



### *Don't Drain the Swamp*

It seems like lots of folks in DC are calling for "draining the swamp." So in an effort to keep some balance to the controversy, I'm advocating for leaving swamps wet. One-third of Cumberland County consists of wetlands that by definition are aquatic soils for at least part, if not all, of the year. Artists for decades have enjoyed the scenic values of wetlands. From Thomas Eakins' painting of hunters Pushing for Rail (1874) on Delaware Bayshore marshes (pictured) to today's local Barn School of Art, painters have filled their canvases with the vast coastal landscapes of our region.

Wetlands are diverse. There are tidal wetlands, freshwater wetlands, vernal

pools, and hardwood swamps. Each has its own characteristics but all include three aspects—water, hydric soils, and plants that can tolerate or thrive in wet conditions. Scientists use these indices to determine whether something is a wetland, for legal and practical purposes. The legal side involves regulation of wetlands by federal and state laws. The practical side deals with such aspects as proper footing and septic conditions for houses. Prior to legal protections being set up, unsuspecting landowners purchased land thought to be dry, only to find out that seasonally their cellar was flooded. Or worse yet, people's septic system was sharing their living space. After major storm events, many people also discovered that their homes were built on massive flood plains. Today, insurance companies and municipalities are more stringent about what constitutes safe and dry places to build.

So why protect wetlands? Why not drain the swamp? Water quality is an important reason. In southern New Jersey, we have no reservoirs or natural lakes. Our water comes from the aquifer. The soils and wetland plants filter and clean our drinking water supply. Wetlands remove

nutrients and plants even change the chemical composition of contaminants. Think of wetlands as a gigantic water filter.

Wetlands provide flood protection for free. They are designed to absorb waters during storm events, allowing rain to percolate more slowly through layers of soil rather than running off developed surfaces. Without swamps, we would all be paddling and wading about. When we install impervious surfaces (sidewalks, roads, driveways, foundations, etc.) wetlands can only mitigate their impact to a point, before their public protective functions are no longer effective.

Along our coastal rivers, wetlands buffer against shoreline erosion. Waves and storm waters flow across grassy marshes where friction reduces the velocity of moving waters.

Many natural products grow under these conditions, including wild rice, cranberries, blueberries, fish and shellfish, white cedar, and other timber trees. The U.S. Fish and Wildlife Service (USFWS) estimates that 96 percent of the commercial catch and over 50 percent of the recreational harvest are

fish and shellfish that depend on coastal wetland systems. This translates to a huge economic contribution. The U.S. commercial fish harvest is estimated to exceed \$10 billion annually, and waterfowl hunters spend over \$300 million each year to harvest wetland-dependent birds (U.S. Fish and Wildlife Service).

The habitat essential to fish and wildlife always includes the elements of water, food, and shelter. So it is no surprise that numerous species are reliant on wetlands for a part if not all of their lifecycles. Local coastal marshes are nurseries for fish. Many species of plants and animals are dependent on wetlands; examples are cattails, cord grass, wild rice, muskrats, beaver, railbirds, marsh wrens, and ducks. And an even larger number rely on the wetlands for food—eagles, northern harriers, peregrine falcons, and red-winged black birds, to name a few. As a transition between open water and dry land, wetlands often become havens for wildlife.

These factors make our local marshes a great place to visit in order to observe wildlife. Our

CU Maurice River and NJ Audubon trips are regularly booked with aficionados. In mid-September, more than 35 butterfly enthusiasts joined CU's Bayshore Butterfly Caravan. It's not unusual for us to have 50 to 75 hikers participating in the Natural Land's eagle walk in January. Hikers enjoy the Peek Preserve and The Nature Conservancy's Bluff Preserves on a regular basis. In fact, the USFWS 2016 survey shows that 86 million Americans or 34 percent of the population participate in wildlife watching. They have estimated bird watching to contribute \$10 billion a year to the economy. That's huge!

Check out CU's calendar each year for 100 different opportunities to get out-of-doors or to learn more about the nature around us at [cumauriceriver.org](http://cumauriceriver.org)