

Field Guide to the
Marine Life of
St. Eustatius



By Niels Schrieken and Sylvia van Leeuwen (eds.)
ISBN: 978-9402172461
The ANEMOON Foundation, Lisse, The Netherlands, December 2016



Stichting ANEMOON

Authors: Floris Bennema, Jessica Berkel, Jaap de Boer, Kalli De Meyer, Glenn Faires, Adriaan Gmelig Meyling, Marion Haarsma, Mike Harterink, Susan J. Hewitt, Bert Hoeksema, Eseld Imms, Sylvia van Leeuwen, Luna van der Loos, Godfried van Moorsel, Niels Schrieken, Johan Stapel and Mark Yokoyama

Editors: Niels Schrieken and Sylvia van Leeuwen

Editorial support: Susan J. Hewitt and Ed Subitzky

Photographers: Marco Faasse, Glenn Faires, Jaaziel García-Hernández, Marion Haarsma, Mike Harterink, Bert Hoeksema, Yee Wah Lau, Sylvia van Leeuwen, Luna van der Loos, Godfried van Moorsel, James Reimer, Niels Schrieken, Frank R. Stokvis and James Thomas

Maps: Eseld Imms, DCNA

Layout: Niels Schrieken

The ANEMOON Foundation
P.O. Box 29
2120 AA Lisse, The Netherlands
anemoon@cistron.nl
www.anemoon.org/eux

Front cover photos: Bert Hoeksema (Longsnout Seahorse *Hippocampus reidi*) and Marion Haarsma (all other photos)

Photo above: Marion Haarsma

Back cover photo: Mark Yokoyama

Citations

Please cite this book as follows:

Schrieken, N. and Van Leeuwen, S.J., 2016 (Eds.). Field guide to the marine life of St. Eustatius. ANEMOON Foundation, Lisse, the Netherlands.

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The publication of this field guide is supported by the Prins Bernhard Cultuurfonds Caribisch Gebied



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Introduction to the marine life of St. Eustatius

