ENVIRONMENT

The Conejohela Flats and its shallow waters are a diverse ecosystem that provides habitat for many different terrestrial and aquatic organisms. The larger vegetated islands are covered in low shrubs, deciduous trees, grasses, and sedges. Purple loosestrife is an invasive plant species that rapidly spreads, crowding out native vegetation and covering mud flats.

The Conejohela Flats have been designated as an Important Bird Area (IBA) by the National Audubon Society and are a significant inland component of the Atlantic Flyway. Over 250 species of birds have been identified and shorebirds, water birds, wading birds, waterfowl, non-migratory birds and many other species can be seen on the Flats. Large flocks of Tundra Swans and Snow Geese congregate here in late winter and early spring.

The Conejohela Flats are known for shorebirds and are one of the most significant stopover sites in Pennsylvania for thousands of migrating shorebirds. Only Presque Isle, near Lake Erie, has a larger concentration of migrating shorebirds. As many as 38 different species have been identified and up to 17,000 migrating shorebirds can be seen on the Conejohela Flats annually. The mud flats offer a temporary location for migrating shorebirds to rest and feed on prey, which provides them with the energy needed for their marathon flights.





Image courtesy of Maryland Historical Society

The images above show a historical and contemporary perspective of the river and Conejohela Flats from Turkey Hill.

HISTORY

The term Conejohela is derived from an Native American word meaning "kettle on a long, upright pole." Susquehannocks were the last known native group to live in this area along the river near present-day Washington Boro. The many islands and rocks were used for hunting and fishing. Dugout canoes were used for travel and the river was a major trade route.

Where the Conejohela Flats are located today was once a major river crossing known as the Blue Rock Ford and later became a crossing for the Blue Rock Ferry. This area and the islands were farmed before and after the construction of Safe Harbor Dam. The Conejohela Flats were and still are a popular and abundant waterfowl hunting area. Historically, the catching of migrating shad was a profitable business for fishermen, who used the islands, sand bars, and rock outcroppings on the river as shad fisheries and shad batteries.

The Susquehanna Hard Coal Navy was a fleet of boats and barges that vacuumed tons of coal silt from the river bottom that had washed downriver from the coal fields in northeastern Pennsylvania. Coal silt was used as a fuel source. The navy ceased to exist after the mid-1950s, but the destructive process of dredging for coal silt continued on Lake Clarke until 1973.

Paddle Excursion and Self-Guided Tour of the Conejohela Flats



Conejohela Flats Paddle Guide

PUSOUEHANNA HERITAGE



To learn more about Susquehanna Heritage visit our website http://www.SusquehannaHeritage.org/



Printing of this brochure funded by the Chesapeake Bay Trust http://www.cbtrust.org/

> Additional birding websites http://www.audubon.org/ http://pa.audubon.org/ http://www.pabirdingtrails.org/

For additional information and list of sources used to develop this publication please contact Susquehanna Heritage.

THE CONEJOHELA FLATS

The Conejohela Flats are a combination of low-lying islands and mud flats on the Susquehanna River in Pennsylvania about three miles south of Columbia and Wrightsville, located just offshore from the small settlement of Washington Boro in Lancaster County.

The Conejohela Flats are alluvial islands that develop from the forces of erosion and deposition and the building up of large amounts of sediment (soil, silt, sand, and coal silt derived from upstream coal mining waste), which alters their shape and size. Major floods from severe weather events can dramatically change islands. Ice during the winter devastatingly carves out large chunks of land and soil altering the landscape. The dredging of river channels, construction of dams, pollution and erosion of soil caused by poor agricultural practices, intensive logging of the watershed, and acid drainage from coal mining in the past and still today has harmed natural areas such as the Conejohela Flats and on a greater scale the health of the Susquehanna River and the Chesapeake Bay. An effort has been made in recent years to restore the health of the river and Bay, but much work remains to be done.

The Safe Harbor Dam (located on the Susquehanna River about 6 miles south of the Conejohela Flats) was built in 1931 to generate electricity. With construction of the dam, the river behind it backed up, flooding many of the low areas of land and islands creating the 11.5 square-mile reservoir known today as Lake Clarke. The dam also became a huge trap for upriver sediment that flowed into the shallows of the river, expanding and creating new islands such as the Conejohela Flats.

The operators of Safe Harbor Dam are required by their Federal Energy Regulatory Commission (FERC) license agreement to not raise the water level of Lake Clarke above a certain set amount so that a percentage of mud flats are exposed from April 15-October 15 during the shorebird migration period. Safe Harbor is permitted to increase the water level to generate more hydroelectric power during the non-migration season.



Image courtesy of Maryland Historical Society

The image above is a portion of Benjamin Latrobe's survey and map of the lower Susquehanna River from 1801. It depicts how the river and area around the Conejohela Flats looked before the dams altered the river landscape.

