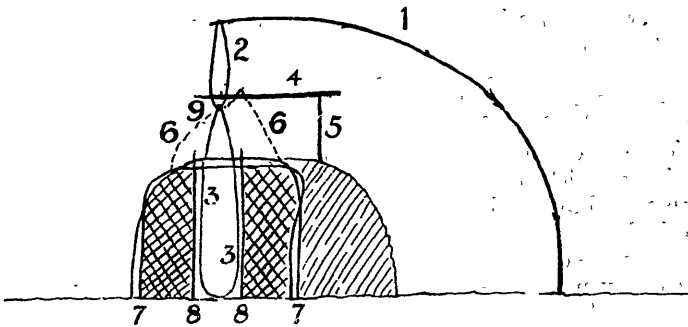
The *tahiti whakaruatapu* (cf. *ruatapu* in Tregear's Dictionary) was a rat-trap having several entrances thereto, and a snare for each. This I have not seen, but the others have been constructed for my benefit by several old Natives.

When rat-trappers were setting their traps on an *ara tahiti* they would carefully remove any leaves, &c., that had fallen on the rat-run.

We now come to that form of rat-trap known as a *pokipoki*. This form of trap was used to take those suspicious or cunning rats that declined to enter the ordinary trap. They seemed to object to passing over the *kurupae*. Like Brer Rabbit, they were "some cautious" and "plenty scared."

In fixing this trap the *rupe* are fixed as before, but the *turuturu*—generally only two of them—are longer. They are inserted in the same manner, and the upper parts, that project above the *rupe*, are bent back, half broken, until their ends rest on the ground. The large leaves of the *wharangi* tree are then used as a lining for the little trap-house behind the *rupe*. These leaves are placed over the bent-down ends of the uprights by which they are supported. Other leaves are used wherewith to block up the front of the trap, with the exception of the central space, where hangs the snare loop, and through which the rat attempts to pass when it sees the bait within. The diminutive enclosure is then covered over with some loose earth, until it resembles a little mound, sloping downwards to the back end. This little hut, or *rua* as it is termed (*rua* = tunnel, cave, hole, pit), is about 8 in. long, and the bait is placed a few inches back from the entrance, inside.

The *katara*, or small upright stick, is thrust down through the roof until the lower end is just above the floor of the little hut. To this lower end is secured the bait of *patate* berries. One end of the *whana*, or spring rod, is thrust into the earth; to the upper end is secured a double cord or loop, knotted near the middle. This is the *tohe*, or snaring-loop. The cord termed *whiti* is secured at each end to the *rupe*, on either side of the entrance. To set the trap, the upper end of the *whana* is bent down, the lower loop being passed between the two *rupe*, and arranged as in the common trap. The *kurupae*, a short stick, is slipped under the *whiti* cord and through the



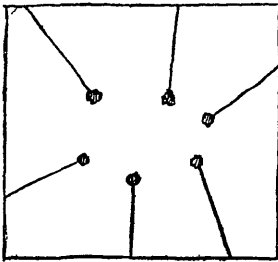
RAT-TRAP, POKIPOKI.

1. *Whana*, spring stick. 2. Upper loop of *tohe* cord. 3. *Tohe*, or snare loop. 4. *Kurupae*. 5. *Katara*. 6. *Whiti* cord. 7. *Rupe*. 8. *Turuturu*, or uprights. 9. Knot of loop.

upper loop of the *tohe*, the rear end resting on top of the *katara*. The *whiti* cord is between the *tohe* and the *katara*. Thus the *whiti* saves the situation, takes the upward strain of the *whana* until a rat, pulling at the bait, tugs the *katara* outwards, thus releasing the *kurupae*, which flies off into space. The bent *whana* flies up, dragging up the looped cord, and jamming the rat against the *rupe*, as before. While the trap is set the strain on the *tohe* is, of course, on the knot, the lower end hanging slack. When the trap is sprung the strain is on the rat. The next act is the arrival of John Tenakoe, who pops Mr. Kiore into his game-bag and resets the trap.

The *torea*, or *kopiha kiore*, is the pit trap for taking rats. The first of these two names is the one in common use among the Tuhoe Tribe.

The following was the *modus operandi* in this district. A hole or pit about 4 ft. deep was dug in a suitable place. Some bait was placed at the bottom of the pit, and a piece of wood was placed in the hole in a slanting position, and down which the rats travelled in order to get at the bait. After the food so placed for them was consumed the rats would return above ground by the same route and go about their other business. After the rats had got accustomed to going into the pit for the food the ladder was taken away, and a number of slight sticks were stuck in a horizontal position into the ground at the mouth of the pit, so that each stick projected over the mouth of the pit. On the end of each stick a bait was tied. The rats walked out on these sticks in order to

ENTRANCE TO A TOREA PIT TRAP,  
BAITED.

get at the bait, but so slight were the sticks that it was impossible for the rats to turn or return upon them, hence they fell into the pit beneath.

Sometimes a cooked bait was used instead of berries. Presumably the bait of cooked food was the more savoury, and attracted more rats than one of ripe berries. Pio, of Ngati-Awa, born *circa* 1823, says, "This is about rat-killing. Hine-mata-iti was the origin of the rat folk. A pit was made, food was roasted (as bait) in the evening, and stuck on sticks in the middle of the pit. At night the rats go to eat it. The trappers go and find a pit full of rats. They are slain and placed in baskets. Two, three, or four basketfuls may be secured in a night. I trapped rats in the days of my youth. It was interesting work. The rats were very fat."

An interesting note was given to me by Tamati Ranapiri, of Ngati-Raukawa, anent the genial *kiore maori*: "There were two ways of taking rats—viz., by the *tawhiti*, and by digging a pit. A pit would be dug some 4 ft. or 5 ft. in depth, and in such a manner that the top overhung, the pit being wider at the bottom than at the top. A peg was inserted at the bottom of the pit, to which was attached the cords by which the rats descended. Food was placed in the pit as baits, such as berries, &c. When this bait was consumed, then more would be thrown in. That same night the trap would be visited, and the rats slain. The trapper would know right well the particular cord by pulling which he could haul up all the cords, or *aka*, placed for the rats to descend by. By pulling this cord he hauled up all the cords, as also the peg to which they were fastened at the bottom of the pit. He then jumped down into the pit and killed the rats. After these rats were taken out the pit was swept and cleansed, so as to do away with the smell of rats, and so that other rats would enter the pit when it was rebaited. I have heard that the *kiore* swam from Hawaiki to Aotearoa (New Zealand), that they swam hither together. A leader swam in front, the next rat took the leader's tail in his teeth, the next took the tail of No. 2 in his teeth, and so on to the last rat."

In the above we note that, among Ngati-Raukawa, cords or forest creepers were used as rat-ladders in the pits. The final remark, about rats swimming hither from Hawaiki, is of interest. In an article already quoted (*Trans. N.Z. Inst.*, vol. xvii, page 200), Mr. Meeson mentions a swarm of rats that swam across the passage leading into the harbour at Nelson. The lemming of North Europe is said to have swum out to sea in hordes. Hurae Puketapu and other Natives of Wai-kare Moana have informed me that in former times, when the native rat was numerous in those parts, they sometimes took to the water in numbers. On misty nights, when fog lay close on the waters, the rats, frightened by the cries of the *ruru* owl, would swim out into the lake until they were drowned. Some say that the native rats would so take to water when the pollen(?) of the *tawai* tree lay thick on the water's surface.

Return we to our *tahiti kiore*, or rat-traps. Te Puia Nuku, an old man of Tuhoe, who was a fighting-man in 1852, and died on the 20th December, 1906, told me that on the opening day of the rat-trapping season all the trappers were *tapu*. As a man set his first trap he would repeat over it the following charm:—

Kiore—e—e !  
 Hai konei ra piko ake ai  
 I te whare nui, i te whare roa  
 E tataia e te mahanga  
 Ko rua hamuti te kiore  
 Te mau ana.

This was repeated over the first trap set only. In Nga Moteatea another version of the above gives the first line as "*Tawhiti—e!*" which reads better. Te Puia put it, "*Ka oti te rapiko, ka karakia i tenei,*" &c. (When the trap was set he recited this). The words *whapiko*, *tapiko*, *kopiko*, and *rapiko*, which seem all allied to and bear a similar meaning to *whakapiko* (= to bend), are all employed to denote the forming of looped snares and the bending-down of the *whana* in trap-setting.

The trappers, on returning to the camp or hamlet on this first day of the season, were obliged to be very careful in their behaviour. They might not speak for the balance of the day and following night. They ate their food in silence, and slept without removing their garments. The next morning they went to take the rats from the traps. The *tapu* was then lifted from them and their employment, and they returned to their normal condition.

Tutakangahau stated that the *tapu* of opening the rat-trapping season was similar to that pertaining to birds. When a good many rats had been taken on the first day, and collected, a time was appointed for the *huhuna* or *whakanoa* rite (lifting of the *tapu*, the making common, opening of the season). This function often continued for two days. There were many *karakia* (charms, invocations, &c.), says Tu, pertaining to the opening of the rat, fish, and bird taking seasons, taking the *tapu* off the forest, &c. Some of them came under the generic term of *kaha*. Such were the *tumutumu*, the *tuota*, and the *motumotu*. The *tuota* was a very *tapu* charm, recited in order to bring plenty of rats, birds, or fish to trap, snare, or net. If a hunter employed this *kaha* he would deem it necessary, on his return from the forest, to perform the *whangai* rite. This was an offering to and placation of the *atua* (gods, demons). The *motumotu* was a *noa* charm, free from *tapu*, and could be used by any person, but its object was the same as that of the *tuota*. It might be asked of a fowler, fisher, or rat-trapper, "*Ko wai to kaha?*" (What is your *kaha*?) and the answer would be, "*Ko tuota*" (It is *tuota*), or "*Ko motumotu*" (It is *motumotu*), or whichever it was.

The following charm or invocation used in trapping rats was given by Himiona Tikitu, of Ngati-Awa:—

Taku turupou nei  
Ko whakaihi nuku, ko whakaihi rangi  
Ka poua nei e au  
Ki runga ki a Papa-tuanuku  
E whakamau atu ana  
Ki te tupua, ki te tawhito.  
Poua te pou, tu te rupe  
Ko te pou na wai?  
Ko te pou na Toi.  
Ko te rupe na wai?  
Ko te rupe na Toi.  
Toi i hea?  
Toi i hekeheke iho i a Maui-mua  
Poua te pou, tu te rupe  
Te Pu, te More, te Weu, te Aka, te Rea  
Tuia a uta, tuia a tai  
Poua te pou, tu te rupe  
Kokoia i raro i a Papa-tuanuku  
Ki a tutangatanga.  
Nau mai ki roto  
Poua te pou, tu te rupe  
Kokoia i raro i a Tane-mahuta  
I te wao kia tutangatanga

Nau mai ki 'roto  
 Poua te pou, tu te rupe  
 Kauhou ariki tu hokai rangi  
 Tuia i runga i te ara o Tane  
 Ko Pipiri te ara i heke ai  
 Ki raro ki Tauwhaiti  
 Tuia i raro i te ara o Tangaroa i uta  
 Ko Pipiri te ara i heke ai  
 Ki Tauwhaiti  
 Tuia ra, tuia ra!

This is said to have been a charm used by Toi, after whom Te Whaiti-nui-a-Toi was named. The *turupou* mentioned was, says Tikitu, a staff made of greenstone, that was handed down from one generation to another, to Haeana and others.

As to the method of cooking the native rat in former times, they seem to have been either roasted, steamed, or potted in their own fat. The Natives say, "*Ka tunia huruhurutia te kiore*"—by which I understand that they were roasted with the skin and fur on.\* When cooked in the *hangi*, or steam-oven, it was by the *kopaki* process, as the *kokopu* fish are cooked. Leaves of the *pororua* plant were wrapped round the rat, which was then cooked in the oven, the leaves being also eaten. Fronds of the *petipeti* fern were sometimes used as a wrapper (*kopaki*) in cooking rats or birds from which the bones had been taken away. Te Puia said, "The native rat was plucked as is a bird, the fur coming off quite easily. The tail, head, and feet were taken off, and the bodies were packed in close-woven water-tight baskets, termed *poutaka*, woven from green flax. These were carefully lined with fronds of the *petipeti* fern, and then with the large leaves of the *rangiora* shrub, so as to exclude the water. The baskets were then immersed in the waters of a stream. When wanted, the rats were taken out of the basket, placed in a bowl formed of half a calabash, and therein stone-boiled."

Rats and birds when potted down in their own fat are alike termed *huahua*, and these fat foods are often alluded to simply as *hinu*.

To prepare rats for potting they were plucked like birds, which exposed a clean, white skin—"me te kiri pakeha" (like a white man's skin), said my informant. The extremities having been cut off, the entrails were taken out, and the bones pulled out. The latter process is described as *kounu* (cf. *unu*=to draw out). This is not the same process as that of *makiri*, by means of which the bones are taken out of birds. In the latter case the flesh is cut away from the bones, but in the *kounu* the bones of the native rat are said to have been pulled out easily without cutting, the flesh appearing not to cling to the bones.

The *ngakau*, or entrails, of the native rat were highly prized as a food item—"the best part of the rat," says an old-timer. They were placed, without any cooking, in calabashes, and so kept until the following spring. They were then eaten with various greens, which come under the generic term of *puwaha*. When the vessel was opened the entrails were no longer recognisable as such, but simply appeared as a mass of fat matter.

The rats were placed in a wooden trough, or *kumete*, and there left for some time, until much of their fat melted and collected in the trough. Stones were then heated in a fire hard by and dropped into this fat, where they were stirred and moved about with sticks, this process being continued until rats and fat were cooked, or sufficiently so to please the Maori

\* Probably only cooked so when cooks were pressed for time.

palate. The rats were then put in calabashes, and the hot fat was poured over them. These vessels were then carefully covered and placed in the food-stores for future use.

Paitini says, "*Ko te huahua manu kē mahia ki te ahi matiti; ko te kiore anake i rereke, ko tena i kohuparatia*" (The *kohupara* method of cooking consists of wrapping the *kiore* or bird in an envelope of leaves, and then cooking in a steam-oven). The Tuhoe Natives, some years ago, were in the habit of eating the introduced rats, but I am not sure which one it was that was so utilised. They were taken in *tawhiti* set around the potato-gardens, and are said to have been very fair eating when fat on a diet of *toromiro* berries, but by no means equal to the extinct *kiore maori*.

The Natives were in the habit of camping on ranges distant from their forts or hamlets in winter-time, for the purpose of trapping rats and snaring birds, but they could do so only on lands belonging to them, or where they had been formally given a right to take game. Any unauthorised trespass was strongly resented, and often ended in bloodshed. A party of Ngati-Koura, who went from Rua-toki to take game in the forests near Parahaki, were attacked by the Rua-tahuna clans on the Wai-hou tributary of the Mimiha Stream, and severely defeated.

