



Bonaire National Marine Park

HANDBOOK FOR KAYAKERS USING LAC

Including

KAYAKER
CODE OF CONDUCT



LAC

Lac is the largest bay in the Netherlands Antilles. Just like the Bonaire National Marine Park, it is a designated National Park and is protected under the Marine Environment Ordinance (A.B 1991 Nr.8). But Lac is not only important to Bonaire, it is important to the world. Lac is a RAMSAR site and is recognized as one of the world's wetlands of special significance.

Lac is a uniquely valuable wetland. Many of its mangroves are completely inaccessible and therefore pristine. It is also the only place on Bonaire where we have extensive seagrass and mangrove ecosystems and there are significant archaeological artifacts, which date back to pre Colombian times scattered around the bay.

Intact healthy seagrass beds safeguard the water quality in the bay and provide a safe haven for many species of young reef fish. Mangroves act as a sanctuary, breeding and foraging ground for wetland birds as well as providing a nursery ground for reef creatures such as fish and invertebrates.

Lac is also home to two globally endangered species: green turtles and queen conch.

THREATS

In addition to the natural cyclic impact of storms, Lac is threatened in part by recent changes to the environment around the bay.

Today less fresh water enters the Lac because of damming and other changes in land use. Sand mining threatens to change the sediment transport and coastal dynamics in the bay. Private houses have been built and parts of Lac are under threat of development. Because Lac is no longer being used in the way that it used to be some of the channels which feed water into the back of the mangroves are becoming overgrown. In the past, the mangroves provided material for basket weaving, boat making and charcoal as well as food. Less and less traditional use is made of Lac these days.

But the number of people using Lac for recreational activities has increased dramatically. Tourism has discovered Lac and there are now many businesses that use Lac for windsurfing, snorkeling, kayaking, diving, fly-fishing as well as general beach recreation.

MANAGEMENT

STINAPA, Bonaire through the Bonaire National Marine Park is the organization responsible for managing Lac. The management goal for Lac is:

To protect the natural environment of Lac together with the naturally occurring species from degradation and preserve the aesthetic appeal of Lac as an unspoiled and under developed area whilst promoting day recreational use.

Within this framework, the Bonaire National Marine Park has drawn up a zoning plan and strict code of conduct for kayakers. Everyone who goes kayaking in Lac must abide by the rules laid out in the code of conduct. Additionally for everyone who leads guided kayaking trips or engages in commercial kayaking activities in Lac there is a compulsory certification program for kayak guides.

KAYAK GUIDE CERTIFICATION

In order to protect the environment of Lac all commercial kayaking activities in Lac must be supervised by a certified kayak guide. This means that they must have

- Registered with the Bonaire National Marine Park (BNMP) and submitted a completed application form
- Accompanied a certified kayak guide on a minimum of 10 logged kayak trips with at least two trips logged in each sector
- A valid internationally recognized first aid qualification
- Attended a course given by the Bonaire National Marine Park
- Passed an exam administered by the Bonaire National Marine Park

Once they have passed the exam, certified kayak guides receive a signed certificate from the BNMP as well as a plastic ID badge which is valid for one year. Kayak guides must ensure that they have a valid ID badge with them whenever they lead trips in Lac.

To remain in active status kayak guides must then attend an annual refresher course given by the Bonaire National Marine Park. Failure to attend the necessary refresher course will result in loss of active status and the person will no longer be entitled to guide kayak trips in Lac.

