



FRIENDS NEWSLETTER: ELLISVILLE MARSH RESTORATION PROJECT OCTOBER, 2011

This newsletter is produced on a periodic basis to keep members of the Friends of Ellisville Marsh, Inc., apprised of developments and opportunities to become involved.

Aerial Photos Tell the Story

When pilot Mike Brennan flew low over the Plymouth coastline on July 31st, his view of Ellisville Marsh was breathtaking (see photo below). Mike's camera captured what most of us had already noticed – that the marsh looked healthier than it has in many years. Thick, green Saltmarsh Cordgrass (*Spartina alterniflora*) is popping up in new places that twelve months ago were bare mudflats. Cordgrass also seemed to be repopulating areas in the back marsh where most of the vegetation had disappeared. But could we use Mike's photos to prove that this year's reopening of the inlet was beneficial to the ecosystem? Probably not.

On the afternoon of September 9th, another low-flying aircraft swooped over Ellisville Marsh, its high-resolution camera loaded with color infrared film. After waiting several weeks for the right combination of clear weather, sun angle and tides, our contractor Col East captured our second, high-resolution photo (called an orthophoto for its stereoscopic characteristics) of the marsh and adjacent areas. The first such orthophoto was taken for the Friends by Col East in August 2008. Each photo is referenced to a series of ground control points whose exact location and elevation are known and the infrared film provides insights into the health as well as extent of coverage of vegetation. Since the orthophotos are rendered to identical scale and reference points, they can be compared to determine how wetlands vegetation and water flows have changed in the intervening years, reflecting both the impacts of the January 2011 dredging of the inlet and other factors such as storms and natural movements of sediment. Photogrammetric analysis, which is planned, will yield further, detailed information about the types of vegetation and its condition. Together with Ellen Russell's on-the-ground analysis using almost 100 vegetation sampling plots, scientific conclusions will be reachable. Stay tuned!



Aerial view of Ellisville Marsh, July 31st, 2011.

Photo courtesy of Mike Brennan.

Insuring the Long-Term Protection of Ellisville Marsh

The Friends are now in our fifth year of operation and earlier this year completed Phase 1 of the long-term restoration and preservation plan for Ellisville Marsh. Local, state and regulatory permits were obtained, initial dredging completed, and nine environmental monitoring programs are underway with another round of extensive data collection completed this summer. The Friends will need to be active for many more years down the road, especially since current regulatory permits need to be renewed in less than five years. Permit renewal will rely heavily on scientific evidence we continue to collect. Recognizing this long-term view, several related actions are now underway to solidify and strengthen the organization's ability to maintain its programs. These include:

- Strengthening our working relationships with the property owners: the Massachusetts Department of Conservation and Recreation and the Wildlands Trust.
- Developing a leadership succession plan that will insure continuity under any contingency.
- Compiling a comprehensive electronic archive of information gathered and records kept since the organization's founding in mid-2007. Many hundreds of computer files, documents, plans and images exist!
- Undertaking a capital fundraising campaign called "*Foundation for the Future*" to create a long-term endowment fund – more information on this soon to follow.

What's New at Ellisville Harbor State Park?

According to Les Perry, EHSP and Shawme Crowell Park Ranger:

- DCR-Shawme Crowell staff recently painted the trim on the Wing house and repaired the stairway to the beach.
- One Osprey fledged this summer from the nest on the platform in the marsh.
- The Wing House will need to be winterized as the budget for fuel oil and the tank are both depleted.
- Les mowed the fields of Spotted Knapweed to help control the spread of the invasive plant.



