

October 2014 Plant of the Month



Zizania aquatic L. Wild Rice: Delaware River (left) and Wading River (right) forms

The October plant of the month is wild rice. This is a native with a history steeped in deep time associated with early Native Americans. *Zizania aquatic* is an annual grass that occupies tidal mud flats of the freshwaters of New Jersey. *Zizania aquatic* is a plant with widespread yet disjunct populations along the east coast in tidal estuaries from Florida to Maine; around the Great Lakes, and finally around the headwaters of the Mississippi. Outlier populations exist in Arizona and Montana. It is an obligate wetland species throughout its range, yet it is only associated with tidal regimes on the east coast.

New Jersey is home to wild rice in a variety of wetland regimes. It is most common along the tidal Delaware River tributaries, from Trenton south to the Delaware Bay. It also grows around the glacial lakes of Morris and Passaic Counties, as well as in non-tidal Pine Barren savannas of the upper Wading River. This ability to occupy a variety of hydrologic systems is an interesting feature of *Zizania*. Large expansive stands emerge from a sea of freshwater tidal plants such as *Peltandra*, *Pontedearia* and *Nuphar* in late July as the annual grass reaches for the light. Flushed by daily tides, our estuarine populations reach heights of 10-12' by September. The plant starts to drop fruit by October and collapses into the mud by November, only to reappear the following spring from seeds sown in fall the previous year. Wild rice growing in the Maurice River and Great Egg Harbor River resemble the populations found along the main Delaware River tidal communities. The typical form has thick, upright stems with an elevated panicle. Unlike the typical, there is a flaccid form in the Mullica and Wading River systems. These plants root below the mean low water line, expand in standing water and fruit on a reduced panicle that barely exerts from the water. Flora of North America, Volume 24 states the plants are immersed in water, but this does not explain the whole picture. This ecophene provides interesting academic problem that needs a taxonomic review.

Early Native Americans discovered this plant early and for thousands of years relied upon its grain each fall. It produces an extremely palatable food that was a staple for many tribes, and this tradition continues with harvests that include a related species, *Zizania palustris* from the upper Mississippi to this day.

The next time you are traveling in fall near the Raccoon or Oldmans Creeks, be sure to scan the horizon for the easily identifiable species.