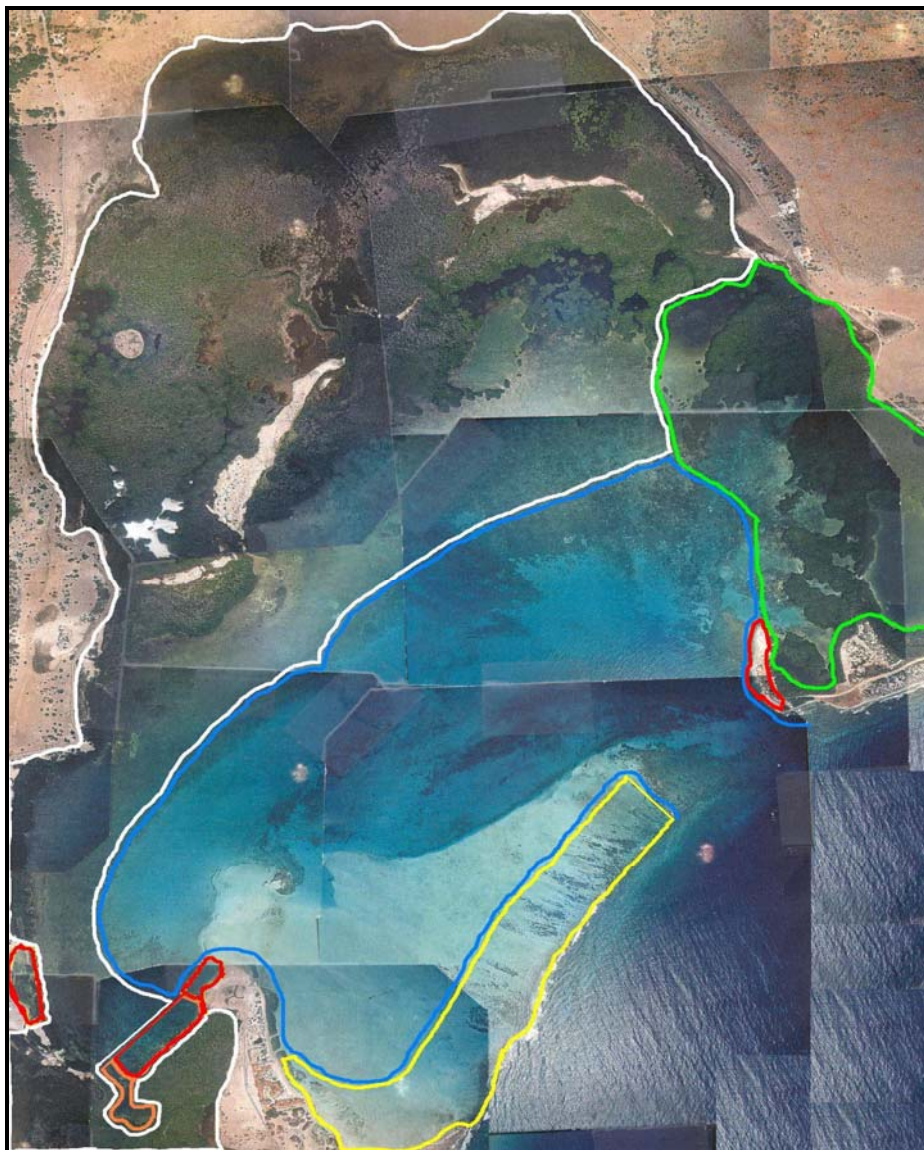
BOOKLET and CODE OF CONDUCT

This booklet provides vital information for kayakers. It gives information about Lac, shows clearly which areas may be used and sets out a code of conduct with rules which all kayakers must follow.

All kayakers are strongly encouraged to attend a kayak certification course.

ZONATION

To safeguard the biodiversity as well as the coral reef, seagrass, mangrove and sandy bottom ecosystems and to minimize conflicts between user groups a zoning plan was devised for Lac.



