

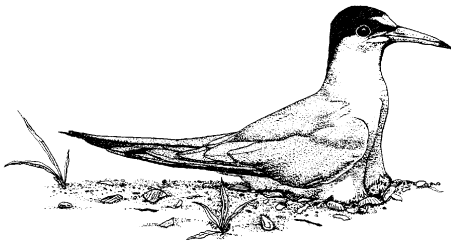
Bethel Beach Natural Area Preserve

105 acres - Mathews County, Virginia

The Site: Located on the western shore of the Chesapeake Bay, Bethel Beach Natural Area Preserve features a long sandy beach, low dunes and an extensive salt marsh. A globally rare coastal insect, rare colonial and marsh nesting birds, and a rare beach plant are protected on the site. The property was acquired with matching funds and assistance from The Nature Conservancy and with a grant from the Virginia Department of Environmental Quality's Virginia Coastal Program.

Natural History: Sands shifting with the wind and tides form a beach and low dunes, which define much of this preserve. Some common beach and dune plant species here include switchgrass (*Panicum virgatum*), American searocket (*Cakile edentula*) and American beachgrass (*Ammophila breviligulata*). The beach is essential habitat for several rare species. Among these is the federally threatened northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*), which spends its entire two-year life cycle on the beach. Adults are about 2/3 of an inch long, have ivory-colored backs with dark markings, and long dark legs. Eggs are laid in the sand, and the larvae live in burrows below the high tide line. Both adults and larvae prey on small insects and other small invertebrates. Adult tiger beetles may also scavenge on dead fishes and crabs.

The beach is also important nesting habitat for the Least Tern (*Sterna antillarum*), which makes a shallow depression in the sand for its clutch of one to four eggs. This dainty gull-like bird is smaller than an American Robin and has a black cap and gray back. In flight it appears as mostly white with black wing tips and a forked tail. In the late 1800s, the least tern population was decimated as commercial hunters sought their feathers for the millinery trade. The biggest threat today is loss of nesting habitat. Least terns require relatively undisturbed beaches and may abandon their nests if disturbed by human activity or unleashed dogs.



Least Tern
Drawing by Megan Rollins

On the back portions of the beach, in the overwash zone where high water tends to drain away from the bay and into the inlet behind the spit a rare plant, called sea-beach knotweed (*Polygonum glaucum*) can be found. An annual, sea-beach knotweed has a blue-green coloration with a whitish waxy coating. It tends to sprawl along the ground with upturned branches and has narrow fleshy leaves.

Behind the beach is an extensive saltmarsh. Typical species of the saltmarsh include black needle rush (*Juncus roemerianus*),

saltgrass (*Distichlis spicata*) and eastern rose-mallow (*Hibiscus moscheutos*). Along the border of the high marsh, groundsel tree (*Baccharis halimifolia*) and wax myrtle (*Morella cerifera*) are common. Like other wetlands throughout the region, this marsh is invaluable to the health of the bay. It helps filter sediments and pollutants from the water, slows shoreline erosion, buffers adjacent uplands from storm generated wave action, and functions as a nursery for many species of fish and crustaceans. Marshes also provide large amounts of decaying plant material, called detritus, which is an important component of the estuarine food chain. This marsh is one of only a few places in Virginia that has been documented as a nesting site for the Northern Harrier (*Circus cyaneus*), a hawk that commonly nests in more northern regions.

Resource Management: The preserve is managed with the volunteer assistance of the Bethel Beach Stewardship Committee. The tiger beetle population and tern nesting success are monitored annually. Human use levels are also monitored, and use restrictions may be implemented to protect sensitive species.

Compatible Uses: The preserve is ideal for low impact activities such as environmental education, nature photography and bird watching. Off-road vehicles, bicycles, horses, swimming and unleashed dogs are not permitted.

Location and Public Access: Bethel Beach can be reached from Route 14 in the town of Mathews by traveling east on Route 611 (Tabernacle Road) for 4.4 miles to Route 609. Turn left (north) on Route 609 and go 2.1 miles to the end of the road. Park near the concrete barricade at the beach.

Part or all of the preserve may be periodically closed for resource management or protection activities. Please call before visiting.

Natural Heritage Resources

Plant

sea-beach knotweed (*Polygonum glaucum*) G3/S1S2

Animals

northern harrier (*Circus cyaneus*) G5/S1

least tern (*Sterna antillarum*) G4/S2

northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*) G4T2/S2

For more information contact:

Virginia Department of Conservation and Recreation
Natural Heritage Program

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or

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Richmond, VA 23219 (804) 786-7951

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Department of Conservation & Recreation

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*Natural Heritage Program -
Conserving Virginia's biodiversity through inventory,
protection, and stewardship*

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