Access Sites for Launching and Exploring the Conejohela Flats

1.) Blue Rock Access

Blue Rock Road, Washington Boro, PA (39.9818917, -76.4639139)

Blue Rock Access is the closest site in proximity to the Conejohela Flats, which are located just offshore. Boat ramp, dock, and gravel parking lot available. This is a undeveloped site and space is limited. Use caution when crossing railroad tracks and be mindful of trespassing. Blue Rock Heritage Center is the home of the Washington Boro Society for Susquehanna River Heritage located at this site.

2.) Lock 2 Recreation Area

2092 Long Level Road, Wrightsville, PA (39.958269, -76.483542)

Lock 2 Recreation Area offers parking and easy water access. The Conejohela Flats are located across the river and paddlers have to cross a large stretch of open water before getting to the Flats. Be aware of weather conditions and the wind, which can change quickly and unexpectedly. Respect and be aware of other boaters and their wake. Shank's Mare Outfitters, located across the road from Lock 2, specializes in sales and rentals of kayaks and paddleboards, outdoor equipment and gear, and offers paddlesports courses, tours, and events.

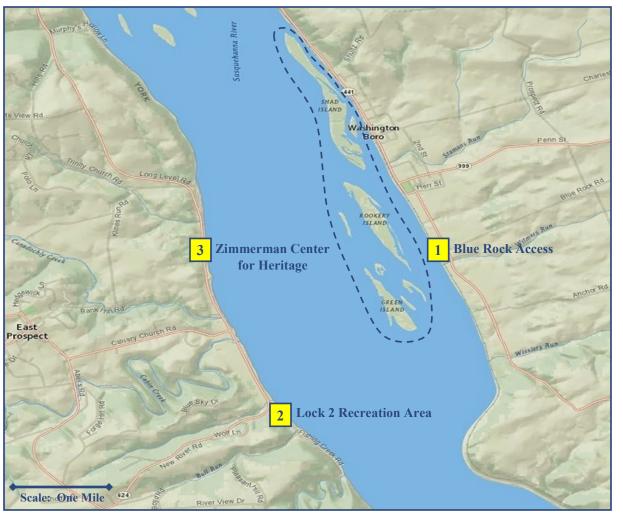
3.) Zimmerman Center for Heritage

1706 Long Level Road, Wrightsville, PA (39.977524, -76.496743)

The Zimmerman Center for Heritage offers parking and a designated paddlecraft launch. The Conejohela Flats are located directly across the river and paddlers will have to cross a large stretch of open water to get to the Flats. Be aware of weather conditions and the wind, which can change quickly and unexpectedly. Respect and be aware of other boaters and their wake. Visit the Zimmerman Center to hike, paddle, view river art, and learn about river history. The Zimmerman Center is owned and managed by Susquehanna Heritage and has been designated by the National Park Service as Pennsylvania's official visitor contact and passport station for the Captain John Smith Chesapeake National Historic Trail.

Safety Tips and Pointers for Paddling the Conejohela Flats

-Paddling the Flats is most suitable for canoes, kayaks, and paddleboards because of the shallow water conditions and chance of becoming stuck. -Mud flats, sand bars, and channels are constantly forming and reforming. there is no set route, making each paddle trip to the Flats a new experience. -Weather is unpredictable and conditions can change quickly and unexpectedly. Always check the weather and water levels. Contact Shank's Mare Outfitters or check http://www.shwpc.com/ for conditions. -Leave No Trace. Respect nature and wildlife. Enjoy from a distance. -Be aware and respectful of waterfowl hunters. Do not disturb duck blinds. -Pack proper equipment and clothing depending on the season and conditions. Take along plenty of water, binoculars, camera, and bird guide. -Paddlers must adhere to life jacket, sound-producing device, and registration/launch permit requirements. Use light source during dark hours. -For more detailed information on paddling regulations and safety see the Pennsylvania Fish & Boat Commission (PFBC) safety webpage http://fishandboat.com/safety.htm or the Pennsylvania Boating Handbook http://www.fish.state.pa.us/bookboat.htm For PFBC launch permit information and requirements use http://fishandboat.com/launchpermits.htm











Bird illustrations by John James Audubon and courtesy of the National Audubon Society

Local Outfitters

Chiques Rock Outfitters, 1028 River Road, Columbia, PA http://www.chiquesrockoutfitters.com/ (717) 475-6196

Shank's Mare Outfitters, 2092 Long Level Road, Wrightsville, PA http://shanksmare.com/ (717) 252-1616

Starrk Moon Kayaks, 497 Cold Cabin Road, Delta, PA http://www.starrkmoon.com/ (717) 456-7720

Additional Water Trail Information

Captain John Smith Chesapeake National Historic Trail http://smithtrail.net/
http://www.findyourchesapeake.com/

Susquehanna River Water Trail-Lower Section http://www.susquehannawatertrail.org/