Partnership for conservation

In 1996, the Potomac Electric Power Company (Pepco), which shared ownership of Bear Island with the National Park Service, donated its interest in the island to The Nature Conservancy. The Conservancy and Park Service are now working together to preserve the natural features of this important island. The Billy Goat Trail is maintained by the Potomac Appalachian Trail Club.

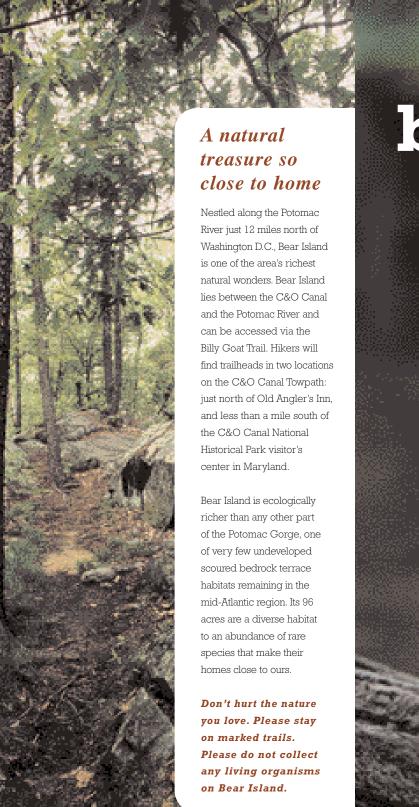
Bear Island is a natural treasure that can never be replaced. The Nature Conservancy and the National Park Service are dedicated to protecting this natural wonder. With your help, Bear Island can remain as ecologically rich as it is today.

The Nature Conservancy

Founded in 1951, The Nature Conservancy preserves plants, animals, and natural communities that represent the diversity of life by protecting the lands and waters they need to survive.

In Maryland, The Nature Conservancy has helped protect nearly 50,000 acres of natural lands. The Conservancy and its members have protected more than 10 million acres in the United States and Canada, and have helped partner organizations preserve an additional 60 million acres in Latin America, the Caribbean and Asia/Pacific region. The Conservancy owns the largest private system of nature sanctuaries in the world.

The Conservancy's Maryland/D.C.
Chapter, with more than 25,000 members,
is the leading private land conservation
organization in Maryland.



bear island

From ocean floor to local treasure

More than 500 million years ago, what is now the eastern seaboard was submerged beneath the Atlantic Ocean. The ocean floor later slid under a continental plate and plunged into the planet's fiery interior. Ancient rock composites that formed from that collision remain exposed today, giving Bear Island its extraordinary shape and contour. For years, people have come to the island to hike its popular and challenging Billy Goat Trail, which traverses the island along the river. The trail requires hikers to pick their way over huge boulders and angled rocks for exquisite views of the Potomac's Mather Gorge.

Photo credits Cover photo by Karen L. Milstein Painted turtle by David W. Harp Billy Goat Trail by Richard Wiegand Map photos by Karen L. Milstein, Richard Wiegand, Dan Boone, Robert Simpson and John Howard Perkins.

a hiker's guide to the billy goat



Pepco

This brochure was funded by Pepco and produced in cooperation with the National Park Service and the Potomac Appalachian Trail Club.

Maryland/District of

Columbia Chapter

Chevy Chase, Maryl

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the billy goat trail

A walk on the wild side

The Bear Island section of the Billy Goat Trail is a journey through a living showcase of natural diversity. From upland forests of oak, hickory and pine to scoured rocky bluffs to temporary and permanent ponds that form along the trail, you encounter a diverse ecosystem that supports more than 50 of Maryland's rare, threatened or endangered plant and animal species.

Potomac River Gorge The entire Potomac Gorge is home to more than 100 rare, threatened and endangered species in the state. The Gorge's ecological richness results from the meeting of the Piedmont region with the Atlantic coastal plain, the overlapping of many species' ranges and a powerful history of flooding.

The Fall Line Factor The Potomac Gorge is the East Coast's largest and most pristine example of a "fall line" landscape — a series of river rapids that mark the change from the hard, ancient bedrock of the Piedmont plateau to the soft, sandy deposits of the coastal plain. The towering rocky outcrops along the Billy Goat Trail are typical of a mid-Atlantic river at a fall line.

Nature at a Crossroads The Potomac Gorge brings together a wide variety of plant and animal species, acting as a migration corridor for mountain and coastal plain



climbing. Hikers should have both hands free. Please do not collect any living organisms on Bear Island and stay on marked trails.

A Flood of Riches Potomac River flooding has scoured Bear Island for millions of years. The severity of each flood plays a dramatic role in forming island habitats. Along the lower elevations, flooding strips away soils, leaving behind sand and gravel or bare rock. Floodwaters can be violent, stripping away trees and creating prairie and savanna habitats. Receding floodwaters leave these areas dry, supporting many rare, unusual and adaptable plants such as wild false indigo and Virginia nailwort.

support diverse forests and native spring wildflowers. Throughout the island, erosion from flooding has also created seasonal ponds that serve as breeding grounds for amphibians such as wood frogs and slimy and spotted salamanders.

At higher elevations, floodwaters deposit deep, rich soils that

Bear Island's Billy Goat Trail weaves through this colorful tapestry of plants and animals, offering a rare glimpse at nature's living fabric, and binding the habitats we all call home.

- 1) Virginia bluebells grow in large patches scattered throughout Bear Island's rich woods and bloom between March and May.
- 2) A late spring bloomer, field chickweed grows in sandy soils along Bear Island's lower elevations.
- 3) Carolina tassel-rue, a western Maryland species, was carried to Bear Island by floodwaters of the Potomac River and grows on stream banks and wooded
- 4) Prickly pear is the only cactus species in Maryland. It blooms in late spring along Billy Goat's rocky areas or on exposed bedrock. Several small colonies exist on the southern end of the island.
- 5) The tiger swallowtail butterfly feeds off the sweet fruits of tulip poplar trees and is one of six types of swallowtails on the island, along with the giant swallowtail, a state-rare butterfly, and the zebra swallowtail, a light-green and black butterfly. It is illegal to collect butterflies on Bear Island.
- 6) The red eft, a land form of the red-spotted newt, lives in the moist forested uplands
- 7) Painted turtles can be seen in shallow ponds throughout Bear Island, feeding on aquatic vegetation, insects, crayfish and
- 8) The wood frog, with its hoarse clacking croack, prefers rich moist woods for its habitat and breeds in permanent and temporary ponds on Bear Island.
- The prothonotary warbler is a strikingly beautiful hird known for its delicate 'sweet-sweet-sweet'' chirp. Bear Island is perfect habitat for this bird since it likes flooded forests and streams with dead
- 10) The great blue heron nests high in the treetops along the Potomac River. During the summer, herons gather on the rocks along Bear Island. A great viewing spot is the Great Falls overlook on nearby Olmstead Island.