

Ancient Interventions: Native Plants





Presentation Overview

- Context of this historical moment
- Context of this place
- Principles of Soil Health
- Native Plants: What they are and do
- Design Principles
- Resources and Where to Get Help

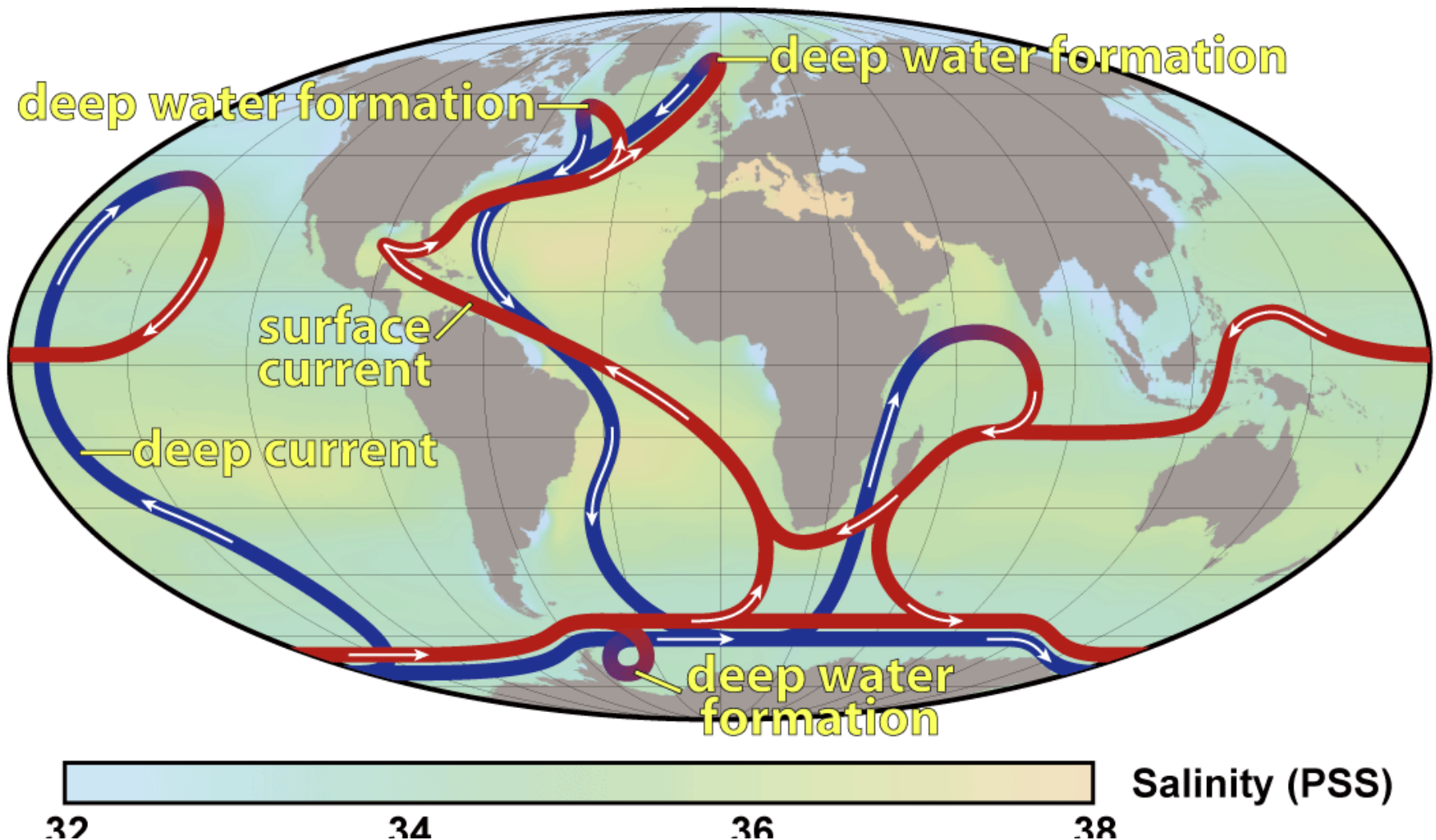
This Historical Moment

Welcome to *The Anthropocene*:

- A warming climate
- Rising sea levels
- Dysfunctional hydrologic, nutrient and carbon cycles
- Increasing levels and severity of storm events, drought and heavy weather
- Mass extinction of species

Global Warming or Climate Instability?

