

MOUNTAINS IN THE SKY

La Réunion



Oceanic islands – those that have never been connected to a continent – are always exciting to visit. Their lack of mammalian predators makes them safe breeding sites for seabirds, and their depauperate communities promote rapid speciation among immigrants, leading to high proportions of endemic species. But the isolation that makes them special also renders island systems especially susceptible to disturbance. The vast majority of recent avian extinctions have occurred at islands, serving as an acute reminder of the impacts of humans on the biosphere. The French island La Réunion offers eight endemic birds in a spectacular setting but, as **Peter Ryan** notes, the experience of seeing them is tinged with melancholy for the extinct birds that once graced the island.

TEXT & PHOTOGRAPHS BY PETER RYAN

The three Mascarene islands (Mauritius, Réunion and Rodrigues) dot the tropical Indian Ocean east of Madagascar. All three are volcanic in origin, associated with a hotspot, where a fault in the earth's crust allows volcanism over a long period. The easternmost island, Rodrigues is the oldest and smallest at 108 square kilometres. It used to support a fabulous array of birds, but only two landbird species survive, the Rodrigues Warbler and Rodrigues Fody. Mauritius, some 550 kilometres farther west, is younger and considerably larger, at 1 880 square kilometres. Once home to the Dodo, the most celebrated of extinct animals, it has eight surviving endemic birds, thanks largely to the aggressive conservation programmes that saved the Mauritius Kestrel, Pink Pigeon and Mauritius Parakeet from the brink of extinction. Réunion, a farther 170 kilometres west, is the youngest and largest island, at 2 500 square kilometres. Its oldest rocks date back some three million years, but the island is still growing, with the Piton-de-la-Fournaise one of the most active volcanoes on earth. Réunion also boasts eight endemic bird species, and is well worth a visit by birders.

The Mascarene islands were uninhabited when they were discovered by Portuguese explorers sailing around the Cape to India in the early 16th century. However, they were almost certainly known to Arab seafarers, who plied the east coast of Africa and Madagascar as early as the 11th century. The Portuguese landed a few livestock, but the islands were only colonised more than a century later, with the French annexing Réunion in 1642. It was not as favourable as Mauritius as a way-station for passing ships, and was largely spared the attention of rival trading nations. Apart from a brief occupation by the English from 1810 to 1815, it has been a French colony throughout. ▷



Above *The Réunion Stonechat is one of the most abundant native birds, equally at home in alpine scrub and mid-elevation forest.*

Opposite *The volcanic peaks are cut by deeply incised valleys and cirques, making for spectacular scenery.*



Réunion is a spectacular island, with massive peaks, calderas and plunging valleys. The highest point, Piton-des-Neiges, rises 3 070 metres above sea level, despite being barely 20 kilometres from the coast. The rugged terrain has helped to protect large areas of mid-elevation forest and montane habitats, but the coastal lowlands have been largely transformed for agriculture and housing, with the exception of the extreme east of the island where regular lava flows prevent development. Currently, Réunion supports a population of nearly 800 000 people, almost all of whom live along the western coastal plain. The recent origin of the island results in a fairly regular coastline, with few bays or lagoons. Unlike the other Mascarene islands, there are no mangroves, and fringing coral reefs are restricted to the west of the island.

There are only 17 native breeding birds, of which six are seabirds and two are widespread waterbirds (Green-backed Heron and Common Moorhen). But what they lack in diversity they more than make up for in endemism. Two of the six breeding seabirds are found nowhere else, and of the nine landbirds, six are confined to Réunion, and two others are shared with Mauritius. Only the Mascarene Martin is more widespread, also breeding on Madagascar. Introduced birds outnumber native species. Some, such as Madagascar Partridge, Grey Francolin, Madagascar Buttonquail, Common and Blue-breasted quails, and Madagascar Turtle-Dove were released for hunting. Others are ornamental species: Zebra Dove, Red-whiskered Bulbul, Common Myna, Village Weaver, Madagascar Fody, House Sparrow, Spice Finch, Red Avadavat, Common Waxbill, and Cape and Yellow-fronted canaries.