*Kiore pao whatu* is a term applied to rats in poor, thin condition, while a *kiore tapapa* implied a fat rat, large and in good condition. The word *haukeke* denotes the thieving propensities of rats. A *pataka pu kiore* is a food-store so constructed that rats cannot gain entrance thereto. It is supported by four posts, the tops of which are about 5 ft. above the ground-line. Two broad slabs are placed on the tops of these posts, and the store built on these slabs. Inverted tin milk-dishes now often take the place of the wooden slab. No permanent step or ladder is used to gain entrance to these stores: the notched pole or log so used is placed in position only when in use.

"*Honoa te hono a te kiore*" is an old saying of the Maori, meaning that those addressed should keep advancing, one after another, without cessation, as the rat was wont to march along the rat-runs. Rats were sometimes termed *niho roa* (long or big teeth), on account of their nibbling, thieving habits. A *tau niho roa* implied a season when rats were very numerous, and bold in attacking crops, food-stores, &c. Hence the underground potato-pits are usually lined with slabs of *pu-nui*, or *Dicksonia fibrosa*, which it is said rats cannot gnaw through.

"*Me te kiri kiore*" (Like a rat's skin) is used to denote a smooth, fine surface, as of a woven garment, &c.

On returning from setting rat-traps the trapper would speak but little, and that in a low tone, lest he be unsuccessful in his trapping. Should he have a *tumeke*, or convulsive start, in his sleep, it would thus be known that some rats were badly caught—i.e., were caught in snares by the body and not by the neck.

Torea-a-tai is a place-name at Maunga-pohatu, the hamlet of the Tamakai-moana clan at that place. (For *torea*, see *ante*.)

After setting the traps on the first day of the season, says one authority, no trapper would partake of food until after the *tapu* was lifted on the following day. This was the occasion of one of the many ritual feasts of the Maori.

If when a trapper examined his traps the first one was found empty it was viewed as a sign of bad luck—but few rats would be found in the other traps.

Such are some items of the methods, customs, and superstitions of the rat-trappers of Tuhoe, the *hanga whapiko tahiti*.

### BIRDS.

We will now give our notes on the bird-lore of the Tuhoe district, some account of divers ways of taking them, as also many myths, customs, rites, &c., concerning the same. We begin with a list of names of all birds found in the district, or that were so found in former times, many of them being now extinct, at least so far as Tuhoeland is concerned :—

- Hakoke* ; syn., *whekau*. Extinct here.  
*Hakuwai*. Perhaps mythical. Extinct here.  
*Hirorirori* ; syn., *riroriro*, &c.  
*Hiwaiwaka* ; syn., *piwakawaka*, &c.  
*Horirerire* ; syn., *riroriro*, &c.  
*Huia*.  
*Kaeaea* ; syn., *karearea*.  
*Kaha*. No longer seen.  
*Kahu*.  
*Kaka*.  
*Kakapo*. No longer seen.  
*Kakariki* ; syn., *porete*.  
*Kakaruwai* ; syn., *pihere*, &c.  
*Kakawariki*.  
*Kamana* ; ? syn., *kaha*.  
*Karearea* ; syn., *kaeaea*.  
*Kareke* ; syn., *koreke*. Extinct.  
*Karu-patene* ; syn., *pihipihi*.  
*Karuwai* ; syn., *pihere*, &c. ; also *kakaruwai*.  
*Kawau*.  
*Kea*. No longer seen.  
*Kereru*.  
*Kiwi*.  
*Koau* ; syn., *kawan*.  
*Koekoea*.  
*Kotareke*. The New Zealand quail.  
*Kokako*.  
*Koko* ; syn., *tu*.  
*Kokorihimako* ; syn., *korimako*, &c.  
*Kopara* ; syn., *korimako*, *makomako*, *rearea*, &c.  
*Koreke* ; syn., *kareke*. No longer seen.  
*Korirerire* ; syn., *riroriro*, &c.  
*Korimako* ; syn., *kopara*, &c.  
*Kotare*.  
*Kotuku*. No longer seen.  
*Kukurutoki* ; syn., *toetoe*.  
*Manapau*, or *manapou*.  
*Mata*.  
*Matapu*.  
*Matuku*.  
*Mimiro*.  
*Miromiro*.  
*Moa*. Extinct.  
*Moho*. No longer seen.  
*Moho-patatai*.  
*Mohorangi*.  
*Momolawai* ; syn., *momoutu* and *tourua*. No longer seen.  
*Momoutu* ; syn., *momotauai* and *tourua*. No longer seen.  
*Nakonako* ; syn., *pipiwharauoa*.  
*Nonoroheke* ; syn., *riroriro*, &c.  
*Oho*.  
*Pakura* ; syn., *pukeko*.  
*Papango*. Black teal.  
*Papu*, or *papua*. A large cormorant.



*Parera*. Brown duck.  
*Pekapeka*. The bat.  
*Pihere*; syn., *karuwai*, *pitoitoi*, &c.  
*Pihipihi*; syn., *karu-patene*.  
*Pioioi*; syn., *whioi*.  
*Piopia*; syn., *koropio*.  
*Pipitori*; syn., *toirua*.  
*Pipiharauroa*; syn., *nakonako*.  
*Pitoroi*; syn., *pihere*, &c.  
*Pitongatonga*.  
*Puwaiwaka*; syn., *tiwaiwaka*, &c. Fantail.  
*Pwakawaka*; syn., *tiwaiwaka*, &c. Fantail.  
*Pohowera*.  
*Porete*; syn., *kakariki*.  
*Pukeko*; syn., *pakura*.  
*Rearea*; syn., *korimako*, &c.  
*Rororo*; syn., *nonoroheke*, &c.  
*Ruru*.  
*Tarapo*.  
*Tareke*; syn., *kareke*.  
*Tataeko*; syn., *popokotea*, *tataihore*, &c.  
*Tataeto*; syn., *popokotea*, *tataihore*, &c.  
*Tataihore*; syn., *popokotea*, &c.  
*Tatangaeko*; syn., *popokotea*, *tataihore*, &c.  
*Tataruwai*; syn., *pihere*, *toutuwai*, &c.  
*Tieke*. No longer seen.  
*Tihe*. No longer seen.  
*Tirakarakā*. Fantail.  
*Titi*. Mutton-bird.  
*Titiporangi*.  
*Tititipo*.  
*Tititipounamu*; syn., *toirua*.  
*Tiwawaka*. Fantail.  
*Tiwakawaka*. Fantail.  
*Toetoe*; syn., *kukurutoki*.  
*Toirua*; syn., *momotawai*. No longer seen.  
*Totorori*. See *Rororo*.  
*Totororire*; syn., *rororiro*.  
*Turi-whakoi-rangi*. A sea-bird.  
*Tuturi-whatu*.  
*Weka*.  
*Whekau*; syn., *hakoke*.  
*Weweia*.  
*Wenweia*.  
*Whenakonako*; syn., *pipiharauroa*.  
*Whio*.  
*Whioi*.

We give below a few notes concerning these birds, and identify them where possible.

The *hakoke* was also known as *whekau*. It was about the size of the *ruru*—some say larger. The Rev. H. Williams identifies it as the laughing-owl (*Sceloglaux albifacies*). The Natives say that this bird lived in holes and crevices in cliffs. Such a place was termed a *pari hakoke*. A saying often heard is "*Me te pari hakoke*" (Like a *hakoke* cliff), as in speaking of a steep and stony cultivation-ground. These birds are no longer seen in this district, but Paitini states that he saw them here when he was a youth—say, in 1855. The *hakoke* nested in cliffs.

In vol. xviii of the "Transactions of the New Zealand Institute," at page 97, Mr. Reischek states (in 1885) that he never saw the *whekau* in the north, and that it was extremely rare in the south. It preyed mostly on rats. He refers to it as *Athene albifacies*. At page 63 of vol. iii of the same journal Mr. Potts gives some information concerning this bird.

*Hakuwai*.—This is possibly but a mythical bird. The Native account is that it was a large bird, very rarely seen. It flew at a great height above the earth, in the night-time, and its cry is given as “*Hakuwai, hakuwai! Ho!*” It is probably the *hokioi* of other tribes. Native tradition says that this bird had four joints in each wing, and that it lived in the sky. Old Pio, of Ngati-Awa, has the pedigree of the nimble *hakuwai*,\* which is now no longer seen or heard. He says, “The ancestors who live in the sky are Whaitiri, Nuhe, Toronu, Moka, and Hakuai.” (The first is the emblematical name for thunder; the next three are names of three species of caterpillar that when they appeared on the *kumara* plants were said to have come from the sky.) “Tangaroa’s offspring were Makara, Tangaroa-akiuki, Tangaroa-a-roto, and Rona. Tangaroa-akiuki had Tu-te-wehiwehi, Tu-te-wanawana, Noho-tumutumu, Moe-tahuna, Haere-awaawa, Turuki, and Hakuai.” Again Pio says, “The descendant of the star Rehua (Antares) was Hakuai. This bird always stays in the heavens. It has four joints (*tuke*) in each wing, and was heard flying at night and crying ‘*Hakuai, hakuai! Hoho!*’ It was an evil omen to see that bird. Te Rangihoki, an ancestor of ours, came across one near Putauaki, and caught it, hence that place is still known as Te Hakuwai.” At another time old Pio said, “Maui-mua married Te Papa-tu-rangi, who was a daughter of Maui-potiki. Their son was Tiwakawaka. The *hakuwai*, who was related to Maui, heard of this, and came and said to Tiwakawaka, ‘Get on my back, that I may carry you to the *ao ma tonga*, to Ka-pu-te-rangi.’ So Tiwakawaka reached that place, and married Haumia-nui, a descendant of the original Haumia. Tiwakawaka was the permanent settler in these lands (New Zealand). In after-days one Maku came here and found Tiwakawaka living at Ka-pu-te-rangi (at Whakatane). This place, Aotearoa, belonged to the *hakuwai*, who arranged that Tiwakawaka should reside here.”

An interesting note on the *hakuwai*, or *hokioi*, may be found at page 435 of the “Transactions of the New Zealand Institute” vol. v. See also vol. vi, page 64; vol. vii, page 494; and vol. xii, page 99.

Sir George Grey gives the following as an old-time saying: “*Pekapeka rere ahiahi, hokioi rere po*” (A bat flies at twilight, a *hokioi* by night).

*Hiroriro*.—See *Riroriro*.

*Hiwainwaka*.—See *Piwakawaka*.

*Horirerere*.—See *Riroriro*.

*Hua*.—Given as *Heteralocha acutirostris* in the Rev. H. Williams’s list. This bird was never, say my Native informants, a denizen of the Tuhoe district, but of the Ruahine and Tararua Ranges. The long black tail-feathers (*kotore hua*), tipped with white, are highly prized by Natives as plumes for the hair.

Mr. Guthrie Smith, of Tutira, states that he heard of a *hua* having been shot at Wai-reka, near Te Putere, on the Waiau tributary of the Wairoa River; but the Rua-tahuna Natives say that they never heard of the birds as being found in those parts.

*Kaeaea* (also known as *Karearea*) (*Nesierax novae-zealandiae*; Sparrow-hawk).—The male bird is known as *kakarapiti*.

*Kaha* (*Podiceps cristatus*; Crested Grebe).—This bird has long disappeared from this district. It was formerly found at the Wai-kare-iti Lake, near Wai-kare Moana. The Natives say that it built its nest on the surface of the waters of the above lake, and anchored the nest to the

\* Williams queries *hakuwai* as the great frigate-bird.

bottom, so that the nest moved with the water but did not drift away. For an illustration of a nest, see "Transactions of the New Zealand Institute," vol. ii, page 50, and description thereof at page 74. This bird is said to have the power of remaining a long time under water, (*he manu ruku roa*). (See note under *Kamana*.)

This bird does not seem to have frequented the rivers of this district; the currents thereof are probably too swift to please it.

In vol. iii of this journal Mr. Travers has a paper on the habits of the *kaha*.

*Kahu* (*Circus gouldi*; Hawk).—This bird is still common in this district. In former times it was sometimes caught by Natives in a trap termed a *tītara kahu*, or *tahiti kahu*. When Taka-moana, of Te Kareke, was slain at O-pokere his enemies utilised his liver as a bait for a hawk-trap. Occasionally a white hawk was seen in former times, but very rarely. They were called *kahu korako* (albino hawks), and this term was often applied to a chief. An old saying was, "*Me haere i raro i te kahu korako*" (Always travel with a white hawk); to which the following is sometimes added: "*kia kai ai koe i te kai, kia whiwhi i te taonga*" (that you may fare well and receive presents). When a chief visited a hamlet he was regaled on the best food, and often received presents, his companions coming in for a share of the good fare.

John White has a singular remark at page 65, vol. ii, of his "Ancient History of the Maori": "The *kahu* was a child of Mahuika, and a god of fire: hence the colour of its feathers."

*Kaka* (*Nestor meridionalis*; Brown Parrot).—The *kaka* and the *kereru* (pigeon) are looked upon as the two most important of forest birds by the Maori, inasmuch as they formed one of their principal food-supplies, being taken in great numbers in former times.

The origin or parent of birds in Maori myth is Tane-mataahi. This applies especially to the *kereru* and *koko* (*tui*) birds: while the origin or parent of the *kaka* was one Tu-mataika; hence these birds are sometimes spoken of as the "children of Tu-mataika." "*Kaore e rīkarika te tamā a Tu-mataika e rere nei*" (How numerous are the children of Tu-mataika flying yonder!)—said of a flock of *kaka*.

The following names are applied to the *kaka* bird: *tarariki*, *tatarariki*, *tatariki*. These names are applied to the leader of a flock of *kaka*. Each flock of these birds, say my informants, has a leader, generally a small-sized bird: hence the *riki*. This bird may also be termed a *kaka whakataka pokai*, or "flock-assembling *kaka*." This bird keeps on the outer side, or edge, of the flock, and seems to shepherd them—keeps them within bounds, and prevents straggling. It also calls the flock from one *whakarua*, or feeding-ground, to another, and keeps flying around the outside of the flock. Only one such leader will be found with a flock. A *tarariki* makes the best of decoy-birds; and is said to be a female bird.

*Kaka kura*: This term is applied to a very rare bird, a *kaka* that has very brilliant plumage, bright-red feathers—unlike ordinary birds of the species, which are of sombre plumage of a brown colour, not possessing so many showy red feathers. The *kaka kura* are said not to travel with any flock, but such a bird keeps aloof from others, with the exception of one companion, a bird of ordinary plumage. These *kura* are very rare: only one such will be found in a district. They are sometimes termed *ariki*, or leaders. Sometimes two *ariki* will be found in a district—one *kura*, or red, and one of white plumage, an albino bird, termed a *kaka korako*.

Albino pigeons are also termed *ariki*. *Korako* (=white, in the sense of albinism, or of rarity) is an expression often applied to chiefs of the *genus homo*—as *kahu korako*, or “white hawk.”