ZONES

White zone

Undisturbed natural and wildlife area – no commercial activities

Blue zone

Windsurfing / kayaking

Yellow zone

Snorkelling / kayaking

Green zone

Guided kayaking activities

Orange zone

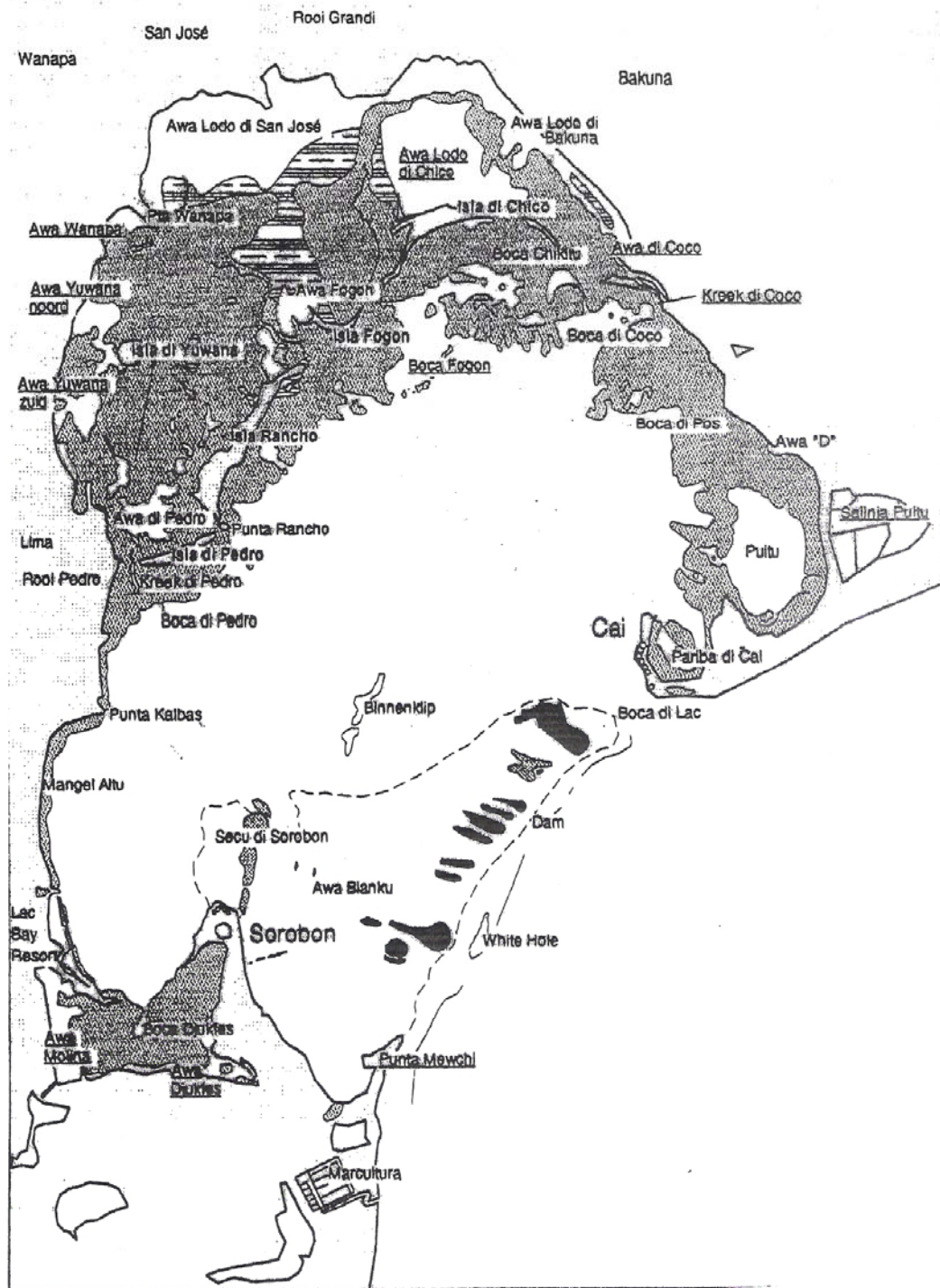
Guided snorkelling activities

Red zone

Swimming, snorkelling and general beach recreation

PLACE NAMES

For clarity, standardized area and place names have been adopted for Lac.



GUIDED KAYAKING ZONE

Guided / commercial kayaking activities may only be conducted in the green zone within Lac.

NOTE: Kayaks may be used in red and orange zones to provide surface cover for guided snorkeling activities.

SECTORS

Within the green zone, there are three sectors:

- Boca di Coco
- Puitu
- Pariba di Kai

These sections are indicated on the map below:



ENTRY – EXIT POINTS

There are two entry/exit points:

- The sandy beach at Cai
- The mangrove channel at Kreek i Coco

SPECIAL CONSIDERATION AT KREK I COCO

Special care needs to be taken when entering/existing via the channel at Kreek i Coco. Leave the water and remove the kayak from the channel as soon as possible. Never attempt to kayak or walk upstream into the back mangrove area. There is a shallow sill just beyond the channel which, if it is damaged, will allow hypersaline water to flow back into the bay causing considerable damage.

CODE OF CONDUCT FOR ALL KAYAKERS

VITAL INFORMATION

Whilst there is really nothing in Lac that could hurt you – as a kayaker you do have the potential to cause harm to this very special ecosystem. Please read the following code of conduct carefully. Contact the Marine Park if you need more clarification.