On arriving at the airport you are greeted by the familiar raucous calls of Common Mynas and monotonous chipping of House Sparrows. The most conspicuous native bird is the Mascarene Swiftlet, which breeds in caves and disused tunnels. Part of the large genus of largely Asian swifts famous for their edible nests, the swiftlet is in trouble on Mauritius, but is still common on Réunion. Mascarene Martins are scarce by comparison. The Réunion Grey White-eye is the most widespread bird on the island. It occurs in virtually all habitats where there is some bushy vegetation, with four distinct colour morphs, each in a different climatic region.

Most of the other native landbirds are confined to natural vegetation, mainly at higher elevations. The exception is the Réunion Harrier, whose male is one of the most striking raptors, with bold black and white plumage, whereas the female is dull brown. Until recently considered the same species as the Madagascar Harrier, genetic studies have confirmed its discrete species status. Persecuted as a poultry thief, its numbers dwindled to only 100–200 breeding pairs, but it is now a protected species. Although some poaching continues, numbers are increasing, and you are likely to encounter several during a drive through agricultural areas. Traditionally these harriers foraged over the forest that clothed most of the island, and they can still be seen soaring over the canopy at higher elevations.

The most difficult landbird to see is the Réunion Cuckoo-Shrike, which is confined to a small area in the north-west of the island. It is best looked for about two to five kilometres



Opposite, clockwise from top left

The male Mascarene Paradise-Flycatcher is less spectacular than its continental relative.

The Madagascar Fody is one of the few introduced birds to occur in native forest. It remains a mystery whether there was a native fody and, if so, what caused its demise.

The grey, west-coast form of Réunion Grey White-eye, a remarkably variable species found throughout the island.

The Red-whiskered Bulbul is a relatively recent arrival, but has already spread throughout much of the island and is far more abundant than the native Réunion Bulbul.



The Réunion Olive White-eye is confined to higher elevations, and has a distinctly long, decurved bill.

along the trail at La Roche Ecrite Reserve. Listen for the male's loud, repetitive whistle which gives it its local name: 'Tuit Tuit'. Like the harrier, it is listed as Endangered, and has a population of only some 120 pairs. It has suffered from habitat loss to forestry and alien plants, but nest predation by introduced rats is the most significant threat. Breeding success was low until poison bait was deployed around the nests to reduce rat numbers. Hopefully the combination of habitat restoration and rat control will ensure the long-term survival of this species.

A visit to La Roche Ecrite should produce all the other native landbirds. Both the Olive and Grey white-eyes are common, as is the Mascarene Paradise-Flycatcher. Réunion Stonechats occur in closed forest as well as more open habitats, but the Réunion Bulbul is less common, and is rather nervous after years of being pursued for the local cage-bird trade. Only a few alien birds occur in the natural forest: Madagascar Fodies and Red-whiskered Buleuls. The bulbuls have spread rapidly since their introduction in the 1970s and may pose a long-term threat to the native species. Higher up,

GONE, BUT NOT FORGOTTEN

The Mascarene Islands rival Hawaii for mass extinction of native birds following the arrival of humans and their commensals. Most species disappeared within a few years of the islands' discovery, and are known only from the often rather fanciful descriptions of the first visitors or from bones found in lava tubes and caves. Other species persisted long enough to be collected and catalogued, and in some cases skins still remain as poignant reminders of the islands' former diversity.

At Réunion, two species survived into the 19th century, the **Mascarene Parrot** (right) and **Réunion Starling** (below). Disease may have played a role in the sudden disappearance of the starling, which went from being fairly common to extinct within a few decades. Both were distinctive species, placed in monotypic genera. The parrot was peculiar in having largely brown plumage, with black-and-white patterning on the head and tail, and a bright orange bill. The starling was equally unusual, with a long, lacy crest and a slender, decurved bill.

