Organic Establishment of Native Wildflowers

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Native Pollinator Education for Eastern Oklahoma

Why We Need Pollinators

- 70% of plants require an insect to move pollen
- 35% of crop production worldwide requires pollinators
- One in three mouthfuls require plants that need pollinators

Pollinators

- Bees, Beetles, Butterflies/Moths, Flies, Wasps, Ants, and Bats
- Bees are the most important
- Relying on the European Honeybee leaves us reliant on one pollinator
- North America has more than 4000 native bee species
- Native Pollinators are more efficient at pollination than Honey bees

How do we Encourage Pollinators

- Natural habitat (Native Wildflowers) increases pollinator diversity and abundance
- Three flowering species in each season of the year (spring, summer, fall)
- Crop pollination is more effective in the presence of native habitat.
- Buffer zones, hedge rows, riparian areas

Concerns

- Some have expressed concerns about increasing native bee populations and the risk of being stung.
- How formal plantings look with native plants
- Amended soil may be to rich and irrigation can cause problems
- Longevity of the planting

Issues Facing Native Pollinators in North America

- Habitat Loss
- Disease
- Climate Change
- Changing agricultural practices

Wildflowers

- Annual and Perennial
- Most require stratification and/or scarification
- Fall planting best
- Must have well prepared seeded free of competing vegetation
- Select species based on location (wet, dry, sun, shade)
- Seed should be sourced regionally (seed from Minnesota may not grow well in Oklahoma).

Wildflowers

- Many wildflowers fall germinate
- May need to mow late in the year (November) to increase sun exposure on the ground over the winter.

Things to Consider before Establishing Native Wildflowers Organically

- What is the goal of the planting (short term, long term)
- Region of the United States
- Ability to prepare site
- Soil condition (degraded from erosion, compacted by construction)
- Erosion Potential if Tilled and Fall Planted
- Existing vegetation
  - Native
  - Non-Native invasive
- Attractivness to a variety of pollinators vs. a few or a single pollinator

Identifying Plants for Your Region

- Seed nurseries
- Research
- Plant a mix of wildflower seeds first, observe what survives and increase those species
- Annual, Perennial, Shrubs, Trees

Site Management

- Burning
- Brush hogging and mowing (vary the area and at different times of the year to maintain diversity)
- Rotational grazing
- Site disturbance to expand planting

Challenges Faced At the Kerr Center Ranch

- Non Native vegetation- Crabgrass (*Digitaria sanguinalis*), Bermudagrass (*Cynodon dactylon*), Johnsongrass*(Sorghum halepense*), Sericea Lespedeza (*Lespedeza cuneate*)
- Fescue (*Festuca arundinace*) can be a problem, but compared to the plants listed above I consider it less of an issue.
- Purchasing seed for our specific region
- Site preparation
- Variable weather patterns
- Learning how to manage a planting from year to year

Native Landscape Kerr Center Headquarters

Native Pollinator Habitat behind Hort. Farm

Native Pollinator Habitat behind Hort. Farm 2017

Native Pollinator Habitat behind Hort. Farm 2017

Native Pollinator Habitat behind Hort. Farm 2017

Attempt to Convert to Native Prairie

Pond Wildflower Plot Near Kerr Center Office

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Maximillian Sunflower

Helianthus maximiliani

Carolina Buckthorn
Rhamnus caroliniana

Kerr Center Native Prairie Prescribed Burn

Native Prairie Kerr Center Ranch

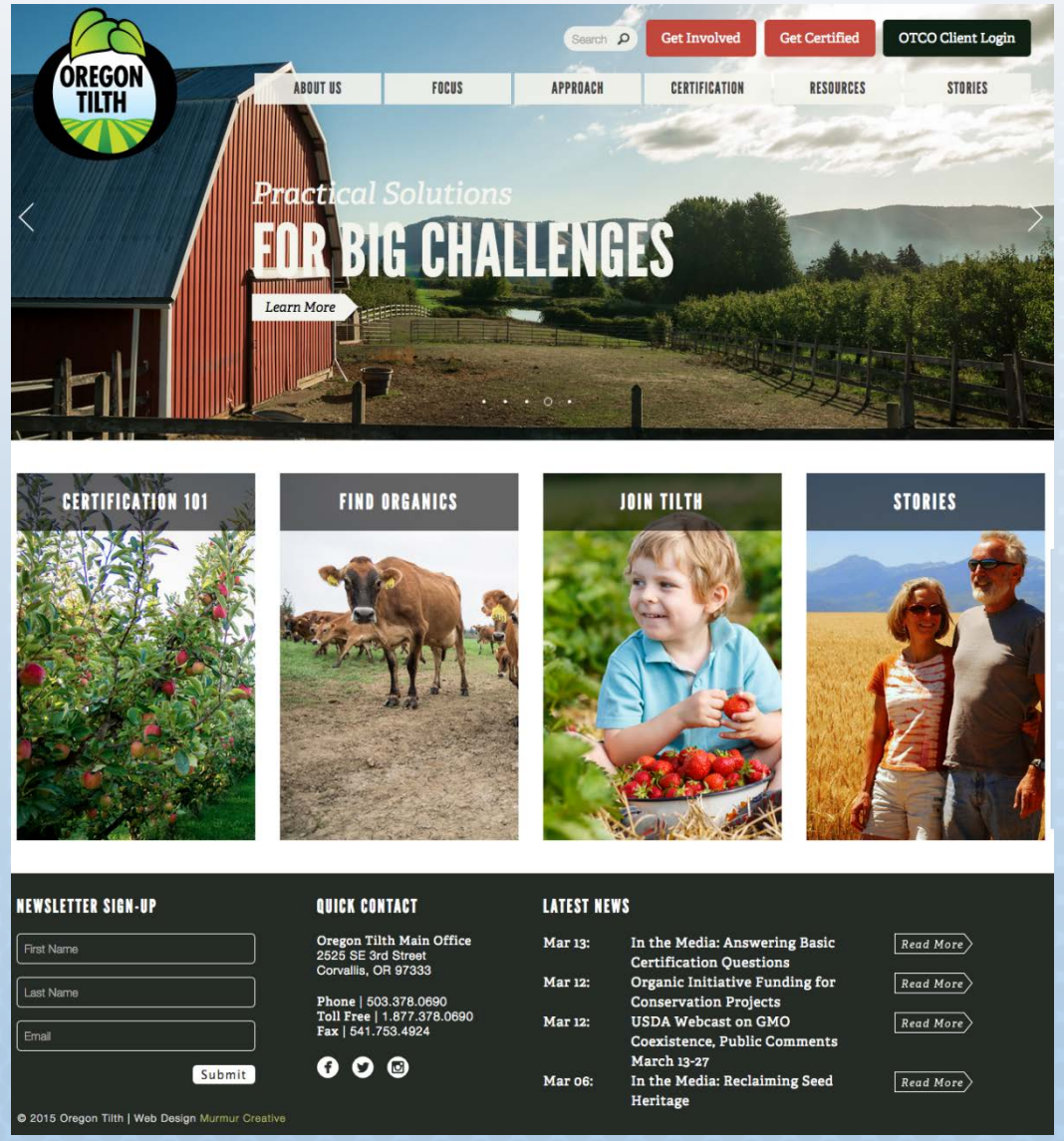
Native Prairie Kerr Center Ranch

Questions?

Oregon Tilth

Resources
Online library of publications, articles, FAQs, guides and more

Events/Webinars
Calendar for 2017



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