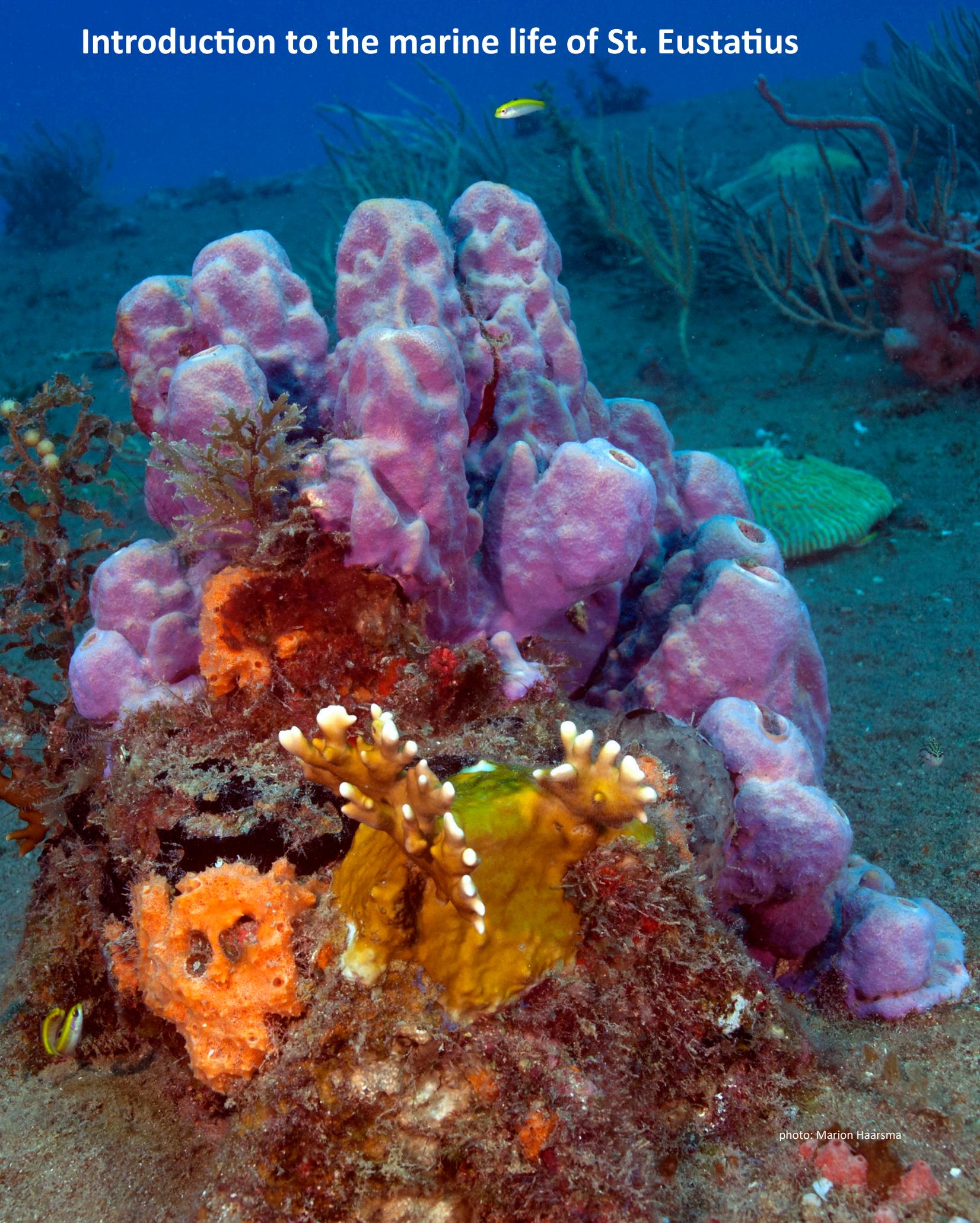




photo: Glenn Faires

About St. Eustatius

Marion Haarsma

The island of St. Eustatius is part of the Dutch Caribbean. Approximately 21 km² in size, it is one of the Leeward Islands in the northern part of the Lesser Antilles, West Indies.

Geologically, St. Eustatius forms part of an inner arc of older islands that were created from what were originally submarine volcanoes. Along with St. Kitts and Nevis, St. Eustatius is one of three islands that share an underwater foundation known as the “St. Kitts Bank”. These three islands were periodically connected together as a single land mass during the ice age, whenever the sea level was low enough to make this possible. The most recent time during which the three islands were joined was about 12,000 years before the present.

St. Eustatius supports an interesting variety of biotopes (types of habitat) both on land and in the sea. The marine habitats include seagrass beds, lava fingers, wrecks, coral reefs, and drop-offs. There are three national parks, managed by STENAPA (an acronym for St. Eustatius National Parks): St. Eustatius National Marine Park, Quill - Boven National Park, and Miriam C. Schmidt Botanical Garden.

The Golden Rock

Today, “Statia” – as the island is popularly called – has a human population of around 4,000. Visitors will find no mass tourism here, no sprawling sandy beaches lined with resorts. What you will find instead is a glorious history that can be both seen and felt. That, and a restful peace. St. Eustatius is a good place to enjoy the pleasant Caribbean climate and the extraordinary diversity of unspoiled nature.

St. Eustatius’ dormant volcano, “The Quill”, stands head and shoulders above the rest of the island. A hike up this perfectly shaped 600-meter-high volcano is a special treat. As an extra bonus, a spectacular tropical rainforest lies hidden within the crater.

Hundreds of shipwrecks just off the coast of St. Eustatius make the island a true diver’s paradise. Experience the well-preserved reef patches and abundant stands of elegant sea fans. Under the surface of the crystal-clear water live many colourful fish, lobsters, and sea turtles. The waters around the island are home to a very rich biodiversity. Coral reefs and fish populations are healthy, and St. Eustatius has its own singular assemblage of marine animals and plants. This underwater richness has been recognised, and was awarded the status of “St. Eustatius National Marine Park” in 1996.