1. Mangroves are robust ecosystems which are adapted to life in a very hostile environment. As long as you do not climb on them, break or cut their prop roots or introduce toxic substances into the mangrove ecosystem– it is very unlikely that you will hurt them.
2. Mangrove prop roots are vulnerable to damage because they are covered in sponges, hydroids, tunicates and oysters. All of them are easily damaged or dislodged. Avoid all contact with the mangrove prop roots.
3. Since birds use mangroves extensively it is important to keep the noise level low when inside a mangrove area. This will in any case give you the best chance of seeing egrets and herons, frigates and XX close up.
4. Seagrass beds are very fragile. Seagrass is particularly vulnerable to trampling because the plant spreads and grows via underground roots that can be easily damaged by contact. Once these underground roots are damaged, they do not regrow. It is very important never to walk, stand or make contact with seagrasses
5. Cover up! At certain times of the year, you may find an abundance of mosquito in the mangroves and all year round the tropical sun is fierce. You are strongly advised to cover up. If you choose to use mosquito repellent, bug repellent or sun care products you must use them before you start your trip – NOT whilst you are in the mangroves.
6. A word of caution: the blades of seagrasses are typically covered in hydroids – small stinging animals that can cause a painful welt on bare skin. Stay away!

KAYAK ZONES

Kayaking activities are permitted in the blue, yellow and green zones only.

- Never enter the white zone whilst kayaking unless you have a written permit issued by the Marine Park.

Guided / commercial kayaking activities are only permitted in the green zone except where kayaks are being used to provide safely cover to snorkellers on guided snorkeling activities.

THE CODE

Do not leave anything behind: whatever you take out with you – bring it back

Do not get out of the kayak between the entry/exit points unless you can step out and stand on a sandy bottom where there is no seagrass

Never pick up, handle or touch marine animals

Do not stand, walk or make any contact with seagrass – be especially careful not to make paddle contact

Stay in water that is at least 30 cm deep - deep enough so that you can paddle without striking the bottom and there is no danger of running aground

- Take care at low water as some areas such as Pariba di Cai and around the entrance to Puitu can become inaccessible.
- If you can see blades of seagrass sticking out of the water it is too shallow to cross in a kayak – make a wide detour to avoid running aground
- If the wind is strong, be careful when entering Puitu. It is easy to lose control of the kayak and be pushed onto the adjacent shallow seagrass area

PADDLING

- Use a short shallow stroke when paddling around the seagrass and mangroves to avoid any contact with them
- Be particularly careful when passing through channels not to strike the roots of the mangroves
- Use one paddle only when going through channels

SNORKELLING

There is only one place where it is really fun to snorkel is through the channel into Puitu. Snorkelling over seagrasses is likely to get you stung as the epiphytes (stinging creatures that live on the seagrass blades) can leave a nasty welt on bare skin.

Do not use fins when snorkeling through the channel into Puitu

- If there is a current, you may find it easier and more comfortable to walk through the channel with your mask and snorkel on than to swim.
- Walking through the channel will not cause any damage as the bottom is all sand.
- Fins are not permitted as you could strike the prop roots with them and damage the marine life (sponges, tunicates, oysters etc) which grows there

RUN AGROUND

If you run aground do not continue paddling and do not get out of the kayak – carefully use the paddle to push yourself off into deeper water. If you are with a group call for assistance.

NIGHT KAYAKING

Night kayaking is particularly adventurous and there is a much higher potential for harm to the environment therefore only persons who are certified kayak guides may conduct night kayaking activities. They must additionally:

- Not exceed a group size of 4 kayaks or 8 paddles
- Take particular care when using channels
- Remove all glow sticks/light devices at the end of the trip

ADDITIONAL CONSIDERATIONS FOR CERTIFIED KAYAK GUIDES

For the safety of the group and the safety of the environment and to ensure that Lac continues to be enjoyed as an unspoiled and under developed area the following rules and limits apply:

Kayak guides are legally responsible for the people and the activities of the people that they take on kayak trips

Kayak guides must give an orientation before taking people into the bay which includes basic information on Lac, its status as a protected area, the rules and regulation laid down in the kayakers code of conduct, “what to do if”, and safety issues

Demonstrate paddling technique, turns on land, and conduct a “check out” with guests in a sheltered area before taking them into the mangrove. If they are unable to control the kayak, have poor skills or are clumsy:

- Get them to buddy with the kayak guide
- Get them to buddy in a double kayak with another competent kayaker
- Only allow them to use ½ paddle

GROUP SIZE

- Maximum permitted group size is 8 kayaks and a maximum of 16 paddles i.e. 8 people in single kayaks or 16 people in double kayaks or any combination of the two which does not exceed 8 kayaks overall
- Kayak guide must be within 50 m of all members of the group at all times

