Otanewainuku Ecological District

Survey report for the Protected Natural Areas Programme

NEW ZEALAND PROTECTED NATURAL AREAS PROGRAMME NO. 37





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Survey Report for the Protected Natural Areas Programme

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Foreword

This report forms part of the Protected Natural Areas (PNA) Programme series of reports. These reports describe Recommended Areas for Protection (RAPs) within ecological regions and districts throughout New Zealand.

Otanewainuku Ecological District extends across the Kaimai Range and the northern Mamaku Plateau to the coast at Otamarakau. The district was once entirely forested, however it now comprises a mixture of indigenous vegetation, plantation forestry, agriculture and horticulture. A range of forest types occur across the district from the tawari dominated submontane forest and rimu-northern rata/tawa-kamahi-rewarewa forest in the lowland zone, through to the pohutukawa dominated coastal zone and sand dune communities. Some of the remaining forest has been logged for podocarps and broad-leaved species. Whilst the present day indigenous vegetation is still largely forest, there are a few scattered wetlands and low sand-dune vegetation along the 16 km of coast. Twenty-five threatened plant species have been found in the district with seven other species attaining distributional limits, including kauri.

This report contains a large amount of information on the ecological values of the Otanewainuku Ecological District. It is a significant reference work but also gives guidance as to conservation priorities. It will be a useful document for landholders, conservation managers from the Department of Conservation and other related organisations, iwi, conservation groups, scientists and the general public.

The identification of RAPs is the starting point for the implementation phase of the PNA programme. This could involve discussions and consultation with landowners, aimed at securing some form of protection of the natural values associated with the RAPs if the landowner so desires.

Effective conservation involves partnerships between local and central government, landowners and local communities. To achieve protection the Department of Conservation promotes a wide range of mechanisms including covenants, management agreements, protected private land agreements, reserves and District Scheme provisions.

The Otanewainuku Ecological District PNAP report has been prepared by Wildland Consultants Ltd under contract to the Department of Conservation.

Henry Weston

Conservator

Bay of Plenty Conservancy Department of Conservation

Abstract

Otanewainuku Ecological District was surveyed during the period January to May 1994 for the New Zealand Protected Natural Areas Programme in order to identify priority representative natural areas for protection. The district covers approximately 188,700 ha. The main characteristics of the ecological district are the dissected ignimbrite plateaus with their incised gorges. The few physiographic variations are primarily due to differing age of ignimbrites, local andesite outcrops and minor rhyolitic domes.

The soils of the district are mainly moderately to strongly leached volcanic ash soils. The former primary podocarp/tawa forests with local beech, which covered much of the district in 1840, have been widely logged and cleared for farming and exotic forestry.

The ecological district was subdivided into eight land systems and four bioclimatic zones (coastal, semi-coastal, lowland, and sub-montane). The land systems reflect the geological and landform variation, while bioclimatic zones were distinguished on the basis of the distributions of selected indicator plant species.

Protected natural areas are relatively extensive and include reserves administered by the Department of Conservation (*c*. 40,000 ha), QEII Covenants (*c*. 1,170 ha), water reserves (*c*. 2,700 ha), and Whakatane District Council Coastal Reserves (*c*. 174 ha). In total these reserves comprise 45,078 ha or 24% of the ecological district. However, a relatively large proportion of the protected areas are in the lowland bioclimatic zone, with *c*. 46% of the lowland bioclimatic zone in reserves. By comparison the semi-coastal bioclimatic zone is under-represented in the existing reserve system with only 10.5% protected overall. Five of the seven land systems represented in the semi-coastal bioclimatic zone can be regarded as being under-represented in the protected area network.

Sixty-two recommended areas for protection (RAPs) are identified, totalling 19,922 ha or 10.6% of the ecological district. These were selected to complement existing protected natural areas, to represent more fully the natural diversity of the Otanewainuku Ecological District. In addition, some recommendations are made for improved management of existing protected areas, some of which should have an upgraded classification in order to reflect their importance for nature conservation.

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