# ST BARTHÉLEMY

LAND AREA 25 km<sup>2</sup> ALTITUDE 0–104 m HUMAN POPULATION 8,450 CAPITAL GUSTAVIA IMPORTANT BIRD AREAS 3, totalling 10.5 km<sup>2</sup> IMPORTANT BIRD AREA PROTECTION 75% BIRD SPECIES **c.80**THREATENED BIRDS 0 RESTRICTED-RANGE BIRDS 3

Anthony Levesque, Alain Mathurin (AMAZONA) and Franciane Le Quellec (Réserve Naturelle de St Barthélemy)



Îlet Tortue IBA, just off the coast of north-east St Barthélemy. (PHOTO: ASSOCIATION GRENAT)

# **INTRODUCTION**

St Barthélemy (also known as St Barts) is an archipelago of 20 islands in which the main island covers 24 km<sup>2</sup>. It has recently become a collectivité d'outre-mer (COM, overseas collectivity) of France (and not an integral part of the European Union), and thus is now administratively separated from Guadeloupe (to France). St Barthélemy was first claimed by France in 1648, but was subsequently sold to Sweden in 1784. Sweden sold it back to France in 1878, but this period of occupancy left its mark with many street and town names (and national coat of arms) having Swedish origins. The island and its satellites are exposed parts of the Anguilla Bank (along with neighbouring islands of St Martin and Anguilla). St Barthélemy lies 20 km east-south-east of the island of St Martin. The island and its satellites are formed from uneven, rocky limestone, but the relief is low and the trade winds pass over without much precipitation falling. The climate is tropical maritime with a dry season (called "Lent") from December to May, and a more humid "winter" season from June to November. The resulting vegetation is xerophytic, much of which has been degraded from overgrazing by goats. The main island has a number of brackish and saline ponds (at Grand Cul-de-Sac and Petit Cul-de-Sac, and Saint-Jean) that support

small numbers of resident and migratory waterbirds, and the island's last stands of mangrove.

The satellite islands of St Barthélemy range in size from L'île Fourchue, the largest at 24 ha, to those that are less than a hectare. Most of them have sea cliffs that rise to 20 m and above (up to 104 m). Historically goats have been left to run wild on these islands and consequently, as is the case on the mainland, large areas have been overgrazed.

# Conservation

Conservation efforts in St Barthélemy are still administered through the Regional Directorate of the Environment (DIREN, part of the French Ministry of Ecology and Sustainable Development) based in Guadeloupe. It provides environmental expertise for the development of local planning documents, land management, balancing the environment and economic development, raising environmental awareness and protecting resources and natural spaces.

Several forms of protected areas exist on St Barthélemy. The St Barthélemy National Nature Reserve (Réserve Naturelle) is a marine area that covers 1,200 ha, including 275 ha of coral reef. It comprises five public marine zones located mainly in the north and north-west of the main island, and is managed by the Grenat Association. The uninhabited islets



Île Bonhomme, one of St Barthélemy's many offshore islands that have been severely overgrazed by goats. (PHOTO: RÉSERVE NATURELLE ST BARTH)

have been identified as Littoral Conservation Areas, and are integrated into the Schéma Régional d'Aménagement (SAR). Biotope Protection Orders cover 5.5 ha around Saint-Jean and 16 ha of the Grand Cul-de-Sac and Petit Cul-de-Sac ponds, and many of the migratory birds that occur on these ponds form part of a Ministerial Protection Order. Zone Naturelles d'Intérêt Ecologique Faunistique et Floristique (ZNIEFF) designations, which have no legal status, cover 37 ha that embraces the island's five ponds, and 42 ha of unique xerophytic vegetation at Pointe à Toiny (on the east of the island).

