Rodney district. Just north of Auckland, this district contains remnant forests much affected by logging and fire, but which are strongly regenerating. Rocky headlands, forest fragments and complex estuarine systems enclosed by sandspits and dunes are a feature of the district.

Motu district. Eastern Bay of Plenty. Much of the land here is Maori land in multiple ownership, lying between Raukumara State Forest Park and the sea. Long hours were spent in meetings with owners, and it was stressed that protection of key areas would be voluntary.

Mackenzie region and the Old Man district. While the magnificent South Island natural tussocklands stand comparison with other great world grasslands such as the North American prairies, scarcely any have been reserved. Forest and Bird has been pushing strongly for the protection of important natural areas in the high country, but it is vital to

know where those areas are.

In the main runholders are pleased that such surveys are being conducted, since questions about what needs to be protected will become clear cut, leaving no-one in any doubt.

New programme problems

The teams adopted different approaches in their surveys — the Mackenzie team stretched itself to complete seven districts, while the Old Man team worked more intensively, to find the autumn snows upon them by the time only half the district had been surveyed. That first 1983-84 season highlighted the problems of putting a new programme into practice. On the one hand the teams had to carry out a survey with scientific precision, on the other they had to do it rapidly so the whole country could be covered in a realistic time.

The next season the teams built on their previous experience. The Mackenzie team moved north to look at three districts of the Heron region, and the team working on the Old Man district finished their survey and helped a new team in the adjoining Lindis, Dunstan and Pisa districts of the Central Otago region. Other surveys were carried out in Marlborough (eight small districts), and in the North Island, teams investigated the Pukeamaru district (East Cape) and the Egmont region.

At the end of the 1984-85 season, the PNA programme found itself a victim of Labour's wish to cut "artificial" employment schemes. Despite strong Government policy on the need for reserves and a sophisticated programme developed to implement it, funding has virtually dried up. This 1985-86 season, only two surveys are underway. The North Taranaki survey is being jointly funded by Lands and Survey, State Coal Mines, Electricity Division and the Forest Service. The Umbrella district in Central Otago is being surveyed through the University Grants Committee.

Staff victims

The young graduates who have staffed the PNA programme are also victims of the poor funding. Because it has operated under the temporary SES scheme, staff could







Centre: Until the 1930s Depression, the Kaingaroa pumice plain was covered in unusual native frost flat vegetation dominated by monoao (*Dracophyllum subulatum*). Today virtually the entire Kaingaroa ecological district has been transformed to pines and pasture. Monoao-hebe-kanuka vegetation only survives in a small block on the Whakatu Crown lands and in the Rangitaiki State Forest along the Taupo-Napier road. Although both areas were zoned for farm development, the Society, DSIR and the Forest Service are now seeking protection of these areas as representative reserves.

Bottom: Native pingao (Demoschoenus spiralis) crests a Northland foredune. Formerly widespread on dunes, pingao has been largely edged aside by introduced marram grass. Remnant pingao needs to be preserved and managed in its natural state to supply much sought-after weaving material for Maori craft workers. Photo: Terry Fitzgibbon

Left: Kawarau Gorge, Old Man Ecological District, Central Otago. A PNA team led by Cathie Brumley surveyed this extremely dry area in 1983-85. It has recommended a series of ecological reserves for the district covering altitude sequences, from the arid gorge vegetation up to the wet tundra of the range tops. Photo: Barney Brewster

not commit themselves to it (most are striving to find other long term work but would gladly accept PNA work if it were long term).

Cathie Brumley, the Old Man team leader, says that a lot of enthusiasm and dedication has gone into the programme over the last two years, but this is in danger of disappearing.

"With the programme stopping now there is a vast store of experience and expertise which will drift away into new jobs— and when the programme takes off again that experience will have to be slowly and expensively built up again," she says.

Derek Roozen, an earth scientist who worked on the survey, points out the value of the broadly based PNA surveys, integrating the biological aspects of the ecosystems with the landforms. He too feels that the loss of staff experience will see the programme set back markedly.

"With the cessation of officially run PNA surveys, the most valuable resource — the knowledge and experience of the survey workers — is lost. If it is restarted sometime in the future, people will have to be trained and will probably make the same mistakes all over again," he says.

Dave McKerchar, Director of National Parks and Reserves, agrees that staff have not been given the best treatment, and the programme has suffered as a result. A lack of job security has meant high staff turnover and last minute extensions of the programme have not helped morale.

A better deal?

However, under the new Conservation Department, the programme may be given a better deal. McKerchar says he hopes to see it as the central mission of the new department in the long term, and thinks it might be more successful in attracting funds after April 1.

Critics of Lands and Survey's uneconomic farm developments have pointed out that \$70 million was budgeted for this in 1984. \$10 million has been budgeted over the next 10 years for the controversial Aotuhia development in eastern Taranaki; (see article in August 1985 Forest and Bird). The National Parks and Reserves budget, on the other hand, amounted to only \$11 million in 1984 -85 and has been cut back to \$9.8 million this year.

Until recently, land development spending by Lands and Survey has not been adequately placed under the microscope, but the folly of spending \$10 million for 12 hill country sheep farms in remote Aotuhia will be made plain with the establishment of the Land Development Management Corporation.