

What is a wetland?

The Environmental Protection Agency and the U.S. Army Corps of Engineers use this definition for regulatory purposes:

"Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal

circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands generally include swamps, marshes, bogs, and similar areas."

Henry D. Thoreau, in Journal IV, wrote that wetlands are "the wildest and richest gardens that we have. Such a dept of verdure into which you sink" (p. 281). Journalist David Hunter Strother, wrote about his swamp adventure in 1856 and recounted how

"Lofty trees threw their arching limbs over the canal, clothed to their tops with gauze-like drapery of tangled vines; walls of matted reeds closed up the view on either side, while thickets of myrtle, green briar, bay and juniper, hung over the black, narrow canal, until the boat could scarcely find passage between."

(Veleisis, 1997, p.98).

Wetlands are further classified by the following characteristics:

- Vegetation
- Hydrology
- Water chemistry
- Origin of water
- Soil types
- Landscape position and landform
- Wetland origin
- Wetland size

Because there are many characteristics wetlands can be defined and classified by, there are a variety of wetlands. Wetlands can be split into the four broad categories of marshes, swamps, bogs and fens. Marshes are wetlands frequently inundated with water. Usually soft-stemmed vegetation adapted to saturated soils grow in marshes. There are a few different types of marshes including prairie potholes (see picture) and vernal pools. Swamps are any wetland dominated by woody vegetation. There are also many types of swamps, including bottomland hardwood swamps (see picture) and mangrove swamps. Bogs are usually moss covered and can have low shrub cover. They are characterized by having acidic waters caused by the peat deposits and covering of sphagnum moss. Fens, like bogs, are also frequently covered in peat, but their water is not as acidic. However, if peat builds up in a fen and cuts that wetland off from ground water supply, the water may become more acidic and the fen may turn into a bog.



Prairie potholes in the Dakotas-
<http://minnesota.publicradio.org/display/web/2008/05/23/farmbillconservation/?refid=0>



Bottomland hardwood swamp-
<http://www.mvk.usace.army.mil/offices/pp/projects/SPP/basics.htm>



Peat bog -
<http://www.guardian.co.uk/environment/2007/dec/23/climatechange.carbonemissions>