FORGOTTEN HABITATS conservation challenge of the future

The battle for protection of non-forested natural areas of New Zealand - tussocklands, wetlands, shrublands and dunelands — is one of the major challenges facing the Society. Executive member Alan Mark, a professor of botany at the University of Otago, has long been interested in conserving these important parts of our natural heritage. This article is an abridged version of this year's Sanderson Memorial Address which Professor Mark delivered.

ow representative are the formally protected natural areas of the total biological resource of this country? It is generally accepted that the representation is very poor, although significant areas of non-forested ecosystems have been protected in most national parks, in several scenic and allied reserves, as well as in some state forest parks, sanctuaries and ecological areas.

In Canterbury, we know from the DSIR Botany Division's inventory of scenic and allied reserves that, while about 70 percent of the natural landscape non-forested (mostly tussock grassland), less than six percent of the total reserved area is in tussocklands or some other type of non-forest cover.

Otago is no better off — 68 percent of the original landscape is non-forested, mostly tussock grassland, but less than 13 percent of the reserves system is of tussock (and only about 0.11 percent of it lowland tussock grassland). However, 400 hectares has been set aside as the Lindis Pass Scenic Reserve. Though the landscape here is impressive, the condition of the grassland is very poor. The area is still retained within pastoral lease and is grazed on a co-operative management basis - an example of a compromise that could be more widely used in the future.

The representation is similarly poor in Southland and Marlborough. In Marlborough there are no tussock grassland reserves, although naturally these were important.

There are, however, in the latter some small shrubland reserves to retain areas of the unique broom species in their natural habitats. The 3500-hectare Waituna wetland adjacent to Foveaux Strait has been ranked of international importance, though its conservation and scientific values could be greatly enhanced by the addition of adjacent areas of Crown-owned lowland cushion bog. Two hectares of red tussock grassland has been reserved alongside the main highway at Pukerua near Gore in northern Southland. We have also been promoting the Gorge Hill area alongside the highway to Te Anau as a combined scenic-scientific red tussock reserve. The case was finally clinched after 13 years of deliberation with the request of the Wildlife Service to release takahe raised from eggs collected in the wild, into a part of the area. Lands and Survey has now recommended a relatively large (3200 hectare) area, half red tussock and half beech forest, for reservation.

In an adjoining ecological district, the Land Settlement Board has recently confirmed a 35,000-hectare pastoral park for the Lake Mavora area — the balance of the land development block considered unsuitable for intensive development. The National Parks and Reserves Authority recommended, along with a majority of those making submissions, that the area — a magnificent mountain landscape of mixed tussock grasslands, alpine barrens, wetlands and beech forests — should be destocked and formally reserved.

Ecological Areas

Within state forests, ecological areas, though mostly forested, have made a significant contribution to the national system of non-forested protected natural areas within the last decade. Tussock grasslands, wetlands and shrublands are all included in the almost 200 areas involving a third of a million hectares that have been accepted for reservation.

The concept, together with that of ecological districts, was initiated by a scientific committee which has now been disbanded and replaced by the Protected Areas Scientific Advisory Committee which is to look at reserve needs throughout New Zealand regardless of tenure.

An important feature of these ecological area reserves is the criteria used to identify them — a substantial size (at least 1000 ha) with natural (catchment) boundaries and fully representative sequences of ecosystems. Moreover, the exercise of ecological area identification was not constrained or even influenced by the Indigenous Forest Policy. Indeed, the committee at its last field meeting in 1984, expressed its concern to the Forest Service that the Government's Indigenous Forest Policy had the undesirable effect of implying that only indigenous forests were worthy of conservation, whereas to the committee a full range of native ecosystems justified preservation and conservation.

In this context I noted with satisfaction an announcement made by the Director General of Forests in March of this year regarding the classes of natural vegetation that in future are to be regarded as indigenous forest for the purpose of the Indigenous Forestry Policy. Included

"Seral vegetation, or other natural vegetation, considered locally important as native wildlife habitat or as representative of a vegetation type otherwise rare in the ecological

Clearly this widening of the scope of the IFP is most significant and represents an important move by the Forest Service is response to these and other expressions of concern.

Current Issues in Non-**Forested Ecosystems**

Shrublands

Three current major issues here are the Te Paki, Waitere and Aotuhia areas of the North Island.

Te Paki in the far north involves some 20,000 hectares bought by the Crown in

