Yellow-eyed penguin in peril

DESPITE THE TREMENDOUS efforts of conservationists, the numbers of yellow-eyed penguin on the mainland continue to plummet. Penguin expert John Darby says the results of the latest census show there are only 167 breeding pairs left on the South Island - a 50 percent drop from last year and the lowest ever recorded.

The seriousness of the penguin's plight can be judged by the fact that when *Forest & Bird* magazine first carried a story in 1985 about falling numbers, it was then estimated there were 550 breeding pairs on the mainland (there are sizeable numbers on sub-antarctic islands but the mainland population is regarded as a discrete one).

A number of factors pointed to a troubled breeding season at the end of 1990: from September to November birds were arriving late at breeding areas; at the end of October most shags breeding on the Otago Peninsula deserted eggs and chicks; during October-November tens of thousands of sooty shearwaters were seen flying north off the Otago Peninsula when they should have been flying south; there was a major decline in the flat fish fishery; a greater number of yellow-eyed penguins than normal were recorded dead.

To John Darby, it appeared the yellow-eyed penguins were heading for another disastrous breeding year, similar to those of 1986 (when adults starved to death) and 1989 (when chicks were severely affected).

Drastic measures were therefore taken. In late October one of a pair of eggs was taken from each nest. The reasoning behind this move was to give the adults less work to do in feeding just one chick as against feeding two. Adults need to be in good condition to survive autumn moulting and feeding two chicks would leave them debilitated at this crucial time.

Where there were two eggs on a nest, wildlife managers ensured that a fertile egg was left. Many of the eggs were infertile. If both the eggs were fertile, where possible one was placed in a nest without fertile eggs.

So why were no attempts made to captive rear chicks?

John Darby says there are no records in the world of penguins having been raised by humans which have been returned to the wild and survived. Secondly, the Department of Conservation believes that the meagre resources available to it are better spent on ensuring a wild population survives than hand rearing chicks that will never play a significant role in the survival of the species.

Now for some good news. Dairy company Mainland Products have pitched in with a $65,000 annual grant which is to go to the Yellow-eyed Penguin Trust. The Trust will use the money for revegetation and fencing, predator trapping and an education programme to teach people about the hazards of dogs attacking penguins and the dumping of unwanted cats.

Mainland are also able to give the penguin nationwide publicity through their TV adverts which feature a yellow-eyed penguin.

Yellow-eyed penguin and friend Roy become acquainted during the production of the Mainland TV commercial.

Southland branch Forest and Bird members restore yellow-eyed penguin habitat at Te Rere Reserve.

KNOW YOUR WEEDS

Wild Asparagus

FIVE SPECIES of asparagus have become wild in New Zealand: climbing asparagus *(Asparagus scandens)*, smilax *(A. asparagoides)*, asparagus fern *(A. setaceus)*, bushy asparagus *(A. densiflorus)* and edible asparagus *(A. officinalis)*. Edible asparagus, when left, grows into a small bushy shrub with erect branches. It is native to Eurasia and North Africa and has sparingly naturalized in New Zealand. The other four asparagus species are scramblers or low climbing vines and are all native to southern Africa. They are grown in New Zealand as ornamentals and have escaped; two of them are problem weeds.

All asparagus species have fleshy roots and tiny true leaves, which may possess a basal spine as in asparagus fern. Cladodes (flattened stems) are the larger leaflike structures which are usually whorled around the stem; their shape and size is characteristic for each species (see Table). Their small flowers possess six segments which give a clue that asparagus is a member of the lily family (and not a fern). The fruit is a fleshy berry containing one to several seeds which are dispersed by birds.

The four asparagus vines are relatively recent weeds in New Zealand with their first naturalised occurrences being from the 1950s (smilax and climbing asparagus) to the 1970s (asparagus fern and bushy asparagus). All four are increasing in abundance and distribution. In a relatively short time climbing asparagus is looking to become one of the worst forest and shrubland weeds in the warmer parts of New Zealand.

Smilax is similar to climbing asparagus but has less of an impact on native vegetation. Both occur as far south as Wellington and

Top: *Climbing asparagus smothering a regenerative forest floor and encircling the lower tree trunks - Mangawhai 1987.* Bottom: *Smilax with flowers, flower buds and very wide cladodes borne singularly.*