## Birds in the hand

ICK SIBLEY, curator of animal operations at Auckland Zoological Park, is part of a small team carrying out trials on captive bird breeding which could have significant spin-offs for the endangered kakapo.

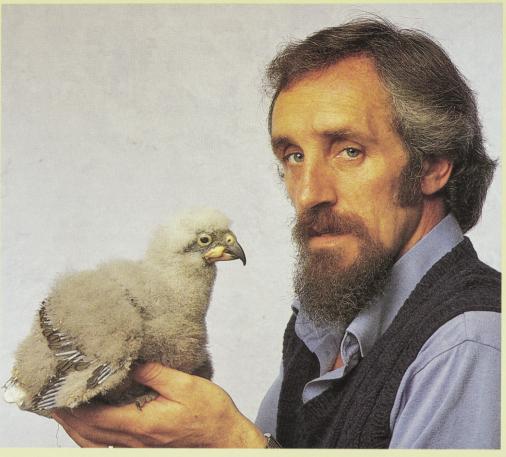
Using the kea and kaka, eggs are being artificially incubated and the birds hand raised. With the information gleaned from these results, scientists and managers might better be able to unlock the key to successful kakapo breeding. It is now ten years since the critically endangered kakapo, population less than 50, has been known to rear a chick.

Mick Sibley makes it quite clear that the motive behind the native bird programme differs significantly from the traditional aims of captive breeding.

"We want to hand raise birds so they will breed. There is evidence that hand-raised birds breed better than wild birds in captivity. However we do not want to 'humanise' these birds. We are only interested in obtaining socially well adapted chicks.



By 11 weeks the kea closely resembles an adult. Photos: Sally Tagg



Mick Sibley and a 5-week-old kea chick raised through captive breeding.

"Say we remove two or three eggs from a bird in the wild, it will lay again. We will artificially incubate and hand raise the chicks of those eggs and the bird will then lay again at no extra strain. So you have effectively doubled production and increased the options for the species," Mick Sibley says.

The kaka and kea will also benefit from the techniques learned in the programme. Recent

studies in Nelson have shown that kaka are not breeding successfully, leading to speculation that the species is on the decline.

## Malcolm Falconer

smilax reaches Banks Peninsula. These vines may be dense enough to kill seedlings, inhibit regeneration and restrict human access. They occupy an unusual ecological habitat for a vine in being only a low climber.

I have seen climbing asparagus in Auckland and Mangawhai (NE of Wellsford) carpeting the ground and clothing lower tree trunks on bush margins and in secondary forest over areas greater than one hectare. This species has been reported by Alan Esler as killing its supporting host by strangulation. The climbing asparagus stems wrap around the supporting plant, and as the host expands it is ring-barked. Seedlings are shade tolerant which gives this species the ability to establish in unmodified forest. Asparagus fern and bushy asparagus are still relatively local in their naturalised distribution. The best method is to dig out asparagus

vines before they become well established. Once rampant they have, to date, been impossible to eradicate. Pulling up plants is only successful for seedlings. Once they reach a reasonable size the stems break, leaving the tuberous roots in the ground to re-sprout. Spraying is difficult because the vines are frequently tangled around native vegetation.

Recently Rod Smart, Noxious Plant Officer for North Shore City, has had some promising results spraying climbing asparagus in a

native habitat with Roundup (50 mls Roundup with 5 mls Pulse in 5 litres of water). Lightly wet the lower portions of the asparagus and respray 30-60 days later to 'spot out' plants missed. Accidentally sprayed native plants can be 'saved' by removing sprayed leaves to prevent translocation of the herbicide.

## **Ewen Cameron**

## Table: Cladode features for the different asparagus vines.

cladode	climbing asparagus	smilax	asparagus fern	bushy asparagus
length (cm)	0.5-1.5	1-3.5	ca 0.5	1.5-2.5
width (mm)	1-1.5	4-15	? 0.1	1-1.5
cladodes per whorl	(2)-3-(5)	1	7-20	1-7