What price our heritage?

At its present level of funding, the Protected Natural Area surveys might be finished in 70 years. Gerard Hutching reports on what the programme is and why it is stalled by lack of funds.

New Zealand's "forgotten habitats — long regarded as the poor relations in the conservation family — are today standing in line for better treatment.

Native forests have always loomed large in our consciousness, but it is only recently that an awareness of the worth of wetlands, tussocklands, shrublands and dunelands has grown. Suddenly, it seems, people are discovering fascinating pockets of original New Zealand that make their districts distinctive — whether it be a mangrove swamp, sand dunes covered with native plants, tussock grasslands or isolated fragments of bush hitherto ignored

For example, a 1980 DSIR survey found that only nine hectares of the former one million hectares of short tussock grassland in Otago was protected in scenic reserves. Even where short tussock has been reserved, such as the Bankside Scientific Reserve beside the Rakaia River on the Canterbury Plains, the tiny area set aside — two hectares — has proved too small and is suffering from fertiliser and spray drift.

Chances lost

To the moa hunters and early European settlers of the South Island, short tussocks were all-pervasive, just as dripping rainforest and flax swamp dominated the Waikato basin or the kauri, kahikatea and mangrove represented the lowlands of Northland. Yet in all these areas this distinctive and widespread natural vegetation and its animal inhabitants have been almost completely replaced by introductions and a cultural landscape.

Opportunities are rapidly dwindling for us and our descendants to have any perception of the landscape around our homes that greeted our earliest ancestors.

Equally, or possibly even more importantly, the chance is being lost to secure baselines in such natural landscapes against which to measure the effects of cultural change on the soil and its biota. Subtle genetic diversity and adaptations in native plants and animals throughout the country are also being lost.

At an official level, an attempt is being made to identify what is left of our natural areas and to protect representative examples of natural vegetation and wildlife. The emphasis is now very much on protecting representative examples rather than just focussing on the rare or exceptional. Thus, Northland's infertile gumlands, West Coast pakihis, the arid native shrublands of inland Marlborough and the red tussock of the Southland plains will have a chance of joining the native forest areas that dominate the present reserve network.

When it was launched in 1983, the Protected Natural Areas Programme was hailed as the means by which New Zealand could plan "an integrated land use programme with the minimum of conflict over different options."

Two years later, though, the programme is starved for funds and could be stalled unless urgent action is taken.

Destruction continues

Meanwhile the destruction has continued. Native forest still goes into the sawmill and chipper or up in smoke, making way for pines and grass; between 1978 and



Above: Native vegetation in the lowland part of the Rangitikei ecological region of the southern North Island has been almost completely eliminated. However, on the mudstone escarpments of the Rangitikei Gorge survive a mosaic of shrub and forest species dominated by kowhai. *Photo: Graeme Loh*

Opposite: Kahikatea forest was once widespread on floodplains and swamps throughout New Zealand but today 98 percent has disappeared with the only remaining extensive forests now in southern South Westland. Elsewhere remnants are scattered through mainly dairy farming districts. The PNA programme is seeking to identify and protect kahikatea forests, described by Captain Cook's botanist Joseph Banks as "the finest trees my eyes ever beheld."

Inset: Representative reserves are living examples of nature's diversity. Many Southlanders initially thought the bog pine of the Wilderness Nature Reserve near Te Anau would be better as farmland. In 1970 such sentiments resulted in 17ha of the reserve being cleared for farming. However the 88ha that remain have now become a special stopping point for the numerous tour buses to Fiordland. Visitors are here shown the "unique vegetation of primeval New Zealand". Photo: G D McSweeney

1982, 367,000 hectares of "scrub and brushweed" was destroyed; the original character of dunelands is changing through widespread marram grass planting; exotic green pasture has replaced large areas of tussockland with the aid of taxpayers' subsidies, and wetlands are still going down the drain because of subsidies.

The PNA programme was set up by the National Parks and Reserves Authority to provide the framework for protecting the best of what remains of all ecosystems throughout the country. The Authority realised that most of New Zealand's national and forest parks and large reserves are found in mountainous areas; they do not fairly represent the original diversity of the country. This is clearly recognised in legislation — the Reserves Act 1977 states the objective of 'preservation of representative samples of all classes of natural ecosystems and landscapes which in the aggregate originally gave New Zealand its own recognisable character.'

The Government in its 1984 election manifesto reinforced that message. When it came to power it found a programme up and running. All it had to do was fund it, but in fact it has cut its funding. The amount required to cover the whole country is estimated to be \$7 million over the next 10 years.

Chequered career

From the start, the PNA programme has had a somewhat chequered administrative career; the NPRA has overall responsibility for the scheme through a complex management committee on which several Government departments and the QE II National Trust was represented. Programme staff have been employed by Lands and Survey but paid through the Labour Department's Special Employment Scheme. The SES was always envisaged as a temporary scheme, but in the two years of the programme's existence, no long-term funding proposal has been put forward to the Government.

The PNA programme has two phases — survey and implementation — and as a first step New Zealand was divided up into 268 ecological districts based on climate, landform, soils, vegetation and wildlife. The Biological Resources Centre under Dr Geoff Park carried out this sub-division and devised methods of rapid survey. The key survey phase got underway in late 1983. It was estimated the programme would last 10 years.

Working in teams of seven to 10, teams conducted four pilot studies, surveying both public and private land with permission from the owners or lessees: