NORTHLAND

3.4 Ruapekapeka, Q06/139 GR 144377 (N16/185) (Fig. 15).

Ruapekapeka was the last fortification constructed in the Bay of Islands phase of the New Zealand wars. It was built in 1845 by Kawiti, and defended by his and Hone Heke's forces against the British attack conducted from December 1845 to 11 January 1846 (Cowan, 1983: vol. 2, 73-87). The site has an irregular plan, with many returns in the rifle trench and bastions in the south-eastern wall and at the north-west and south-west corners. The perimeter originally consisted of an exterior stockade and screen (two lines of posts), a ditch (or linked rifle pits) and inner bank. The interior consisted of many sub-terranean pits designed to withstand exploding shells. Howitzer, solid-ball cannon-fire and rockets were used against the pā. After it was taken, the huts and stockade lines were burnt.



Figure 15 Oblique aerial view of Ruapekapeka, February 1992. The surviving perimeter of ditch and bank provides unique insights into the earlier phases of Maori gunfighter pa. The ditches lay inside a screen or palisade of puriri logs; the interior pits were rooofed over with earth to avoid the effects of exploding rocket fire. Totara trees line the fence in the foreground and manuka-dominated scrubland dominates the background.

History of site condition

The condition of Ruapekapeka has now been documented for some 70 years. Changes in its condition over those years give pause for thought. In 1922, James Cowan described the site as follows:

Half-burned *puriri* logs, almost imperishable, lie about the hillside; there are the stumps of trees felled by the Maoris when clearing the glacis [exterior field of fire] of the *pa*. Three or four stockade-posts, roughly trimmed *puriri* trunks, stand on the line of the double stockade; they resist age and weather to-day as they did the British round shot and fire-stick long ago.... We descend into one of these *ruas* near the centre of the *pa*. Its mossy floor is 6 feet below the surface of the ground; it has a narrow entrance or shaft, and then it opens out fanwise underneath into a comparatively wide chamber. . . . The parapets and trenches are in the most perfect state of preservation on the western and southwestern aspects. Here the trench is 5 feet deep, and from the ditch-bottom to the top of the parapet the height is 8 or 10 feet. The trench system would still conceal a little army. . . (Cowan, 1983: vol. 2, 77-79)

Some 80 years after the battle, then, the interior bomb-proof pits of the $p\bar{a}$ were readily entered and there were many signs of the massive timbers of the stockade. Cowan also notes that the defences were in the best condition to the west and south-west. This is still the case today, and the profiles that he describes are still approximately true.

Generally, the conservation status today, as marked by the general lack of patches of progressively eroding soil, is good. Some tracks formed by visitors are causing spots of failed grass cover but the impacts on the historic fabric are not pronounced. On our visit we saw very limited signs of people getting access to the underground pits, wearing a path into only one pit near the northern perimeter. Stepping of cattle or people to reach fodder or blackberries had made minor collapses on one or two other pits near the southern perimeter.

Vegetation

Wider forest setting

Bush more or less surrounds the site. It is predominantly pūriri and taraire forest with tōtara, rewarewa and kohekohe trees, a very high incidence of epiphytic *A stelia* and an understorey of māpou, nīkau, māmaku, kawakawa and *Coprosma* spp., and numerous species of fern (*Doodia* sp., *Blechnum filifolia*, *Pteris macilenta*, *A splenium flaccidum*, *Pyrossia eleagnifolia* and *Phymatosorus pustulatus*, among others). Vines include *Metrosideros perforata* and kareao (*Ripogonum scandens*).

Two weed species occur on the bush margin: *Tradescantia fluminensis* (wandering jew) and *Impatiens sodenii*: both should be removed. Apart from these weeds, the forest appears to be in excellent condition with good visibility of the forest floor features. There is no reason to assume that this forest type will not re-colonise the areas around

the $p\bar{a}$, and over the $p\bar{a}$ itself in the long term. However, the vegetation surrounding the $p\bar{a}$ in 1845 was fern and grassland with patches of forest (largely still extant). If historical correctness is desired, then grass or fernland should be maintained. This would also provide visitors with vistas of the Bay of Islands and the overall tactical setting of the site.

Surrounding grassland, shrubland and treeland

A complex zone of vegetation surrounds the pā. Some important historic features are included. Part has been recently planted in shrubs (karamu, *Coprosma robusta*) in an attempt to eventually establish forest, and restrict weeds. Unkept areas adjacent to the site are in tall kikuyu, bracken and manuka. Weeds here include ragwort, *Senecio bipinnatisectus* and one individual of passion vine (*Passiora mixta*). Near the entrance to the pā is a patch of *A geratina adenophora* (Mexican devil) and a few *Hypericum androsaemum* (tutsan). In the northern area of grazed grassland, where the British ditch and banks occur, there is an expanse of parsley dropwort (*Oenanthe pimpinelloides*). "Parsley dropwort is an aggressive and persistent weed which invades pasture and has become extremely common in Northland in the last 30 years" (Webb *et al.*, 1988: 135).

