



This Grass Wasn't Made for Walking

Comparing beachgrass and your lawn

By Eastern Lake Ontario Dune Steward Greg Chapman

The grass in your lawn is tough stuff! It tolerates being walked on, sat on, and repeatedly trimmed by the lawnmower, yet still it thrives.

However, lawn grass cannot tolerate the extreme temperatures, heavy sustained winds, burial by shifting sand, and low moisture and nutrients levels found along the Eastern Lake Ontario sand dunes.

Remarkably, these are the conditions where beachgrass grows best, making beachgrass an even tougher plant than lawn grass in some ways. This small, unassuming plant is able to accomplish the huge task of capturing and stabilizing large amounts of windblown sand, allowing the dunes to grow and stay in place.

However, there is an important difference between these two grasses. While lawn grass is meant to be walked upon, beachgrass cannot withstand being trampled by foot or vehicular traffic. Walking on beachgrass often kills it, leaving nothing to hold the sand dunes in place.

Eastern Lake Ontario Dune Stewards educate the public about dune ecology, including the dune-building role of beachgrass. Stewards promote responsible use of the natural resource area by encouraging recreational users to use designated walkways and dune walkovers.

Your lawn grass has beachgrass beat when it comes to tolerating foot traffic. For this reason, it is best to admire beachgrass and its dune-building abilities from a distance, and enjoy picnics, walks and games upon the nearby beach instead.



This beachgrass, flowering along the Eastern Lake Ontario shoreline, is helping to stabilize the dunes of the Eastern Lake Ontario Dune and Wetlands Area.

Photo: Greg Chapman, Eastern Lake Ontario Dune and Salmon River Steward Program

Comparing Beachgrass and Lawn Grass

Beachgrass

- Often the first dune-building plant
- Slows and traps sand
- Stabilizes dunes, allowing other plants to grow
- Prevents dune erosion

Lawn grass

- Provides recreation space
- Filters, cleans and retains water
- Helps regulate temperature
- Prevents soil erosion

How these small plants do big jobs

- Fibrous root systems hold on to sand and soil
- Underground stems (rhizomes) give rise to new plants
- Forms dense colonies through underground cloning

Their differences

- Beachgrass can survive in low moisture, low nutrient conditions
- Lawn grass needs regular watering and occasional fertilizing
- Beachgrass thrives in extreme sun and heat
- Lawn grass can be damaged by excessive sun and heat
- Foot traffic damages the roots and rhizomes of beachgrass, and often kills the plants
- Lawn grass is intended to be walked upon

How beachgrass helps form dunes

- First plant to colonize dunes
- Grass blades slow wind and trap moving sand
- Burial by sand encourages more vigorous growth
- Roots and rhizomes form dense underground network
- As dunes stabilize, other dune building plants move in
- Absence of beachgrass can lead to rapid dune erosion

How to help beachgrass thrive

- Stay off the dunes! Foot and vehicle traffic kills beachgrass and other plants
- 25 round trips through the dunes kills 50 percent of the vegetation, so use designated walkovers and boardwalks



The rhizomes (foreground) of beachgrass form an underground network. Photo: Greg Chapman, Eastern Lake Ontario Dune and Salmon River Steward Program

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

