

Pacific Northwest (PNW) sand dune ecology

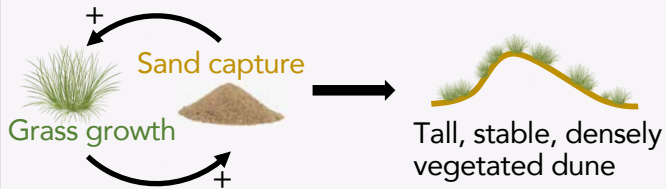
The sand dunes of the PNW are home to 3 dune-building grasses.

Ammophila arenaria
INVASIVE

Leymus mollis
NATIVE

Ammophila breviligulata
INVASIVE

These grasses build dunes via a positive feedback loop between trapping sand and vertical growth.



Ecosystem services:

Both *Ammophila* species build taller dunes than the native *Leymus*. These dunes provide critical **coastal protection**. However the invasive *Ammophila* grasses outcompete native plants and **decrease habitat** for some native birds.

A new hybrid:

In 2012, a hybrid *Ammophila* beach grass was discovered in the PNW. The first step in understanding the impact of this hybrid on coastal protection and biodiversity management is to map how much of it exists. **You can help!** Simply upload your beach grass photos to iNaturalist.

Want to learn more?

Scan this code to visit our iNaturalist project!



Special thanks to:

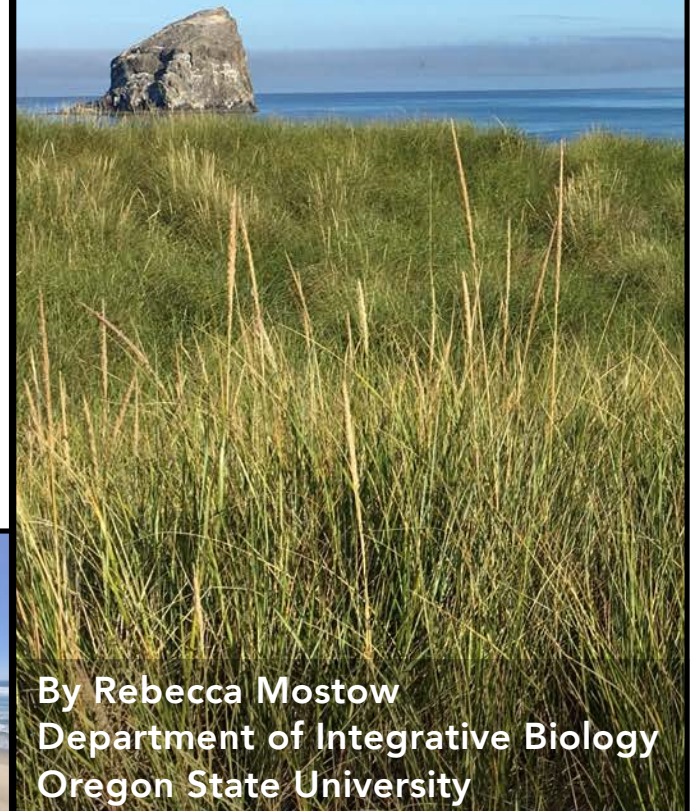


Oregon State University



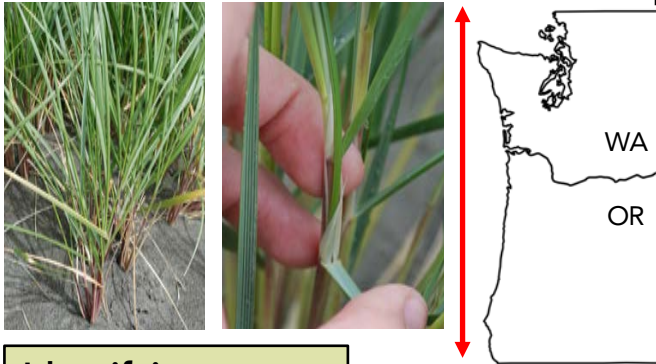
A guide to beach grasses of the Pacific Northwest