*Tawaka* and *Tata-apopo*.—The term *tawaka* is said to be applied to a large *kaka*. If it has a very large head it is a *tata-apopo*. The *tata-apopo* makes the best decoy-bird for the *pae* method of taking these parrots, while the *tarariki* makes the best decoy for the *tutu* system—of which more anon. The *tata-apopo* is said to be the male bird, and is known by the large size of its head.

Flock names: A flock of *kaka* when flying is termed a *pokai kaka*, but when settled on a feeding-ground is known as a *whakarua kaka*; though the expression *whakarua* seems to mean, primarily, a place occupied or resorted to by a flock of birds—their feeding-ground, in fact.

A flock of pigeons (*kereru*) is alluded to as a *tipapa kereru*. The word *tipapa* seems to = *whakapapa*. A *rakau tipapa* implies a tree much resorted to by these birds, and on which they are snared.

A flock of *koko* birds when flying is termed a *wiri koko*, but when settled on a feeding-ground is called a *hapua koko*. This word *hapua*, like *whakarua*, means a hollow, and was probably first applied to a feeding-ground.

A flock of ducks (*parera*) is termed a *kawai parera*. *Ta* is another flock-name, but I have only heard it applied to the *tataeto* (whitehead) and *kokako* (crow), as a *ta tataeto* and a *ta kokako*.

In the season known as *whaturua*, or midwinter, many *kaka* become so fat that it is difficult for them to take flight—they cannot rise in flight from the ground. When found feeding on the ground they walk to the nearest tree and climb up it—walk up, in fact—and are then caught by hand. When in this state of excessive fatness they are called *keketo* by some tribes.

The cry of the *kaka* is extremely harsh, but it also emits a deep whistle at times. The screeching sound made by this bird when on the feeding-grounds grates upon the ear, but when flying their cry seems more to resemble a croak. This is often heard in the dead of night and at daybreak by us denizens of the realm of Tane. Like most other native birds, the *kaka* is becoming scarce, but appeared in considerable numbers at Rua-tahuna four years ago, where, near my camp, a single Native shot about four hundred.

The *kaka* utters a peculiar cry or screech when alarmed, the cry being known as *tarakeha* among the Natives—*ka tarakeha te kaka*. A similar word is *kareha* (=to cry out in alarm), of a *kaka* bird; and *kaiewha* has a similar meaning, as also has the term *korihari*. “*Ka kite te kaka i te kaeaea, ka korihari*.” All these expressions denote *tangi mataku*—fear or alarm cries of the *kaka*.

*Tarahae* expresses the quarrelling of birds—the querulous or angry sounds emitted by birds when apparently squabbling over food. *Kaka-tarahae* is a place-name. *Tarawhete* means to chatter or mutter aimlessly—said to have been originally applied to sounds made by the *kaka*, as when sitting on a perch, but now used to denote the gossiping of persons. *Ko-whete* has a similar meaning.

*Kaka* were often kept in captivity by the Natives, and used as decoys in the fowling season. Such birds while kept at the hamlet were termed *mokai* or *maimoa* (pets), but when taken to the forest to be used as decoys were known as *timori*, *tirore*, &c.

Tamati Ranapiri, of Ngati-Raukawa, says, "While a tame or captive *kaka* was kept at the village it was simply called a *mokai kaka*, but when taken to the forest and used as a decoy it was termed a *timori*": which amounts to saying that a tame bird was called a pet or captive at home, but when used as a decoy was so described.

The *tirore* was a *kaka* used as a decoy, but it was not a tame or captive bird. When commencing a day's snaring the first *kaka* caught would be used as a decoy. This bird was called a *tirore*, but it was not a *maimoa* (pet) or *mokai* (captive). The fowler would make a perch for this bird above his head where he was perched in the tree-top, by lashing a piece of *aka* or climbing-plant stem to two branches. To this the captured bird was tied by a string secured to his leg. But first the fowler would break the beak of the bird, so that it could not gnaw the cord and so free itself. This bird would attract others by its cries and actions. If other *kaka* do not come readily, then the hapless *tirore* is again brutally treated, for the fowler will break one of its wings, tear out a piece of the bone, and give it to the bird. The bird will clutch the bone in its claws, and gnaw at it, making sounds peculiar to it when eating. This attracts other birds, and they hover round, and some settle on the snare-perches and are caught. These decoys are used in a similar way in the *pae* method of taking birds. The decoy that is placed above the head of the fowler is never taken home or eaten, because it has a certain amount of *tapu* pertaining to it, having been near the sacred head of man. That bird is left to perish miserably in the woods. The *tirore* is sometimes known as a *tionga*. The decoy-birds kept at a village were kept fastened to a *whata kaka*. This was made by placing a wooden trough on the top of two posts, over which a roof was put. In the sides of the trough were made holes, into which were thrust the ends of hardwood rods, about 1 in. in diameter, termed *hoka*. These *hoka* were about 6 ft. long, and formed perches for the captive birds, or *mokai kaka*. Food for the birds is placed in the *waka*, or trough. If the birds fall to quarrelling, then the old ones are each given their food in a small netted bag, made of flax-fibre, and termed a *rohe*, which is secured to the *hoka*.

The birds are secured to the perch by means of a cord fastened to one leg. A bone ring (often made of human bone), often carved, and termed a *moria* (*poria* among other tribes), was placed on the bird's leg. On one side it had a hole bored through it, where the cord was attached. Occasionally these *moria* were made by plaiting the epidermis of the midrib of the leaves of the *toi*, or *Cordyline indivisa*. I lately came across the following in one of the innumerable songs of the poet Piki:—

E koro, Titi—e !  
 Akuanei au ka whawhati atu ki a koe  
 Tena tonu ra to moria toi  
 Kai to wae wae e mau ana mai  
 He tauri komore no te mokai kaka  
 I mahue noa to turuturu, &c.

The Maoris often speak of certain stones, of a reddish colour which are said to have been often found in the crops of *kaka* that have reached New Zealand shores from Hawaiki—that is, presumably, from the isles lying north of New Zealand. These stones are known as *o manapou*. The *kaka* are said to swallow these stones when they leave foreign parts to fly to these shores. It seems a far cry to hale the *kaka* of slow, heavy flight from. I seem to have read somewhere that *manapou* is the name of a Samoan tree. In Mr. J. White's "Ancient History of the Maori" (vol. ii, page 90) we

find *manapau* given as the name of a tree of Hawaiki. The very same sentence occurs in Sir George Grey's "Polynesian Mythology." Williams's Dictionary gives "*manapau*, a tree," and refers it to the latter work. Old Pio, of Ngati-Awa, made a remark to me one day, "There is a lake at Pi-hanga, the green lake. A bird called the *manapou* is found there. It has two topknots on its head. These birds dive to the bottom of the lake in order to bring forth their young. There is also a bird at Rua-wahia, the *tiroitiro*, its cry being 'Ti-tiro, ti-tiro!'"

Another old warrior says, "The *manatawa* is a dark-coloured stone, or kernel, in form like that of the *tawa*. It is found, like the *o manapou*, in the crops of *kaka* that fly hither from Hawaiki, but is somewhat smaller. We believe both to be kernels of tree-fruits of Hawaiki. They are eaten by birds there, and those birds fly here to New Zealand. In olden times the *kaka* used to fly here in great numbers from Hawaiki, and would be so exhausted on reaching land that they were easily caught by hand."

*Umanga* or *umanganui* is an expression sometimes applied to birds, more especially to *kereru* and *kaka*, as being the two chief species from a Maori point of view. Natives say that the term is derived from *uma*, the breast, most of the meat on a bird being found on the breast. But *umanganui* is also used in other ways, as *Te umanganui o nehe ra, he wharwhai*, the origin of which is not so clear.

The *kaka* nests in hollow trees, as also do the *kotare*, *miromiro*, *momoutu*, *ruru*, and *tihe*.

The young of the *kaka* were taken from the nest for food purposes when feathers had grown on their wings, but before they could fly. They were not taken before that age. They would be found very fat, especially so were the *puta* or hollow of the tree a deep one. Paitini says that such a deep hole or hollow in a tree in which *kaka* nested was termed a *rua matini*. To ascertain whether or not the young birds were ready for taking, the fowler procured a green branch and rustled it at the mouth of the hole. If very young the birds uttered no cry, but if they squawked on hearing the sound, then the fowler knew that they were old enough to take.

*Kaka* resorted to the same hollow tree year after year for breeding purposes, unless they were frightened away by clumsy fowlers. These *puta kaka*, or breeding-holes, were highly prized. Should a person meddle with one to which he had no right he would be pursued and probably slain.

The term *matini*, or *rua matini*, is applied, says Paitini, to a deep hole or hollow in a tree (apparently not to a shallow hole). It was in these deep holes that the fattest young *kaka* were found. Those found in shallow holes, such as could be reached with the arm, were not so fat. In a *matini* the nest may be at the ground-line, but the opening thereto situated 10 ft. up the trunk of the tree. An implement called a *whakawiri* was used wherewith to take young *kaka* from such deep holes. This was a rod or light pole, to one end of which were attached a number of loops of flax or other fibrous leaf. This end was thrust down the hollow into the nest. The young birds, in scrambling about to avoid it, would get mixed up among the loops. The manipulator kept turning the rod round, so that the loops were twisted round the bodies, legs, or wings of the birds, which could then be drawn up. One young bird was always left to "take care of the nest," as the Maori puts it. This was probably done so that the birds would not desert the tree as a nesting-place. Again, if an axe were used on the tree, to enlarge the entrance to the hole or make a new entrance, the birds would desert it.

When young *kaka* are taken from these nests and cooked for food, then it is highly essential that the ashes of the fire at which they were cooked should be taken to the tree and cast into the hollow where the nest is situated. If this be not done, then the parent birds will desert that tree and never again nest therein, but will seek and select another hollow tree elsewhere, this new nest being known as a *puta whakapiri*. For such are the thoughts of the Maori.

The *kaka* is sometimes troubled with a parasite, a kind of worm called *ngaio*, and when so affected is very thin. The worm sometimes found in the *kokopu* fish is called by the same name.

"*He kaka kai uta, he manga kai te moana*" (A *kaka* on land, a barracouta in the ocean) is an old-time saying, both being famously voracious where food is concerned. Also, the parrot rends wood as the above fish rends a net. The *kaka* is often found in the forest by the fowler hearing pieces of wood drop from where a parrot is rending a decayed limb in order to get at the grubs therein.

"*He pakura ki te po, he kaka ki te ngaherehere*" (A swamp-hen at night, a *kaka* in the forest). These two birds mark, by their cries, the passing of the hours of darkness.

"*He wahine ki te kainga, he kaka ki te ngaherehere*" (A woman at home, a parrot in the forest). Another simile. Women and parrots, the two noisiest creatures known to the neolithic Maori. (*E tama! Ko te ahi taua hai whakarite.*) It is with much pain that the *pakeha* transcriber places this saying on record. Nothing but a stern sense of duty enables him to do so.

When Maruru hinted to his people that it would be a good thing to slay Tu-te-mahurangi he said, "*Ka eke te kaka parakiwai, kaua e takiritia; ka eke te kaka kura, takiritia*" (If a common brown parrot mounts the snare-perch, do not snare it, but if a scarlet parrot mounts it, then snare it). By this the people understood that they were to slay the chief, but spare his people. This item is from Colonel Gudgeon's pamphlet on the Ohura evidence.

*Kakapo* (*Stringops habroptilus*; Ground-parrot).—This bird is no longer found in the Tuhoe district, but was at one time numerous at certain places, such as the Parahaki lands, on the head-waters of the Waiau River, and at Te Whakatangata, and other such wild, rough forest lands. When some members of the Ngati-Mahanga clan went a-hunting *kakapo* at the latter place it was a trespassing on the lands of Ngati-Tawhaki, who promptly slew, cooked, and ate the offenders.

*Kakapo* were numerous in former times at Ngatapa, near Manuoha. Their holes were seen in long rows at that place.

Natives say that *kakapo* live together in flocks; each flock has its own range of feeding-grounds, and its own camp, or *whawharua*. Each bird has its own hole (*pokorua*) at the camping-place. Each flock has its leader, called the *tiaka*, which is said to be always a small-sized bird. It is called *tiaka* on account of its smallness ("*tiaka*=dam, mother," is the only meaning assigned to this word by Williams). At night the birds come forth from their holes and collect on a common meeting-ground at the *whawharua*. This place is a playground for all the birds of that particular *whawharua*. Having all gathered together, each bird now goes through a singular performance, beating its wings on the ground and making a roaring sound, at the same time making a hole in the ground with its beak. The Maori says that these birds collect to *tangi*. During the above performance the

*tiaka* walks round the outer edge of the playground, as a sort of sentry. Near morn the *tiaka* leads the flock back from the feeding-grounds to the common living-place, which is always situated in a rough, steep locality. (*Ahakoa he rau nga pokorua, ka kiia tena whenua he whawharua. Ko te mahi a nga kakapo ki te whawharua, he patu i ona paihau ki te whenua, me te rara a tona waha ki te tangi.*)

I have before me an article on the American grouse, in which the following occurs: "It is the custom of these birds to prepare their ballroom by beating down the grass with their wings, and then to dance something suspiciously like the "lancers." By twos and fours they advance, bowing their heads and drooping their wings; then they recede and then advance again, and turn on their toes, swelling their feathers and clucking gently."

As to the *tiaka*, or sentinel-bird, a note at page 192, "Journal of the Polynesian Society," vol. ii, says, "These birds when feeding placed one of their number as a sentinel, which hung by its beak to the branches of a tree, uttering a warning cry." This double performance, doubtless a somewhat difficult one, does not seem to have been performed by the *kakapo* of Tuhoeland.

The Natives hunted the *kakapo* (as also the *kiwi*) at night, with dogs. *Kakara*, or rattles, were tied on the necks of the dogs, and the hunters followed the sound of these. They would be careful to approach the *whawharua* on the opposite side to that from which the wind was blowing. When the birds were assembled, and began their dance, elevating their wings preparatory to striking them on the ground, it is said that they could be caught by hand. But it was necessary to catch the *tiaka* (leader and sentinel) first, then the others could be easily caught. If the leader was not so caught, then all would escape. The lure-call used when hunting these birds was made by placing the hand at the side of the mouth.

*Kakapo* are said to collect berries of the *hinari* and *tawa* trees, and also fern-root (*aruhe*), in the fall of the year, and carry such food to secluded pools of water, in which they place it to preserve it for future use. When summer begins the birds commence to feed on these stores of food.

The *kakapo*, *kiwi*, *kaka*, *kereru*, *koko*, and *weka* were all preserved in their own fat in former times, and so kept for future use.

In former times cloaks were made of *kakapo*, the skin being stripped off, with feathers adhering to it, for this purpose. Such garments were known as *kahu kakapo*. Old Pio, in his quaint way, says, "This is another remark—a different subject: a *kakapo*. This ancestor was like a bird in appearance: it had two wings. It was a bird of high rank. The feathers and skin were stripped off to make garments for chiefs. Then it would be said, 'So-and-so has a *kakapo* cloak.'"

