

# SHORELINE SPOTLIGHT



## Native Plant Spotlight Swamp Milkweed (*Asclepias incarnata*)

Swamp milkweed is a plant native to much of central and eastern North America that prefers full sun and moist soils, such as those found around wetlands and on shorelines. Swamp milkweed is a self-fertilizing, colonizing perennial with fragrant clusters of pink and light purple flowers that attract a wide variety of pollinators to its nectar. Milkweed is also a favoured food source of endangered Monarch (*Danaus plexippus*) and Queen (*Danaus glippus*) butterfly larvae. This plant spreads through seeds that drift on the wind, and through rhizomes (horizontally shooting roots), making the milkweed a persistent plant. The leaves shoot from the stem in pairs, and are bitter to deer and grazing animals.

## Impacts of Storm Surges

In the last four years, there have been anywhere between 2-7 Category 3+ hurricanes per year hitting our coast, bringing with them huge winds that drive water higher onto the shore. Storm surges from post-tropical storms Lee and Fiona ranged from 1.5m to potentially 2m (respectively) above the average high tide lines. Surges can damage both the built and natural environments. They can wash out roads, homes, and marinas, while saltwater inundation kills plants and threatens public drinking water. The increased erosion and flooding during storm surges damages habitats, and can cause animals to haphazardly flee inland.

While hurricane seasons are extremely difficult to predict, the Tropical Storm Risk (TSR) extended range forecast for 2024 is predicting an active hurricane season, with anywhere from 4-9 hurricane level storms reaching Atlantic Canada due to warming sea surface temperatures. Other climate change effects, such as sea level rise and atmospheric changes, will only increase the amount of damage we face.

It's best to be prepared for hurricanes and storm surges before they happen. Green Shores for Homes is a valuable resource that can help your shoreline increase its resilience against storms. While no shoreline adaptation method can completely remove the risks associated with intense storms such as hurricanes, the plants and soft structures of Green Shores projects mimic how the natural landscape has adapted to respond to storms.

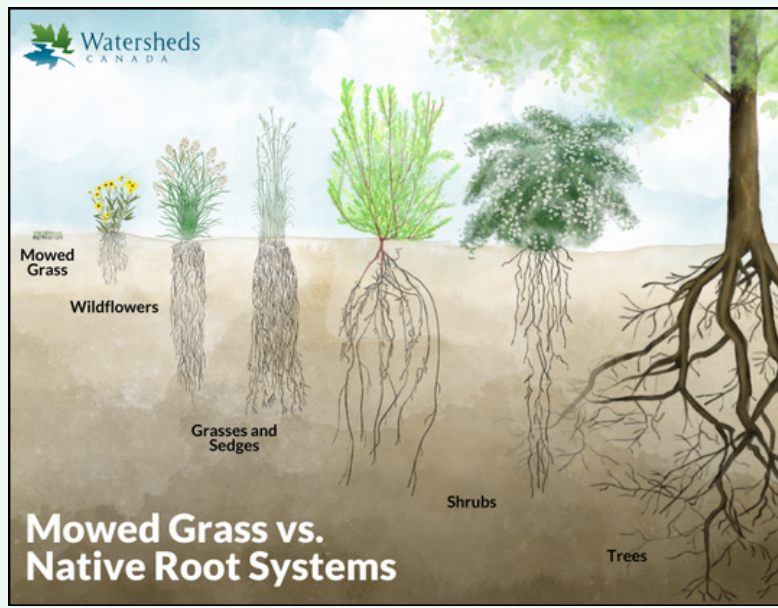
For information about preparing yourself, your family, and your home for a hurricane, visit the Canadian Red Cross' website at [www.redcross.ca/how-we-help/emergencies-and-disasters-in-canada/types-of-emergencies/hurricanes](http://www.redcross.ca/how-we-help/emergencies-and-disasters-in-canada/types-of-emergencies/hurricanes).



## Why Plant Native Species?

Native species are specially adapted to the climate, soil conditions, available water supply, and are important food sources and structural elements for native wildlife. Established native shoreline plants require minimal irrigation and maintenance. The deep mesh of roots created by diverse native flora helps to hold shoreline soils in place, reducing erosion, absorbing and filtering overland runoff.

Both native plants and native wildlife populations are declining, in part due to invasive or non-native species out-competing them for resources, and due to management practices that favour non-native grass species over diverse flowering and soil restoring plants. By choosing to plant a diverse range of native species on your shoreline, you're contributing to an ongoing effort to restore more resilient, natural habitats to our beloved lakeshores and coastlines.



