BBC iWonder

Honeycreepers

Clip from: Islands of Evolution – Hawaii: A New Eden (BBC Four)

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On the isolation of an island, some plants and animals can rapidly evolve into not just one, but many new species.

Scientists call this adaptive radiation. And one of the best examples of it, anywhere in the world, is found on the Hawaiian island of Maui.

Here live numerous species of Hawaii's rare honeycreepers.

And among those most exquisite adaptations is the shape of the bill. This is exactly what Darwin observed, at the very cradle of the idea of evolution, in the Galapagos Islands. Yet another group of finches, another group of modifications to bill form in adaptation to mode of life

The first finches arrived on Hawaii five million years ago. They quickly radiated and adapted into five distinct lifestyles: Insect-picking gleaners, generalists, long-beaked nectar eaters, seed-lovers and parrot-beaked bark pickers.

And each of these different lifestyles has spawned multiple species. The total tally of these endemic birds once exceeded 50.