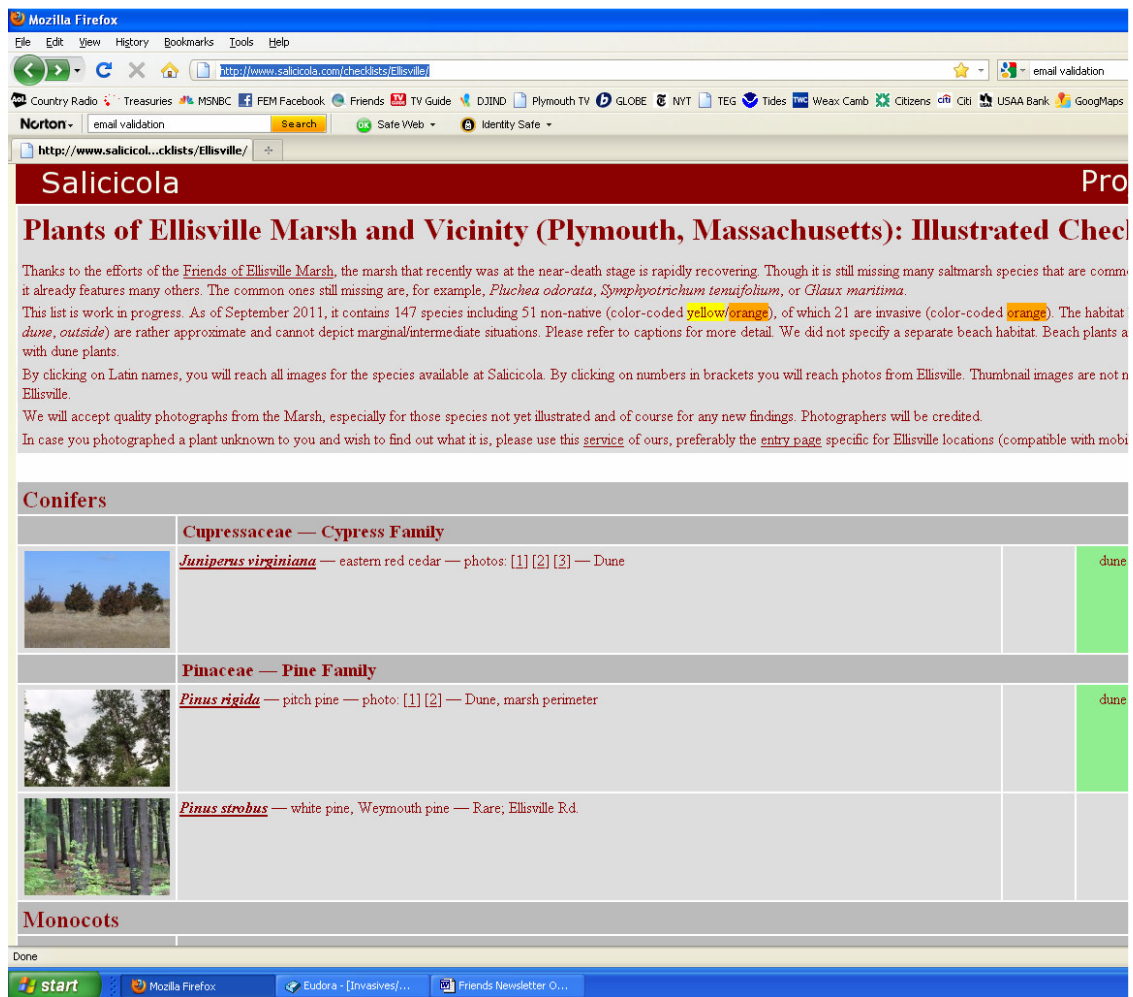
Summer on the wane in Ellisville.

Photo courtesy of Jeanne Lesperance.

Plant Species Inventoried at Ellisville

One of the more remarkable accomplishments of the summer season had to be the completion of walk-around surveys of plant species at Ellisville Marsh by Irina Kadis of the Arnold Arboretum, accompanied by several Friends members. During the survey, significant colonies of the invasive plant, Spotted Knapweed (*Centaurea maculosa*), described in an earlier newsletter, were discovered at both Ellisville Harbor State Park and Shifting Lots Preserve. Subsequently, Irina and her husband Alexey created an on-line checklist of all 147 species of plants found, including native and non-native types. If you want to try and find them all, the color photos on their site will be invaluable. Sincere thanks to Irina and Alexey for generously providing their expertise and organizational skills!

To see the plant checklist, visit: <http://www.salicicola.com/checklists/Ellisville/>



Salicicola Pro

Plants of Ellisville Marsh and Vicinity (Plymouth, Massachusetts): Illustrated Checklist




Thanks to the efforts of the [Friends of Ellisville Marsh](#), the marsh that recently was at the near-death stage is rapidly recovering. Though it is still missing many saltmarsh species that are common it already features many others. The common ones still missing are, for example, *Pluchea odorata*, *Symphytotrichum tenuifolium*, or *Glaux maritima*. This list is work in progress. As of September 2011, it contains 147 species including 51 non-native (color-coded yellow/orange), of which 21 are invasive (color-coded orange). The habitat *dune, outside* are rather approximate and cannot depict marginal/intermediate situations. Please refer to captions for more detail. We did not specify a separate beach habitat. Beach plants are with dune plants.

By clicking on Latin names, you will reach all images for the species available at Salicicola. By clicking on numbers in brackets you will reach photos from Ellisville. Thumbnail images are not from Ellisville.

We will accept quality photographs from the Marsh, especially for those species not yet illustrated and of course for any new findings. Photographers will be credited.

In case you photographed a plant unknown to you and wish to find out what it is, please use this [service](#) of ours, preferably the [entry page](#) specific for Ellisville locations (compatible with mobile devices).

Conifers

Cupressaceae — Cypress Family	
	<i>Juniperus virginiana</i> — eastern red cedar — photos: [1] [2] [3] — Dune
Pinaceae — Pine Family	
	<i>Pinus rigida</i> — pitch pine — photo: [1] [2] — Dune, marsh perimeter
	<i>Pinus strobus</i> — white pine, Weymouth pine — Rare; Ellisville Rd.

Monocots

Visit Us on Facebook

The Friends of Ellisville Marsh now have a Facebook page, thanks to new board member Becky Harris. Check us out! Share your photos and experiences.

To contact the Friends' board or share your ideas, please email us at Board@EllisvilleMarsh.org.