



Helping the Dunes Grow One Summer at a Time

By Eastern Lake Ontario Dune Steward Collin Blake

Being an Eastern Lake Ontario dune steward has been a rewarding and fascinating experience. The purpose of the dune steward program is to educate the public about responsible recreational usage of the Eastern Lake Ontario Dunes and Wetlands Area (ELODWA). This contact promotes willing compliance with area regulations so ELODWA can be enjoyed in an environmentally responsible manner.

Along the eastern shore of Lake Ontario is the coastal barrier system known as ELODWA that contains beaches, sand dunes, embayments and wetlands. The sand dunes are an integral part of the coastal barrier system. These dunes extend approximately 17 miles and are the largest and most extensive freshwater sand dune formations in New York State. This barrier system provides habitat for rare plant and animals. For example, two types of beachgrass are found on the Eastern Lake Ontario sand dunes. Champlain Beachgrass is native to the area and very rare. American Beachgrass (non-native) is more expansive and larger, growing up to 3-4 feet in height.

This area is a natural stopover for migrating birds between the Arctic and South America. Caspian, common, and black terns are some of the birds seen in the area. Like the terns, shorebirds can also be found utilizing local bird sanctuaries. Shorebirds such as sandpipers and plovers feed on invertebrates in the algae that have wash up along the edge of the water. Please minimize human disturbance when watching these birds.

To protect the dunes, the stewards install fragile dune signs, protective snow, and string-fencing. Visitors are encouraged to walk on dune walkovers and designated footpaths to promote dune stabilization and growth. Unwanted travel through the dunes harms the beachgrass, which holds sand in place and helps stabilize sand dunes. Over one summer, 25 round trips (foot traffic) on a path (through the dunes) can kill 50% of the vegetation.

In August 2008, the Steward Program transplanted Champlain beachgrass at the Black Pond Wildlife Management Area. Stewards transplanted beachgrass that encroached a designated footpath to an unstable dune area. Once transplanted beachgrass becomes established, it will stabilize the dune more with each summer.



*Eastern Lake Ontario Dune Steward
Collin Blake (right) explains a
beachgrass planting.*

Photo: Mary Penney, New York Sea Grant

A Primer on Dune Protection

Protection of the Dunes

- Eastern Lake Ontario Dune Steward Program established in 1985
- Partnerships are vital to the success of the steward program
- Stewards promote environmentally sound use of this fragile ecosystem
- Installation of protective fencing, signs, maintenance of designated walkways
- Beachgrass plantings with their extensive root system help stabilize the dunes



*Beachgrass.
Photo: Collin Blake*

Causes of Dune Erosion

- A blowout forms when a patch of protective vegetation is lost, allowing strong winds to “blow out” sand and form a depression
- Blowouts are U-shaped
- Wind erosion accelerates sand scouring
- Blowouts are often caused by unwanted foot traffic

Dune Facts

- ELODWA stretches approximately 17 miles
- ELODWA contains the largest freshwater dune system in New York State
- The dunes of ELODWA are the second tallest freshwater sand dunes in the Northeastern United States (highest are at Cape Cod, Massachusetts)
- Dune system is irreplaceable if destroyed! The climatic and geomorphic conditions to build the dunes no longer exist
- Steward Program has helped protect and revitalize the dunes for 23 years

For More Info: Eastern Lake Ontario Dune & Salmon River Steward Program, 315-312-3042

The Eastern Lake Ontario Dune Steward & Salmon River Steward Program is managed by New York Sea Grant in partnership with the New York State Department of Environmental Conservation, New York State Parks, and The Nature Conservancy

