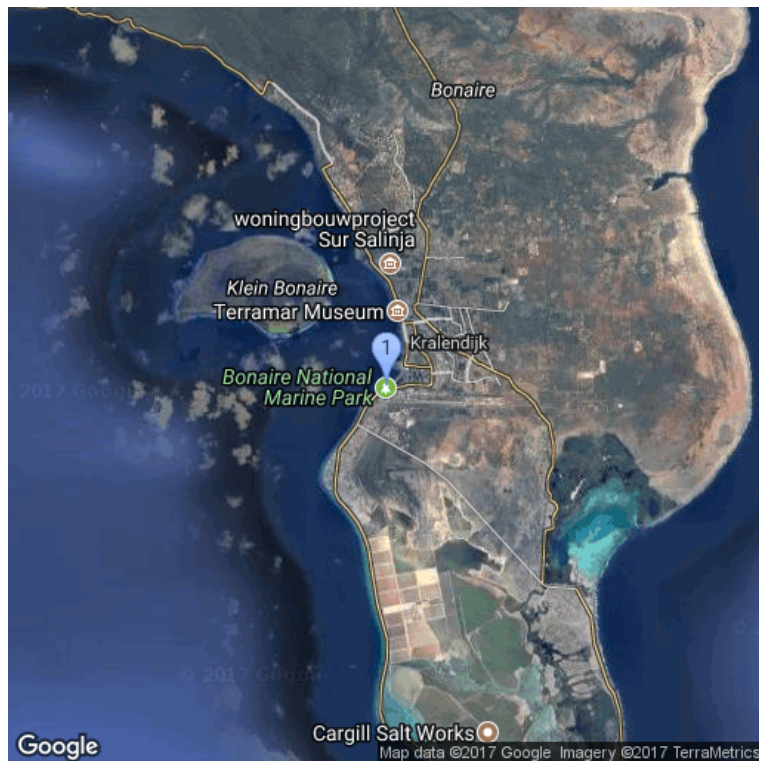


### Bonaire National Marine Park

**Short Name**

Bonaire

**Country**

Netherlands

**Description****Ecoregion location**

SCaribbean

**Boundaries**

Surrounding the whole Island, centred on 29.09'40.47N 68.18'15.78S

**Map URL**

<http://www.bmp.org/divemap/divemap-home.html>

**Total Surface area**

95

**Land Surface area**

65

**Sea Surface area**

27

**Shoreline area**

None

**Site national category**

National park

**Site international designation**

Five (5) Ramsar sites. UNEP-CEP's demonstration site for sustainable PA management.

**IUCN category**

VI

**Designation**

Legally Designated

**Date established**

1979/01/01

**Legal citation**

Marine Environment Ordinance (A.B 1991 nr.8)

**Citation reference URL**

<http://www.bmp.org/pdfs/Marine-Ordinance-Engl.pdf>

**Other legal designations**

Gazetting of Marine Environment Ordinance (EBHAM 28th Jun 1991 Nr.9), Permitting anchoring in the bay of Kralendijk (EBHAM 28th Jun 1991 Nr.10), Regulation of permitting for dive operators (EBHAM 13th Dec 1991 Nr.21), Regulation of diver admission fees (EBHAM 13th Dec 1991 Nr.22), Regulation of legal fees for permits (EBHAM 22nd Dec 1993 Nr.18), Regulation of fees for private moorings (EBHAM 20th Mar 1996 Nr.3), Prohibition of anchoring in the Marine Park (EBHAM 18th Aug 1999 Nr.11), Regulation of payment for use of yacht moorings (EBHAM 18th Aug 1999 Nr.12), Protection of Klein Bonaire under Marine Environment Ordinance (EBHAM 25th April 2001 Nr.13). Fish Protecetd Areas 2008

**Primary responsible institution**

STINAPA Bonaire

**Primary contact**

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**Climate**

Bonaire has a tropical climate warm-dry and sunny throughout the year, with average temperatures of 27Â°C, mitigated by the steady breath of the north-east trade winds. The

rainy season starts in October and ending in December, the average annual rainfa

### **Geological features**

cliffs, terraces, beaches, rocky shores, volcanic formations, rocky shores, keys, caves, karstic

### **Hydrological features**

sheet flow, underground water drainage, ocean loop/meandering current, upwelling

### **Other hydrological features**

Truly oceanic island surrounded by water in excess of 2500m deep.

### **Terrestrial habitats**

Dry forest, dry desert/shrub, sandy shore, sand dunes, mangrove. A wide range of habitats are represented on Bonaire and Klein Bonaire and within the surrounding waters. These range from the xerotrophic (drought resistant) forest covering the northern part of the Island, through sand dunes, salt pans, mangroves, seagrass beds to a number of different coral reef communities. The following descriptions focus on the marine and terrestrial habitats and species which are associated directly or indirectly with the Bonaire National Marine Park. The northern part of the island is hilly consisting of fine grained volcanic rock and limestone. The southern part is flat and consists of fossil coral reef deposits enclosing some lagoonal areas.