Thermohaline Circulation



Fear is Not the Answer

STUDENT OPINION

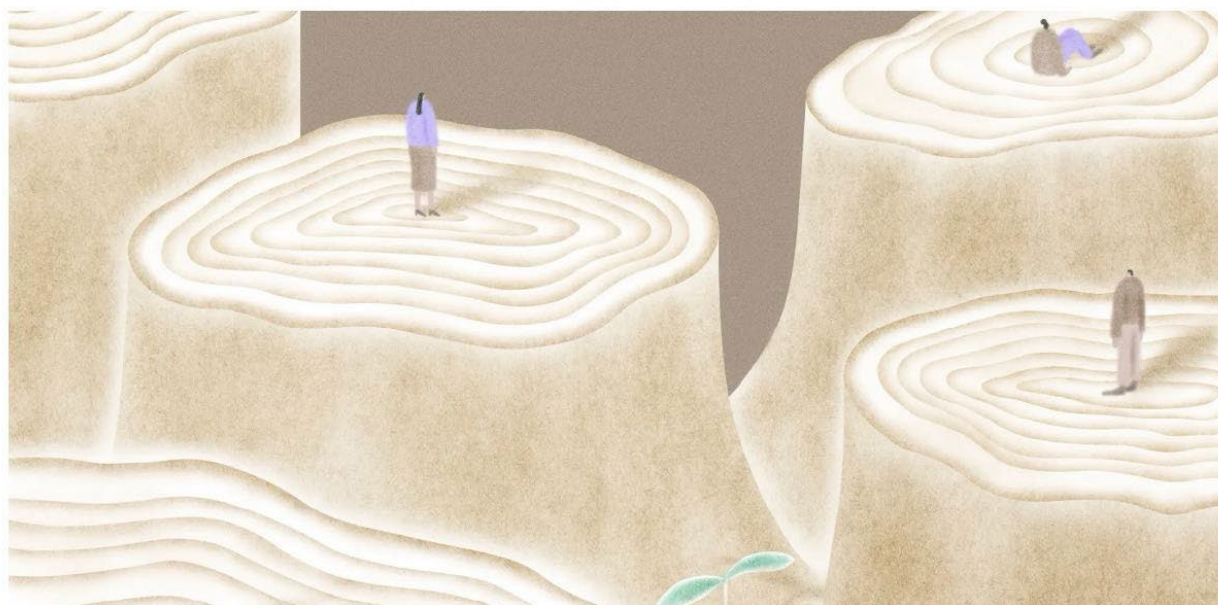
Do You Experience Climate Anxiety?

Can widespread eco-distress be a catalyst for climate solutions?

