

TROPIC NEWS

DEPARTMENT OF PLANNING AND NATURAL RESOURCES

DIVISION OF FISH AND WILDLIFE

Volume 4 Number 10

ROCKY SHORELINES

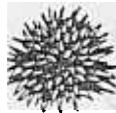


Rocky shorelines consist of steep coastal bluffs and cliffs which have been formed by weathering and wave action on rock out-

crops. They are different from rocky beaches, which have a gentle slope and are covered with loose rock or coral rubble. At first glance, these areas do not appear to be suitable habitats for many creatures. But they are far from deserted.



Along weathered outcrops, a few specialized salt-tolerant plants can be found. Gulls and pelicans perch here. These areas may be important rookeries for several species of nesting sea birds. In areas of rock that are occasionally splashed by water, a few hardy marine animals such as periwinkles and crabs can be found. Farther down, in the splash zone, oysters, sea urchins, and a wide variety of molluscs cling to the rocks, including



whelks. Small fish swim in and out of the rock crevices. Here they are safe from most underwater predators, but may fall victim to hungry birds.



In areas where softer rocks have been eroded by wave action, tide pools may form with many organisms living in them. Sea anemones, urchins, crabs, chain morays, many fish, including blennies and gobies can be found in these small, balanced ecosystems. They are dependant on wave energy to bring them their food supply. Pairs of oyster-catchers can often be seen foraging on whelks and other snails. They fly up in the air and drop the shells on the rocks to break them.

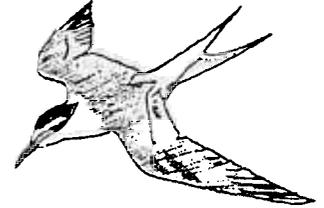


These rocky shoreline areas help stabilize the coastline by reducing erosion. They are also good hand line fishing spots, and provide a scenic vantage on many of our coasts.



TERN UPDATE

The Sooty tern colony on Saba appears stable as far as the number of nesting adults, but heavy May rains may have lowered the numbers of fledglings produced this year.



Roseate terns nested in May, two weeks later than usual. As part of an ongoing effort to monitor and reestablish populations of the Roseate tern in the Caribbean, Div. of Fish & Wildlife biologist Judy Pierce, in conjunction with the U.S. Fish & Wildlife Service and several universities and state agencies, began in 1991 a color banding program at Roseate colonies in Puerto Rico and the USVI. Color banding of adult and young terns provides information on the movement of terns between colonies. A total of 109 adults have been banded this year. To date approximately 1200 Roseate nests have been found in the USVI out of an estimated total population of between 2,200 - 2,400 pairs of breeding adults.

THE KINGFISH ARE COMING!

Just before dawn on July 12, St. Thomas sportfisherman (and women) will gather for the start of the Fifth Annual Bastille Day Kingfish Tournament presented by the Northside Sportfishing Club and sponsor, Coors LIGHT. The annual "funraising" event benefits Sibilly School and St. Thomas Rescue and features a \$1,000 cash award for the largest kingfish landed by noon at Hull Bay Beach's Northside Hideaway. Other catches eligible for cash awards and prizes include jack, dolphin, barracuda, mackerel, bonito, and tuna. Entry fees of \$25 per angler include tournament T-shirt and open bar from noon weigh-in until 2:00PM. Anglers can pre-register at E&M Brocery, Bryan's Electrical and Neptune Fishing Supplies and are urged to attend the 7:00PM registration and rules meeting on Friday, July 10th at Northside Hideaway.

COMING SOON

- MARLIN SEASON IS COMING
- WHAT IS A WATERSHED?
- RECREATIONAL FISHING IN THE USVI



ARTIFICIAL REEFS WORK FOR EVERYONE... ESPECIALLY FISH!

The Division of Fish and Wildlife has been conducting experiments on various aspects of improving artificial reefs for over a decade. Some of these studies have been coordinated with the University of the Virgin Islands. Continuing studies will focus on predator effects on resident fishes and homing and persistence of resident fishes to reefs. Some of the more significant results are 1) location of the artificial reef is very important to the species which utilize it (reefs on algal plains have different species than reefs on sand bottom), 2) type and size of materials placed on artificial reefs determine which species and size fishes will live there (large holes and objects attract large fishes but few small fishes, etc.), 3) removal of large resident fishes dramatically affects the other fishes present (disturbing the balance could cause other reproductive fishes to leave).

It appears that the best way to manage artificial reefs is to have some that are not fished, some where only trolling is allowed and others where bottom fish can be taken but with size restrictions.

We now have three new artificial reefs sites south of St. Thomas and St. John with additional sites being identified off St. Croix to complement the west end site. **Our greatest need is for materials of the right type.** Many materials are not good for the marine environment (cars, appliances, wood) and cannot be approved by the U.S. Army Corps of Engineers, the agency with regulatory responsibility. However, concrete building materials, large construction steel and materials, old concrete and steel docks, old steel barges and vessels are excellent for artificial reefs. These materials are desperately needed. **If you have materials to donate, please give us a call!** We want to improve fishing grounds for everyone... **especially for the fish!**

Trees were saved by printing on recycled paper

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FRUIT BATS AND FORESTS

The U.S. Virgin Islands have three species of fruit bats: the Jamaican fruit bat (*Artibeus jamaicensis*), cave fruit bat (*Brachyphylla cavernarum*) and red fruit bat (*Stenoderma rufum*). All three species of bats feed on fruit and all three are important in dispersing the seeds found in fruit to different parts of the island. This makes the bats important in maintaining existing forests and in any attempt to reforest new areas.

These bat species also feed on pollen and nectar, and are responsible for the pollination of many trees. In other parts of the world fruit bat pollination is the only way some tree and shrub species can reproduce. This makes fruit bats essential for the survival of forest ecosystems. Many people consider bats to be miniature monsters like in the horror movies. Most farmers know not to fear them, but think of them as pests. In fact, bats are helpful to farmers and everyone by ensuring that our forests continue to be replanted.



QUOTE

"If Man were really Superior to Animals, he would take better care of the Earth."

Winnie The Pooh



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