### **Terrestrial flora and fauna species**

Inland characteristic plants include Cacti (Cactaceae), Acacia (Obada/ Acacia), Mesquite (Kuida, Prosopis), Caper plants (Stoki/ Oliba, Capparis), Brasia (Haematoxylon), Lantana (Lantana) and Croton (Weli Sali/ Codiaeum). On the coastal flats Saltworts (Batis) and Sea-purslane (Banana di Rif/ Sesuvium) can be found and in lagoonal areas. Red Mangrove (Mangel Tan/ Rhizophora), White Mangrove (Laguncularia racemosa), Black Mangrove (Mangel blancu/ Avicennia germinans) and Buttonwood (Conocarpus erectus) are abundant around Lac and some of the sali±as. The most abundant groups of terrestrial fauna are lizards, including the Green Iguana (Iguana iguana). 7 species live on the islands of which two are endemic – the Bonairia

### **Marine habitats**

Fringing reef, macro-algal bed, seagrass bed, rocky intertidal, sandy shore, sand dunes, mangrove, islands, saline ponds.

### **Marine flora**

Calcareous algae, Dichtyoma sp., filament algae, various green algae. Turtle grass (Thalassia testudinum) and Manatee grass (Syringodium filiforme)

### **Marine invertebrates and fishes**

Knobby Brain Coral (Diploria clivosa); a Elkhorn Coral (Acropora palmate), Fire Coral (Millepora) Staghorn Coral (Acropora cervicornis) Yellow Pencil Coral (Madracis mirabilis), Boulder Brain Coral (Colpophyllia natans), and Boulder Star Coral (Montastraea annularis) and bounded by Gorgonians; Smooth Flower Coral (Eusmilia fastigiata); Lettuce Coral (Agaricia sp.); Blushing Star Coral (Stephanocoenia michelinii). Blue Tang (Acanthurus coeruleus), Bicolor Damsel (Stegastes partitus), Stoplight Parrotfish (Sparisoma viride), Brown Chromis (Chromis multilineata), and Bluehead Wrasse (Thalassoma bifasciatum)

### **Marine mammals, birds and sea turtles**

Hawksbill, Leatherback, Olive Ridley, Green Turtles. Passing cetaceans including whale and dolphin species. Brown Pelicans, Flamingoes, Tern species, Frigate birds.

### **Endangered species**

Sea turtles: Caretta caretta, Eretmochelys imbricata, Dermochelys coriacea, Lepidochelys

olivacea; Marine mammals: *Physeter catodpn*, *Balaenoptera edeni*, *Balaenoptera physalis*, *Megaptera novaeangliae*.

### **Special aggregation sites**

Duncan MacRae: Foraging grounds Lac is not only the largest semi enclosed seagrass and mangrove bay in the Dutch Caribbean but also a vitally important foraging ground for juvenile green turtles which can be found in the bay in their hundreds cropping

### **Primary management institution**

STINAPA Bonaire

### **Personnel**

Manager, chief Ranger, 6 Rangers; shared staff: director, TPA ranger, accountant, administrator, communications, outreach, cleaner.

### **Management objectives**

species protection, ecosystem protection, fisheries management, user conflict resolution

### **Other management objectives**

protection of historical and cultural sites, to operate as an effective management organisation

### **Management framework**

Yes

### **Date of establishment of management framework**

1991/01/01

### **Last update of management framework**

None

### **Management programmes**

advisory committee, construction regulations, emergency operations program, enforcement program, financial or business plan, fisheries regulations

### **Zoning**

anchoring, cultural resources, diving, no-take, public use, recreational fisheries, subsistence fisheries, other

### **Other zone types**

Science, no diving reserve.

### **Funding sources**

Government subsidies, admission fees, grants, donations and souvenir sales.

### **Fisheries resources**

snappers, groupers, other reef fish, pelagic fish, lobster, conch, turtles

### **Fisheries regulations**

url above to fish protected area legislation and marine environment ordinance. Others can be requested from the MPA manager

### **Coastal development**

Restricted

### **Beach management**

beach sand cleaning regulations, construction restrictions

### **Monitoring programmes**

coral reef health, coral reef resilience

### **Issues or threats for accomplishing management objectives**

Nutrient enrichment, storm, wastewater, run-off, poaching, diving

**Role of site in network**

Part of Dutch Caribbean Nature Alliance national network of PA's

**Areas of special expertise for knowledge transfer**

sustainable finance, reef resilience.