*Kakariki*; syn., *Kakawariki* and *Porete* (*Cynanorhamphus novæ-zealandiæ*; Green Parrakeet).—This bird is generally termed *porete* by the Tuho people. These birds were formerly very numerous, and appeared in flocks about clearings and on the edges of forests, very much as the *pihi-pihi*, or silver-eye, is now seen.

"The origin or parent of the parrakeet," says old Pio, "was one Hine-porete. Her descendants are the *kakariki*, whose cry is 'Torere, kaurehe! Torere, kaurehe!' The Maori people slay these birds in the autumn by erecting a *tanga*, and using a lure-call to attract the birds. Now, there was an ancestor named Tutunui (or Tunui), who planted a crop of *kumara* (sweet potatoes) on the land of Hine-porete and her folk. When the *kumara* grew above ground those *porete* folk came and pulled up the whole crop. Tutunui observed the loss of his crop, and so he fixed a *kapakapa* (?) and caught



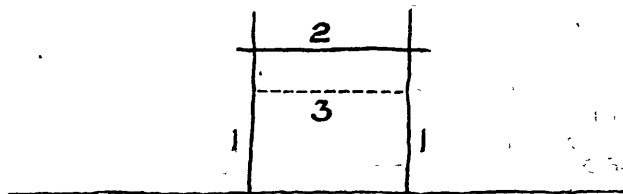
and slew all those folk, except Hine-porete, who flew up on to a tree, a *mata*. She cast her weapon, a *patu mata*, and killed Tutunui, thus avenging the death of her offspring." Which ends this story.

There were three methods of taking the parrakeet—viz., the *koputa*, the *tanga kakariki*, and the *puaka*.

The *koputa*: A rough shed was built at the edge of a forest. Saplings or branches were used, butt ends stuck in the ground, the tops bent over and tied together to form a roof. Branchlets, fern-fronds, &c., used to cover the framework. The front of the shed was left open. Inside the sheds *kurupae* or perches were placed for the birds to settle on. These perches were placed near the back of the shed. Pegs or short stakes (*turu-turu*) were stuck in the ground near the perches, and to these pegs were secured *maimoa porete*, or decoy-birds, to attract the flock. These decoys do not seem to have been kept at the hamlet, as were *kaka*, but each trip a fowler would first procure a few birds for this purpose by means of the lure-call. The fowler procures some fronds of *paraharaha*, a fern, which he carefully arranges in a certain manner and ties to the end of a long stick. Upon seeing a flock of parrakeets (*pokai porete*) in the distance, he takes the above pole and waves it about, which actions attract the flock, and it soon settles upon trees near the shed. The fowler then conceals himself just outside and near the back of the shed. He lures the *porete* by placing the side of his hand to his mouth and imitating the peculiar jerky sounds made by these birds when flitting from tree to tree. The birds soon begin to enter the shed and settle upon the perches, where they intently watch the decoy-birds, which are on the pegs in front of and a little below the level of the perches. The fowler has by his side a number of short sticks, each with a *reti*, or running noose, attached to one end. When he sees that a number of birds have settled on the perches, the fowler takes up one of the sticks, thrusts it through the frail wall of the shed, and slips the noose over the head of a bird. He recovers arms, secures bird, and takes up another stick, until all are used. He then disengages the nooses, sets them anew, and continues his snaring.

*Kaka* were sometimes taken by means of the *tari*, or noose fixed on a rod.

*Tanga porete*, or *tanga kakariki*: This is sometimes termed the *pae* method, but differs from the *pae* used in taking *kaka*, *koko*, &c., and is like that used in taking the *pihipihi*. Two upright poles are stuck firmly in the



TANGA PORETE.  
1. Pou. 2. Rongohua. 3. Cord, tau maimoa.

earth, and to these a horizontal cross-rod is lashed. This serves as a perch for the birds, and is termed a *rongohua*. Underneath the cross-piece a cord is stretched across and tied to the *pou*, or uprights. Several *porete* are so tied to this string that they can struggle to free themselves, and by so struggling, and flapping their wings, attract the free birds. Thus they serve as decoys, and soon the birds begin to alight upon the *rongohua*. The

fowler is half-concealed by a rude shelter of branches or fronds of tree-ferns erected near one of the uprights. He uses a striking-stick or rod, termed a *hauhau manu*, to strike down the birds with. He makes a swift strike, running the striker along the perch, thus knocking off any bird that happens to be sitting on it. The blow is downward. The rod is usually a light, slight *mapau*.

The *puaka*: A *puaka* trap is made by making a sort of enclosure of an oblong form, and several feet in length, by sticking a number of rods in the ground in a vertical position. Small rods about 3 ft. in length are used. In this fence-like structure four, six, or eight spaces are left for the birds to enter by. In each space a loop snare is set. Before this trap was constructed, some food would be placed on the spot several times as bait, to get the birds into the habit of coming to the place. The *pihere* was also taken in this manner.

A stronger form of the above trap is used for taking *kiwi*, a *tahiti* like the *tahiti kiore* being set at each entrance.

The crop of a bird is called *tenga*. The same term is applied to goitre in the genus *homo*. The crop of a *porete* is very prominent when full of food. This crop is of a white colour inside, and of the usual rough surface. A white sand, apparently of volcanic origin, deposits of which are common in this district, is known by the name of *tenga kakariki*. It is said to resemble the rough inner surface of a parrakeet's crop.

"*Kakariki e tunua, kakariki e otaina*," is an old-time saying of the Maori. It seems to have been quoted when food was being prepared in times of serious danger. "Never mind if the food be underdone, let us eat it as it is and get away out of danger."

The *porete* was not a shy bird when in flocks, and was much easier to take than some other species.

*Kakaruwai*; syn., *Pihere*.—See latter.

*Kamana*.—A water-bird. A Taupo name. Perhaps the same as *Kaha*.

*Kareke*.—Rev. H. W. Williams gives this bird as the marsh-rail (*Porzana affinis*). As it is no longer found in this district I could not name it, but, from the description given by Natives, judged it to be a rail. They state that it was about the size of a *moho-patatai*, another rail. One Native told me that *kareke*, *tareke*, and *koutareke* are all names for the one bird. Williams gives the two latter as names for the New Zealand quail, for which see his list in the "Journal of the Polynesian Society." The quail was at one time very numerous in some parts, and was taken by means of a net.

The *kareke* has long disappeared from these parts, but nearly all the elder Natives say that it was a swamp-dwelling bird, and also a *manu tohu*. It was a sign of good or bad luck to fowlers who heard the cry of this bird on the right or left hand.

One old Native states that the *kareke* and *koreke* were the same bird; that it frequented fern country; that it was larger than the *kukurutoki*, and had a different plumage. This sounds like quail.

*Kawau* (*Phalacrocorax carbo*, *P. varius*, &c.).—Several kinds of shags are known by this name, of which *koau* is a variant form. (It is as well to mention right here that I am cribbing all scientific names of birds from the Rev. Williams's list, for which see the "Journal of the Polynesian Society," vol. xv, page 193.)

*Papu* or *papua* is another shag-name—a large river-haunting species. The young of this bird were eaten by the Natives in former times. They generally roost in large numbers on a dead tree situated on some steep hill

side or cliff overlooking a stream or lake. They will roost on the same tree for many years, leaving it in the morning to go in search of food, and returning to it in the evening. Such a tree, that stood on the banks of the Wai-kohu River in the seventies, was the roost of a flock of about sixty *kawau*. These shaggeries, being usually situated on cliffs or steep sidelings, are termed *pari kawau*. Shaggeries were carefully preserved and sometimes *rahuitia* by the owners of the land, and resorted to every year for the purpose of securing the young birds. There was a famous one at O-whaka-toro, and another, named Whakatangihau, near the O-karika Stream. Both of these were mentioned in Court by Natives establishing their claim to those lands. *Kawau moe roa* is a term applied to bird-snares, eel-pots, and such nets as are left in the water (not merely dragged). Apparently these are likened to the "long-slumbering *kawau*" that sits quietly for hours on a log in a river, but is wide awake when a fish heaves in sight. The nest of this bird is a rough affair.

Captain Cook speaks of broiling and eating some shags at Whitianga. "They afforded us an excellent meal," he says. But, after all, what is the matter with a beefsteak, or even stewed pigeon? And that is all right.

A small species of cormorant is known as the *kawau tatarariki*. These smaller *kawau* are said to represent, or be the form of incarnation of an *atua* maori termed Waerore.

When a shag is about to take flight it stretches out its long neck stiff and straight, and so flies. Hence the saying, "*Ka maro te kaki o te kawau*." (The neck of the *kawau* is stiffened), applied to a person or party just about to start on a journey. The expression *kawau maro*, as applied to several columns of troops joining together to form a solid column for the war-dance, has a similar origin.

*Kea*.—The *kea*, says Paitini, has disappeared. It was a bird that lived in open country. It was smaller than a *kaka*, and had a different sort of bill. *He mea ahua whero taua manu* (Of a brown or reddish colour).

*Kereru* (*Hemiphaga nova-zealandia*; Pigeon).—We have not much to say about this well-known bird until we come to describe the methods of taking the three principal food-supply birds—the *kereru*, *kaka*, and *koko*.

It is known to most of us that *rupe* is a kind of emblematical name for the pigeon. The local Natives cannot distinguish the sexes of this bird—at least, they have no names for the two sexes. Occasionally nests of the pigeon are found in this district, but not often. They are mostly found in small trees, and about 10 ft. or 12 ft. from the ground. To find a pigeon's nest is looked upon here as an omen of ill fortune, of death or sore affliction for the finder. It is also an evil omen to hear a pigeon calling at night. *He tatai mate tena, he atua*.

A tree much frequented by pigeons is termed a *rakau tipapa* (*ti*=whaka, a causative prefix). Such a tree is usually a *taumatua*, for which see post, under "Snaring."

When these birds become fat in winter the expression "*Kua whaturua te kereru*" is heard, meaning that the birds are in good condition, having plenty of fat on the intestines. They get very fat in some seasons when there are plenty of *toromiro* berries, &c. Both the pigeon and *koko* (*tui*) are very fond of the berries of the white *maire* (*maire rau nui*), but do not fatten thereon. They were often snared on those trees. The *koko* also eats the berries of the *maire roro*, but the pigeon never does so. When pigeons are feeding on leaves, as those of the *kowhai*, *puruhi* (*houhi ongaonga*),

*Plagianthus betulinus*), &c., they get very thin, and the skin gets covered with a kind of scurf (*maihī*).

In some districts the pigeon is called *kuku* and *kukupā*. "*He kuku ki te karinga, he kaka ki te haere*" (A pigeon at home, a parrot abroad) is a favourite apophthegm of the Maori. It may be applied either to a person who is dowdy, careless of personal appearance at home, but who puts on fine feathers when going out, or to a person who is quiet at home but talkative when abroad.

Mr. J. White has preserved ("Ancient Maori History," vol. ii, page 78) an old-time myth as to how the pigeon became possessed of wings, and how its legs and beak acquired their red colour.

I have seen but one specimen of an albino pigeon in this district: it was shot at Tarapounamu some years ago by Mr. C. Anderson. The plumage, however, was not white, but had a pale pink tinge.

*Kiwi* (*Apteryx*).—This bird is still fairly numerous in some parts of Tuhoe land. At Parahaki and about Tara-pounamu they are common, though, of course, not often seen. When camped at Hei-pipi, near the latter place, their cries were often heard at night in winter, especially so on wet nights. Several were killed by us, and I noted that the fat seemed to be confined to a layer under and adhering to the skin, the rest of the bird being quite thin. The skin is very thick. One good skin I intended to preserve, but old Tutaka, who was camped with me at the time, came across it, and promptly roasted it at a fire and ate it. He rejected the larger feathers.

*Kiwi* are rare or unknown in some parts of this district. I have only heard one near Rua-toki. As observed, *kiwi* were sometimes caught with a *tahiti*, but the usual method of taking them was to hunt them with dogs at night. *Kakapo* were hunted in the same manner. This seems to have been about the only useful work that the native dog was capable of. The dogs were taken after dark to a place frequented by *kiwi*, and a lure-call was often employed by the hunters to cause the birds to reply thereto. The dogs were released to find, pursue, and catch the birds, but a kind of rattle was fastened to the dog's collar so that the hunters might be able to follow the sound thereof. A dog-collar was made from flax-fibre. When tied up, a stick, called a *potete*, was secured to the collar at one end, and had a cord attached to the other end by which to tie the creature up. The dogs tried to free themselves by gnawing the stick—hence its use. A muzzle, termed a *ponini*, was sometimes used on dogs. The rattle, called *kakara* by Tuhoe, was composed of several pieces of wood (*mapara*, the resinous heart-wood of the *kahikatea* tree), or of bone, sometimes whale-bones. These pieces were about 4 in. long, and about four of them were tied to a dog's collar, and rattled when he moved. Major Mair states that these rattles are termed *tatara* by the Whanganui Natives, and *rore* at Wai-kato.

The word *whakangangahu* seems to define the luring of *kiwi* by means of a call—"Me haere ki te whakangangahu kiwi ma tatau." The word *whakangau* is here only applied to the hunting and taking of pigs with dogs. The deep whistling sound made by a *kiwi* hunter to cause the birds to answer him, and so disclose their whereabouts, is termed *whakahihi*. It is one of the sounds known as *korowhiti*, in making which the bent finger is placed in the mouth. The former name is applied only to the *kiwi* lure-call. "*Ka whakahihiia te kiwi e te tangata.*"

Parties of people used to go a-hunting the *kiwi* in former times. It was cold work in winter for these bushmen, who possessed but little clothing.

Hence the death of Moe-tere and her husband among the snows of drear Huiarau.

The cry of the female *kiwi* is rendered by the Maori as "*Poi, poi!*" and that of the male bird as "*Koire, koire!*" or, as some render it, "*Hoire!*" The cry of the male bird resembles a deep, hoarse whistle—such a sound as is termed *korowhiti*. As old Tutaka put it, "*Mehemea ka poi, he waha taua manu. Mehemea ka korowhio, penei me te korowhiti, a he tane tena.*"

If the *kiwi* hunter has no dog he takes a firebrand along. He then sounds the lure-call above mentioned, which closely resembles the cry of the male bird. If the birds are not together, but roaming about singly, such a lone bird will approach the hunter, attracted by the call. The merry fowler, on seeing the bird approach him, waves his firebrand vigorously until it bursts into flames, whereupon the *kiwi* thrusts its beak into the earth, and is easily caught by the hunter.

If the birds are roaming in pairs they will not come to the lure-call.

The bird is said to be afraid of the fire when it blazes up (perhaps its eyes are dazzled by the bright flame), hence it sticks its beak into the ground so as to shade its eyes.