About the book

Niels Schrieken and Sylvia van Leeuwen

This guide is intended to give an overview of the diversity of the marine life of St. Eustatius. But to show and describe all the species living in the waters around Statia is impossible; in 2016, the known total was already over a thousand, and many more species remain to be observed and recorded. It is even likely that there are several species left to be discovered which are as yet unknown to science.

In this guide we have listed many of the island's common and characteristic marine animals and plants. To showcase the uniqueness of the marine life of the island, we have included some species that are found nowhere else, or are found only in this part of the Lesser Antilles. In addition, some species are included which are easily found around St. Eustatius, but which are rarely seen elsewhere in the West Indies.

Together these beautiful and strange creatures illustrate the surprising diversity of Statia's surrounding waters, hidden treasures that await anyone who wishes to search for them.

We hope this field guide will encouraged you to explore the amazing marine life of St. Eustatius.

Learn more!

The guide is designed to be accessible to persons of all ages and backgrounds, while avoiding oversimplification. It is based on both scientific research and field observations by citizen scientists and scuba divers. More information of the marine biodiversity of the Dutch Caribbean islands and the species in this field guide is available on www.anemoon.org. For further study we recommend the identification guides of Paul Humann and Ned Deloach on Florida Caribbean and Bahamas (3 volumes). Those who need help, can use the Facebook group of The ANEMOON Foundation, <https://www.facebook.com/groups/StAnemoonMOO/>

Share your observations!

By doing so, you will contribute to science, and to the management and protection of the St. Eustatius Marine Park. All you have to do is observe and share your observations and/or photographs of marine species on <http://statia.observation.org/> or on <http://www.inaturalist.org/>. You can also use the Observation Card or the Extended Observation Form in the additional information section. You can download the card and the form via www.anemoon.org/EUX.

Names and abbreviations

All photos were taken in the waters and on the Island off St. Eustatius, mainly during the St. Eustatius Marine

Expedition 2015, organised by Naturalis Biodiversity Centre and The ANEMOON Foundation. The common names used in this book follow Paul Humann and Ned Deloach. The scientific names follow WoRMS (www.marinespecies.org). The abbreviations sp. and spp. are used for species and multiple species.



