

BEACHES

Beaches are shoreline areas that are covered by sand, stone, coralline rubble or other materials that can come from the land or the sea. Beach sediments are moved continuously by the natural forces of wind, waves, currents, and tides. The shape, size and even the location of any beach is always changing. These same forces also sort beach sediments. High wave action "washes away" small, light particles, like sand grains. Beaches with high wave energy are made up of large, heavier materials while sandy beaches are found in calmer, protected areas.

TYPES OF BEACHES IN THE V.I.

In the V.I. beach sediments come from many sources, calcareous algal plates, coral particles (mainly produced by parrotfish grazing on dead coral), mineral grains (from erosion of quartz and feldspar rocks on land), gravel and boulders. While there is usually a mix of materials on any beach, the dominant type determines how the beach is classified.

Gravel/Rock beaches are made of minerals or rocks that erode from cliffs and soils and are transported to the shore by gulls. Some gravel may be washed ashore from sea floor deposits by waves and currents. The "grain" sizes of gravel beach sediments ranges from a few millimeters to inches in diameter.

Coralline rubble or cobble is another common beach material in the V.I. Storms cause significant coral breakage and pieces of coral skeleton are carried to shore and deposited by wave, current, and tidal action.

Sandy beaches in the V.I. are made up of a mixture of several materials. Coral particles, shell and urchin fragments, and algal plates -- all composed of calcium carbonate -- give the sand its white color and fine texture. Natural forces such as wave and current action break these materials down into very fine particles. As the

small grains are easily washed away, sandy beach stability depends on a constant supply of new sand from offshore or upstream sources. Man-made structures can interrupt movement of the natural sand supply and cause beaches to disappear.

MORE THAN JUST SAND!

Organisms that live in and provide materials for our sandy beaches include algae and many invertebrates are important living components of our beaches. Crabs, clams, worms, sea stars, sand dollars, urchins and many others live in and on sand both above and below the tide line. Many salt tolerant plants are found along beaches. These help to hold the sand in place and prevent beach or shoreline erosion from wind and waves. Most sand beaches and vegetated back-beach areas in the V.I. provide sea turtles with vitally needed nesting areas. Terns, Oystercatchers, Sandpipers, and other shorebirds feed and nest there also.

WHY ARE BEACHES IMPORTANT?

Beaches are important to the organisms that live and feed on and near them. They are also important to people. Beaches:

- buffer coastal areas from storm energy. Beaches can absorb high-energy wave action due to their ability to change shape in response to storm forces.
- provide easy and safe access to the sea.
- provide us with recreation areas for picnics, parties, sunbathing, beachcombing, and for quiet contemplation and appreciation of our islands' beauty.
- enhance our tourist-based economy. Visitors are lured here by our beautiful beaches.
- act as filters for upland runoff, trapping soil

particles and preventing them from clouding our coastal waters. This provides clear water for our seagrass beds and coral reefs to grow.

KEEP OUR BEACHES BEAUTIFUL

- **Always** dispose of trash properly. If there are no trash receptacles around, take your trash home or to the nearest dumpster! Garbage on the beach can be unsightly and unhealthy. Trash also attracts rats and mongooses who will eat bird and sea turtle hatchlings.
- **Never** remove sand from our beaches! It takes nature many years to make sand to replace any that is taken away.
- **Discourage** construction of man-made structures on, or near (<50') beaches. Beach sediments constantly move; anything that affects that movement can forever damage our beaches.
- **Protect** reefs and seagrasses. Without them, the sand supply for our beaches would disappear and eventually, so would our beaches.
- **Shield** all light fixtures near beaches, or use proper lights (low-pressure sodium) to prevent turtle hatchlings from wandering away from the sea to their deaths.
- **Never drive** on beaches! This will increase beach erosion and can crush turtle and bird nests. It is against the law.
- **Report violations to DPNR's Division of Environmental Enforcement. 340 773 5774 or 340 774 3320 ext. 5106**

For more information on beaches and other habitats, contact:
DPNR's Division of Fish and Wildlife



BEACHES:

