

Surviving the descent of man

It might be paradise, but evolution has not been kind to the Galapagos islands, finds **Julia Horton**

Snout to snout, two prehistoric-looking marine iguanas engage in a silent bout of heavyweight head-butting on the black twisted lava. After several minutes of stalemate, one snorts and stalks off into the sea, survival of the fittest apparently decided for now in a way which suits their no-nonsense appearance to a tee. They seem oblivious to the dozen or so tourists watching just a few feet away, mesmerised by this encounter with the animals of the Galapagos.

These remote volcanic islands 600 miles off the coast of Ecuador famously inspired Charles Darwin's revolutionary work, *On The Origin Of Species*, first published in 1859. Each isle remains a living demonstration of the subtle differences developed by birds and beasts in response to their different habitats which Darwin increasingly pondered after his now legendary visit in 1835.

It was minute variations in the colouring of mockingbirds which the young English naturalist noticed in the specimens he collected that eventually led him to propose that life evolved by natural selection of key characteristics.

Differences in marine iguanas are far easier for novices to spot. At around four feet long, the iguanas squaring up for battle on Fernandina island dwarf those on the island of Genovesa, which are the smallest in the archipelago. To an amateur naturalist they may all look like ancient thugs, but these reptiles have shown the most adaptations to their environment, learning to switch from hunting on land to underwater where they can now remain beneath the surface for up to an hour at a time.

Cruising from island to island it is impossible not to be overawed by the sheer volume and variety of colourful creatures. Bright red and yellow Sally Lightfoot crabs sidle furtively across the landscape, living up to their name by seeming to walk on water as they scurry from rock to rock. Curious blue-footed boobies are also in abundance, with pairs of the birds doing a comical-looking courtship dance, carefully lifting up each azure foot in turn to impress their mate.

Under the waves turtles glide gracefully while sea lions play endlessly in the shallows and penguins rocket by like black and white torpedos hunting shoals of fish flashing silver in the turquoise ocean.

It is, as our guides merrily remind us during every morning wake-up call, paradise. But

there is trouble in paradise. While the evidence for evolution is plain to see in other lifeforms, it is questionable how much mankind has progressed since Darwin unveiled his historic paper.

This must surely be the only place on earth where there is a need for a sign reading: "Shark resting area. No swimming," but the impact of tourism here is no joke. The warning notice is by a narrow water channel alongside another island in the archipelago where visitors were once allowed to join the creatures of the deep in their own environment. While it is still possible to snorkel with sharks at other locations here, the practice was stopped at this site because of concerns about disturbing the wildlife.

Visitor numbers have rocketed since the islands were declared a national park half a century ago in 1959, from around 2000 a year to more than 150,000. Tourism is controlled by the national park authority through strict regulations limiting the numbers and types of activities allowed on the islands.

In 2004, park authorities banned snorkelling off Fernandina after tourists were routinely found to be touching the turtles there – flouting rules banning any contact with wildlife.

People also put themselves in danger regularly. Every month on average a tourist is reportedly bitten by a sea lion after ignoring warnings not to get too close.

As with Antarctica, the pristine, remote environment of the Galapagos is under constant threat of being ruined by the hordes of tourists enticed into making the lengthy journey here in growing numbers every year. And while no-one lives in the Antarctic bar scientists, Galapagos is home to thousands of Ecuadorians.

Such is their strength in the tourism market that these islands, having survived endless physical battering by the elements, have weathered the recent economic storm too. That success threatens the fragile ecosystem further as growing numbers of people from mainland Ecuador – one of the poorest countries in South America – descend on Galapagos seeking work, legally or otherwise.

The more people, the more pressure on natural resources like fresh water, and the greater the risk of introducing more invasive species, risking the loss of yet more unique animals and plants found only in Galapagos.

Under the terms of the national park, 97%



Adapting to their environment, marine iguanas have learned to hunt underwater, and can remain under the surface for up to an hour

PHOTOGRAPH: PHOTOLIBRARY.COM

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of the islands are protected, leaving just four islands where people are allowed to live.

With around 40,000 residents on the islands now the authorities are actively trying to prevent any more people from setting up homes and businesses amid growing fears about the impact of the population explosion.

By the laws of nature the human struggle for survival pits people against the flora and fauna which keeps their island economy afloat. But greed has also played a big part in the conflict as fishermen have rushed to cash in on the lucrative market in Asian aphrodisiacs which range from shark fins and sea cucumbers to sea lion penises.