Blue beads

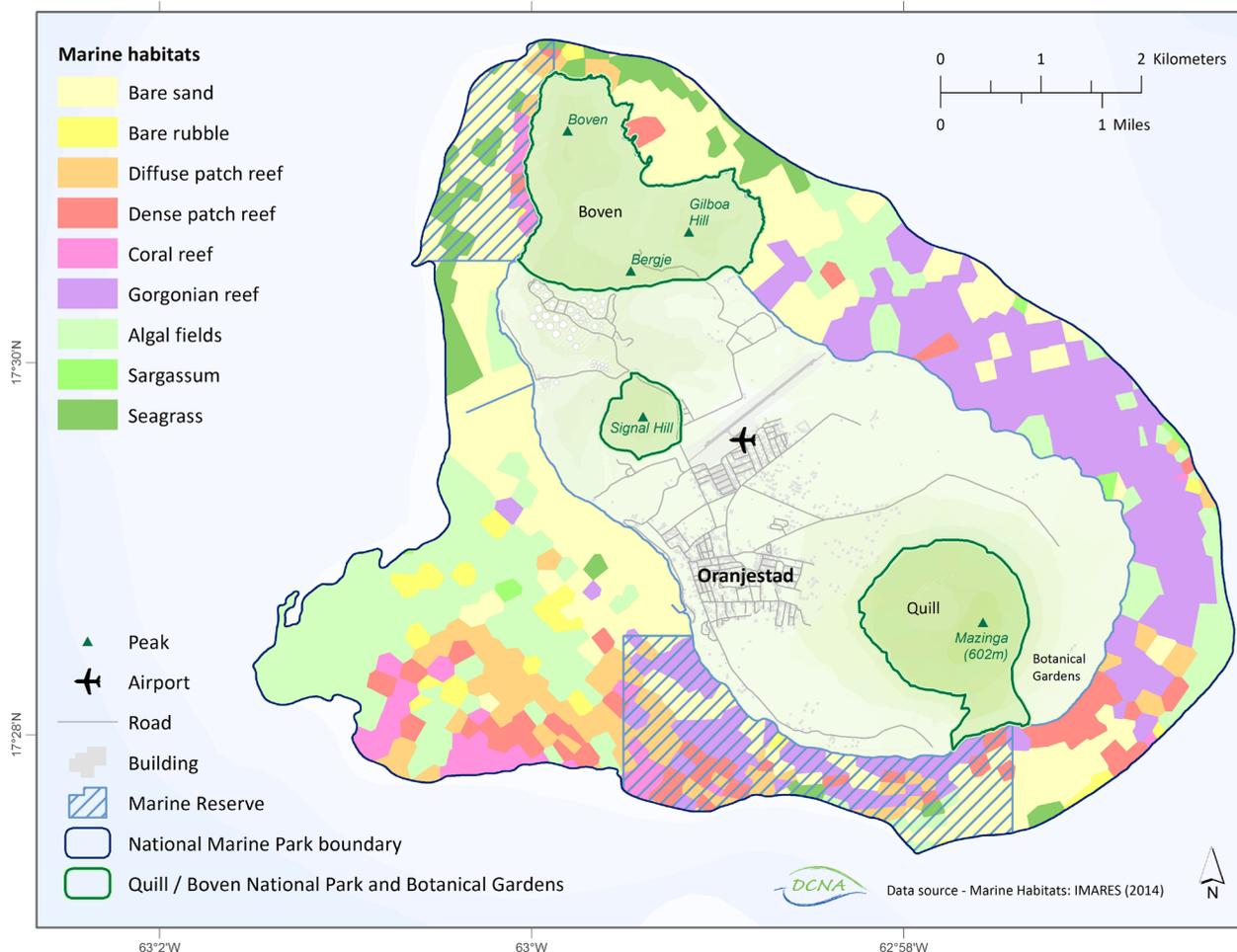
The origin of the blue beads goes back to the 17th century when the Dutch West India Company used these beads for trading. The pentagonal shaped beads were made in Amsterdam and travelled the world wherever the Dutch went. Thirty blue beads were used by the Dutch to purchase New York's Manhattan island from the native Indians. The beads in St. Eustatius were given to slaves as wages. After emancipation, the legend says the ex-slaves gathered at the cliffs and threw their beads in the sea to celebrate freedom. This is probably the reason that most of the blue beads are found by divers in the dive site called "Blue Bead Hole".

The best technique to find them is somewhere between swimming close to the sandy bottom and a few metres above the bottom for a wide angle view. The moment you spot something blue, you feel your heart pounding, but don't get too excited as you may end up with a small shard and they don't count. You never forget the moment you find your first blue bead and the atmosphere on the boat when the trophy is examined by fellow divers.

According to the legend you don't find blue beads but the beads find you, and if you're found, you will return to St. Eustatius again and again. Blue beads are the only artifacts that are allowed to leave the island.

