News Science

Mockingbird goes back to its origins in honour of Darwin

A bird that almost died out after giving the great naturalist his eureka moment will sing again on its home island, **Lewis Smith** reports

The bird that prompted Charles Darwin to start developing his theory of evolution is to be returned to its native island to help to celebrate the 200th anniversary of the naturalist's birth.

Floreana mockingbirds played a pivotal role in guiding Darwin's thoughts after he noticed slight differences between them and the mockingbirds living on other islands in the Galápagos.

Within 50 years of his visit to the Galápagos in *HMS Beagle*, however, the Floreana mockingbird had been wiped out on Floreana island, known to Darwin as Charles island.

This year conservationists intend to bring back the species to Floreana island to live and breed there for the first time in more than 130 years.

When Darwin reached the Galápagos in 1835 and collected specimens of mockingbirds, or mocking-thrushes as he often called them, from Floreana he was struck by the small differences from those that he had taken from the island of San Cristóbal, 50 miles away.

In his account of the expedition to South America, *The Voyage of the Beagle*, he recalled his surprise that animals on nearby islands displayed such variation.

"My attention was first thoroughly aroused, by comparing together the numerous specimens, shot by myself and several other parties on board, of the mocking-thrushes, when, to my astonishment, I discovered that all those from Charles Island [now Floreana] belonged to one species (Mimus trifasciatus); all from Albemarle [now Isabela] Island to M. parvulus; and all from James [now San tristobal] Islands belonged to M. melanotis."

Floreana mockingbirds were common on the island when Darwin visited but quickly died out in the face of an onslaught from animals introduced from Europe.

Rats, which attacked them and ate the eggs, and goats, which destroyed the prickly pear cactus the birds depended on, were the worst but cats, donkeys and pigs also took a toll.

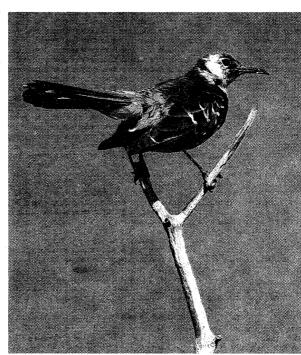
The species survives today only because it managed to find refuge on two tiny isles, Gardner-by-Floreana and Champion, which lie within sight of Floreana island, but with fewer than 150 birds alive it is classified as critically endangered.

Stock for the reintroduction project will be taken from the populations on the tiny isles. Five females and five males are expected to be captured this spring as fledgelings and transported to Floreana, where they will form the basis of a breeding population.

Once the birds have adapted to their new home, and the surroundings have been cleared of invasive species, they will be released into the wild. It is hoped that the first releases can takeplace this year. Once the release sites have been identified the rats and other invasive animals will be eradicated. At the same time large areas of invasive plants will be removed from Floreana and replaced with prickly pear cactus and other native species to create the conditions that the mockingbirds need to survive and thrive on the sand.

The release programme will be carried out by conservationists from Durrell, set up by the naturalist and author Gerald Durrell 50 years ago and formerly known as Jersey Zoo. They will work with conservationists from the Charles Darwin Foundation, Galápagos National Park, Zurich University, and the University of Missouri.

Scientists at Durrell have extensive experience in helping rare island birds.



The variations Darwin observed in mockingbirds helped to form his theory



Among those they have saved are the pink pigeon and the Mauritius kestrel.

Professor John Fa, of Durrell, said of the mockingbird: "It is an iconic species for our understanding of evolution. It was the bird that made Darwin think about the origin of species."

Glyn Young, a researcher for the project, added: "There is a popular view that the young Darwin, preparing his new specimens, held the mockers [mockingbirds] up together and a light went on in his head! I believe that this was pretty close to the truth."

200 years on

Until April 19 The Natural History Museum in London offers the single largest exhibition dedicated to Darwin. *Darwin 200* contains artefacts and artwork that are rare, revealing and in many cases had never before been shown publicly.

February 5 Penguin to rerelease Darwin's seminal On the Origin of Species as part of its Classics Collection. The new edition has illustrations by Damien Hirst.

March 20 — August 23 The Australian Maritime Museum introduces Voyages that Shook the World, an interactive experience at which visitors can step aboard the Beagle and travel alongside Darwin, discovering the planet and learning about it through his eyes.

July 19-24 The Charles Darwin Foundation hosts a symposium exploring the role of science in relation to a sustainable future at Santa Cruz on the Galápagos Islands.

Summer, date to be confirmed

The release of Jon Amiel's feature film *Creation*, which explores the balance that Darwin found between his revolutionary theories on evolution and the relationship with his religious wife.

July 6 – December 9 For A Voyage Around the World Cambridge University library will exhibit the world's largest archive of manuscripts, books and letters related to Darwin.

October 3 - July 2010

Manchester Museum presents Charles Darwin — The Evolution of a Scientist, a comprehensive look at Darwin, Darwinism and post-Darwin influenced theories. The exhibition will include new installations, hands-on features for children and a host of artefacts. collected from around the world.