The *kiwi* makes its nest in holes among roots of trees, or under overhanging banks, or holes on steep sidelings. Often they are made under the roots of *tawai* (*Fagus*) trees. The Maori has an idea that the bird leaves the eggs to hatch themselves and does not sit on them (*awhi*). This is such a long process (two seasons, some say) that the tree-roots sometimes grow over the egg and prevent the hatching or escape of the young bird. We note a reference to this in a song composed by one Mihi-ki-te-kapua, a prolific song-composer of the early part of the nineteenth century:—

Engari te titi e tangi haere ana—e  
Tau tokorua rawa raua  
Tena ko au nei, e manu—e  
Kai te hua kiwi i mahue i te tawai  
Ka toro te rakau kai runga—e  
Ka hoki mai ki te pao  
Ka whai uri ki ahau.

Cloaks or capes of *kiwi* feathers are still made by Tuhoe and some other tribes. The feathers are woven into and securely fastened to a woven flax-fibre garment. These are termed *kahu-kiwi*.

*Koekoea* (*Urodynamis taitensis*; Long-tailed Cuckoo).—This bird and the *pipiwharau* (*Chalcococcyx lucidus*) were somewhat of a puzzle to the Natives, who never seem to have understood their habit of migrating. Hence the Maoris have cherished two peculiar myths in regard to these birds. One is that they appear from the ground in spring, having buried themselves in the earth or mud in the fall of the year and remained there throughout the winter; the other is that these birds are in some way the offspring of the lizard called *ngarara-papa*.

The cry of the *koekoea* is short, and is rendered by Natives as "*Hoi!*" It emits a hoarse whistling sound, often heard in the dead of night. This cry may be heard from about the time the *manuka* blossoms until the white-pine has ceased to shed pollen.

The local Natives state that the young of the *koekoea* and *pipiwharau* are fed by the *tataeto* (syn., *tataihore*). The *pipiwharau* appears at Rua-tahuna about the end of October, or early in November. It is also known here as *nakonako* and *whenakonako*, on account of the peculiar markings of plumage. The first of this species heard by me at Ruatoki

in 1904 was on the 11th October; but in 1906 I heard one near Whakatane on the 28th September. In 1903 at Rua-tahuna the first I heard was on the 15th October. The *koekoea* appears soon after the *nakonako*. When an old Native at my camp saw the first *koekoea* of the season in that locality he said to me, "*Kua puta te koekoea, wainehi ana te ahua, ara e ahua pokorehi ana*"—by which he seems to have meant that the plumage of the bird was pale or dingy. Possibly it was a young bird, the markings not yet distinct.

Both the above species are said to deposit their eggs in the nests of the *tataeto* (whitehead, *Certhiparus albicillus*), or *tataihore* as it is termed at Te Wairoa, Hawke's Bay. The young birds are fed by the *tataeto* along with its own.

The *koekoea*, it is said, does not eat berries, but lives on insects, lizards, &c. The *nakonako* also eats insects. The *koekoea* attacks and eats the young of the *koko*, and is chased and attacked by the parent *koko* birds. The former does not show fight, but escapes by swift flight. The *koekoea* were formerly taken to provide plumes for the head-dresses of the Maori. The tail-feathers were so used.

The term *koekoea* is sometimes applied to lazy, shiftless folk: "*E! kua rite koe ki te koekoea.*" It fits well a wanderer or vagabond.

In an old *whakatakiri*, or song sung while dandling a child, we find the following:—

Ko te uri au i te whenakonako,  
I te koekoea  
E riro nei ma te tataihore e whangai.

A substance known as *mimi koekoea*, apparently the excrement of that bird, is eaten by the Natives. It is found on leaves, and is said to be dropped by the bird when flying. It is licked off by the Maori, who says that it has a sweet taste.

The cry of the *nakonako*, or *pipiwaharauoa*, differs from that of the *koekoea*, and it also gives different forms of its cry. These are rendered by the Maori as "*Kui, kui! Tioro, tioro, tioro!*" Another as "*Whiti o, whiti o, whiti o!*" But its principal cry is given as "*Kui, kui, kui! Whitiwhiti ora!*" When the cry of this bird is heard, then it is known that the summer is near. When the first cuckoo is heard in the spring the Maori children are heard addressing it as follows: "*E manu, tena koe! Kua tae tenei ki te mahana-tanga. Kua puawai nga rakau katoa. Kua pa te kakara ki te ihu o te tangata. Kua puta ano koe ki runga tioro ai, tioro i te whitu, tioro i te waru. Me tioro haere ano e koe tenei kupu e whai ake ki te marae o tama ma, o hine ma. Kui, kui, kui! Whitiwhiti ora!*" (O bird, I greet you! The warm season has now arrived. All trees are blossoming. The fragrance is scented by man. Once more your resounding cry is heard above, sounding in the seventh [month], sounding in the eighth [month]. Go forth and sing the following song o'er the homes of lads and lasses—"*Kui, kui, kui! Whitiwhiti ora!*")

At page 113 of vol. xxxvi of the "Transactions of the New Zealand Institute" may be found a long and interesting paper on the *koekoea*.

The *koitareke*, or native quail (*Coturnix novæ-zealandiæ*), has long disappeared from this district. The younger Natives, who have never seen this bird, often confuse its name with that of the *kareke*, a rail. (See also under "Quail.")

*Kokako* (*Glaucopsis wilsoni*; Blue-wattled Crow).—This bird is known as *honge* among the Ngati-Tipa and probably other tribes. It is now very scarce in the Tuhoe district, a few being occasionally seen among the wild

forest ranges of Parahaki, on the head-waters of the Waiata River, where no man liveth. In former times they were taken by means of a call-leaf by fowlers, but not in great numbers. They were, of course, eaten by these bushmen. The blue wattles of this bird are termed *werewere kokako*, a name also applied to a blue-coloured fungoid growth that is found growing on trees. Natives say that when a crow sees this blue object he goes and rubs the sides of his head on it.

A flock of crows is termed a *ta kokako*. An old saying is "*Te ta kokako a Ira-motumotu*" (The crow flock of Ira-motumotu)—whereby hangs a tale.

Ira-motumotu was an ancestor of the Tuhoe people, and it fell upon a certain fine night that Ira's wife went a-fishing for the simple *kokopu*. She brought some home alive in her *puwai*, or fish-basket. Ira opened the basket and the fish promptly jumped out. Here endeth the first canto. Anon, in days that followed, Ira went a-fowling, and snared some crows, the which he secured alive in a basket and carried home to his wife. He told her to cook them, and she, simple creature, opened the basket, whereupon the crows all escaped, and flew away far beyond all beck and call. She made wild clutches at the escaping birds, but never again did she handle those crows. Hence Ira's *ta kokako* has passed down the changing generations as a synonym for the unattainable. Again, when Te Whakatohea raided Rua-tahuna they pursued one Manu-ka-tiu with the pious intention of slaying, cooking, and eating him. One who knew Manu's fleetness of foot said, "You will never catch that man. Just think of his name—the Soaring Bird." One replied, "*Ka rere ia ki hea i te ta kokako a Kotikoti*?" (How may he escape from the crows of Kotikoti?) However, the Soaring Bird did escape, and warned Rua-tahuna; hence the night attack on and defeat of Te Whakatohea at Tatahoata, where their chief, Te Piki, furnished a breakfast for the Child of Tamatea.

Anent the origin of the *kokako*—it was in this wise: In Maori myth both the *kokako* and the *pakura* (syn., *pukeko*) are the offspring or descendants of an old-time *tipua* (supernatural being) known as Wairua-kokako, or Hine-wairua-kokako.

*Koko*; syn., *Tui* (*Prothemadera novae-zealandiae*; Parson-bird).—The origin of this bird was a singular one, according to Maori myth. The *koko* bird and the *inanga* fish (under various names) are both said to be the offspring of Rehua (Antares). In one sense the name Rehua is applied to the constellation Scorpio, except the Scorpion's Tail, which is *Te Waka o Tama-rereti*. For Rehua is often alluded to as a bird. The curved line of stars extending eastward from Antares is one of his wings—the unbroken one, or *paihanu ora*. The other wing of Rehua is broken, as may be seen if you look at the broken line of stars just westward of Antares. This is the *paihanu whati* or broken wing of Rehua. Old Pio, of Awa, said, "There is an ancestor roaming across the heavens: it is Rehua. That ancestor is a bird, and has one broken wing and one sound one. His children are the *koko* bird and the *inanga*. Those are the offspring of Rehua. The *koko* bird is with his ancestor Tane (i.e., is a denizen of the forest). This bird provides food for man, the rich *huahua*, only eaten on important occasions or by chiefs, often kept for ritual and social feasts. You cannot equal *huahua* as a food; it is unrivalled."

In the mythical story of Rupe we may note that when that hero visited Rehua in the uppermost or tenth heaven Rehua shook the *koko* birds out of his hair, where they fed upon parasites (*kutu*), and had them cooked as food for Rupe.

The above stories are difficult to understand until we note an explanation given by Mr. Tregear in a very interesting paper on "Polynesian Folklore" (Trans. N.Z. Inst., vol. xix, page 490), wherein he states that *lehua* (= *rehua* in Maori) is an ancient name for a forest in the Hawaiian dialect.

The Tuhoe Tribe have two names for each sex of the *koko*. The male bird is known as *kopurehe* and the female bird as *kowwha* from the time of the flowering of the *kotukutuku* until the fruiting of the *hinau*. During the balance of the year the male bird is termed *kokouri* and the female *kokotea* (cf. *parauri* in Tregear's Maori Dictionary).

The term *kowwha* seems to equal *uwaha*, and is applied to female animals and female blossoms or trees.

The Natives say that towards the autumn the *koko* will, in some seasons, wake up in the night and "talk" for a few minutes, and then again be silent. This is said to be a sign of a fruitful season coming—all forest food products will be plentiful.

The *koko* was, apparently, the only bird taught to talk by these Natives, and the only one kept as a pet. The *mokai kaka* were kept for use. When a bird was caught which it was proposed should be kept and taught to speak, it had a piece of its long tongue cut off. This bird is a honey-sucker. A famous talking *koko* kept at the Hei-pipi hamlet years ago was named *Tauaiti*, after an ancestor of those parts. It was *tokia* (end of tongue cut off) by *Pirimona*, of *Maunga-pohatu*.

The bird was then placed in a covered place. Two pieces of supplejack were fixed in the ground as hoops, one at right angles to the other, to serve as a framework. This frame was covered with a mat or old baskets. Food was placed at one end and water at the other end of this structure, and the bird soon learned to find them. After some time the bird would be put in a cage made of thin twigs of *manuka*. A small opening was left at each end of the cage, and a small wooden trough, sometimes ornamented with carving, was fixed outside the cage, just under the two apertures. Food was placed in one, and water in the other. These cages were hung in the porches of the houses. After the birds had learned to talk they would begin to air their eloquence very early in the morning. Old-time residents of *Pori-rua*, of forty or more years ago, will remember such a bird, the property of *hale Jimmy Mitchell*. That *koko* was a past-master in the delivery of the Maori tongue.

The tongue of a *koko*, or the ends thereof, are termed *pukihī* by Natives, a word also used to denote rays of light, as from stars, &c., and also the tail and side streamers of a kite. These ends of the bird's tongue were cut so as to enable the creature to speak distinctly. If they were not so cut, then the bird's enunciation would be very poor. The *koko* emits some curious sibilant sounds at the end of each "set piece," which sound much like a person spitting.

We here give a few specimens of these songs or recitations taught to the *koko* in former times:—

#### HE AKO KOKO.

Kiki tai pari, kiki tai pari  
Whakataka horohoro ki tua o Maketu  
Maranga mai—e—u—e. E—u—e  
Ka ki te tai, ka heke te tai  
Ka whakarara koa nga tai o te awa  
He tai taua—e, ehe! ehe!  
Kai tuha!



## HE AKO KOKO.

## 1.

Uia te manuhiri me ko wai. Uia te manuhiri me ko wai. Ko Tu koe, ko Rongo koe, ko Whakamau-tarawa. Tahia te wananga—e. Ko Matiti, ko Matiti-kura, ko Matiti-aro.

## 2.

Ko Tupato, ko Hikairo, te Kuti, te wera, te rapa, te hāua. E, ko Apanui, Apanui—e! Mau ki te hoe. Tutaki—e! Mau ki te hoe. Ko te hoe nui, ko te hoe roa, ko te hoe na Matatua. Tikina ra, kausa te tai o Pakihi, kai hika mokai ko koe. Moi, moi—e! Haere mai! Ehe! Ehe! Kai tuwha!

## 3.

ai ana, tatakī ana te waha o te puta. Ka rure te wahine—e! Te wahine takiri tohetohe, e rere taua. Korihi ake te ata. Karangatia, e! Haere mai! Haere mai, e te manuhiri tua-rangi. Kaore he kai o te kainga. Kai tawhiti te kai. Moi, moi—e! Haere mai! Ehe! Ehe! Kai tuwha!

## 4.

Koka—e! Tahia te marae. Koka—e! Me tohutohu tu te kai. Me tohu te rua iti. Me tohu te rua rahi. Koi tae ki te whitu, me te waru. Tukutuku karere ki raro ki te whakahawea na. E! Haere mai! E te manuhiri tuarangi. Kaore he kai o te kainga. Kai tawhiti te kai. Moi, moi, e! Haere mai! Ehe! Ehe! Kai tuwha!

## 5.

Ko te wheu, ko te whare. Te whare patahi—e! Hui te rangiora. E rongo ki waho, e! Haere mai! Haere mai! E te manuhiri tuarangi. Kaore he kai o te kainga. Kai tawhiti te kai. Moi, moi—e! Haere mai! Ehe! Ehe! Kai tuwha.

On comparing a number of versions of the above *koko* speeches I find that part 5 is the latter portion of part 1, and should be added thereto. It will be seen that these birds were taught to cry a welcome to visitors, and to give orders that the plaza of the hamlet be swept and made presentable.

Tamati Ranapiri, of Ngati-Raukawa, states that Maoris know the sexes of some birds, and can distinguish them—i.e., the *kaka*, *kereru*, *tui* (*koko*), *kokomako* (syn., *rearea*, *kopara*), and *huia*. He says also that *manu tute* (quarrelsome birds) and *manu taupua* are always males, no matter of what species.

*Manu tute* is a term applied to birds that bully and drive other birds away from a food-bearing tree, as the *koko* are sometimes seen to drive pigeons away from a tree (*tutetute* = to jostle).

*Manu whakakenakena* is an expression applied to a bird when it causes its neck-feathers to stand up like a frill, as the *koko* sometimes does.

The Maoris have a belief that when the *koko* becomes excessively fat, as it sometimes does, it is in the habit of pecking its breast so as to cause much of the surplus fat to exude. I must decline to guarantee the truth of this statement.

That the *koko* is a somewhat strenuous and interfering sort of creature we know well. It has not much use for birds of other species. Some months ago, when ascending a bush-clad hill near my camp I heard a series of angry shrieks and (apparently) shocking oaths, and presently came upon a strange scene. A gentle *ruru* (morepork owl) was standing on the ground, and a *koko* was wheeling and making swift dashes at it, and evidently trying to frighten or drive it away by means of these attacks and discordant shrieks. At last the *ruru* fled down a gully, pursued by its assailant, who again attacked it as it sat on a branch, and the owl again fled. This process was repeated until I got tired of following them, and probably longer. The owl seemed to make no attempt to retaliate or defend itself.