Marine habitats of St. Eustatius

Niels Schrieken and Eselfd Imms



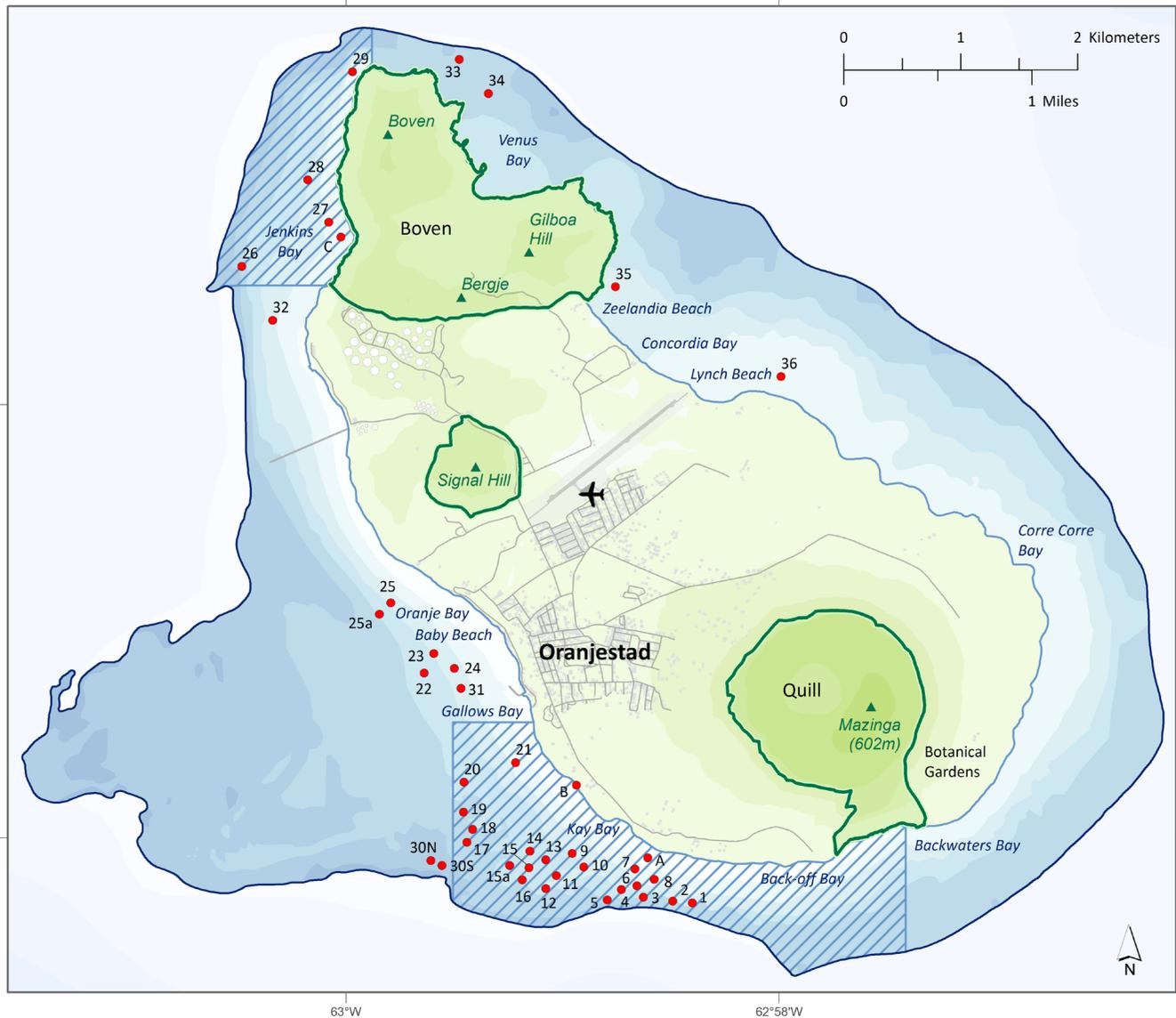
Marine habitats

Although St. Eustatius is a small island, it is home to a number of different habitats for land, shore and underwater animals and plants. St. Eustatius offers 36 official dive sites and 3 snorkel sites (see the map on the next page). Diving on St. Eustatius is mostly done by boat, and most dive sites are on the Caribbean coast, because the waves are more gentle there. The Atlantic coast has powerful waves which makes it much harder to dive there. Around St. Eustatius, the marine waters offer a large variation of habitats (see the map above). Each habitat gives home to different species. Exploring the many dive sites of St. Eustatius means you are diving in numerous very different environments. Almost all of the official dive sites are marked with mooring buoys to save the reef from anchor damage.