Learn to identify American marram grass, European marram grass, and their hybrid grass



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Ammophila arenaria
European marram grass
(AKA European beachgrass)



Identifying characters:

- Stems growing in a tight clump, dense
- Leaves rolled
- Ligule long, pointy (~20mm)

Range:

Present in WA, OR, CA but dominant from central OR to southern CA

Ammophila breviligulata
American marram grass
(AKA American beachgrass)



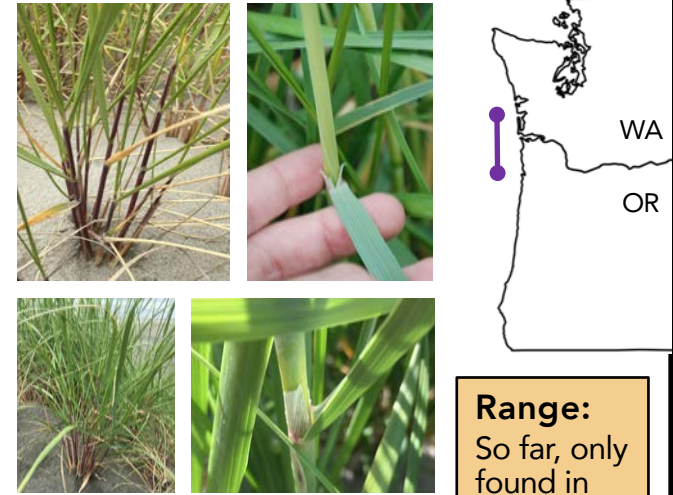
Identifying characters:

- More space between stems, less dense
- Leaves wider
- Ligule very short and flat (~2mm)

Range:

Dominant from northern OR into WA

A. arenaria x breviligulata
Hybrid marram / beachgrass



Identifying characters:

- Intermediate leaf width
- Intermediate ligule length (~7mm)

Range:

So far, only found in southern WA and northern OR.

ID tips:



Check the ligule!

The easiest way to tell these grasses apart is using their ligule, the small piece of tissue between the base of the leaf and the stem. ***A. arenaria* has a long, pointy ligule while *A. breviligulata* has a short, flat one.**



Where are you?

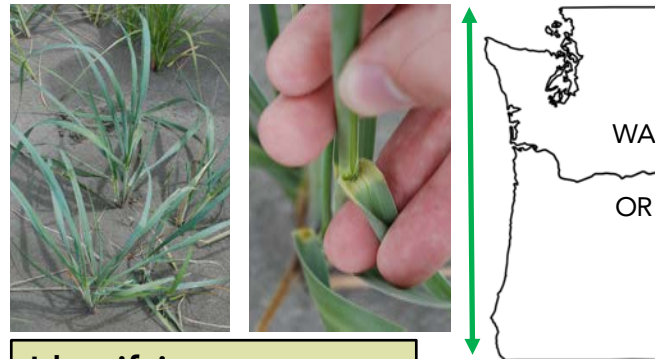
Check the ranges of the species to see which one is most likely. ***A. breviligulata* is dominant in WA. *A. arenaria* is dominant in most of OR.**



Not sure? Submit to iNaturalist!

Submit photos of the ligule, leaves, and flowers as "genus *Ammophila*." The curator will figure out the ID.

Leymus mollis
American dune grass



Identifying characters:

- Leaves very wide leaves with waxy coating, often grey-blue
- Prominent midrib
- VERY short ligule (<1mm)

Range:

Present in WA, OR, and CA but never dominant

iNaturalist

How to submit an observation:

- 1) Log on to [iNaturalist.org](https://www.inaturalist.org) or open the app
- 2) Click the "Upload" or "Observe" button



- 3) Select all your photos of this individual including the:



a) plant



b) ligule



c) flower (if present)

- 4) Fill in your species ID (date and location should auto fill)
- 5) Click "Submit"!

Your observation is automatically uploaded to the Beachgrass Mapping Project.