SECTORS

- At any one time ONE kayak group is allowed per sector

REPORTING

Help the Marine Park to do the best job they can by reporting any:

- Damage
- Unusual activities
- Unusual bird, fish or invertebrate sightings

USER STATS

- On a monthly basis you must submit to the Marine Park an overview of the use you have made of the bay on their standard form
- Make sure you keep a good record of
 - Date of your visit
 - Sector(s) visited
 - Group size

SAFETY

Kayak guides must be familiar with rescue procedures and first aid including resuscitation techniques. Additionally they must have an emergency plan

Kayak guides must carry

- a spare line and cleats which is suitable for use as a tow line
- cell phone or other means of emergency communication
- first aid kit including treatment for stings
- fresh water

RECOMMENDED READING

- Mangroves: trees in the sea – Jerry Greenberg
- Marine Life of the Caribbean – Alice Jones and Nancy Sefton: chapters 3 and 5 and page 85

BACKGROUND

- Historia di Lac – Boi Antoin
- The First Bonairians – Jay Haviser
- Een Natuurwetenschappelijk Onderzoek Gericht of het Behoud van het Lac op Bonaire – P.Wagenaar Hummelinck and P.J.Roos. Pub Natuurwetenschappelijke Werkgroep Nederlands Antillen Nr 18 December 1969
- Post Settlement Life Cycle Migrations of Reef Fish in the Mangrove – Seagrass – Coral Reef Continuum – Elroy Cocheret de la Moriniere [field work from Spaanse Water, Curacao]
- Importance of Shallow Water Bay Biotopes as Nurseries for Caribbean Reef Fish – Ivan Nagelkerken
- Handbook for Mangrove Area Management – Lawrence Hamilton and Samuel Snedaker. Pub IUCN / UNEP
- Species lists: birds, fish, marine plants

DOCUMENTS AVAILABLE FROM THE MARINE PARK

- Baseline Ecological Study van het Lac – G.W.N.M van Moorsel and A.J.M. Meijer. Bureau Waardenburg bv.
- Lac Project: progress report Jun – Dec 1998
- Lac Bay Management Plan 2003 (draft) – Henk Renken
- Lac Monitoring Programme – Susie Westmacott
- Lac Bay: Then and Now ... A historical interpretation of environmental change during the 1990s – Cindy Lott. October 2001
- Lac Bay Project: progress report July – Sept 1999 – Cindy Lott.

SPECIES LISTS

PLANTS

Scientific Name	Common Name	Remarks
Sea grasses		
Diplanthera wrightii		
Ruppia maritima	Widgeon grass	
Syringodium filiforme	Manatee grass	
Thalassia testudinum	Turtle grass	
Mangroves		
Avicennia germinans	Black mangrove	
Conocarpus erectus	Buttonwood tree	Mangrove associate
Conocarpus erectus var. sericeus	Buttonwood tree	Mangrove associate
Laguncularia racemosa	White mangrove	
Rhizophora mangle	Red mangrove	
Algae		
Cyanophyta		
Lyngbya spp	Blue-green algae	
Microcoleus spp.	Blue-green algae	
Schizothrix calcicola		
Cyanobacteriae		
Entophysalis deusta		
Chlorophyta		
Acetabularia calyculus	Green mermaid's wine glass	
Acetabularia crenulata	White mermaid's wine glass	
Avrainvillea nigricans	Fan algae	
Avrainvillea rawsonii	Fan algae	
Batophora oerstedii	Long shag carpet	
Caulerpa cupressoides var cupressoides	Cactus tree algae	
Caulerpa cupressoides var lycopodium	Cactus tree algae	
Caulerpa mexicana	Flat green feather algae	
Caulerpa racemosa var racemosa	Green grape alga	
Caulerpa sertularioides f farlowii	Green feather algae	
Caulerpa sertularioides f sertularioides	Green feather algae	
Caulerpa verticillata		
Chaetomorpha spp	Green steel wool algae	
Cladocephalus luteofuscus		
Cladophora spp		
Cladophoropsis membranacea		
Codium intertextum		
Codium repens		
Dasycladus vermicularis	Short shag carpet algae	
Derbesia spp.	Turf ball algae	

Dictyosphaeria cavernosa
Dictyosphaeria ocellata
Ernodesmis verticillata
Halimeda incrassata
Halimeda monile
Halimeda opuntia

