



Let's take a Journey with Nature

We Need our Wetlands

What is a wetland?

“Wetland” is a generic term for all kinds of wet habitats – implying that it is land that is wet for some period of time, but not necessarily permanently wet. An example of a temporary wetland is a vernal pool, created by precipitation. Wetlands are a link between the land and water ecosystems. Some common names for different types of wetlands are swamp, marsh and bog. Depending on the type of wetland, it may be filled mostly with trees, grasses, shrubs or moss. The main characteristics of a wetland are determined by the combination of the salinity of the water in the wetland, the soil type and the plants and animals living in the wetland.

In the Past, wetlands were regarded as worthless, mosquito-infested swampy lands that bred diseases, restricted overland travel, impeded the production of food and fiber. Now in the present wetlands are looked on as one of the most important productive life ecosystems on earth.

The source of water in wetlands are predominantly precipitation (rain, snow, mist), surface and groundwater storages. Water flows out of wetlands due mainly to evaporation, surface runoff and evapotranspiration (the evaporation of water supplies due to plant consumption).

There are two main man types of wetlands Coastal wetlands (salt and brackish water) and Inland (freshwater) wetlands.

Bethel's inland wetlands are along streams, in isolated depressions, along the edges of ponds, or in other low-lying areas where the groundwater meets the soil's surface or when runoff is significant enough to allow formation

The Ecological Importance:

Fish and Wildlife Habitat/Biological Productivity: Often called “nurseries of life” many species of birds, fish, mammals, reptiles, amphibians and especially insects rely on wetland habitat for breeding, foraging, and cover,

providing a unique habitat for species that cannot survive elsewhere. Migratory birds depend on wetlands, and many endangered and threatened animal species require wetlands during part of their life cycle. The incredibly high rate of wetlands loss has contributed to their demise.

Human importance:

Flood control: Wetlands can play a role in reducing the frequency and intensity of floods by acting as natural buffers, soaking up and storing a significant amount of floodwater and then releasing it slowly.

Cleaning the water that you drink: Wetlands filters the water that flows through the wetland. Before our drinking water reaches your faucet, wetlands are able to filter out sediment, nutrients and toxic chemicals. Thus the filter, clean and store water.

Groundwater recharge: Aquifers and groundwater are "recharged," that is, replenished with water by precipitation that seeps into the ground and by surface waters. Those wetlands connected to groundwater systems or aquifers are important areas for groundwater exchange.

Recreation: Plants and animals are not the only ones who benefit from wetlands. Lakes and ponds, which are included in a wetland ecosystem, serve as excellent areas for fishing, canoeing, and swimming, while smaller wetlands are prime bird watching spots and provide prime scenery for nature walks.

The Limits of Wetlands

As amazing as wetlands are, and for all their ecological and human contributions, they do have their limits. A partially filled or otherwise damaged wetland is one that only partially meets its potential for flood control or groundwater recharge. Wetlands may have tremendous capacities to provide environmental and human benefits, but they are not indestructible. If we want wetlands to continue to perform their ecological and human functions, then we have to do our part to protect them.

Human Activities That Affect Wetland Plant Communities

- Land Clearing
- Non-Native Species Invasion
- Using Chemicals: Fertilizers, pesticides and herbicides (plant and insect killers)
- Dumping and Filling
- Septic Systems failure.
- Recreation Overuse: Off road vehicles (ORVs) -- dirt bikes, all-terrain vehicles, and mountain bikes -- destroy soils, vegetation, and wildlife habitat within a wetland and its protective buffer strip.

What can you do to help conserve our remaining wetlands?

Support the Bethel Land Trust's mission of land conservation to permanently preserve sensitive natural areas, farmland, water sources or notable landmarks forever so as to help preserve or improve the quality of life of Bethel, CT residents.