

#### Today's Agenda

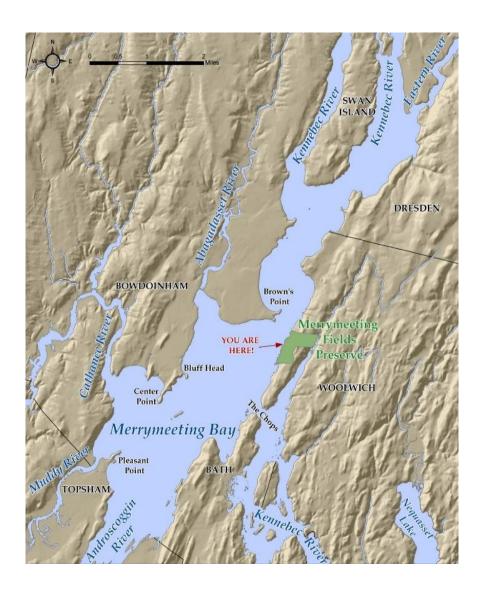
- Merrymeeting Fields Preserve
  - Management by KELT, Kennebec Estuary Land Trust
- Natural Communities at Merrymeeting Fields
  - Mixed woods
  - Open fields
  - Waterfront on Merrymeeting Bay
- Ecological Aspects
  - Habitats, communities, ecosystems
  - Wolf trees
  - Succession
- Ferns

## Merrymeeting Fields Preserve Woolwich

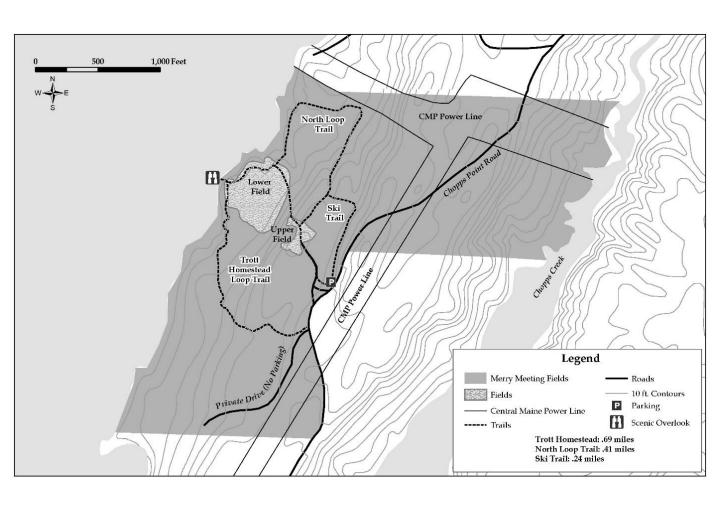


#### Merrymeeting Fields Directions

Take Route 1 North to Route 127 (just across Bath bridge on the left). Take North on 127 to Route 128 and turn left. Follow about 6 miles to Chopps Point Road, turn left. Follow 0.9 miles to parking lot and kiosk on right. View Website.



# Merrymeeting Fields Trail Map



# Staghorn Sumac: A Pioneer Species



<u>Reading the Forested Landscape</u> by Tom Wessels

#### Wolf Trees



## Lower field, Merrymeeting Fields preserve

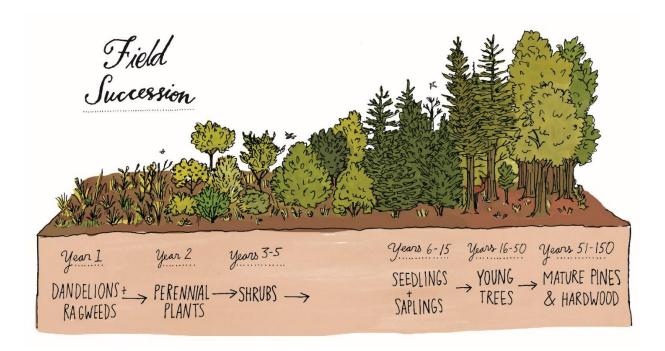


Habitats, Communities, Ecosystems

#### **Ecological Succession**

Succession is the pattern of biological community evolution in one place over time:

- Primary succession beginning in an essentially lifeless area.
- Secondary succession in areas where a previous community has been disturbed but not eradicated.



#### Questions:

- Are the life stages of a human being equivalent to succession?
- Is there a good comparison in the animal kingdom to ecological succession?