Neomeris annulata
Padina jamaicensis
Penicillus capitatus
Penicillus dumetosus
Penicillus pyriformis
Rhipocephalus phoenix
Udotea flabellum
Udotea oxidentalis
Ulva lactuca
Valonia macrophysa
Valonia utricularis
Ventricaria ventricosa

Phaeophyta

Dictyota cervicornis
Dictyota ciliolata
Dictyota dichotoma
Dictyota divaricata (cf)
Dictyota mertensii
Hydroclanthrus clathratus
Lobophora variegata
Padina gymnospora
Sargassum platycarpum (cf)
Styopodium zonale
Turbinaria tricostrata

Rhodophyta

Acanthophora spicifera
Amphiroa fragilissima (cf)
Amphiroa rigida var antiliana (cf)
Asparagopsis taxiformis
Bostrychia tenella
Ceramiales (Centroceras
clavulatum?)
Champia parvula (cf)
Chondria spp
Coelothrix irregularis
Eucheuma isiforme
Galaxaura subverticillata
Gelidium pusillum
Gracilaria spp.
Griffithsia spp (cf)
Hypnea cervicornis
Laurencia intricata (cf)

Green bubble weed
Little green bubble weed

Three finger leaf alga
Green jointed-stalk alga
Watercress alga
Calcareous green ringed
algae
White scroll alga
Merman's shaving bush
Bristle ball brush
Flat-top bristle brush
Green pine cone algae
Mermaid's fans
Mermaid's fans

Teardrop marble algae
Marble algae
Green glass marble algae

Brown

Olive brown y branching
Serrated strap alga

Small brown y branching
Largest brown y branching
Swiss cheese algae
Brown ruffle leaf algae
Potato chip roll edge algae
Sargassum algae
Leafy flat-blade algae
Brown trumpet algae

Red

Stick spur branch
Y-twig alga
Y-twig alga

Red band fine filament
Swollen rubber epiphyte

Wiry iridescent blue turf
Grand tough spine branch
Tubular thicket alga
Wiry/ Rubbery purple turf
Cylindrical rubber branch

Hook half y branching algae
Stubby branch algae

Laurencia poitei
Liagora mucosa
Neogoniolithon spectabile
Neogoniolithon strictum
Peyssonnelia spp
Polycavernosa crassissima (?)
Polysiphonia spp
Spyridia filamentosa
Wrangelia argus

Stalked clusterballs
White gooey branch
Thick branch calcareous red
Thick branch calcareous red

Purplish fuzzy turf algae

Angiospermae

Batis maritima
Bursera simaruba
Cereus repandus
Corchorus hirsutus
Distichlis spicata
Erithalis fruticosa
Fimbristylis spathacea
Haemotaxylon brasiletto
Hippomane mancinella

Ipomoea pes-caprae
Jacquina barbasco
Lemaireocereus griseus
Lithophila muscoides
Melocactus spp
Opuntia wentiana
Randia aculeata
Ritterocereus griseus
Salicornia ambigua
Sesuvium portulacastrum
Sporobolus pyramidatus
Suriana maritima
Tournefortia gnaphalodes

Saltwort
Red saddle-tree
Candle cactus

Seashore saltgrass
Black torch
Sedge
Brazilwood, dyewood
Manchineel, Poison apple
Beach morning glory, sea
vine
Joewood

Turk's cap cactus
Prickly pear

Candle cactus
Glasswort
Sea purslane
Salt marsh grass
Bay cedar
West Indian lavender

BIRDS

Scientific name

Pelicanidae

Pelecanus occidentalis

Common name

Brown pelican

Fregatidae

Fregata magnificens

Magnificent
frigatebird

Ardeidae

Ardea herodias
Butorides striatus

Great blue
heron
Little green

Egretta alba	heron
Egretta rufescens	Great egret
Egretta thula	Reddish egret
	Snowy egret
Egretta caerulea	Little blue
	heron
	Tricolored
Hydranassa tricolor	heron

Phoenicopteridae

Phoenicopus ruber ruber	Greater flamingo
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Anatidae

Anas bahamensis	White- cheeked pintail
Anas discors	Blue-winged teal

Pandionidae

Pandion haliaetus	Osprey
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Falconidae

Falco peregrinus	Peregrine falcon
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Scolopacidae

Arenaria interpres	Ruddy turnstone
Calidris alba	Sanderling
	Stilt
Micropalama himantopus	sandpiper
	Lesser
Tringa flavipes	yellowlegs
	Greater
Tringa melanoleuca	yellowlegs