Chien Thong, wreck

Chien Thong, Caribbean side. Chien Tong was once a 52 m/170 ft Taiwanese longliner but is now a magnet for turtles, barracudas, reef sharks and other marine life. It is the place for night diving: giant Hawksbill Sea Turtles, Green Sea Turtles use the wreck as a hotel for the night.



- Dive Site
- ✈ Airport
- ▲ Peak
- ▭ Quill / Boven National Park
- ▭ National Marine Park boundary
- ▨ Marine Reserve
- Road / Pier
- ⊕ Building

Depth in metres



Data source - bathymetry: IMARES (2014)

Dive sites

- | | |
|-------------------------------|-------------------------------|
| 1 Drop Off East | 22 Triple Wreck |
| 2 Drop Off West | 23 Double Wreck |
| 3 Grand Canyon / Off the Wall | 24 Stingray City |
| 4 The Cliffs / Down South | 25 STENAPA Reef |
| 5 Coral Gardens | 25a Chien Tong |
| 6 Mushroom Gardens | 26 Doobie's Crack |
| 7 The Humps | 27 Outer Jenkins Bay |
| 8 Valley of the Sponges | 28 Twin Sisters |
| 9 Five Fingers North | 29 Gibraltar/North Point |
| 10 Five Fingers South | 30N The Charles L Brown North |
| 11 The Ledges | 30S The Charles L Brown South |
| 12 Anchor Reef | 31 Blue Bead Hole |
| 13 The Blocks | 32 Aquarium |
| 14 Hangover | 33 North Man |
| 15 Anchor Point South | 34 Five Canyons |
| 15a Anchor Point West | 35 The Cave |
| 16 Anchor Point North | 36 English Quarter |
| 17 Twin Peaks | |
| 18 Barracuda Reef | |
| 19 Nursing Station | |
| 20 Blair's Reef | |
| 21 Crook's Castle | |

Snorkel sites

- A Blind Shoal
- B Twelve Guns
- C Inner Jenkins Bay



photo: Arjen Speksnijder

Double Wreck, reef

Double wreck is a former wrecksite now fully grown with sponges and coral. You find fishes, stingrays, turtles and small marine life.

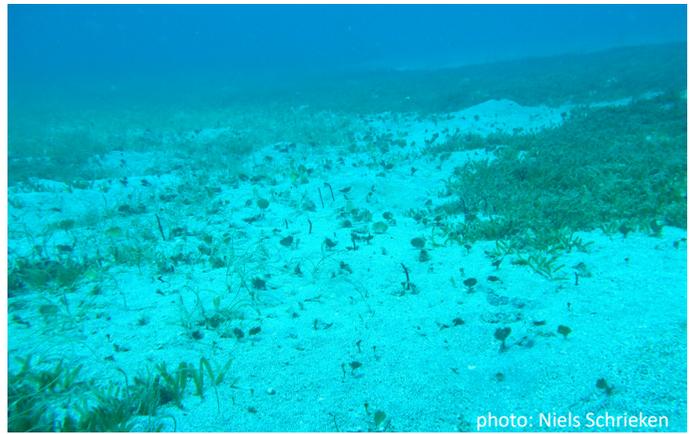


photo: Niels Schrieken

Blue Bead Hole, seagrass

Blue bead hole is sand with sea grass. Here you find the most colourful blue fins, the Flying Gurnard!



photo: Simone Montano

The Humps, patch reef

The Humps are huge coral-covered lava bombs and lava 'fingers'. You find loads of (juvenile) reef fish, corals and sponges. A true heaven for macro-lovers.



photo: Niels Schrieken

Scubaqua House Reef, submerged city wall

These old city wall of stone is covered with sponges and some corals. Small fish and other creatures hide in crevices.



photo: Glenn Fairés

North Man, boulders

On the exposed side of the Island. Large boulders overgrown with sponges and coral. Here you can find different species of marine life than on the Caribbean side.



photo: Arjen Speksnijder

Shark Reef, drop off

At the north of the island. The reef is surrounded by deeper water and gives you the feeling you dive in the open ocean. There is an abundance of barracudas, jacks and don't even try to count the lobsters.