

The critically important sites are:-

ANEGADA	East End, Flamingo Pond
BEEF ISLAND	Beef Island Channel (N & S), Hans Creek, Trellis Bay Pond
JOST VAN DYKE	East End
TORTOLA	Belmont Pond, Chapel Hill, Dubois Point Pond, Bar Bay, Paraquita Bay, Hodges Creek, Sea Cow's Bay, Slaney and Wickham's Cay
VIRGIN GORDA	Deep Bay

How to help Mangroves

It is very easy to plant red mangroves since their saplings begin to grow on the parent plant. They literally 'plant' themselves - they stick in the substrate where they fall and continue their growth. We can help plant propagule saplings by simply sticking them upright in the soil where the trees occur. Specialized procedures like the Riley Encasement Method are used by the CFD and BVI NPT, and can be seen in places like West End, Havers, Hodge's Creek, Brandywine Bay and Well Bay.

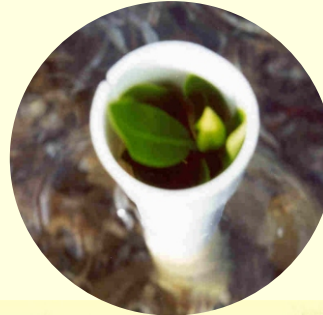
Another important way that we can help mangroves and the environment is to avoid littering these areas. Water circulation is weaker in bays and lagoons, so live-aboard boats and motorboats are discouraged in these areas.

Cutting or removal of mangroves for development should be avoided as should dredging and filling activities as these can have adverse effects on mangrove systems.

For more information contact:
Conservation & Fisheries Department
P. O. Box 3323, Road Town, Tortola
Tel: 284.468.2700/468.3701 Ext. 2700
Fax: 284.468.2781 E-mail: cfd@gov.vg

"Professional Services Delivered to the Public"

Mangroves of the virgin islands



Mangroves' Importance

Mangroves are unique salt tolerant plants which occur along sheltered coastlines and in association with lagoons and salt ponds. With these plants it is the degree of salt tolerance which determines where a species of mangrove may grow. For example, the least salt-tolerant red mangroves will actually grow right in the sea water, whereas the more tolerant black and white mangroves will be found in the saline soil further inland. During the drier months of the year, evaporation of sea water in the black areas of mangrove stands results in increased salt concentrations which may in turn result in die-offs of the mangroves if levels become too high.



Mangroves serve many functions. They are best known for their function as hurricane shelters for boats. A prime example of this happened in 1989 at Paraquita Bay on Tortola, when up to 200 boats safely sheltered from Hurricane Hugo, a Category 5 storm.

Mangroves also protect the land and the sea from one another. Land is protected from wave action, especially during high tides and storms. The sea environment is protected from soil run-off caused by heavy rainfall. As time goes by, this continual process causes accretion - silt, soil and sediments pile-up and become compacted among the mangrove roots, thus 'making land'.



Paraquita Bay Lagoon & Mangroves



Slaney Point Mangroves

This is in evidence at Slaney Point, Tortola (pictured above).

Mangroves act as nurseries for many juvenile marine species like fish, conch, crabs, sea eggs and lobsters which spend their young lives in red mangrove roots. From here, these creatures migrate first to sea grass beds, then coral reefs and even the open ocean. The spiny lobster and gray snapper actually go from the mangroves directly to the coral reefs. Mangroves also provide a habitat for many birds like the blue gaulin.

In 1990, the Conservation & Fisheries Department, with technical assistance from the OECS-NRMU (Natural Resources Management Unit), inventoried and mapped all the major mangrove systems in the VI. These mangrove systems were assessed on ecological and socio-economic criteria and divided into 3 categories:-

- (1) Critical Importance
- (2) Moderate Importance
- (3) Not Very Important

The VI Government has accepted and approved this assessment. Management plans must now be prepared for all the mangrove sites.

...of all mangrove species, there are four types present in the VI. Each type is distinctive and unique.

Red Mangrove

Rhizophora mangle

Red mangroves grow directly in sea water. This trait is welcomed by many juvenile aquatic animals that use this root system as protection from predators. This highly networked prop root system is able to support a 50-foot tree!



The red mangrove is unlike all the others in some interesting ways; for example their method of propagation. They go from flower to seedling while still part of the parent tree. Once the seedling is large enough it will fall off the tree into the seawater where it may stick in sand or be carried downstream by currents.



White Mangrove

Laguncularia racemosa



Black Mangrove

Avicennia germinans



This is probably the most utilized type of mangrove in the VI. It is used for such things as fence posts and fish pots, and it is burnt for charcoal; a good amount of the latter is done locally.

The black mangrove is the one species that normally produces pneumatophores,

These structures provide a safe hiding place for the nests of wading birds.



Buttonwood Mangrove

Conocarpus erectus



A unique feature of mangroves is their land-making ability. Their root systems act as giant filters to trap silt and litter run-off from the hills during heavy rains and gradually builds them up to land.