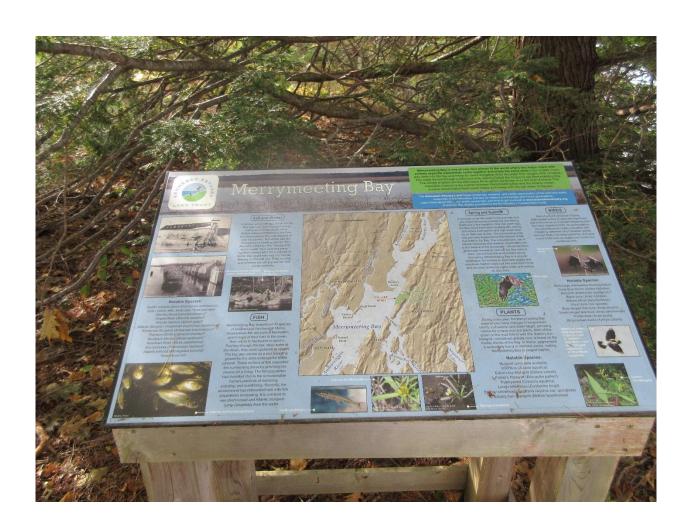
## **Ecological Succession**

What kind of disturbances create "arrested succession" in Maine upland forests?





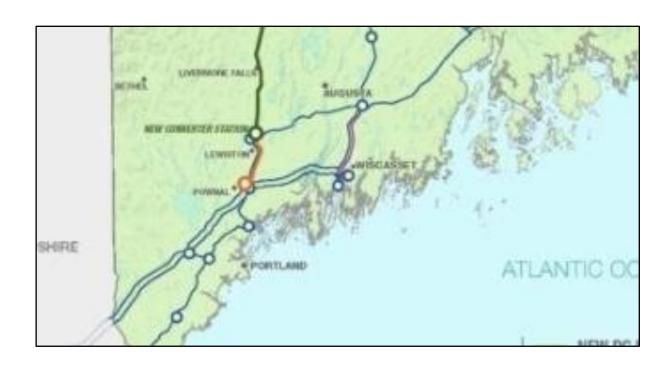
# Riverside Kiosk: Merrymeeting Fields preserve



#### View SW towards the Chops, Riverside kiosk

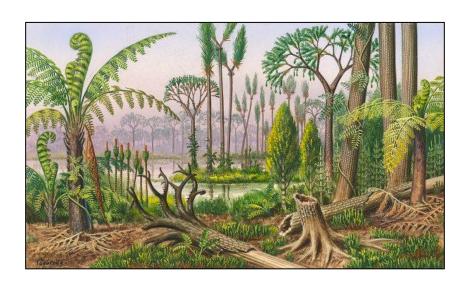


# CMP Powerlines and Merrymeeting Fields



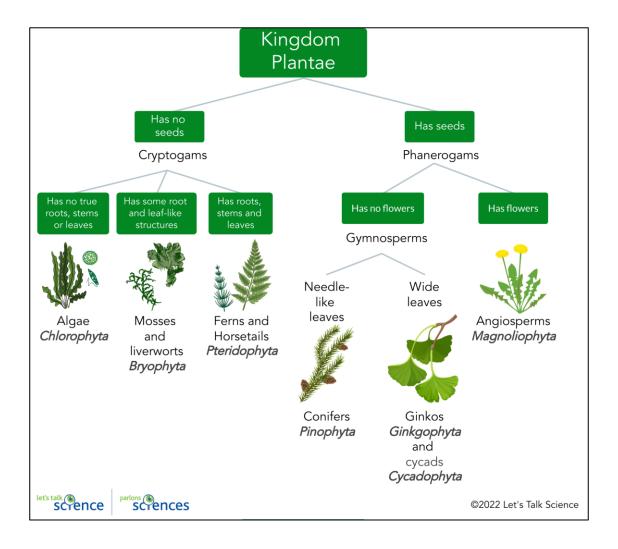


#### Ferns: An Ancient Life Form



- Ancient & Primitive: Ferns are among Earth's oldest plant groups, having evolved before flowering plants, 300 million years ago.
- Their fossilized remains contributed to the coal and natural gas deposits we use today.
- Vascular: They possess vascular tissue for transporting water and nutrients, allowing them to grow roots, stems, and leaves.
- Ferns reproduce via spores that are carried by the wind, rather than through seeds and flowers.
- **Fronds,** or fern leaves, are a defining feature. The Ostrich Fern is our edible fiddlehead.

# The Plant Kingdom



#### Some Ferns at Merrymeeting Fields





Clockwise from above:

Bracken fern,

Christmas fern,

Ostrich fern,

Sensitive fern.

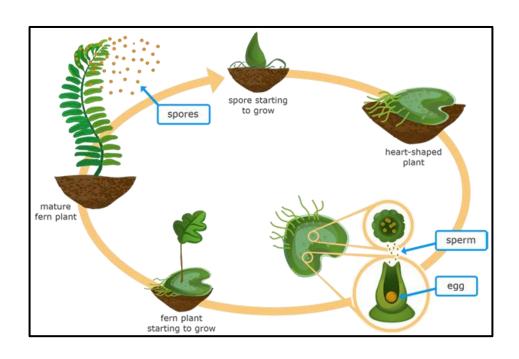




#### Fern Lifecycle







## Fern Lore: Searching the Fern



