

## Assessment of Five State Rare Plant Populations at Cove Point Marsh (Year 2008)

### Assessments of *Ammannia latifolia* and *Fuirena pumila* populations

No populations of *Ammannia latifolia* or *Fuirena pumila* were found. These species were last observed along the marsh / beach dune interface in 2006 and 2005, respectively. Both species appear to have succumbed to the brackish water inundation of the historically freshwater marsh.

### Assessment of *Carex hyalinolepis* population

The population's size was measured on 29 May, 2008. The sandy dune that historically separated the marsh from the Chesapeake Bay is moving toward the marsh and is now on top of the *Carex hyalinolepis* population which in 2007 was observed along the marsh / dune ecotone and historically was found in Cove Point Marsh. No plants of *Carex hyalinolepis* were found in the marsh and one patch measuring 8.2 m x 7.7 m was observed on the sandy dune. The maximum number of fruiting stems observed within a square meter of the population was 3. The estimated average number of fruiting stems per square meter was 0.3.

It is unknown whether the *Carex hyalinolepis* will be able to survive in the much drier dune conditions since it is a species generally found in marshes. Most of the plant species currently associated with the *Carex hyalinolepis* population are species typically found in dry upland sites such as *Rubus*, *Lonicera japonica*, *Toxicodendron radicans*, and *Vitis labrusca*. Some stems of *Phragmites* also found within the *Carex hyalinolepis*, are probably plants that were in the marsh in 2007, but are now covered by the dune.

### Assessment of *Scutellaria galericulata* population

This population was measured on 29 May and 24 September, 2008. On 29 May the maximum length measured 7.2 meters and the maximum width was 1.5 meters. A total of 26 stems were counted and the maximum number within a square meter was 5. No plants were observed in flower. When the population was revisited on 24 September a total of 37 stems were counted and all but 3 had set fruit. Four plants were still in flower.

During the 29 May site visit it was observed that someone had trimmed the red maple trees along the boardwalk and piled the cut branches on top of the *Scutellaria galericulata* population. I removed the branches and it seems that no damage was done. One additional Maryland State listed species *Oldenlandia uniflora* (S3) was found growing within the *Scutellaria galericulata* population on 24 September. This is the first time this species has been found at Cove Point. Some *Phragmites australis* was observed on the northeastern side of the *Scutellaria galericulata* population.

#### Assessment of *Potamogeton foliosus* population

No plants of *Potamogeton foliosus* were observed during site visits on 29 May or 24 September, 2008.

#### Assessment of *Zizaniopsis miliacea* population

This population was measured on 29 May, 2008. The maximum length measured 69.5 meters and the maximum width was 14.7 meters. No fruiting stems were observed within the population. The *Zizaniopsis miliacea* plants looked stressed and some had brown leaves. This however was not the case during the 24 September site visit when the population appeared to be entirely healthy and thriving. This is the first year when no plants of *Zizaniopsis miliacea* were observed to have set fruit. *Phragmites australis* was thick on the north side of the *Zizaniopsis miliacea* population.

#### Assessment of *Leptochloa fascicularis* population

This population was examined on 24 September, 2008. It was found to be fairly common along exposed edges of peat mats in the interior marsh and appears to be fairly tolerant of brackish water. Since the marsh is now tidally connected to the Chesapeake Bay, the peat mats that were historically exposed during droughts no longer appear, and thus extensive habitat once present during drought years at Cove Point Marsh is not there. This species is no longer listed as rare by the State of Maryland.