

MacKenzie Basin.

During a "pit day" Dick Anderson tells me how the Wildlife Service intends to save the kakapo from extinction. Like many staff, he feels strongly about the bird's survival, having been involved in numerous expeditions since the mid-60s.

"The kakapo's a remarkable animal which must be preserved. The big hope for the future is transferring them to large, predator-free islands and the two most suitable are Little Barrier and Codfish Islands (the latter near Stewart Island).

"Those birds that have been taken to Little Barrier are doing well, but they haven't bred yet. In March 1986, 15 track and bowl systems were discovered on the summit ridges of the island, and at least seven males boomed during February and March. This is the first sustained booming since their transfer in 1981," Anderson says.

Codfish Island is possibly even more suitable for kakapo as the climate is closer to what the present population is used to, but it is yet to be completely cleared of possums and wekas. It is estimated that perhaps two years will see the last of these and the island will become fit for kakapo habitation.

But as the only breeding population lives on Stewart Island, where fewer than 50 birds are still at risk from cats despite the vigilance of Wildlife staff, isn't that a sufficient threat to remove the kakapo from there immediately and transfer them, even temporarily, to a safe haven?

Anderson answers that they are satisfied the cat problem is under control, at least

enough not to warrant upsetting the birds by shifting them. Furthermore, even though the kakapo on Little Barrier are not breeding yet, there are high hopes that they will do so. Finally, time is on their side, for it is estimated that kakapo could live as long as 50 years although they breed perhaps only at one to four year intervals in normal situations.

**I**t is the second to last day of my all too brief stay in the Transit Valley. The chances of finding kakapo in time-honoured ways are evaporating; modern technology takes over as we decide to locate one of the males (dubbed Talbot) fitted with a radio transmitter.

Talbot's booming area lies only a 100 or so metres below the camp, and so we start from there, pointing antennae shaped like a TV aerial in the most likely direction — but instead of descending, the "beep beep" signal comes from the right, across the valley.

For the next five hours we sidle across, through predominantly rata-beech forest inhabited by flocks of noisy kaka and where the going is much easier than the tortuous sub-alpine scrub not too many metres above.

Finally, about two kms from where we have started, the signals tell us Talbot is just below. As silently as possible we descend until the signal is arriving from all directions — the transmitter will not lead us precisely to the bird, but only provides a vague direction of its whereabouts. Usually


dogs find it at this point.

By descending further, we soon realise that Talbot is now above us. We are on a dense beech-covered ridge, one side of which drops away sharply down to a waterfall. Every fern or moss under every rock and fallen tree becomes a kakapo . . . suddenly, a flash of wings and there he is under a log, attempting to bury himself deeper into his secretive world.

Anderson catches him at an awkward angle and cannot prevent the bird from gnawing painfully into his hand. After a bout of hoarse croaking Talbot calms down and placidly sits, his owl-like countenance seemingly expressing the wisdom of many years.

It is a special moment. The anthropomorphic sentiment that this and other Fiordland kakapo must be very lonely cannot help surfacing, nor the feeling that such a unique animal must be preserved.

In less than five minutes our business is done; Talbot is somewhat lighter than he should be for booming and breeding purposes, but otherwise he is in good condition. The moment he is placed onto the ground he crawls back under the log and adopts the freeze position characteristic of the species. It is the only defence it knows.

Up until now that posture has been no safeguard against marauding predators; today humans hold the key to the survival of this "old New Zealander" in what has become a battle against time. The boom of the kakapo has sounded out for thousands of years. Will it continue to do so in the 21st century? 

wonderful sight it would be — he likened it to a ballroom.

### Odd creature

Modern research on the kakapo has confirmed many of Henry's contentions, some of which were and still are unusual, for the kakapo is indeed an odd creature. For instance, only in the last five years has it been possible to verify Henry's conclusion that breeding occurred only in those years when booming occurred, and that booming did not occur every year. This view, more than any other, was challenged or rejected outright by many authorities of the day (and even up to the present), and the disagreement raised doubts in many circles as to the validity of Henry's other observations. Henry was a skilful field naturalist and a meticulous observer, and he was well acquainted with the kakapo's unusual behaviour, which he had carefully studied over many seasons. He anticipated rejection of his views when he said 'this is one of the true stories that will not be believed in the future — can't understand it, won't believe it'. The doubts were not resolved in Henry's lifetime. However, his conclusions have been confirmed by the radio-tagging of females on Stewart Island during the last five years. It is indeed the case that females do not

breed every year and that their nesting coincides only with those years when males boom intensely for two to three months. Intense booming occurs at one- to four-year intervals. Henry speculated that booming and breeding were related to the availability of food, though he was hard-pressed to justify his view for he found that the males' air sacs started to develop several months before the seasonal abundance of food. Recent research does in fact indicate that booming and breeding are linked to the sporadic heavy cropping of certain food species.

### Gay Lothario

Further evidence of Henry's reliability as an observer has resulted from our recent studies, using light-intensifiers, of females at nests. Henry contended that the female alone attended the nest (the male 'knew nothing' of it, he said, and was a 'gay Lothario'). The conclusion was disputed by a number of the old naturalist's contemporaries, and ours! However, our studies in 1981 and 1985 — the only times nesting has occurred recently — show that incubation and care of the young are in fact undertaken solely by the female. Other observations noted by Henry have also proved to be equally accurate, and his reports and records have been invaluable to current con-

servation efforts. For instance, his descriptions of female kakapo enabled us confidently to identify the first female that we encountered on Stewart Island — probably the first seen since Henry's time. Similarly, his descriptions of nests, nestlings, and juveniles, have all been totally accurate and thus of immense help to us in the field. We have also found Henry's technique of hunting kakapo using a muzzled dog wearing a bell to be the only safe and effective method, and it has been successfully employed by Wildlife Service field staff. Similarly, his techniques for holding birds temporarily in captivity and of feeding captive birds have all been adopted by those involved in recent capture-and-transfer programmes.

Henry's writings, more than any other, have been indispensable in our field work. During the 1970s, while searching for kakapo in Fiordland, I would always take copies of Henry's reports with me; and on those rather frequent occasions known as 'pit days', when field work was impossible due to heavy fog, torrential rain, or snow, we would remain in our sleeping bags and study what he had to say. We never ceased to be impressed by the breadth and accuracy of his observations and the depth of perception of his interpretations. 