WHERE THE LAND MEETS THE SEA



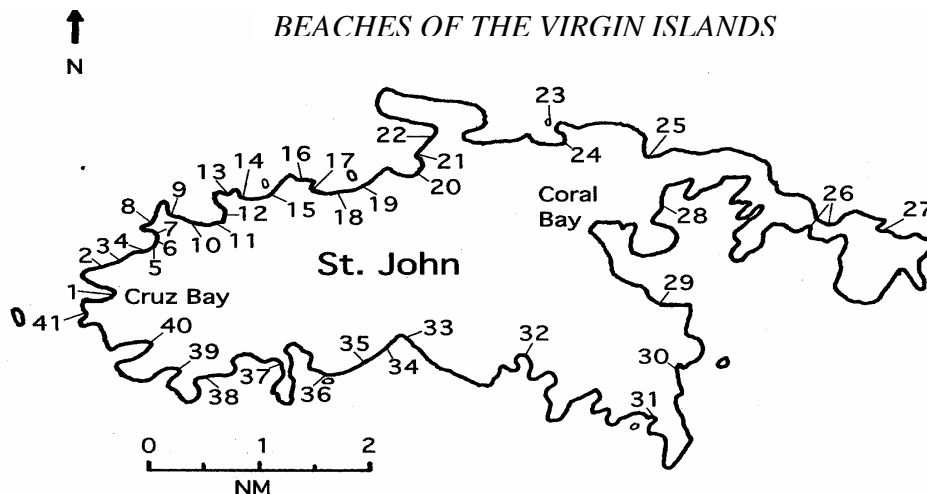
Department of Planning and Natural Resources