A number of threats impinge on St Barthélemy's birds and biodiversity. Seabirds are affected by the poaching of adults and young birds, and egg collection. Urban encroachment, agricultural expansion, pesticide use and uncontrolled grazing by goats and cows is resulting in habitat loss and degradation, and soil erosion. Alien invasive predators including black rat Rattus rattus, small Indian mongoose Herpestes auropunctatus and domestic cat Felis catus are all impacting bird populations. An integrated protection scheme covering the seabird colonies should be put in place during the breeding season. The protection would consist of a ban on approaching closer than 100 m to the coasts of the islets, and landing would be prohibited. On the recent establishment of St Barthélemy as an overseas collectivity, a promise was made to regenerate the environment within the islands. A seabird conservation and restoration plan would provide an excellent focus for the implementation of such a promise. Restoration efforts will need to focus on goat eradications on the islets (to allow for the assisted recolonisation of the vegetation), and predator eradication (where necessary).

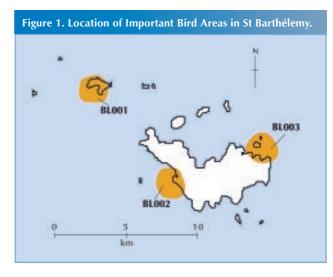
# **■** Birds

Approximately 80 species are thought to have been recorded on St Barthélemy. The island's small land area and xerophytic vegetation that is often degraded from overgrazing by goats means that breeding landbirds are poorly represented. About

15 landbird species breed, including four species restricted to the Lesser Antilles Endemic Bird Area (EBA), namely Antillean Crested Hummingbird Orthorhyncus cristatus, Green-throated Carib Eulampis holosericeus, Caribbean Elaenia Elaenia martinica and Lesser Antillean Bullfinch Loxigilla noctis. Small numbers of waterbirds (of six species) are present on the island's ponds, and the island's avifauna increases with the arrival of Neotropical migrants from North America each winter. However, the main bird interest on St Barthélemy is from the 13 regularly breeding species of seabird that form colonies on many of the satellite islands. The species include those listed (with national population estimates, and estimates of numbers in the IBAs) in Table 1. Also breeding are Red-billed Tropicbird Phaethon aethereus (140–280 pairs), White-tailed Tropicbird P. lepturus (20–40 pairs), Sooty Tern Sterna fuscata (150–300 pairs), Bridled Tern S. anaethetus (75– 100 pairs), Brown Noddy Anous stolidus (98 to 120 pairs), Least Tern S. antillarum (15-20 pairs), and Brown Pelican Pelecanus occidentalis (18 pairs). Both Audubon's Shearwater Puffinus lherminieri and Roseate Tern S. dougallii are rare or occasional breeding birds. All of the satellite islands have the strong potential to support larger numbers of seabirds. However, on some of the islands extensive goat grazing has led to erosion which is hindering the recolonisation of vegetation needed by the nesting seabirds. Other pressures (tourist disturbance, pollution etc.) are also suppressing the populations of St Barthélemy's seabirds.

# **IMPORTANT BIRD AREAS**

St Barthélemy's three IBA—the country's international site priorities for bird conservation – cover 1,050 ha (including marine areas), and about 0.4% of the country's land area. The IBAs have been identified on the basis of four key seabird species (listed in Table 1) that variously meet the IBA criteria,



More than 1% of the Caribbean populations of both Brown Booby and Royal Tern nest within St Barthélemy's IBAs.

(PHOTOS: VINCENT LEMOINE)





Les Petite Saints, part of IBA BL002, just south of the entrance to Gustavia harbour. (PHOTO: ANTHONY LEVESQUE)

Key bird species	Criteria	National population	Criteria —	BL001	St Barthélemy IBAs BL002	BL003
				•		
Brown Booby Sula leucogaster	•	450-525		180	130	
Laughing Gull Larus atricilla		1,320				450
Royal Tern Sterna maxima		90-150				150
Common Tern Sterna hirundo	•	90-105			60	

and thus the IBAs all represent globally significant seabird colonies, and all are on St Barthélemy's satellite islands. Mainland St Barthélemy supports populations of three Lesser Antilles EBA restricted-range species. However, these species are well represented within the wider IBA network throughout the Lesser Antilles and thus no IBA has been identified specifically for them in St Barthélemy.