 Give this article



 326

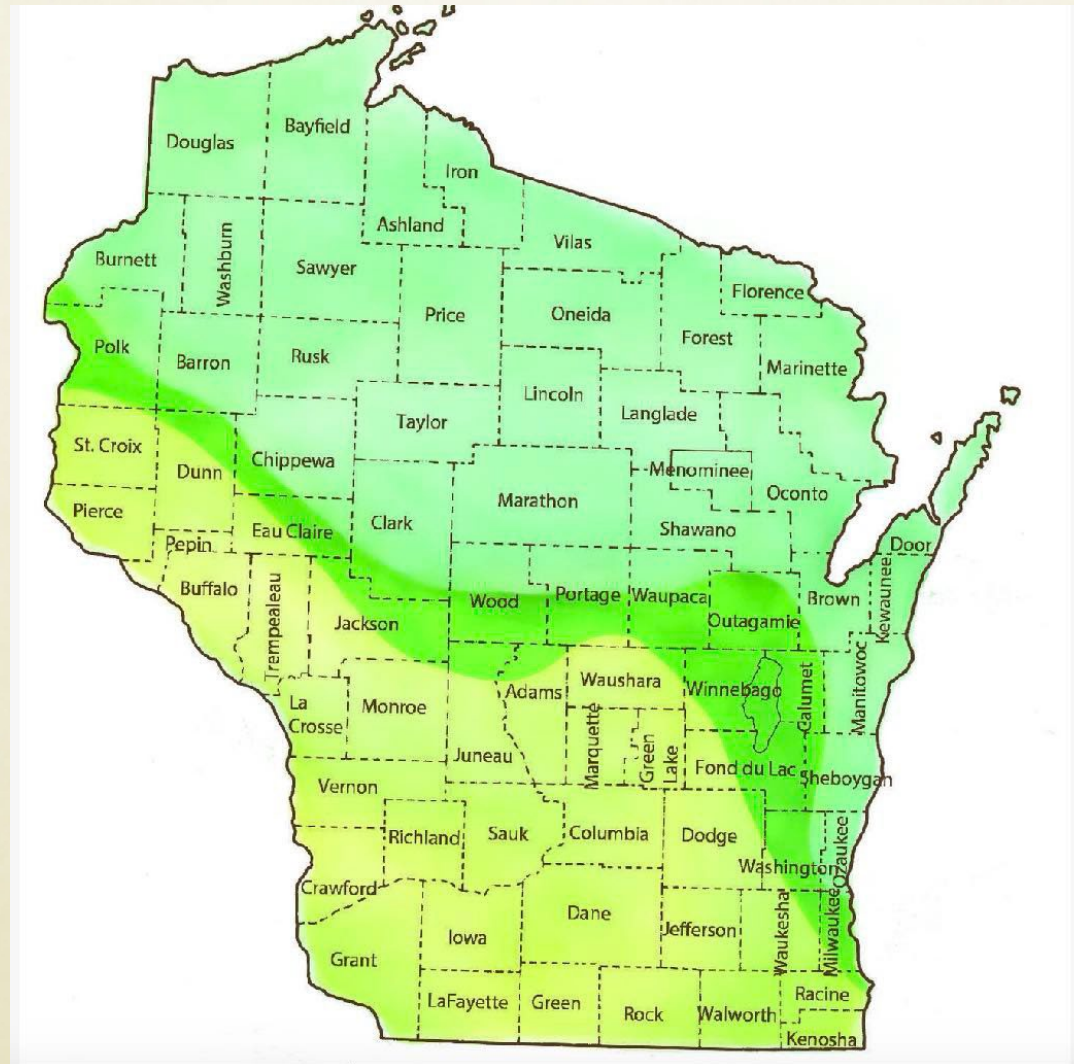




- Cameron School District Native Planting



Ecological Tension Zone



What Are Native Plants and Why are they Incredibly Valuable?

1. They are from this region/biome and are thus well-adapted to soil types, climate, animal groups and eco-tones.
2. They lend crucial support for other insects and animals by providing food, habitat and cover.
3. They have “functionality” in the landscape, whether filtering water, building soil health, preventing erosion, infiltrating water, adding bio-diversity, or photo-synthesizing the sun.
4. In short, Native Plants have millions of years of evolution in their DNA, in making this place a home, meaning they have a significant role in creating and keeping this habitat whole and functioning. They are resilient and provide resilience.

And, they are beautiful, especially
together









Good-Natured
Landscapes













Pathways to Native Plants

Direct seeding on bare ground — meadow seeding.

Establish friendly perennial cover crop or nurse crop and build off it with live plants or by inter-seeding.

Plant live plants into bare ground with mulch or some form of resilient cover, i.e. cardboard, carpenter's paper, overturned sod — major mulch continuously.

3. Any combination.... but start small and slow, and the **planting windows are May 15 to July 1 or August 1st into fall.**

Direct Seeding On Bare ground

How do you achieve bare ground?

1. **Repeated tillage**, every two weeks for months.
2. **Black plastic**, well secured, for at least 9 months. Don't allow plastic to fragment.
3. One time, or several times, **application of herbicide** — wait for at least a month.

Cover or Nurse Crop

1. **Establish a suitable cover or nurse crop** — one that out-competes weeds and either winter kills or can be effectively mowed. Low-mow fescue for example.
2. **Plant live Native plants** in the nurse crop — in early summer window preferably.
3. **Mark and mulch** live Native plants **heavily**.
4. **Mow** in such a way that live Native plants are not killed.
5. The next spring, **continue to mark and mulch** live Native plants, and **mow area to height of @8" to 10"**.
6. Continue to mark, mulch and mow to favor Native plants.

Live Plants in Bare Ground

1. Remove existing vegetation: till ground repeatedly, insolation with plastic, use of herbicide.
2. Plant live plants, mark them, use serious mulch — cardboard, carpenter paper, etc., and tend the live plants over time: **mark, mulch, mow above live plants.**
3. Remember: **Native plants put most energy into their roots for first two/three years and are hard to discern, tend and manage.**

Keys to Establishing Native Plants

1. Native Plants put most energies into root formation over early seasons.
2. They are hard to identify and weeds out-compete them, which can be fatal for Native establishment.
3. Clearing the existing vegetation is challenging, yet absolutely essential.
4. Once established, Native plantings need periodic burning or removal of vegetative cover in spring for new plants to emerge and additional Native seeds to germinate.
- 5. You can create favorable conditions for Native plants, but ultimately not control them: they move, they recede, they flourish, they disappear.**

Resources

- Doug Tallamy — Nature's Best Hope, Bringing Nature Home, The Living Landscape
- Larry Weaner, Thomas Christopher — Garden Revolution
- Owen Wormser — Lawns into Meadows
- David Wallace-Wells — The Uninhabitable Earth
- Prairie Moon Native Seeds, Winona, MN
- Dragonfly Gardens, Live Native Plants, Amery