Recurvirostridae

Himantopus mexicanus	Black-necked stilt
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Laridae

Larus atricilla	Laughing gull
Sterna maxima	Royal tern

Columbidae

Columba corensis	Bare-eyed pigeon
	Common
Columbina passerina	ground dove

Tyrannidae

Tyrannus dominicensis

Grey Kingbird

Mimidae

Mimus gilvus

Tropical mockingbird

Parulidae

Dendroica petechia

Yellow warbler

Coerebidae

Coereba flaveola

Bananaquit

Aratinga pertinax

Caribbean parakeet

FISHES

Scientific name

Common name

Ostraciidae

Lactophrys trigonus

Trunkfish

Lactophrys triqueter

Smooth trunkfish

Chaetodontidae

Chaetodon capistratus

Foureye butterflyfish

Chaetodon striatus

Banded butterflyfish

Apogonidae

Apogon binotatus

Barred cardinalfish

Apogon maculatus

Flamefish

Pomacanthidae

Pomacanthus paru

French angelfish

Pomacentridae

Abudefduf saxatilis

Sergeant major

Mycrospathodon chrysurus

Yellowtail damselfish

Stegastes diencaeus

Longfin damselfish

Stegastes fuscus

Dusky damselfish

Stegastes leucostictus

Beaugregory

Stegastes partitus

Bicolor damselfish

Stegastes planifrons

Threespot damselfish

Stegastes variabilis

Cocoa damselfish

Mullidae

Mulloidichthys martinicus

Yellow goatfish

Pseudupeneus maculatus

Spotted goatfish

Gobiidae

Coryphopterus glaucofraenum

Bridled goby

Lophogobius cyprinoides

Crested goby

Nes longus

Orangespotted goby

Haemulidae

Anisotremus virginicus	Porkfish
Haemulon aurolineatum	Tomtate
Haemulon chrysargyreum	Smallmouth grunt
Haemulon flavolineatum	French grunt
Haemulon sciurus	Bluestriped grunt
Haemulon striatum	Striped grunt

Carangidae

Caranx ruber	Bar jack
Trachinotus falcatus	Permit

Scaridae

Cryptotomus roseus	Bluelip parrotfish
Scarus coeruleus	Blue parrotfish
Scarus guacamaia	Rainbow parrotfish
Scarus iserti	Striped parrotfish
Sparisoma aurofrenatum	Redband parrotfish
Sparisoma chrysopterum	Redtail parrotfish
Sparisoma radians	Bucktooth parrotfish
Sparisoma viride	Stoplight parrotfish

Lutjanidae

Lutjanus apodus	Schoolmaster
Lutjanus griseus	Grey snapper
Lutjanus mahogoni	Mahogany snapper
Ocyurus chrysurus	Yellowtail snapper

Holocentridae

Holocentrus adscensionis	Squirrelfish
Myripristis jacobus	Blackbar soldierfish
Sargocentron coruscum	Reef squirrelfish

Acanthuridae

Acanthurus bahianus	Ocean surgeonfish
Acanthurus chirurgus	Doctorfish
Acanthurus coeruleus	Blue tang

Labridae

Halichoeres garnoti	Yellowhead wrasse
Halichoeres poeyi	Blackear wrasse
Thalassoma bifasciatum	Bluehead wrasse

Gerreidae

Eucinostomus gula	Silver jenny mojarra
Eucinostomus melanopterus	Flagfin mojarra
Gerres cinereus	Yellowfin mojarra

Ophichthidae

Myrichthys ocellatus	Goldspotted eel
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Atherinidae, Clupeidae, Engraulidae

Siversides

Sphyraenidae

Sphyraena barracuda

Great barracuda

Albulidae

Albula vulpes

Bonefish

Teleostomi

Asymmetron lucayanum

Cyprinodon dearboni

Broad killifish

Poecilia sphenops

Molly

Rivulus marmoratus

Marmored killifish

Bothidae

Bothus lunatus

Peacock flounder

Tetraodontidae

Sphaeroides spengleri

Bandtail puffer

Muraenidae

Gymnothorax funebris

Green moray

Gymnothorax moringa

Spotted moray

Serranidae

Serranus baldwini

Lantern bass

Mugilidae

Mugil curema

White mullet

Belonidae

Tylosurus crocodilus

Houndfish

Blenniidae

Ophioblennius atlanticus

Redlip blenny

Centropomidae

Centropomus undecimalis

Common snook

Dasyatidae

Dasyatis americana

Southern stingray

INVERTEBRATES**Scientific name****Common name****Cnidarians**

Aiptasia pallida

Pale anemone

Bartholomea annulata

Corkscrew anemone

Bunodeopsis antilliensis	Mangrove anemone
Bunodosoma spp	Warty anemone
Cassiopeia frondosa	Upside down jelly
Cassiopeia xamachana	Mangrove upside down jelly
Condylactis gigantea	Giant anemone
Epicystis crucifer	Beaded anemone
Stichodactyla helianthus	Sun anemone

