Parakeets and penguins seem unlikely bedfellows – but on New Zealand's subantarctic Antipodes Island these two very different birds are well acquainted. Spilt food, guano, flies and carcasses provide plenty of pickings for Reischek's parakeets, a subspecies of red-crowned parakeet, which forage around the edges of the raucous erect-crested penguin colonies.

FRESH ARRIVALS have to learn new tricks and whole ecosystems can develop fresh ways of functioning, like the reptile-dominated forests of the Poor Knights Islands. Here geckos and skinks have become the "birds and bees" of the forest through their pollinating and dispersal roles. Small lizards are also preyed upon by giant centipedes which grow as long as 25 cms.

In Hawaii Morris filmed a species of looper caterpillar, a most unlikely carnivore. But because of the under-representation of spiders and ants on the island, the caterpillar was able to evolve a taste for insects and an effective ambush hunting technique.

Since ants and spiders have flooded into Hawaii with humans, looper caterpillars have been restricted by competition and predation to higher areas. Similarly, in New Zealand, some native invertebrate populations have been decimated by new immigrants such as wasps.

Islands operate as species factories. With different selection pressures from those on continents, new arrivals can evolve in hitherto unimagined ways. In the Solomon Islands Morris filmed a giant skink, *Corucia zebrina*, which evolved over time from a small, fast-moving insectivore to a large, plodding, tree-dwelling, fruit-eater, complete with prehensile [grasping] tail. "It has become the reptile equivalent of a monkey," says Morris. The skink is also involved in an unusual partnership, often sleeping among fruit bats and benefiting from the mammals' warmth.

In Hawaii unspectacular finch and herb plant ancestors co-evolved into a fantastic array of lobelia flowers and specialised nectar eating birds.

Morris wonders what variations of beak shapes in New Zealand's wattlebird family, which includes the saddleback,

"IT IS REMARKABLE that some of the largest and heaviest insects in the world are still being discovered in New Zealand in the late 20th century," says Morris. First seen in the 1980s, the Mercury Islands' tusked weta (still unnamed by taxonomists) has remarkable two-centimetre-long tusks used for ritual combat. The species shows how vulnerable island populations can be, occurring only in a couple of hectares of forest on one island of the Mercury group. The weta has evolved alongside the tuatara, two rare species of skink, and a giant centipede. "It is one of those extraordinary islands," says Morris, "which provide an insight into what New Zealand must have been like in the past."