The really bizarre birds disappeared from Réunion much earlier, leaving only tantalising hints of their existence. Bone remains confirm the presence of an endemic night-heron, a flightless ibis, a short-billed shelduck, a coot, a kestrel and an owl. Early reports suggest that there were also two or three more parrots, a duck, several pigeons, and a couple of rails. Similar species were found on Mauritius and Rodrigues, and a kestrel, pigeon and parakeet still survive on Mauritius. Early explorers at these islands provided some fascinating insights into these birds' lives.



François Leguat, a Huguenot fleeing Europe, spent two years on Rodrigues from 1691. His journal describes how near-flightless night-herons stole pet geckos from their camp, and how the large, flightless rail was easily caught because it attacked anything red. This unfortunate behaviour also was reported for the Mauritius Red Rail, and was exploited to catch these birds for food.

The most celebrated birds were the giant, flightless pigeons, the dodos and solitaires. Despite being extinct, images of dodos are ubiquitous at the islands, advertising everything from businesses to beer. Numerous remains confirm the existence of the Mauritius Dodo and Rodrigues Solitaire, but it is now thought that two reports by early visitors of a large flightless bird on Réunion referred to the flightless ibis.

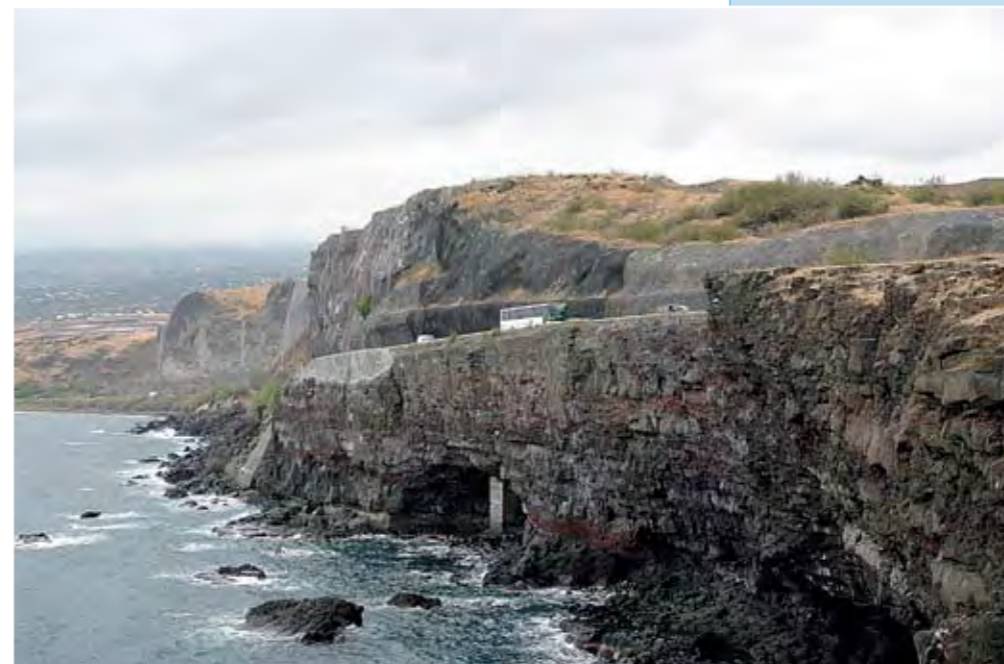
Other small birds probably went extinct without attracting attention. One puzzle is whether there was a native fody on Réunion. Early reports of a bird with a bright red head and breast probably refer to a fody, but if so, why did it go extinct? Endemic fodies still survive on Mauritius and Rodrigues, despite there being much less natural habitat left at these islands. And it's not only birds that went extinct when humans arrived. Among the more spectacular creatures lost from Réunion were two species of flying fox, a giant tortoise and a large skink. Some conservationists favour re-introducing flying foxes from Mauritius and tortoises from Aldabra, but there are no easy options for restoring the absent ducks, owls and ibis.



the montane heathland is remarkably reminiscent of high-elevation Karoo scrub, and is home to a healthy population of Cape Canaries.