Gastropods

Cerithium literatum	Stocky cerith, Letered horn shell
Cerithium variable	Variable horn shell
Cyphoma gibbosum	Flamingo tongue
Epitonium spp	Wentle trap
Littorina angulifera	Mangrove periwinkle
Melongena melongena	West Indian crown conch
Strombus gigas	Queen conch
Strombus pugilis	West indian fighting conch
Strombus costatus	Milk conch

Crustaceans

Alpheus armatus	Red snapping shrimp
Callinectes spp	Blue crab
Coenobita clypeatus	Land hermit crab
Limnoria tripunctata	Southern gribble
Microphrys bicornuta	Speck-claw decorator crab
Panulirus argus	Caribbean spiny lobster
Percnon gibbesi	Nimble spray crab
Petrochirus diogenes	Giant hermit
Stenopus hispidus	Banded coral shrimp
Stenorhynchus seticornis	Yellowline arrow crab

Bivalvia

	Mangrove oyster
Laevicardium laevigatum	Egg cockle
Periglypta listeri	Lister's venus
	Amber penshell, Flesh pen shell
Pinna carnea	
Tellina caribaea	Caribbean tellin
Tellina mera	Mera tellin

Echinoderms

Diadema antillarum	Long-spined urchin
Echinometra lucunter	Rock-boring urchin
Holothuria arenicola	Burrowing sea cucumber
Holothuria mexicana	Donkey dung sea cucumber
Lytechinus variegatus	Variegated urchin
Meoma ventricosa	Red heart urchin
Oreaster reticulatus	Cushion sea star
Tripneustes ventricosus	West indian sea egg

annelida

Arenicola cristata	Southern lugworm
Branchiomma nigromaculata	Black-spotted feather duster
Eupolymnia crassicornis	Spaghetti worm
Hermodice carunculata	Bearded fireworm
Loimia medusa	Medusa worm

Barnacles

Cirripedia spp	Barnacles
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Isopoda

Anilocra laticaudata??	Soldierfish isopod
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Ophisthobranchia

Tridachia crispata	Lettuce sea slug
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Cephalopoda

Octopus vulgaris	Common octopus
Sepioteuthis sepioidea	Caribbean reef squid

Ascidacea

Botryllus spp

Terrestrial snails

Cerion uva
Tudora aurantia

REPTILES**Scientific name****Common name****Turtles**

Caretta caretta	Loggerhead turtle
Chelonia mydas	Green turtle
Eretmochelys imbricata	Hawksbill turtle

Sauria

Anolis bonariensis	Anolis lizard
Cnemidophorus murinus	Blue-tail lizard
Iguana iguana	Iguana

CORAL AND SPONGES**Scientific name****Common name****Corals**

Acropora cervicornis	Staghorn coral
Agaricia agaricites	Lettuce coral

Agaricia humilis	Lowrelief lettuce coral
Diploria labyrinthiformis	Grooved brain coral
Diploria strigosa	Symmetrical brain coral
Favia fragum	Golfball coral
Montastrea annularis	Bolder star coral
Porites astreoides	Mustard hill coral
Porites branneri	Blue crust coral
Porites porites	Finger coral
Siderastrea radians	Lesser starlet coral

Sponges

Amphimedon compressa	Erect rope sponge
Aplysina fistularis	Yellow tube sponge
Chondrilla nuclea	Chicken liver sponge
Dysidea etheria	Heavenly blue sponge
Spheciospongia	
vesparium	Loggerhead sponge
Tedania ignis	Touch me not sponge

Hydrozoa

Millepora spp	Fire coral
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Gorgonacea

Eunicea spp	Sea rod
Gorgonia spp	Sea fan

INSECTS

Scientific name	Common name
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Corixidae	
Odonta	
Trochopus plumbeus	