In 2007 almost three decades after being named a World Heritage Site by Unesco the islands were added to the list of endangered sites. In the same year Ecuadorian president Rafael Correa publicly pledged that conservation was a key national priority.

But while park authorities have taken action against illegal fishing, environmental campaigners say there remains a "significant" problem with thousands of sharks alone slaughtered in the seas around the Galapagos each year.

And when the notoriously lax Ecuadorian government has clamped down on quotas in the past few decades some fishermen responded by slitting the throats of the famous giant tortoises after which the islands are named. They also attacked staff and scientific bases at the Charles Darwin Research Foundation, which was set up in 1959 to work alongside the national park.

Tensions appear to have calmed, though fishermen at the main dock on the island of Santa Cruz (where most residents live) remain concerned about licences and limits on where they can sell their catch.

The foundation admits it hasn't always got the balance right between preserving wildlife and people's livelihoods and as it marks its 50th anniversary the foundation is launching a major scheme aimed at finding new ways to combine the two. Named after the first island to be inhabited by humans, Project Floreana is a collaboration between the foundation, the park authority and the 100 residents who live there.

Work will include setting up no-take zones in a bid to reverse years of over-fishing. By restoring underwater life, scientists working

with local fishermen hope to create new jobs for them in tourism as dive masters.

Back on board our ship, we guests are well adapted to the daily routine, with two trips ashore providing ample opportunity for guided snorkelling and walks and masses of food to sustain us throughout the day. Our guides, Harry Jimenez and Ivan Lopez Ruiz, are an impressive double act with incredible knowledge, enthusiasm and humour.

Snorkelling and diving offer some of the best close encounters with wildlife. Somer-

saulting in the shallows with a sea lion is a magical experience.

Leaving the Galapagos, it seems unbelievable now that for centuries no-one wanted these farflung isles. Numerous explorers agreed with Fray Tomas de Berlanga, then Bishop of Panama, who branded the islands "worthless dross" when he accidentally discovered them in 1535 after drifting off course en route to Peru.

The problem of how man can live in harmony with the flora and fauna here remains to be solved but at least the value of the Galapagos is now recognised. ■

TRAVEL NOTES

GETTING THERE AND WHERE TO STAY

Iberia Airlines has return flights to Quito from Edinburgh and Glasgow from around £1,100. Visit www.iberia.com/gb. Aerogal has return flights from Quito to the Galapagos for around \$400 (£260) return. Visit www.aerogal.com.ec. A seven-night cruise with

Ecoventura starts at \$3,225pp (£2,085) for a double cabin. Visit www.ecoventura.com.

A double room at one of the four Red Mangrove Galapagos Lodges starts from \$238 (£154) per room per night, including breakfast. The hotel's five-night Darwin Triangle cruise costs \$1,850pp (£1,200) for a double

room, travelling by water taxi.

A six-night Fly The Darwin Triangle tour with Red Mangrove Galapagos Lodges costs from \$3,135pp (£2,030) including return flights from Quito to the Galapagos, internal flights, meals and accommodation. Visit www.redmangrove.com.

LATE DEALS

Wilderness Scotland (www.wildernessscotland.com, 0131 625 6635) has a seven-day **paddling tour of the west coast** for £725pp. Price includes most meals, accommodation, equipment, guide and all transport during the trip, departing August 29 or September 26.

Direct Holidays (www.directholidays.co.uk, 0844 879 8191) has seven nights in **Tunisia** from £272pp. Price includes half-board at a three-star hotel and return flights from Glasgow departing May 16.

Barrhead Travel (www.barrheadtravel.co.uk, 0871 226 2673) has seven nights in **Cyprus** from £349pp. Price includes all-inclusive accommodation at a four-star resort and return flights from Glasgow departing May 18.

Flexibletrips (www.flexibletrips.com, 0844 879 8253) has three nights in **Amsterdam** from £249pp. Price includes room-only accommodation at a five-star hotel and return flights from Aberdeen departing on September 16. Quote reference number 11253885.

Barrhead Travel (www.barrheadtravel.co.uk, 0871 226 2673) has a five-days **Paris Cruise and Cabaret** coach trip for £279. Price includes accommodation, a Seine cruise and return travel by coach departing Glasgow or Hamilton on Thursday.