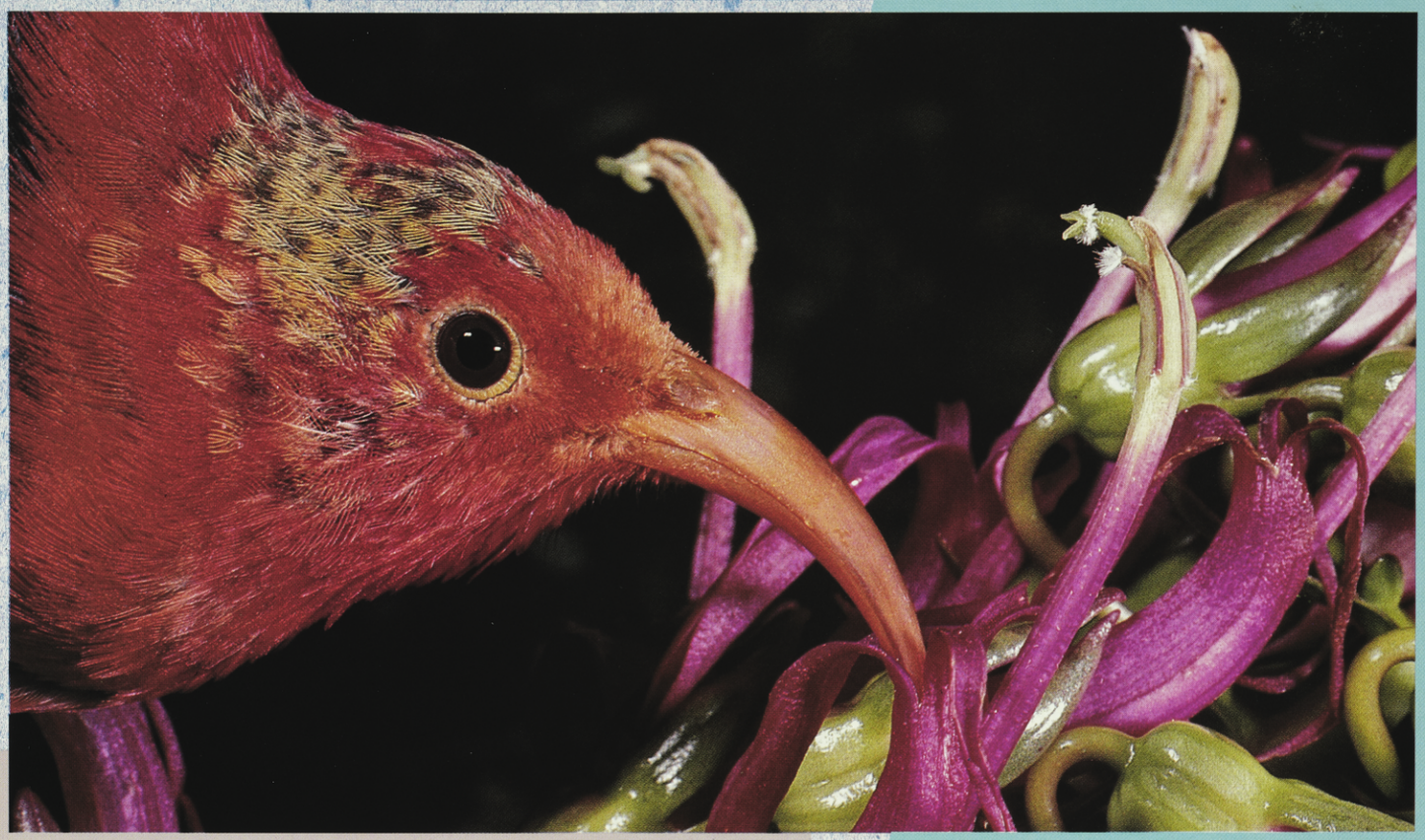

IT IS THOUGHT the ancestor of the Hawaiian honeycreepers was a finch-like bird that arrived on the newly formed volcanic island several million years ago. It has since evolved into a large number of species, each with a distinctive beak shape suited to its favoured food. Many are now extinct, including the seed-eating Grosbeak finch and the fruit-eating Ou. The Iiwi (*Vestiaria coccinea*) pictured, evolved a beak shape suitable for extracting nectar from the flowers of a species of lobelia. It is one of a range of ornate beak shapes which co-evolved with the long, tube-shaped flowers. Such specialisation has meant that the extinction of either plant or bird has sealed the fate of the other. This co-evolution is mirrored in New Zealand's wattle birds.

THE WEKIU BUG (*Nysius wekiucola*) of Hawaii "shows how island immigrants can completely change their food source and exploit new environments," Morris says. The bug lives only on the summit of Mauna Kea mountain, above the snow line and the altitudinal limits of plants and other invertebrates. It feeds exclusively on dead insects blown up into the snow by the mountain winds. Related to tiny, green seed bugs common on New Zealand road sides, the wekiu bug's plant-eating proboscis has adapted to suck the body fluids of chilled and dying insects.

kokako and extinct huia, were lost in the distant past. The different shapes of male and female huia beaks – enabling them to exploit different food sources – he describes as an example of "island magic".

"To look at the moa, dodo and Komodo dragon is to realise the power of Islands," says Morris. Their downfall has only come since humans harnessed the sea and wind and became the third agent of species dispersal.

Our carry-bag of predatory and competitive ground-dwelling mammals – whose previous absence in New Zealand allowed giant, flightless crickets (weta), singing bats, and dancing night parrots to evolve – is now pressuring such remarkable animals to extinction. While filming *Islands* Morris visited Easter Island and observed the statues of a culture that exploited the environment to such an extent it destroyed itself. Such shameful history need not be repeated he hopes.

Since cultures are also capable of change there is the opportunity to learn from our mistakes.

American biologist Jared Diamond has described New Zealand "as the closest we can come to studying evolution on another planet". It is essential, Morris says, that we save those species and ecosystems that have practised island magic. ❖

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