Grassland and shrubs on pā features

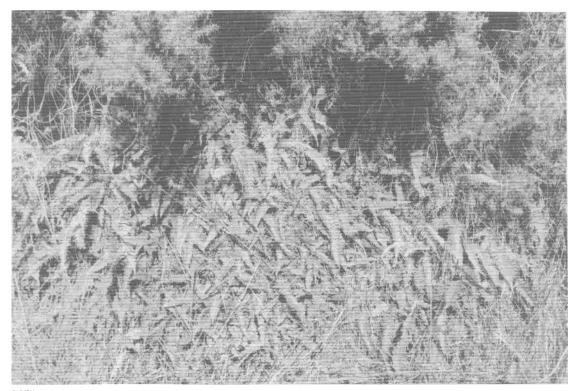
The mown grassland consists of browntop, yorkshire fog, paspalum, pātītī, cocksfoot and ratstail (*Sporobolus africanus*) with small areas of a danthonia (*Rhytidosperma ?racemosum*) and an expanding component of kikuyu (which is seeding in cowpats). Associated with the grasses are many species of herbaceous plants, including plantain, *Dichondra*, wild carrot, *Prunella*, and white clover. Bracken is sometimes encroaching and close-cropped gorse is evident. Two ground mosses (*Pseudoscleropodium purum* and *Thuidium furfurosum*) are widespread.

The pits and trenches contain a variety of herbs and shrubs, because they are not maintained in grass (Fig. 16). Some areas of grass described by Woods (1993: 4) include Yorkshire fog, cocksfoot; there are also a potentially useful sedge (*Cyperus eragrostis*) and rushes (*Juncus spp.*). Ferns include bracken, ponga, mamuku, *Paesia* (ring fern), *Doodia media* and *Blechnum* "black spot", all of which are significant in protecting soil features. One observer considered that the underground rhizomes of bracken formed conduits for water when they died and thus contributed to soil erosion, but we have not seen examples of this. We are more impressed by the ability of bracken to hold friable soil together and protect sensitive pā features from raindrop impact. Gorse and blackberry also occupy pits and trenches, and people seeking blackberry fruit have unwittingly caused some minor bank erosion. In the few cases where pits are maintained in grass, there is erosion caused by people crawling in to explore the underground galleries.

The pits contain a range of native shrubs including koromiko (*Hebe stricta*), karamu, pate and kawakawa. The field bindweed (*Convolvulus arvensis*) was also noted by Woods (1993: 4). *Metrosideros perforata* has been planted in the moist, shaded pits, as a ground cover (Gardiner, 1994, pers. comm.) and survives sparingly. Some of the pits



16(a)



16(b)

Figure 16(a), (b) Ruapekapeka: (a) the pits and ditches, protected from grazing and mowing, have become colonised by gorse, bracken, blackberry, koromiko and tree ferns with a wide variety of herbaceous ground plants. (b) a dense cover of indigenous fern *Doodia media* covers the shaded surface of a ditch on Ruapekakepa.

are very moist and contain introduced rushes and sedges. There has been local but significant erosion of the rims of pits and trenches by stock seeking to eat the diverse shrubs and other plants growing within.

Management

Ruapekapeka has been periodically cleared of bracken, woody vegetation and some weeds over the last 15-20 years. Aerial photographs for a photogrammetric survey in 1981 (SN5651, RN H/2, 4.1.81) show the site completely bare of all but grass cover. At that time also, the site was being mown. Since 1987, the site has been mown with a small 4-W -D ride-on mower, and the principal depressions and perimeter gun-pits have been left to form a gorse, fern and shrubland cover (detailed above, Fig. 17). The cutting height of the mowing generally appears to be set too low and some scalping of convex features is occurring, especially on the northern perimeter. One of us (K.J.) also visited the site in May 1994, and noted that there had been some "knock-down" spraying of the edges and tops of gorse bushes growing in the trenches.

Key management measures are needed. Mowing should be set at a greater height, especially for work on the perimeter bank, allowing for a minimum clearance on the bank of 15 cm. Elsewhere a minimum clearance of 10 cm should also be set. This will still reveal the features. Some scrub-cutting and weed-eating of shrubs, including gorse and bracken fern, is needed in the perimeter trenches, to take these back to within



Figure 17 Ditch and bank surfaces of Okuratope colonised by trees/ferns, tanekaha and other forest species which provide some protection from rain-induced erosion.