The skins of the *koko* (and also those of some other birds) were used as *pohoi*, or ear-pendants. The skins, with feathers on, but minus heads, wings, and tails, were prepared by inserting a round stick in them, and hanging them up to dry. Thus the skins assumed a cylindrical form. They were suspended from the ears.

Besides being potted and steamed in an earth-oven, the *koko* was often cooked after being wrapped in leaves. A favourite method was roasting before a fire. A green stick with one end cleft, split down the middle, was used as a spit. It was termed a *rapa* or *korapa*, whereas an unsplit stick used as a spit is called a *kohuki*. Five or more *koko* or other small birds were stuck in the cleft of a *korapa*, and the spit was stuck in the ground near a fire.

When fowlers were counting a day's takings they did not count two *koko* as a brace, but reckoned two birds as one, or, in some places, three as one. Hence a *pu koko*, or brace of *koko*, consisted of four birds, or, in some parts, of six birds. This was on account of their small size.

*Tahei koko*, or snares for taking this bird, were set all over the top branches of trees frequented by them. When visited again by the fowler, he would often find dozens of birds caught on one tree. Then would be heard the saying, "*Me te raparapa tuna*." So many birds were hanging from the snares that they looked like a lot of eels hung on a stick to dry. Another such simile was applied to pigeons when so caught in large numbers: "*Me te rau rangiora*" (Like *rangiora* leaves). In this case the birds are compared to leaves of the *rangiora*, which are white on the under-side.

"*He koko kai kohe*" (A *kohe*-eating *koko*). When these birds are feeding on the berries of the *kohe* tree they become very fat. This saying is applied to a stout person as a simile. He is compared to a *koko* that has fattened on *kohe* berries. Both the *koko* and pigeon eat these berries.

"*He koko whakamoe, ka mate te tangata*" (When like a benumbed *koko*, men perish). Applied to sleepy-headed, lethargic persons who do not keep a good watch at night; hence they are surprised and slain by enemies. The *koko* gets so benumbed on frosty nights as to be unable to fly, and is then taken by hand.

"*Me he korokoro tui*" (Like a *tui*'s throat) is said of an eloquent speaker. This is given by Sir George Grey in his "*Maori Proverbs*." I have not heard it used among Tuhoe.

*Kotare* (*Halcyon vagans*; Kingfisher).—The kingfisher is not numerous in the Tuhoe district; a few are seen, usually on the outskirts of the forest region. I have seen them pecking into dead, half-decayed tree-trunks in order to form their nests. At a place called Te Puta-kotare, at Whirinaki, these birds used to make holes for nests in a bluff overlooking a lagoon: hence the place-name. The Natives say that these birds eat lizards, and hence some persons will not use them as food. The young were in former times taken from the nest just before they could fly, and eaten by those who were not too deeply imbued with superstitious dread of consequences.

*Kotuku* (*Herodias timoriensis*; White Heron).—This bird is no longer seen in these parts, and seems to have been only occasionally seen in former times: hence the saying, "*He kotuku tawanga kotahi*."

In olden days the *kotuku* is said to have frequented a pond or lagoon at Manuoha, a very wild spot and remote, and also the Kaipō Lagoon, which is the source of the Mokau Stream, at Wai-kare Moana.

The plumes of the *kotuku* were highly prized by the Maori in former times, being used by chiefs for sticking in their hair. These feathers or

plumes were known by several names, the three kinds used for the above purpose being the *whaitiri*, *tatara*, and *titapu* (or *rau o titapu*). The *tatara* were the outside plumes. Another Native states that the bird has four of these prized long plumes in each wing: the first one is called a *kapu*, and the other three are *kira*. Women were not allowed to wear these plumes: they were only permitted to wear the shorter ones, which had a distinctive name. If a woman were to wear one of the long plumes, all her hair would fall off. Or, as another Native put it, if a man wearing *kotuku* plumes is sitting among us as we partake of food, no woman may come and join in the meal. If one does so, then all her hair will fall off. But if the plume-wearer takes it out of his hair and lays it down, then women may join in the meal. These hair-shedding episodes must have been truly annoying to the fair sex of neolithic New Zealand.

Tutaka states that the *titapu* was a very *tapu* object. Perhaps that was why it acted as a depilatory.

The *awe kotuku* are even now much prized. These are very fine and graceful feathers, of delicate texture and appearance, that overlap the tail-feathers of the *kotuku*.

*Kukurutoki*; syn., *Toetoe*, &c. (*Sphenæacus punctatus*; Fern-bird).—This bird is usually termed *toetoe* by the Tuhoe Tribe, and *kukurutoki* by Ngati-Awa. It is seen flitting among the fern (bracken) and about the edges of swamps. Its ordinary cry is rendered by the Maori as “*Te, te, te!*” but it has other cries which are regarded as tokens of approaching good or bad fortune by Natives. For this bird is a *manu-tohu*. By its cry we can foretell the success or failure of an expedition, or hunting-trip, or *kai taonga* (*murū*) raid. If you hear the *toetoe* cry “*Kore ti, kore ti!*” you will not be successful—not at all. That cry is a *puhore* (token of non-success). But if the cry of that bird is “*Toro ki, toro ki, toro ki! Kuri, kuri!*” that is a sign of good luck: you will gain your object. When its cry resembles “*Kuri whatia!*” that is a sign of disaster or death; while the cry “*Kuri ora!*” is a token of life, peace, and prosperity.

*Matapu*.—A large bird, says my informant, of black (or dark-coloured) plumage. It is like a *kawau* in appearance, but has a shorter neck. It frequents forest-streams.

*Matuku* (*Botaurus pæciloptilus*; Bittern).—Sometimes called *matukuhu-repo*, because its peculiar booming cry is heard in swamps. Several auguries are drawn from the cry of this bird. Thus it gives notice of an approaching wet season, when floods are to be many.

Old Pio, of Awa, rambles on anent birds in his usual style: “In the tenth month (April) the sun changes its course and returns to the ocean, to his winter wife, Hine-takurua (Winter Maiden). The sun has many descendants out on the ocean. These are Hine-karoro (origin and personification of the *karoro*, or black-billed gull), the next born being Hine-tara (the *tara*, or tern); the next is Hine-tore. The last born of that lot was Punga, the origin of lizards. This Punga also had Haere-nui, then Nohotumutumu (origin of the *kawau*), then Moe-tahuna (origin of the *parera*, duck). The next born after Punga was Matuku (origin of the *matuku*, or bittern). I will speak of this person, of how he makes the booming sound. There are two signs in the call of this bird—it calls to its parents, and also gives certain tokens regarding the months and seasons. This person, the *matuku*, goes wandering about in the swamp. It sees a hole, and thrusts its beak down into that hole. The food it contains is an eel. The bird thrusts its head down into the mud and seizes the eel. Then the bird gets

out of breath, its fundamental orifice opens and emits a booming sound. Such is the cry of the *matuku*."

The bittern is now scarce in this district, but few are heard.

*Mimiro*.—See *Miromiro*.

*Miromiro*; syn., *Mimiro*, *Tarapo* (*Petroica toitoi*; Pied Tit).—These little birds are still fairly numerous in the forests of Tuhoealand. The sexes are known by their different colours, the male bird having black and white plumage, while that of the female is of a dingy pale (*koma*) colour. The female bird is called *tarapo*.

There are two items to record in reference to the *miromiro*. When Maui, the famous hero of Maori myth, went in search of his mother, he reached Paerau, where he found the folk of that place busily engaged in planting their crops. Maui transformed himself into a bird, a *miromiro*, which bird perched itself on the *whakamarama* (crescent-shaped handle) of a *ko* (digging-implement) and sang a *tewha*, or planting-song. After divers adventures, Maui assumed the form of a *kereru*, or pigeon, and finally found his mother.

Again, the *miromiro* bird was often employed to carry love-messages to a sweetheart or absent wife or husband. There was a certain amount of ritual pertaining to this practice. Certain charms, termed *iri* or *atahu*, were recited, and it is said that they were very effective. The bird would go forth and find the desired person, however distant, and perch itself on him or her. At once such person would be seized with a great desire to go to the sender of the bird messenger. Runaway wives or husbands were often brought back by such means, the bird being the active medium employed. I am informed that the above statements are quite true—and who am I that I should doubt them?

"*Ma te kanohi miromiro*" is a saying preserved by Sir George Grey. (It will take a sharp eye to see or find something mentioned—an eye as quick as that of the *miromiro*.)

Missionary Taylor states that the *miromiro* "generally flies about graves." After having known this bird for nearly fifty years, I have come to the conclusion that it gets along very well when there are no graves handy.

*Moa*.—This creature is no longer met with in the forests of Tuhoealand, I may observe, but it has at one time roamed far and wide over the steep forest ranges of this district. *Moa* bones have been found near the summit of the Tara-pounamu Range, at an altitude of quite 2,500 ft. above sea-level, and probably 2,700 ft. These were found by road-workmen at the base of a *rimu* tree, on a steep sideling. A leg-bone was sent to the Auckland Museum. Natives report *moa* bones as having been seen in caves or rock shelters in the wild forest country at the head of the Tauranga River (called the Waimana by us), and near the summit of Maunga-pohatu—viz., at Nga Whatu-a-maru. A *moa* skeleton was found in a chasm near Awa-awaroa, at Wai-kare Moana, by Mr. McGrath.

Native tradition speaks of the *moa* having lived on the Poho-kura Block in times long past away, and also of a lone *moa* that lived on the Tawhiu-au Range, at Galatea. Presumably these upland *moa* were mountaineers, for they certainly roamed in very rough high-lying country.

The word *moa* is often found to occur in place-names, but whether or not these names have any connection with the bird it is now impossible to ascertain: thus, Moa-whara is a place-name on the upper Whakatane River; Tapuae-moa, a place near Te Teko; Moa-nui, a place on the Waioeka River; Whanga-moa, on the shores of Roto-kawa; while *rau-moa* is a plant-name.

Tradition states that a *moa* was killed at Whakatane by one Ngahue, a very early voyager to New Zealand, who returned to the isles of the north. Mr. Percy Smith heard this same tradition repeated by a very old Native of Rarotonga.

Pio, of Awa, born about 1823, has his little budget of notes concerning the *moa*: "There were certain folk on this island in ancient times. They were like birds in appearance, and also resembled man in structure. They had two legs, two arms (?), and a head, and a mouth too, but they could not speak. They stood on one leg and held the other up—drawn up. It always kept its mouth open, because it lived on air (or wind). It always stood facing the wind, no matter whence it blew—north wind, south wind, east wind, all were food for those folk. Those creatures had fine plumes, like birds' plumes, that grew under their armpits. These plumes were called *rau o piopio*, and were worn by chiefs in ancient times. They were also used, together with *huia* and *kotuku* plumes, when dressing the hair of a dead chief for the lying-in state. A certain ancestor of ours, whose name was Apa, came across one of those folk on the western side of Putauaki (Mount Edgecumbe). It looked like a man standing there. Apa struck a blow at the leg it was standing on, whereupon the creature kicked Apa so violently with the drawn-up leg that he was hurled over a cliff and killed. Hence that place has since been known as the Takanga-o-Apa. Those folk of that tribe were called *moa*. I say those folk who stood on one leg and held the other up are lost: our ancestors killed them. Those *moa* are no longer seen, but their bones are found—huge bones, like those of cattle or whales in size. They were descendants of Tutunui. They were all slain in ancient times. It was said that survivors of the *moa* were living on high ranges, on precipitous places, in gullies, at Tawhiuau and elsewhere. I saw some of their bones at the base of Tawhiuau (near Galatea). After Christianity was introduced, a party of Maoris went with a European to search for *moa* at Tawhiuau. They did not find any."

The above is the only tradition concerning the *moa* that is known by the Natives of these parts. The ancestor Apa here mentioned flourished about four hundred years ago. The tribe Ngati-Apa, of Putauaki, were apparently of the early inhabitants of New Zealand. The Tuhoe people have preserved no other traditions concerning the *moa*. Their history, legends, folk-lore, songs, &c., are silent as to the *moa*, save for the few notes given here. And Tuhoe are truly of the old-time people of New Zealand, who were in camp here long centuries before the last migration of Polynesians to these shores.

A very singular statement appears at page 494 of vol. vii of the "Transactions of the New Zealand Institute." It is quoted from a letter written by the late Judge Maning: "There is no subject, except perhaps the history of their wars and migrations—none on which the traditions of the Maori are so numerous and particular as those regarding the *moa*," &c. This is somewhat startling when we know that early European settlers and sojourners in New Zealand could gather but very little information anent the *moa* from Natives then living, or from song, story, and legend. Colenso is correct in his statement that scarcely anything anent the *moa* has been preserved save a few fabulous stories. He made inquiries at Te Whaiti and Te Reinga, and many other places, in 1841, but could gain nothing authentic. The Reinga Natives spoke of a lone *moa* that lived in a cave (guarded by a reptile) at Whakapunake. They also stated that a few years before Colenso's visit in 1841 they had been raided by the Ure-wera Tribe

and forced to fly to the rugged Whakapūnake Mountain for refuge, and where many of them were slain by the Ūre-wera (Tuhoe) raiders; but they saw no *moa* in those wilds. Colenso never met with the *moa* in Maori legend, save in that of Ngahue, given above. He collected nine old-time aphorisms concerning the *moa*, and a few references in poetry, but very little else. There was no more *moa*.

“*Nā te moa i takahi te rata*” (The *moa* trampled on the *rata*), or “*He rata te rakau i takahia e te moa*,” is an old saying that I first heard from Ngāti-Hau, of Whanganui. That tree sometimes grows far from upright, and is said to have been forced into that position by a *moa* treading on it. Sir George Grey has preserved “*He mihia te kōhatu i taona ai te moa*” (The *mihia* stone was used for cooking the *moa*).

The expression *moa kai hau*, or “air-eating *moa*,” is sometimes met with in poetry, as—

Kia noho atu au i konei  
Hai moa kai hau ki Whakapūnake ra.

*Moho*.—Tutaka states that the *moho* was a flightless forest-bird, but is now extinct; also that the *mohorangi* was a flying-bird found in open country, in fern and swamp. Williams gives *moho-patatai* as the land-rail (*Hypotenidia philippensis*). The *moho-patatai*, says Paitini, is a long-legged bird with a small body. It is no longer seen in the Tuhoe district. The last one here seen was caught at Te Whaiti about the year 1890 or 1892.