The cliffs and land up to 15 m from the coasts of these IBAs are within Littoral Conservation Areas, giving them some legal protection from development. Two of the IBAs are also within the marine Réserve Naturelle de St Barthélemy which covers a number of areas and satellite islands around the coast of the "mainland", and also offers some protection from disturbance. However, the IBAs (and the seabirds within them) are still threatened by disturbance and undocumented levels of egg collecting. It is unknown whether rats Rattus spp. are present within the IBAs, and this should be a priority to assess, both within the IBAs and on the other satellite islands. Eradication efforts where rats are present would be feasible and would boost the recovery of seabird populations while they are also benefitting from the relatively recent removal of goats from some breeding islands. An assessment of the presence of goats on the satellite islands would also be worthwhile as a precursor to the development of broad seabird conservation strategy for St Barthélemy.

The monitoring of the seabirds within St Barthélemy's IBAs should be continued and used to inform the assessment of state, pressure and response variables at each IBA in order to provide objective status assessments and inform management decisions that might be required to maintain (or improve) these

internationally important biodiversity sites. Monitoring the seabird populations on the other satellite islands will also be important to determine the extent to which species might, between years, use a larger network of breeding locations to sustain the local population. Such monitoring will also be essential to assess the impact of any future management activities (such as rat or goat eradications) on these islands.

# **KEY REFERENCES**

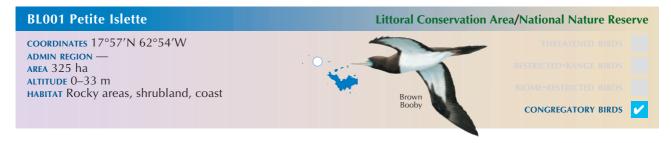
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# ■ Site description

Petite Islette IBA lies just to the south-west of l'île Fourchue, itself c.5 km north-west of the main island of St Barthélemy. The uninhabited islet is just 1.3 ha, and it is surrounded by near-vertical sea cliffs rising to 33 m. The IBA includes marine areas up to 1 km from Petite Islette. The island itself is extremely dry, with the parched stony ground colonised by drought-resistant xeric vegetation, and grassland dominated by various species of cactus, bushes and a few small trees.

# Birds

This IBA is regionally significant for its Brown Booby *Sula leucogaster* colony, with more than 60 pairs found nesting in 2002. A survey in 2007 confirmed the species' continued presence with at least 80 adults and some young birds counted on the islet. Other species present were Laughing Gull *Larus atricilla*, an American Oystercatcher *Haematopus palliatus*, Magnificent Frigatebird *Fregata magnificens* and Zenaida Dove *Zenaida aurita*.

# Other biodiversity

The Vulnerable Lesser Antillean iguana *Iguana delicatissima* occurs along with the Anguilla Bank endemic lizards, namely

the ground lizard *Ameiva pleei* and *Anolis gingivinus*. Clumps of Royen's tree cactus *Pilosocereus royenii*, prickly pear *Opuntia tricantha*, and Turk's cap cactus *Melocactus intortus* are present.

#### Conservation

Petite Islette is privately owned by Serge and Carole Beal. The island's cliffs are formally protected as a Littoral Conservation Area belonging to the Conservatoire du littoral that forbids any development within 15 m of the coast. The island is within the Domaine Public Maritime (DPM) of the St Barthélemy National Nature Reserve (Réserve Naturelle) that surrounds much of l'île Fourchue, and this prohibits the anchoring of boats. Consequently, landings on the island are limited. The principle threat to the island was the presence of goats, but these were removed some years ago. It is unknown if rats Rattus spp. are present on the island. The collection of seabird eggs might still be an occasional activity, and this should be monitored. There is also potential disturbance from plant collectors taking cacti from the island. A census of breeding seabirds was carried out in 2001–2002 by Gilles Leblond and a complementary visit made in 2007 by Anthony Levesque (AMAZONA). An inventory of the flora was undertaken by Félix Lurel in 2006.