Watersheds Canada

For references and further reading, visit [www.transcoastaladaptations.com/green-shores-newsletter](http://www.transcoastaladaptations.com/green-shores-newsletter)

## Looking to Adapt your Shoreline?

TransCoastal Adaptations is offering **free shoreline assessments** for a select number of waterfront homeowners in Pictou County, West Hants, and the Kespukwitek-Southwest Nova Priority Place to promote the uptake of nature-based shoreline protection and rehabilitation. Visit [www.transcoastaladaptations.com/call-for-green-shores-sites](http://www.transcoastaladaptations.com/call-for-green-shores-sites) to learn more!

## Green Shores Webinar

TransCoastal Adaptations is hosting our second Green Shores Webinar on **March 20, 2024** from **1-2pm** AST. The webinar, entitled *Green Shores: Applying Nature-Based Solutions in the Foreshore*, is of interest to those working on nature-based projects with elements extending below the Ordinary High Water Mark (OHWM), and to anyone with an interest in nature-based shoreline adaptation measures. Presenting at this webinar are two experts in the field, Cori Barraclough from Aqua-Tex Scientific Consulting Ltd. in BC, and Dr. Donna Marie Bilkovic from the Virginia Institute of Marine Science on the Atlantic.

The webinar is free for all to attend. [Registration is required](#). To register for *Green Shores: Applying Nature-Based Solutions in the Foreshore*, visit: [www.transcoastaladaptations.com/events](http://www.transcoastaladaptations.com/events)

## Green Shores Case Studies: Learn More About Projects in your Area

Green Shores case studies will become available as more projects in the Maritimes get certified. Two case studies have already been created; the first an overview of the recently added Credit 2.1, and the second exploring the effects that neighbouring hard armour has had on a shoreline in Pictou County. Find them here:

[www.transcoastaladaptations.com/green-shores-case-studies](http://www.transcoastaladaptations.com/green-shores-case-studies)



## Upcoming Training Opportunities

Our next Level 1 training session will take place on **February 28th**, at Saint Mary's University in Halifax! All members of target communities are welcome to register FOR FREE by emailing us at [transcoastaladaptations@smu.ca](mailto:transcoastaladaptations@smu.ca).

On-demand training is also available online through BCIT for \$250.15.

If you have up to 20 members of your community interested in Level 1 training, contact us to discuss setting up a date and space for a free training session at a location near you!

## Past Projects: Admiral Tryon Blvd

The Admiral Tryon Boulevard project in Parksville BC aimed to repair and stabilize the shore against erosion from high tides and storm events, provide beach nourishment, revegetate the site, and protect habitat. The site achieved these goals by using both soft and hard elements (this is called a hybrid approach), and earned a Green Shores for Homes silver rating with 21 credit points.



The property is within a conservation area of important habitat for waterfowl and fish. To stabilize the bank and ensure habitat protection, a buried revetment was utilized. A buried revetment is a hybrid structure consisting of rock buried below a sloped surface of smaller materials, like the sand and cobble found naturally on this shoreline. The structure was planted with native shrubs and grasses to mimic a coastal dune's ability to dissipate wave energy. Driftwood was strategically placed on the shoreline to slow wave energy, trap sediments, and create micro-habitats for plants to establish. In total, soft shoreline measures were applied over approximately 80% of the shoreline length. The project was completely vegetated within 3 years of completion. The full case study can be found at [stewardshipcentrebc.ca/admiral-tryon-boulevard-parksville/](http://stewardshipcentrebc.ca/admiral-tryon-boulevard-parksville/).



Native Shoreline Plants of the Atlantic Region is a compendium of native species that can be found along Atlantic marine and freshwater shorelines. When choosing plants for your next Green Shores project, be sure to use the native species specialized to life on your shores. This list provides the scientific and common names of each plant, what level of sun exposure and soil moisture they prefer, and comments about what kind of habitat they're commonly found in. Species are separated into two groups - lakeshore plants and marine shore plants. Each group is subdivided into trees, shrubs, and grass and herb type plants (called graminoids and forbs).

The list of Native Shoreline Plants of the Atlantic Region can be found in Appendices G-3 and G-4 of the Green Shores for Homes guidebook, as well as the Green Shores Resources section of the TransCoastal Adaptations website. Visit [www.transcoastaladaptations.com/green-shores](http://www.transcoastaladaptations.com/green-shores) to access the guide.

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