**Division of Fish and Wildlife
6291 Estate Nazareth 101
St. Thomas, V.I. 00802
340 775 6762**

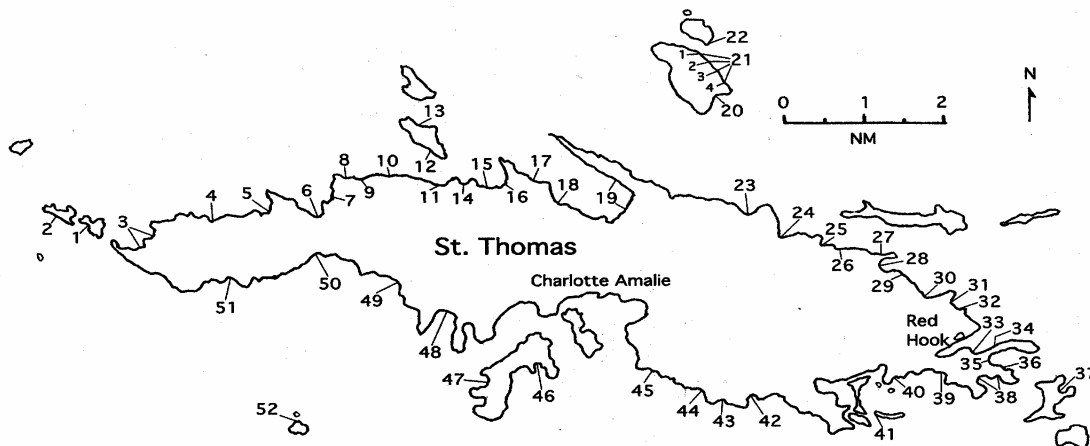
or

**45 Mars Hill,
Frederiksted, St. Croix,
VI 00840
340 772 1955**

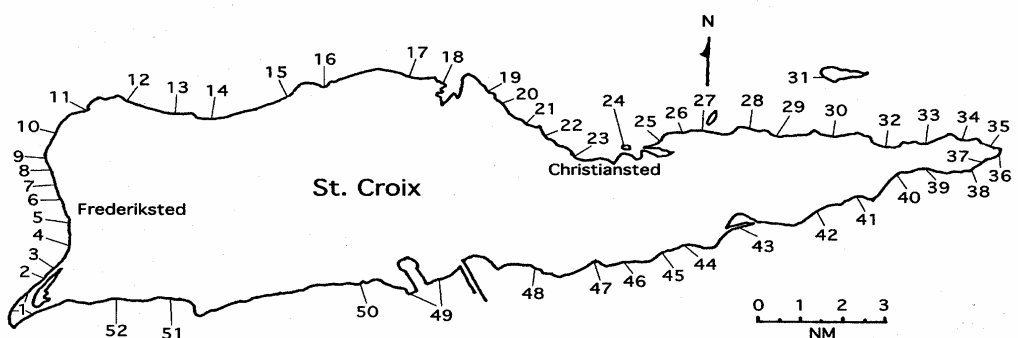
BEACHES OF THE VIRGIN ISLANDS



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|-------------------|-----------------------|---------------------|--------------------|---------------------|--------------------|
| 1. Cruz Bay | 8. Turtle Bay | 15. Trunk Bay | 22. Francis Bay | 29. Johnson's Bay | 36. Cocoloba Beach |
| 2. Salomon Bay | 9. Hawksnest Caneel | 16. Windswept Beach | 23. Waterlemon Cay | 30. John's Folly | 37. Dittlif Beach |
| 3. Honeymoon Bay | 10. Skinny Beach | 17. Peter Bay | 24. Leinster Bay | 31. Saltpond Bay | 38. Hart Bay |
| 4. Little Caneel | 11. Public Hawksnest | 18. Little Cinnamon | 25. Brown Bay | 32. Little Lameshur | 39. Chocolate Hole |
| 5. Caneel Beach | 12. Private Hawksnest | 19. Cinnamon Bay | 26. Haulover Bay | 33. Reef Bay | 40. Great Cruz Bay |
| 6. Scott Beach | 13. Denis Bay | 20. Big Maho Bay | 27. Newfound Bay | 34. Genti Bay | 41. Frank Bay |
| 7. Paradise Beach | 14. Jumby Bay | 21. Little Maho Bay | 28. Zootenvaal | 35. Western Reef | |



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|--------------------|-----------------------------|---------------------------------|----------------------|---------------------|----------------------|
| 1. West Cay | 10. Penn Bay | 19. Magen's Bay | 28. Water Bay | 37. "Bareass" Bay | 46. Sprat Bay |
| 2. Salt Cay | 11. Neltjeberg Bay | 20. Hans Lollick - Coconut Bay | 29. Sugar Bay | 38. Cowpet Bay | 47. Honeymoon |
| 3. Botany Bay | 12. Inner Brass - Sandy Bay | 21. Hans Lollick - Dry Bays 1-4 | 30. Lindquist Beach | 39. Secret Harbor | 48. Lindberg Bay |
| 4. Bordeaux Bay | 13. Inner Brass - Hard Bay | 22. Little Hans Lollick | 31. Pelican Beach | 40. Scott Beach | 49. Brewer's Bay |
| 5. Stumpy Bay | 14. Dorothea Bay | 23. Mandahl Bay | 32. Sapphire Beach | 41. Cas Cay | 50. Preseverance Bay |
| 6. Santa Maria Bay | 15. Palm Bay | 24. Tutu Bay | 33. Skinny Beach | 42. Bolongo Bay | 51. Fortuna Bay |
| 7. Hendricks Bay | 16. Hull Bay | 25. Sunsi Bay | 34. Vessup Bay | 43. Limetree Bay | 52. Saba Bay |
| 8. Sorgenfri Bay | 17. Tara Bay | 26. Spring Bay | 35. Bluebeards Beach | 44. Frenchman's Bay | |
| 9. Caret Bay | 18. Barrett Bay | 27. Coki Point | 36. Turtle Cove | 45. Morningstar | |



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|------------------|----------------------|--------------------------|---------------------|-------------------|--------------------|
| 1. Sandy Point | 10. Butler Bay | 19. Judith Fancy | 28. Prune | 37. Isaac Bay | 46. Halfpenny |
| 2. Stony Ground | 11. Ham's Bay | 20. St. Croix By The Sea | 29. Coakley | 38. Jack Bay | 47. Manchenil |
| 3. Second Target | 12. Maroon Hole | 21. Pelican Cove | 30. Tague Bay | 39. Grapetree Bay | 48. Canegarden Bay |
| 4. Dorst | 13. Davis Bay | 22. Turquoise Bay | 31. Buck Island | 40. Turner Hole | 49. Krause Lagoon |
| 5. First Target | 14. Northstar | 23. Princesse | 32. Smuggler's Cove | 41. Rod Bay | 50. Manning Bay |
| 6. LaGrange | 15. Cane Bay | 24. Protestant Cay | 33. Knight Bay | 42. Robin Bay | 51. Campo Rico |
| 7. Prosperity | 16. Rust-Op-Twist | 25. New Fort | 34. Boiler Bay | 43. Great Bay | 52. White Lady |
| 8. Williams | 17. Gentle Winds | 26. Shoy's | 35. Cramer's Park | 44. Fareham Bay | |
| 9. Sprat Hall | 18. Columbus Landing | 27. Green Cay | 36. East End Bay | 45. Spring Bay | |

These maps show only major sand beaches around the Virgin Islands. Cobble/gravel beaches and very small sand pocket beaches are not shown. Many beaches throughout the VI are continuous with different segments having different names, making boundaries very uncertain.

These maps do not show the location of every natural pond in the U.S.V.I. The ponds shown are the largest and most important, for wildlife and sediment reduction.