# BL002 Les Petit Saints et Gros Islets COORDINATES 17°54′N 62°51′W ADMIN REGION — AREA 360 ha ALTITUDE 0–20 m HABITAT Rocky areas, shrubland CONGREGATORY BIRDS

# **■** Site description

Les Petits Saints et Gros Islets IBA comprises two sets of rocky islets that lie 500 m offshore from the entrance to Gustavia harbour on the western side of St Barthélemy. Les Gros Islets consist of two volcanic islands of 0.6 and 0.2 ha, that rise to c.20 m. They lie just north (500 m) of Les Petits Saints which are a small group of rocky mounds to the south of the Gustavia harbour entrance. Xerophytic vegetation clings to the cliffs and rock crevices on these islands, including the rare herbaceous plant *Pappophorum papiferum* as well as a species of *Cyperacee* and *Cleome*. The IBA includes marine areas up to 1 km from the islets.

# Rirds

This IBA supports a globally significant breeding population of Common Tern Sterna hirundo. About 20 pairs were found on Les Petits Saints in 2001, but this population has not been re-assessed since then. A regionally important population of Brown Booby Sula leucogaster also breeds, with c.100 birds (various age classes) on Les Gros Îlets, and c.20 found on Les Petits Saints in 2007. Other seabirds breeding on these islands include Bridled Tern Sterna anaethetus, Royal Tern S. maximus, Brown Noddy Anous stolidus, Red-billed Tropicbird

Phaeton aetherus (several pairs), Magnificent Frigatebird Fregata magnificens, and Laughing Gull Larus atricilla.

# Other biodiversity

No globally threatened or endemic taxa have been recorded.

# Conservation

Les Petits Saints et Gros Islets IBA is state-owned. Les Petits Saints cliffs are formally protected as a Littoral Conservation Area belonging to the Conservatoire du littoral that forbids any development within 15 m of the coast. Gros Islets are within the Domaine Public Maritime (DPM) of the St Barthélemy National Nature Reserve (Réserve Naturelle) that surrounds the Pain de Sucre island, and this prohibits the anchoring of boats. Consequently, landings on the island are limited. It is unknown if rats *Rattus* spp. are present on the island. The collection of seabird eggs might still be an occasional activity, and this should be monitored. A census of breeding seabirds was carried out in 2001–2002 by Gilles Leblond and a complementary visit made in 2007 by Anthony Levesque (AMAZONA). An inventory of the flora was undertaken by Félix Lurel in 2006.



# ■ Site description

Îlet Tortue IBÂ lies just offshore from l'Anse du Grand Culde-Sac at the north-eastern end of St Barthélemy. This uninhabited island covers 7 ha, and is 35 m at its highest point. It is vegetated in a mosaic of grasses, bushes and small trees that rarely get above 3 m (due to the constant strong winds), with agaves and cacti like the Turk's cap cactus *Melocactus intortus* and Royen's tree cactus *Pilosocereus royenii*. Goats were present on the island until recently, as a consequence of which the vegetation is still recovering and erosion remains a problem. The IBA includes marine areas up to 1 km from the island.

# **■** Birds

This IBA supports a significant seabird colony. A globally important breeding population of Laughing Gull *Larus atricilla* and regionally significant Royal Tern *Sterna maximus* population have remained stable between surveys in 2002 and 2007. Red-billed Tropicbird *Phaeton aethereus* also breed, with less than 10 pairs observed in 2007.

# Other biodiversity

Îlet Tortue is one of the largest and best vegetated islands in St Barthélémy and represents a refuge for a number of rare species.

# Conservation

L'îlet Tortue IBA is a privately owned, belonging to Henri Gréaux. The island's cliffs are formally protected as a Littoral Conservation Area belonging to the Conservatoire du littoral that forbids any development within 15 m of the coast. The island is within the legally protected zone of the St Barthélemy National Nature Reserve (Réserve Naturelle) that covers marine areas off the north-eastern tip of the main island. This prohibits the anchoring of boats, shooting and fishing (as disincentives to land) but there is occasional landing on the island and egg collecting remains unregulated. Terrestrial areas are not covered by the reserve. It is unknown if rats Rattus spp. are present on the island, but the goat population was recently removed. However, restoration of goat affected areas would reduce erosion and sedimentation of the nearby marine environment. A census of breeding seabirds was carried out in 2001-2002 by Gilles Leblond and a complementary visit made in 2007 by Anthony Levesque (AMAZONA). An inventory of the flora was undertaken by Félix Lurel in 2006.