*Momotawai*.—Given by Williams as the bush-wren (*Acanthidiositta chloris*). I have been told by Natives that *momotawai*, *momoutu*, *tītīpōuinamu*, and *toirua* are all names for the bush-wren. But others say that the *momoutu* is smaller than the *momotawai*, and the latter has disappeared, while the former is still seen; also, that both are distinct from the *toirua* and *tītīpōuinamu*. Another ruffian says, “The *toirua* resembles the *momoutu*, but is larger, and has no tail. It is the same as *momotawai*.” Te Pouwhare also says that the *toirua* and *momotawai* are one and the same bird. The *toirua* is said to be also known as *pīpītorī*.

To take the *momoutu* the fowler imitates the cry of the bird, and takes a leaf in his fingers, which leaf he shakes and twirls about. This attracts the bird, so that it comes close enough to be caught by hand, even perching on the hand of the operator. Natives say that it mistakes the twirling leaf for its own young. It is a dark-coloured bird.

*Nakonako*.—See under *Koekoea*.

*Nonoroheke*.—See under *Riroriro*.

*Oho*; syn., *Oho-mauri*.—Given in Williams's list as the land-rail, same as *moho-patatai*, &c. My Maori notes say: A bird of light-coloured, marked or patterned plumage. A difficult bird to take. It has a habit of appearing suddenly by the roadside as one passes: hence its name, “the startler.”

*Pakura*.—See *Pukeko*.

*Papango* (*Fuligula novæ-zealandiæ*).—Black teal.

*Papua* or *Papu*.—A species of *kawau* (cormorant).

*Parera* (*Anas superciliosa*; Grey Duck).—A flock of *parera* is termed *kawai parera* when in the water, but *pokai parera* when flying. When young ducklings take to the water, which they do early in life, they are called *kawaiwai*. When the *parera* and *whio* are moulting they are extremely fat, and were in former times caught in large numbers with dogs and even by hand at such times. At other times they were snared. A long cord,

termed *kaha*, was stretched tightly a little above the surface of the water, being fastened to stakes thrust into the bed of the lake or stream. To this cord were attached innumerable loop snares (*tahēi*, *tahere*), which were attached to the main cord so as to hang down and bring the open loop just above the surface of the water. In swimming to and fro the ducks were caught by the neck in this running noose. Favourite feeding-grounds of the duck in lakes or wide river-mouths, &c., were sometimes entirely surrounded with a ring line of snares.

Maoris do not appear to have been in the habit of taming birds, or keeping them as pets, save in the case of the *koko*. The *kaka* were so kept for use as decoys. Occasionally one hears of other birds being tamed, or partially so. For instance, one Tohi-ariki so kept a *parera* as a *mokai* or pet, and named it Korotau. On going a journey he left the bird in care of his wife. She neglected to feed it: hence it left the hamlet for pastures new. When Tohi returned he composed the following lament for his lost bird:—

Kaore te aroha ki taku nei manu  
 Titoko tonu ake i te ahiahi  
 Ka tomō ki te whāre takuate kau au  
 E whāe ma, e!  
 Tirohia atu nga parera e tere atu ra  
 Ehara tena, he manu maori.  
 Waiho me titiro ki te huruhuru whakairoiro  
 Mai no tawhiti.  
 He rangi au e tatari akuanei  
 He raro au e tatari apopo  
 Kai hea Korotau ka ngaro nei  
 Tena ka riro kai te katokato i te rau pohata  
 Ka whakataiorē tu nui ki te po me te ao  
 Ka oho ai au  
 E waiho ana koe hai tiaki hanga  
 Hai korero taua ki tona taumata  
 Waiho me ui ake te iwi ngaro.

*Pekapeka* (Bat).—The bat is termed a bird by the Maori. They are not often seen in this district.

The *pekapeka* was eaten in former times by the Natives. They usually are found living in hollow trees, and in former times, it is said, large numbers frequented such holes. To take them, a fire was kindled in the hole, and the entrance stopped up in order to prevent the escape of the birds. Thus the birds were stupefied by the smoke, and fell to the bottom of the hollow of the tree, where the merry fowler secured them. These resorts of the bat have a powerful and evil odour. The Natives were careful to kill the first bat caught, as this insured a good bag. If this first one escaped, then but few would be taken.

*Pihere*; syn., *Karuwai*, *Kakaruwai*, *Pitoitōi*, *Tataruwai*, *Toutouwai* (*Miro australis*; Robin).—This bird was called *pitoitōi* on account of its cry (which is rendered by the Maori as "*Pitoi-toi-toi*"), and *karuwai* (watery eye) because small drops of water are seen exuding from its eyes. Ngati-Awa and other tribes call these birds *pitoitōi*; Tuhoe style them *pihere*; while Ngati-Kahungunu, of Te Wairoa, use the name *karuwai*. Tuhoe call the female of this species *mokora*.

The robins practically disappeared from the forests of Tuhoe land years ago, and were rarely seen, though numerous in pre-European days. But in the summer of 1901–2 they reappeared in limited numbers at Rūa-tahuna, as also did the *rearea*, or bell-bird. Mr. R. C. L. Reay, surveyor, writing from Wai-maha, east of Maunga-pohatu, in 1903, stated, "The

*pitoitoi* are numerous in the Hangaroa district. They come near our camp, and follow along the survey-lines we cut. They appear to be darker in plumage than the *pitoitoi* I remember north of Auckland many years ago, and without the white lumps at base of beak."

When in going hunting or fowling in the forest you hear the cry of the *pitoitoi* far in the forest-depths, that is a sign of non-success: your trip will be a failure.

The *pihere* is taken by means of a trap termed a *korapa*, or *whakarapa*. To make this trap a piece of supplejack is bent so as to assume a U shape. Across the two ends a stick is lashed so as to cause the supplejack to retain its shape. It is now like a capital U with a closed top. Dried strips of flax are netted on this frame so as to form a net with a mesh small enough to hold such small birds as the *miromiro*. The trap now resembles an enlarged section of a snow-shoe—not the ski, but the Canadian snow-shoe. The straight cross-piece is termed a *kurupae*, and its ends project a few inches on either side of the trap. The trap is placed in a vertical position on the ground, the *kurupae* resting thereon. Two pegs are thrust in an oblique manner into the ground just above and resting on the projecting ends of the *kurupae*, and on that side of it on which the trapper takes his stand. The trap will probably be held in an upright position by the pegs; if not, then a slight stick will be used to prop it up. A cord some 30 ft. in length is attached by one end to the top of the frame of the trap. This cord is passed through a small hoop of supplejack, like a diminutive croquet-hoop, fixed in the ground just in front of the trap. The cord is carried on to the fowler's stand, he holding the end in one hand. In the other hand he holds a stick, with which he keeps striking a block of wood lying on the ground by his side. This tapping attracts the birds. The Natives say that the birds think it to be caused by some person chopping grubs (*huhu*) from a decayed tree, a common practice in Maoriland. It is a fact that the robins will collect around persons working in the bush, as I know full well, having often watched and fed them under such circumstances.

A bait of berries, earthworms, or *huhu* grubs is placed on the ground immediately in front of the standing trap, and close to it, so that the trap covers it when it falls. The birds, attracted by the tapping sound, draw near, and soon espy the bait and flock to it. When many are collected round the bait the fowler pulls the cord, which causes the trap to fall upon the birds and thus imprisons them. The cord, being passed under the little *korowhiti*, or hoop, holds the trap down close and prevents the birds escaping. All the fowler has to do is to retain his strain on the cord when he advances to secure the birds.

Other small birds, such as *miromiro*, &c., are taken at the same time. It is not the *pihere* alone that is attracted and so taken. No bird is too small to serve as food for the Maori, as witness the taking of the *pihipihi*.

*Pihipihī*; syn., *Karu-patene* (*Zosterops cœrulescens*; Blight-bird, Silver-eye).—This bird appeared in this district before there was any fighting with Europeans in Tuhoeland. It was known here at first as *karu-patene* (? button-eye). This bird is taken in great numbers in the Rua-tahuna district by the call-leaf and striking process, exactly similar to that method of taking parakeets termed *tanga porete* and *tanga kakariki*, for which see under *Kakariki*.

The decoy *pihipihī* are tied by the beak to the cross-cord with a short string. The fluttering and struggles to escape attract other birds, which perch on the cross-rod, and are struck down by the fowler, who



is half-concealed within a shelter of branches or fern-fronds.<sup>39</sup> A call-leaf is also used by fowlers. These birds are preserved in fat in great numbers in the interior of Tuhoe land. They are not carefully plucked—many feathers are left on—and they are not cleaned. But that matters not. The hardy Tuhoean bush-folk crunch up the birds—head, bones, inside, remaining feathers, and all—with great zest. But the *pakeha* looketh sideways at this delicacy.

*Piopio*; syn., *Koropio* (*Turnagra tanagra*; North Island Thrush).—The North Island thrush is almost gone from the forests of Tuhoe land. There are said to be some still in the Parahaki district, a wild uninhabited tract of rough forest country but seldom visited by Natives, and which but few Europeans have penetrated. These birds are said to have been numerous in former times all over the Tuhoe district, and fowlers used to take them in considerable numbers, attracting them by means of a lure-call. A leaf was generally used whereby to make most of these lure-calls. The plumage of this bird is described by Natives as *pakaka*, or *whero popouri*, in regard to colour. (See *Pohowera*.)

*Pipitori*.—Said to be another *alias* of the *toirua*.

*Pipiwaharaura*.—See under *Koeko*.

*Pitoitoi*.—See *Pihere*.

*Piwaiwaka*; syn., *Tiwaiwaka*, *Piwakawaka*, *Tiwakawaka*, *Tirakaraka*, *Hirairaka* (Pied Fantail).—This is the bird that caused the death of Maui, the hero who endeavoured to gain eternal life for man, and failed at the task, as many others have. In this and some other myths birds are alluded to as *Te Tini o te Hakuturi*, though it would sometimes appear that the term is applied to fairies. In like manner the expression *Tini o te Mahoihoi* is sometimes explained by Natives as being a sort of general term for birds, though others state that it is applied to plants, &c.

*Pohowera*.—I have heard this name applied to the *piopio*, but I do not know that it is a genuine name for that bird. *Pohowera* is certainly the name of a sea-bird. This bird is also found a certain distance inland at times. If its nest is found in a *kumara* cultivation the eggs are carefully counted, for it is, or was, believed that the field will produce twenty baskets of *kumara* (sweet potatoes) for each egg the nest contains.

*Porete*.—This is the most common name for the parrakeet among the Tuhoe Tribe. (See under *Kakariki*.)

*Pukeko*; syn., *Pakura* (*Porphyrio melanotus*; Swamp-hen).—These birds were never numerous in the Tuhoe district, which is essentially a forest country, the realm of Tane. I have not yet seen this bird hereabouts. In former times they were numerous in the Ngati-Awa district, which contains a great area of swamp-lands. They were snared in a similar manner to that employed in taking ducks, except that the apparatus was fixed on land. A long cord was stretched tightly from stake to stake, and from this cord hung many loop snares, at such a height above ground that a *pukeko*, in walking, would be likely to thrust its head into the loops. The expression *kawau moe roa*, or “long-slumbering shag,” was applied to all such snares as were so left, unattended by the fowler, for the birds to catch themselves in. It was also applied to eel-pots and all such nets as are left in the water.

The *pakura*, or *pukeko*, was a troublesome bird to the Maori agriculturalist, for it entered the fields at night and scratched out and ate the tubers of the *kumara* (sweet potato).

As we have seen, the *pakura* and *kokako* are sprung from a mythical being known as *Hine-wairua-kokako*, a *tipua*, or supernatural being. Says

Pio, "The *pakura* are a troublesome folk. They are the offspring of Hine-wairua-kokako. Most evil are the actions of that ancestress and her offspring in pulling up and devouring the food of the Maori people. When seen assailing the crops a person goes to *hiehie* them (to drive them away by shouting at them). This is the *whakahiehie* :—

Hie! Hie!  
 Haere ki te huhu  
 Haere ki te repo  
 Haere ki a Hine-wairua-kokako.  
 Hie! Hie!  
 Haere ki a Hine-wairua-kokako  
 Hie! Hie!

The sign by which the Maori knows the approach of daylight comes from the *pakura*. Its cry is heard about midnight, again later on, and again a third time. The third cry tells us that daylight is at hand."

*Quail*.—The New Zealand quail was known in this district, but disappeared many years ago. It was once numerous in open country, and was taken with nets. It is *Coturnix novæ-zealandiæ*. The Native names of the quail given by Williams are *koreke*, *koikoiareke*, *koitareke*, *kokoreke*, *koutareke*, and *tareke*.

*Rearea*; syn., *Korimako*, *Korihimako*, *Kopara*, \**Kokomako*, *Kokorimako* (*Anthornis melanura*; Bell-bird).—The *rearea* was sometimes speared, and also taken by means of a *puaka*, which is an enclosure made by thrusting sticks or branches into the ground so as to form a sort of fence. Small openings were left by which the birds entered to eat the bait placed inside. Loop snares were arranged in these open spaces, by which the birds were caught. The *porote* was also taken in this manner.

The bell-bird had long disappeared from Rua-tahuna when I first visited those sylvan wilds in 1895, but reappeared there in the summer of 1901-2. I often heard them near my camp in that year; but they were not numerous. It was not like the delightful clamour heard in the bush of the Wellington District in the early sixties: that was something to remember.

*Riroriro*; syn., *Nonoroheke*, *Nonoroheko*, *Horirerire*, *Hirorirori*, *Korirerire*, *Totororire* (*Totorori*?) (*Pseudogerygone igata*; Grey Warbler).—This is a *manu tohu tau* of the Maori. It shows them what the coming season will be by its manner of building its nest. If its snug little roofed nest is built with the side entrance thereto facing the north, then the prevailing wind of the coming season will blow from the south, and *vice versa*. If the opening of the nest faces the *muri* wind a *tau tokerau* will follow—that is, easterly winds will prevail, and it will be a pleasant, prolific season. If the nest faces the east, that means a *tau hauauru*, *he upoko maro*—a westerly and cold, inclement season: crops and forest products will not be satisfactory. The *muri* is a wind that blows from the coast up the Whakatane Valley. This wind betokens good fishing weather. It is styled a *hau aroha*, a favourable wind. *Upoko maro* is a term used to denote cold weather—the cold south winds, or *tonga kokoti*.

The cry of this bird is rendered by the Maori as "*Riro, riro, riro!*" When this cry is heard in winter or early spring it is a sign for man to be up and doing—to commence the work of preparing cultivations for crops, &c. It is urging the Maori people to commence the work of the year.

Two authorities give me *totorori* as a name of the *riroriro*. Another Native says it was a bird similar in size and appearance to the *riroriro*, but not the same; that it was a forest bird, but is no longer seen.

*Ruru* (*Ninox novæ-zealandiæ*; Morepork).—This well-known bird is sometimes known as *koukou* and *peho*. As *Mihi-ki-te-kapua* of old sang, when left lonely in her old age at *Wai-kare Moana*;—

E'peho; e'te ruru; he tokorua'ano  
Tena'ko'au nei; he kotahi.

