## **Conservation Matters**

A monthly column focused on conservation education, as the result of collaboration among several area conservation commissions and organizations. If your town's commission or conservation organization would like to contribute articles, please contact Jessica Tabolt Halm jesshalm78@gmail.com

Title: New Possibilities: The Oxbow Recreation and Nature Preserve

Written By: Larry Spencer, Chair, Holderness Conservation Commission

<u>Alm</u>ost <u>everyone</u> in the Plymouth area knows <u>of the oxbow</u> area <u>on the Pemi River</u>. When flooding occurs in the intervale, the <u>flood</u>water comes up<u>river</u>, from the south, to engulf Holderness Road. The record of these past flooding events is encoded on the north face of the CITGO gas station. And, students at PSU who did not move their cars from the parking lot behind the PSU Ice Skating Rink in time know too well the outcomes of the floodwaters.

Larry Spencer, Chair of the Holderness Conservation Commission, and Chris Buckley, past member of the HCC and present member of the Plymouth Conservation Commission and Plymouth Planning Board, <a href="https://having.been.working.with.their.conservation.commissions.and">having.been.working.with.their.conservation.commissions.and</a> many other community members to get the area set aside as a recreation/nature preserve.

A bit of history: Maps made of the area in the late 1700's and early 1800's show that the Pemigewasset River, about ¼ mile south of the present day Holderness/Plymouth bridge, made a large loop to the east before returning to the west side of the valley and heading south towards where the Squam River joined its flow, just south of present-day Ashland (which of course at this time was still part of Holderness). When the dividing line between Plymouth and Holderness was established, it went down the middle of the river. At some time in the last couple of decades of the 1800s, the river, having a mind of its own, decided to go straight and left a large ox-bow within the middle of the western edge of Holderness with a bit of Plymouth enclosed in this space. At one time in the past, driving north on I-93, one passed over part of this ox bow as the interstate was built over the eastern edge, and two road signs indicated you were entering Plymouth and then quickly a few seconds later, leaving Plymouth. When the interstate was built in the 60's, it was built high up on a large levee across this section of the valley (above the flood level) and materials were extracted/dumped in the area to the west of the interstate, thus leaving a series of hay fields, ponds, stream channels in the flood plain of the river.

**Natural History:** The area we are talking about can be called a riparian floodplain/forest. Part of it has been transformed into hay fields, hayed in the past by now deceased Holderness resident, Milton Huckins. The rest consists of stands red maples, sycamores, swamp white oak and in the higher western areas, black cherry. A wide variety of animals abound, including a couple of species of salamanders and frogs, three species of turtles (wood, Blanding's and spotted turtles), beavers, river otters, mink and a number of breeding bird species. The whole area lies on top of a past glacial feature, a stratified glacial drift aquifer deposit. Thus, when flooding occurs, the waters cover the area from the south and as the river level goes back to normal the waters either penetrate into the underlying aquifer or roll back into the river.

**Present ownership:** The areas just south of Holderness Road, going from east to west, are owned by the Irving Corporation (including the old driving range), Holderness School, Plymouth State University and the town of Holderness. This project ignores the smaller parcels (the CITGO station, and the smaller housing parcels adjacent to South River Street). Inside the oxbow are parcels owned by the Lakes Region Golf Courses and the Plymouth Athletic Club. The last property to the south of the oxbow and stretching across into Ashland is also owned by the Lakes Region Golf Courses.

Present uses: Many individuals gain access to the area by parking at the southeast corner of the PSU Ice Skating Rink parking lot and taking the road between the old driving range the PSU rugby field to reach the real ox-bow area. They come to walk their dogs or to observe birds or other natural features of the area. In the winter, this road is maintained by the Squam Lakes Snowmobile Club, as it provides snowmobilers using the railroad corridor with a chance to gas up at either the CITGO or Irving Stations. In summer this node also provides access for folks whose destination is the so-called South Beach or Secret Beach, a beach located where the Pemi River makes a wide sweep to the east (about where the ox-bow was cut off). The other major access to the area is at the south end of South River Street at the property owned by the Town of Holderness and managed by the Conservation Commission. This property provides an entry to the numerous mountain bike trails maintained by local chapter of the New England Mountain Bike Association (NEMBA). The area has also been used over the years by professors from Plymouth State for a variety of ecological studies.

The Future: Spencer and Buckley have been working with a variety of owners and user groups with the hope of getting a conservation easement that will protect not only the stratified drift aquifer that underlies the area, but also the ecological area that cover that deposit. With the assistance of Holderness School and the Irving Corporation, they have attempted to prevent non-snow time motorized access as past motorized vehicles have dramatically changed the road system by overuse affecting not only the vegetation, but also some of the turtle species found in the area (wood turtles used to occupy the area, but none have been found recently). NEMBA assisted the Holderness Conservation Commission to place a sign at the Holderness Riverside Park that maps out the mountain bike trails on the western side of the property. We are hoping to erect additional signs, one between the Irving Station/CITGO stations and another at the southeast corner of the PSU parking lot that will notify users of ecological values of the property. We also plan to have signage throughout the property that will inform users of the different ecological habitats that compose the area. This has been a long process, but with the help of many, there is an end in sight. The next time you head back into the area with your dog, your binoculars, your bike, your snowmobile, your cross-country skis, or your snowshoes you may be using a new conservation property, The Oxbow Recreation and Nature Preserve.

**Photo caption:** The graphics below depict the future Oxbow Recreation and Nature Preserve, first as a property map that shows the dark dashed line separating the towns of Plymouth and Holderness, and second as an aerial view via Google maps. In this photo, the thin yellow line marks the border between Holderness and Plymouth.