Seabirds are not abundant, largely due to the impacts of hunting and introduced predators over several centuries. There are no predator-free offshore islets to act as refugia, but seabirds still survive, breeding on cliffs and other inaccessible areas. White-tailed Tropicbirds are often seen commuting to their nests during the day but, apart from small numbers of Common Noddies, the other seabirds visit the island at night. They can be seen gathering off the island each evening during the breeding season. Two widespread tropical species, Wedge-tailed and Tropical shearwaters, breed at mid-elevations, but the two high-elevation breeders are both confined to Réunion.

Barau's Petrels are still fairly common, with about 4 000 pairs breeding in elfin forest in the central massif. They can be seen from the south-west coast in the late afternoon. Etang du Gol, a lagoon near St-Louis, is a favoured site, with birds approaching close to shore before circling up and soaring inland. They are joined by small numbers of shearwaters, and there is always a chance of seeing one of the few remaining Réunion Black Petrels. This Critically Endangered species once bred on Rodrigues and perhaps Mauritius, but is now reduced to fewer than 100 pairs on Réunion. Like the other seabirds, it is protected from hunting, but it is still threatened by introduced predators and light pollution. Each year, up to 800 Barau's Petrel fledglings are found in urban areas after being dazzled by street lights on their first flight to sea. An awareness and rescue programme saves around 90 per cent of these birds, indicative of the increased importance of conservation on Réunion. Whether such measures will be in time to save the Black Petrel and the cuckoo-shrike remains to be seen. □



Exploring the island is complicated by a combination of rugged terrain, often narrow roads and large traffic volumes.

off you go...

As Réunion is an overseas department of France, euros form the official currency, and prices tend towards the upper end of what one might expect in mainland France. If you need a French visa, make sure that it specifies Réunion. Air Austral offers direct flights from Johannesburg to St-Denis, and boasts some great in-flight cuisine. Tourism is largely geared to French visitors, but many people involved in the industry speak some English, and it is possible to get by with a soupçon of French.

All the landbirds are found at La Roche Ecrite, above the capital of St-Denis. With a bit of effort, all the endemics (except the Réunion Black Petrel) can be seen in a single day, but it's worth spending more time to explore the mountainous interior and do a spot of fish-watching on the coral reefs. Although the island is only 200 kilometres in circumference, distances are deceptive because of the often appalling traffic. Try to avoid travelling along the west coast during morning and evening rush hours.

Réunion is best visited in winter or spring (May to October), when it is cooler and drier, and there is little risk of tropical storms. Hurricanes often block roads and may prevent access to key birding areas. Cilaos, a deep valley near the central peak, has the dubious distinction of holding the record for rainfall in a 24-hour period: 1 870 millimetres! The summer rainy season also brings an increase in mosquito activity, and the associated threat of disease. In 2005/06, an outbreak of chikungunya (a rare viral infection carried by mosquitoes) affected almost a quarter of the population, and greatly reduced tourism. Aggressive anti-mosquito controls have been instituted and hopefully the problem will be controlled in future. There has been no outbreak to date during the 2006/07 wet season.

There are several flights daily between Réunion and Mauritius, making it feasible to visit both islands in one trip. Mauritius is an independent country with a well-developed tourism industry. Most landbirds are confined to the Black River Gorges National Park in the south-west of the island, where guides are available to help locate the rarer species. Round Island, off the north-east coast of Mauritius, is home to a diverse array of tropical seabirds, including an intriguing population of Trinidad Petrels that is sometimes considered an endemic species. Recently, Kermadec Petrels have also been recorded at Round Island. Rodrigues, administered by Mauritius, is less often visited, but tourism is increasing. The two surviving landbird species (the warbler and the fody) are confined to the few areas of remaining forest at Solitude Forest Station and in Cascade Pigeon Valley.