If a *ruru* is heard to utter its cry at a junction of two tracks it is looked upon as a sign that a hostile party is approaching—a war-party is at hand—look out for squalls. As old *Pio* put it, “I begin another subject—the warning given by the *ruru* when danger is nigh. If a war-party approaches a hamlet, this bird gives warning of its coming. It calls out to the people of the place in this way: ‘*Kou, kou! Where, where, where!*’ Then the people arise and fly to the forest. The enemy assaults an empty place.” So much for the wise owl.

A Native states that the morepork has four different calls, and that if a person imitates the bird's cry it will answer him. Its first cry is “*Kou, kou!*” hence the bird is in some places termed *koukou*—an example of onomatopœia. The next cry is “*E—e—e!*” which is *he tangi aroha ki te tangata*—a kindly greeting to man. Another cry is “*Whe, whe, whe!*” and then “*Peho, peho!*” which latter is thought to betoken anger. *Pio*, of *Awa*, says that the bird will answer a mimic call three or four times: “*Ko te ruru, tana korero, kou, kou! Ka utua e te tangata, ka tahi pona, kou, kou! Ka rua pona, kou, kou! Ka toru pona, ka whakarere. Ka wha pona ranei, ka whakarere.*”

These birds were, and are still, eaten by Natives. They are simply knocked down with a stick, or snared by means of a slip-noose on the end of a stick. The fowler takes a leaf between the thumb and one finger of his left hand, and twirls it in order to attract the attention of the bird as he slips the noose over its head.

Native children will cook and eat a morepork, or any other bird, wherever they happen to kill one.

I have a friendly *ruru* at my camp here, beneath the frowning defences of the old *Hau-kapua pa*. On cold winter mornings, when the frost is keen, this bird comes forth from the bush as soon as the sun rises, and perches himself upon my garden-fence, where, with closed eyes, he suns himself for an hour or more. Though very close to the camp he does not get alarmed, knowing by experience that he will not be molested.

In only one case have I heard of a *ruru* being looked upon as the form of incarnation of an *atua maori*. *Karukaru*, an *atua* or demon of the Natives of the *Whanganui* River, was brought to this district some years ago (*i.e.*, his cult was so brought, I presume). The *aria* of *Karukaru* is a *ruru*. This was the familiar demon of *Matoru*, a would-be shaman of these parts, whose nose was put out of joint by *Rua the keka*. This demon, *Karukaru*, guards his human mediums from danger, warns them when any one is attempting to bewitch them, &c. One evening old *Paitini* returned to his home at *Heipipi* and found a *ruru* perched under the porch of his cabin. The bird was startled and flew away to an open shed, where it perched itself upon a buggy that old *Pai* had bought. The old man at once suspected something was wrong. A most superstitious man, your elderly *Māori*. He suspected the poor *ruru* to be the worthy *Matoru's* demon, sent for no good purpose. He went to the shaman and made inquiries. *Matoru* told him that he had sent his familiar demon to take possession of the buggy, which was henceforward to be the property of the dread *Karukaru*. *Pai* was also told that if he did not quietly give up possession of the buggy, then both he and his

wife would die—that is, be slain by black magic. Hence this couple were much disturbed: they wished neither to die nor yet lose their buggy. At this juncture the godless *pakeha* stepped in, and, with incisive vocabulary and impious disregard for gods or demons, broke up the game.

*Tarapo*.—Williams gives this as a name of the *kakapo*. Akuhata te Kaha, of Tuhoe, says it was a forest bird, smaller than a *kakapo*, and no longer seen. Te Pou-whare states that *tarapo* was the name of the female *miromiro*.

*Tataeto*; syn., *Tataeko*, *Tataihore*, *Tatangaeko*, *Popokotea*, *Tatariheko* (*Certhiparus albicapillus*; Whitehead).—These birds are still seen in the Rua-tahuna district, though not numerous as of yore. I have come across flocks of them in remote places there—or, rather, they have come across me. They move in flocks, flitting quickly from tree to tree. Natives say that the *tieke* and *tihe* birds join flocks of whiteheads and accompany them; a few will be seen with each such flock. A flock of whiteheads will sometimes set on to a *ruru* and chase it about, even as the *koko* does.

A flock of whiteheads is termed a *ta tataeto* by Tuhoe and *taki tataeko* by Ngati-Awa. Ngati-Kahungunu, of Te Wairoa, call this bird *tatai-hore*.

*Tieke* (*Oreadion carunculatus*; Saddleback).—This bird has entirely disappeared from the forests of this district, albeit there are here hundreds of thousands of acres of wild forest lands, within the shades of which man is but seldom seen. The Natives say that bees have destroyed the *tieke* by occupying the holes and hollow trees where the bird was wont to breed. This is absurd. Such holes and hollow trees are here by the million in this great forest, but bees' hives are scarcer than in any other part of the Island I have camped in. In the fair vale of Whare-kopae, Poverty Bay, I found nine hives within half a mile of my tent. To find one in the Tuhoean forest would need about a day's search.

When going a-hunting or fowling, if you hear the cry of a *tieke* on the right-hand side of the track it is a *marie*, or token of good luck—you will be successful; but if you hear it to the left, that is a *puhore*, or sign of non-success.

At Repanga, or Cuvier Isle, there are said to be two *tieke* birds, named Takereto and Mumuhau, which are *atua*, or supernatural beings. They are claimed by the migrants of both the "Matatua" and "Arawa" canoes.

In taking the *tieke*—for all forest birds were food for these bushmen—in some cases a fire was kindled. This is said to have attracted the birds.

*Tihe* (*Pogonornis cincta*; Stitch-bird).—The male bird is termed *tihe-wera*. Its plumage is described by Natives as being *whero manaeka* (? yellowish-red). The female is called *tihe-wai*. This bird disappeared years ago from the forests of this district. It was taken by means of the *puaka* snare-trap.

*Titi*.—This sea-bird was formerly found in large numbers on the rugged ranges of this district, where they had breeding-places to which they came every year. The Natives used to visit these places every year to take the birds, both young and old. These were preserved in fat in great numbers. They were placed in calabashes by the inland people, but those who had access to the coast used vessels made of a large species of seaweed or kelp. These latter vessels were called *poha*. The advent of the Norway rat put an end to this food-supply, for they devoured the young birds; hence the *titi* ceased to come to these parts to breed.

Places where these birds were taken by fowlers are known as *ahi titi* (*titi* fires), because a fire was always kindled on such occasions. The tops

of cliffs, hills, and ridges seem to have been selected as places whereat to take the *titi*. A net about 20 ft. or 30 ft. in length was set up on the edge of such cliff or slope. This net was fastened to poles or stakes inserted in the ground. Each pair of stakes was lashed together at the top, thus forming an inverted V—so  $\wedge$ . Where these two stakes crossed and were lashed was termed the *mata tauira*. The upper rope of the net was called the *tama-tane*, and the rope on the lower edge the *tama-wahine*. The net was made of flax-fibre. Old persons, past their hard-working days, spent much of their time in making nets, snares, &c. These birds were taken at night-time, about November. A fire was kindled in front of the net and a little distance from it. Behind the fire, and immediately below the net, the fowlers were seated, each having a short stick in his hand wherewith to strike down the witless birds. The birds, attracted by the fire, flew to it, and came into contact with the net. Ere a bird recovered from the shock it was struck down by the fowlers. A foggy or misty night was considered best for taking these birds. Two men only remained standing: their task was to strike down the high-flying birds that flew against the *mata tauira*. Should the first bird taken chance to fly against the *tama tane*, or *mata tauira*, that was looked upon as a sign of poor luck—but few birds would be taken that night; but should it strike low down the net, at or near the *tama wahine*, that was an excellent omen—many birds would be taken. If a menstruating woman chanced to be among the party of fowlers a very poor bag was the result—the birds would fly about, screeching loudly, but keep clear of the net. Also, the fowlers were careful not to cause any of the birds to bleed. If any blood were drawn, then no more birds would come near the fire.

Great numbers of these birds were taken by such means in former days, before the European rat appeared on the scene. The birds were plucked, cleaned, and the bones taken out; then they were prepared at the *ahi matiti* for potting.

A large number of places are pointed out here as former *ahi titi*, mostly on the higher ranges, as those of Huiarau, Maunga-pohatu, &c., and at Wai-kare Moana, O-tukopeka, Te Rua-ngarara, Taumata-miere, and countless other places.

*Titiporangi*.—The only note I have anent this bird is, "A forest bird, smaller than a *titi*. It has disappeared from this district. It was dark-coloured on one side and light-coloured on the other." This is the rendering of the original Maori. Williams gives *titiporangi* as a name of the black teal.

*Tititipo*.—This was given me as a bird-name, but more I cannot say.

*Tititipounamu*.—See Toirua.

*Tiwaiwaka, Tiwakawaka*.—See *Piwaiwaka*.

*Toetoe*.—Same as *kukurutoki*. (See latter.)

*Toirua*.—See under *Momotawai*.

*Totorori*.—See under *Riroriro*.

*Totororire*.—See under *Riroriro*.

*Turi-whekoi-rangi*.—A sea-bird.

*Tuturiwhatu* (*Ochthodromus obscurus*; Dotterel).—The name of this bird is connected with that of one of the sisters of Taukata—he who brought the knowledge of the *kumara* to Whakatane. The two brothers, Taukata and Hoaki, had two sisters, Kanioro and Tuturiwhatu. These were the children of Rongoatau, of Hawaiki, and descendants of Pani and Rongomai. This Tuturiwhatu met with an accident and had her chest burnt. The bird

of the same name is said to be her, or represent her. It has no place in this list, save the fact that it is sometimes seen on the river-beds of this district.

*Weka* (Wood-hen).—These birds are not numerous in this district, but are said to have been so formerly. In those days they were snared, and also hunted with dogs.

*Whekau*.—See *Hakohe*.

*Weweia* (*Podiceps rufipectus*; Little Grebe).—Natives state that a pair of these birds are always seen in a crateral pond on the summit of Mount Edgcombe by those who ascend that isolated cone.

*Whenakonako*.—See under *Koekoea*.

*Whio* (*Hymenolæmus malacorhynchus*; Blue Mountain-duck).—One often sees these birds when traversing the rough streams of the high-lying interior, as at Rua-tahuna. These birds were taken at night, the fowlers carrying torches, which they flashed suddenly on the birds when near to them. This is said to cause the birds to settle, whereupon they are struck down and secured.

*Whioi* (*Anthus novæ-zealandiæ*).—Ground-lark.

The following is a list of the birds that have disappeared from the Tuhoe district, and several other species may be marked as doubtful, as the *kokako*, *piopio*, and others. It must be remembered that nearly the whole of this district is covered with dense forest, with few clearings, and that the Native population is small, and residing principally on the outskirts.

<i>Hakuwai.</i>	<i>Kea.</i>	<i>Moho-patatai.</i>
<i>Hakohe, or wnekau.</i>	<i>Koitereke.</i>	<i>Moho-rangi.</i>
<i>Kaha.</i>	<i>Kotuku.</i>	<i>Momotawai.</i>
<i>Kakapo.</i>	<i>Moa.</i>	<i>Tieke.</i>
<i>Kareke</i>	<i>Moho.</i>	<i>Tihe.</i>

Cutting out the *hakuwai* and *moa*, we have here a list of thirteen species that have disappeared from this district since the coming of Europeans to these isles, whilst some others have almost, if not quite, disappeared. The species that have survived have almost all become greatly reduced in numbers.

The *korore* is said to have been a water-bird, a species of duck. Mr. C. E. Nelson tells me that he got the name from an old Native of Ngati-Whatua, who had seen it in his youth. It has not been seen for many years. This was the origin of the place-name O-korore.

We will now endeavour to explain the Native theory or belief as to the cause of the disappearance of native birds—for they firmly believe that it is primarily due to certain ancient customs and faiths having been abandoned by themselves, the Maori people of these isles. They believe that the degeneration of the Maori, and the serious lessening of the Native population, have been brought about by their forsaking ancient customs and old-time cults—by their having become *noa*, or free from *tapu*—debased, in fact—through contact with Europeans. And they hold a very similar belief in regard to the cause of the disappearance of birds, or the lessening of their numbers.

The old-time Maori was, or believed himself to be, an extremely *tapu* person. His system was, as it were, imbued or permeated with a highly sacred, semi-volatile, and all-pervading non-material ichor, a spiritual and intellectual essence or ether. And it was this that preserved man from death or disaster of certain kinds. When speaking of a person's *hau* or *kawa ora*, it is this that is in the speaker's mind. It is the *mauri ora* of

man. Even land possesses this quality, as we shall see anon. It is the very essence of vitality. If lost or debased in any way, the person, or tree, or forest, or land is in a truly bad way, and armourless against shafts of magic or other evil influences. Broadly speaking, the above state may be termed *tapu*; but there are many inner terms and definitions which cannot be understood by the *pakeha*.

Said Ngahooro te Amo, of Ngati-Mahanga, "Birds were exceedingly numerous in former times, before Europeans came. In the days of my youth, at Te Whaiti, when the multitude of birds were singing in the early morn, a person's voice could scarce be heard in the forest, so great was the noise. Birds were numerous so long as we cooked them in the ancient manner—that is, in a *hangi* (steam-oven); but when we began to cook them in the *kohua* (iron pots) obtained from Europeans, then it was that the evils of the *tawhanarua* came upon us. For it was unlucky and of evil omen. Then it was that birds began to decrease in numbers."

The word *tawhanarua* means "to cook a second time." When cooking birds, should they be found to be underdone when the oven was opened, then the proper thing to do was to use them in that state, and not attempt to recook them. If they were cooked again, then the birds of the adjacent forest would surely disappear. So sayeth the Maori.

Said Himiona Tikitu to the writer, "In olden times birds were always cooked in the evening. If cooked in the daytime, then all birds would desert the forest. They would be heard flying away in myriads in the night-time, migrating to other parts. The *tawhanarua* or *tao rua* (second cooking) would have the same effect, as also would the use of European cooking-vessels. Because the forest and its denizens became *tamaotia* (defiled) by these things. Hence the birds would disappear, even as we Maori people did after we became *noa* (defiled, free of *tapu*) by washing in water heated in the cooking-vessels of the white men. But remember that the above restrictions only obtained during the busy part of the bird-taking season—that is, while the birds were being potted down for future use. When this labour was ended, then the above restrictions were removed."

In the above remarks we see how the life principle, the vitality, of man, birds, forest, and land were seriously affected and endangered by certain simple acts of omission or commission.

The scarcity of birds now so remarkable in this forest district became most marked about the middle eighties, though they had been gradually decreasing in numbers for many years before that time.

When forwarding my first contribution of these notes on forest-lore, I remarked that the balance must lie over for another year. Alas for human hopes!—for there is still a balance, and a bulky one, I ween. Peradventure we may prepare that balance ere the sun again returns to Hinetakurua, the Winter Maiden, and send it forth as an *amonga* to the modern *whare takiura*, whose priests are the men of the linotype.

It was Kuha-tahi, the husbandman, who cried, "*Hoatu, hoatu! He ra tapahi.*"