



is a global seagrass monitoring program, active throughout the world. SeagrassNet scientifically monitors seagrass beds so

that changes in their health and structure can be determined with accuracy over time. All data collected are sent to a website/database for display and analysis: [www.SeagrassNet.org](http://www.SeagrassNet.org).

Besides finding new information on the status and trends of seagrass health, SeagrassNet is committed to the long-term protection of seagrasses. SeagrassNet monitoring has shown that seagrass near populated and rapidly developing areas does poorly, while seagrass in more remote, pristine and protected areas, is still largely healthy. Learn more about seagrasses so you can recognize their value in our global ecosystem!

### Threats to seagrass

- human activities on land
- anything that decreases water clarity
- fertilizers/pesticides entering the ocean
- nutrients entering the ocean
- sediment run-off entering the ocean
- dredging and coastal development
- some boating and fishing activities
- aquaculture
- docks and piers

### Protecting seagrass

- decrease run-off from roads & farms
- reduce wastewater pollution
- limit use of fertilizers on lawns
- avoid overboard boat discharge
- minimize dredging and filling
- use careful boating practices
- practice sustainable aquaculture
- build high, narrow docks
- clean up coastal areas
- support Marine Protected Areas

Dr. Frederick T. Short  
Director, SeagrassNet  
University of New Hampshire  
603-862-5134 phone  
[Seagrass.Net@unh.edu](mailto:Seagrass.Net@unh.edu)



NEW HAMPSHIRE  
CHARITABLE FOUNDATION  
AND TOM HAAS



UNIVERSITY of NEW HAMPSHIRE

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North  
Atlantic  
Seagrass

### Seagrasses

- Underwater flowering plants
- Valuable coastal ecosystems
- Form vast meadows to small patches
- 5 species in the North Atlantic
- Nurseries, shelter and food for fish
- Ducks, geese, and brant eat seagrass
- Recognize and protect seagrasses

# North Atlantic Seagrass



## *Zostera marina*

eelgrass

- Flat leaves to 3 m with closed sheath
- Leaf tip smoothly rounded
- Rhizome robust with terminal shoots
- 2 bundles of roots per node
- Flowers on repeatedly branched stem



## *Zostera noltii*

dwarf eelgrass (Europe only)

- Flat narrow leaves to 30 cm; open sheath
- Leaf tip rounded and unevenly notched
- Thin rhizome with shoot from each node
- Flowers on branched stem



## *Ruppia maritima*

widgeon grass

- Flat very thin leaves 3 to 25 cm
- Blades gradually taper to a point
- Very thin rhizome
- Flowers on long stem



## *Halodule wrightii*

shoal grass

- Flat leaves to 22 cm
- Leaf tip with 2-3 points
- Rhizome with 2-5 roots per node
- Flowers emerge from sheath



## *Cymodocea nodosa*

- Flat leaves to 30 cm (Europe only)
- Leaf tip rounded slightly serrated
- Rhizome robust with one root per node
- Flowers emerge from sheath

## Seagrass functions and values

Seagrass contributes to a healthy coastal marine environment. Seagrass provides habitat for commercially and recreationally important fish and shellfish species. It is a nursery area for young marine creatures like flounder and lobster. Seagrass filters the water of sediments and pollution. The seagrass root mat adds stability to the coastal zone, and seagrass leaves lessen the impact of wave energy on the shoreline. As dead seagrass breaks down, it becomes part of the coastal food chain, supporting a diverse ecosystem.



## Birds and seagrass



Ducks, geese and brant eat seagrass and their migratory flight paths include stops in seagrass beds. Blue herons, egrets and other wading birds find small fish, shrimp and other invertebrates in shallow intertidal seagrass meadows. Ospreys and eagles hunt for fish over seagrass beds. A healthy seagrass resource is essential to maintaining waterfowl and other bird populations.

## Salt marsh / seagrass / bivalve connection

Seagrasses, salt marshes, and bivalve reefs form a three-part marine coastal ecosystem in the North Atlantic. Each part contributes to a healthy ocean. Salt marshes filter the water coming off the land and create a stable shoreline. Seagrass further filters runoff and provides nursery areas for many of juvenile mussel settlement. Seagrass, as it dies and decomposes, provides a link in the food chain essential to bivalve reef animals. The seagrass - salt marsh - bivalve reef environment is a productive area of high biodiversity and beauty. Together, these three habitats create a coastal resource for fisheries and tourism.

