



plants like kowhai, lancewood and matai change from a juvenile divaricating form once above the browsing height of moa.

In Indonesia, Morris gained an insight into another long-gone evolutionary process while filming Komodo dragons, three-metre long monitor lizards capable of killing and feeding on adult deer. New Zealand, Morris says, had its Komodo dragon equivalent. The extinct giant eagle, *Harpagornis*, was the supreme predator of these islands, and in that role shaped the way other animals evolved.

Probably *Harpagornis* was a wait-and-pounce killer: sitting in trees usually near the edge of forest, picking its prey with keen eyesight, swooping down and striking with awesome power. With falcons and goshawks also hunting from above, it made a lot of sense for smaller birds to move about the forest floor and avoid daylight.

"The kiwi and kakapo didn't happen out of apathy and general degeneracy," Morris says. Such theories he labels as "continental arrogance". New Zealand's fauna was actively selected for – under pressures exactly the opposite to those created by ground-hunting, smell-sensitive mammalian predators.

Today with only the wreckage of our avifauna left we have to think laterally to try and work out the factors that once shaped it, Morris says.

Before the arrival of humans on the Pacific Islands, new immigrants could arrive only by sea or wind dispersal. With up to 4,000 km of water to cross it was a lottery, for which some groups of plants and animals were better suited.

The red-crowned parakeet, *Cyanoramphus*, has colonised Pacific Islands from the subantarctic to the tropics and successfully adapted to the different foods available on each. While the sub-species on most islands eat seeds, nectar, flowers and leaves, on Macauley Island in the Kermadecs the parakeet eats limpets off coastal rocks.



WHEN IMMIGRANTS arrive on islands they are forced to learn new tricks. This form of Pacific gecko (*Hoplodactylus pacificus*), found on Sugarloaf Rock near the Poor Knights group of islands, specialises in eating regurgitated fish, spilt in gannet colonies. Other members of the same species found throughout the northern half of the North Island feed exclusively on live prey such as insects and grubs, and are nocturnal. But on the barren rock stack of Sugarloaf the geckos emerge in daylight the moment they smell spilt fish to claim the meal before red billed gulls can get to it.