

Intertwine Alliance Conservation Forum

Pollinator Conversation

January 21, 2016
Meeting Notes



MC: Bruce Barbarasch, Tualatin Hills Park & Recreation District
Meeting space facilitated by: David Cohen, Intertwine Alliance
Moderator: Janelle St. Pierre, Portland Parks & Recreation
Speakers: Elaine Stewart, Metro
Mary Logalbo, West Multnomah SWCD

Intro to the Conservation Forum

The purpose of the Conservation forum is to provide a venue for the conservation community to get together to discuss topics that will help advance efforts based on the Intertwine Regional Conservation Strategy. There will be four sessions in 2016 that focus on Pollinators, Wildlife Corridors and Connectivity, Project/Partner Updates, and Measuring Project Success. These forums are designed to spark conversations, create connections, and spawn working groups as appropriate. Bruce Barbarasch and Jonathan Soll are the leads from the Conservation Steering Committee and hope to connect people and resources when possible.

Overview of Topics for Discussion

- Pollinator basics and monitoring discussion
 - Elaine Stewart provided an overview of the life cycle of a few pollinators
 - Key points:
 - Pollinators need nectar and pollen sources across the season and not all pollen has the same value as a food source.
 - Different species (particularly butterflies) need host plants and over wintering sites to complete their lifecycle.
 - The range of habitat needs required by different pollinator species is highly variable but, depending on the species, they may require habitat features to be present in a fairly small areas for their entire life cycle.
 - Most of our native bees are solitary nesters that build nests in a wide variety of locations including bare ground, stems of plants, and woody material. Native bumble bees form small colonies.
 - There are limited data available for most of the native bees, but it's thought that many populations are at risk.
 - The goal of the monitoring break-out section is to explore our needs and information gaps. Here is a starting point:
 - What do we want to monitor? How technical do we need to be?
 - There are several protocols available: streamlined protocol, maritime northwest protocol, Bumble Bee watch.
 - Protocols vary widely in level of difficulty and training needed.

- What food and nesting resources do we have and what do we need to create? Do we need to monitor habitat, and how?
 - What are adequate patch sizes and levels of connectivity for pollinator habitat?
 - What information gaps do we have?
 - What are we doing, and what can we do?
- Pollinator habitat across the landscape
 - Mary Logalbo, with the West Multnomah Soil & Water Conservation District (WMSWCD), described efforts across multiple landscapes from hedgerows in working landscapes to backyard habitats and the development of The Meadowscaping Handbook.
 - The goal of the habitat discussion is to find out what areas people are interested in exploring in more detail. Topics for review include:
 - Landscape design questions
 - Site management logistics
 - Regional scale questions- how do we determine habitat needs?
- Survey of other pollinator initiatives from meeting participants:
 - WMSWCD: Working on a variety of pollinator projects across different landscapes. Staff are working on community science pollinator monitoring with Xerces Society. They have purchased bulk native seed for pollinator meadows and distributed this to interested landowners and at outreach events.
 - Portland Bureau of Environmental Services: Interested in developing best management practices for pollinators along the lines of the BMPs for nesting bird impacts.
 - Swarm Portland: local group that is looking for opportunities to create urban habitat for bees and promote pesticide reduction.
 - Backyard Habitat Certification Program: New initiative to support food security and air quality through community gardens and hedgerows.
 - Forest Park Conservancy: Looking for opportunities to create corridors in the industrial district.
 - Metro: working on assessing corridor connectivity, there is a challenge in finding appropriate surrogate species for prairies.
 - Tualatin Hills Park & Recreation District: Working on projects to create pollinator habitat in powerline corridors and a former quarry site. Also interested in the regional conversation of propagating and promoting understory plant species.
 - Natural Resource Conservation Service: has published pollinator technical notes (see the resource section below). They are working on bigger tracts of land.
 - Jackson Bottom Wetlands: There is a pollinator garden on site and larger restoration efforts including mason bee studies.
 - Portland Parks & Recreation: Working on creating pollinator habitat in multiple parks from a larger meadow at Gabriel Park to demonstration gardens on Forest Park and small meadows in wooded parks.

Break-out sessions

- **Habitat:** This discussion consisted of a survey of topics that participants were interested in exploring.
 - Landscape transition: what does the process look like for creating pollinator habitat

- Forbs- how do we integrate more forbs into our restoration efforts
 - We think in terms of meadows but tree and shrub layers need to be part of the pollinator landscape. What else do we need about including on the landscape (like bare areas)?
 - Public outreach is needed to explain the landscape transition process – signage is helpful – Xerces Society has a nice template
 - Numerous opportunities exist to install habitat features with a host of landowners including powerline corridors. Portland Parks & Recreation and Metro are working with Bonneville Power Administration on a powerline corridor pilot project which will create a larger scale patch template.
 - Maintenance: What do these landscapes really require?
 - BMPs for landscape transition and restoration practices
 - What does after care look like to support the whole pollinator life cycle? Example: leave nesting areas intact
 - Benchmarks across the region?
 - What scale do we need to get to and how do we map collective efforts? The Xerces Society has highlighted to us that any habitat is good habitat and it's more crucial to think about creating stepping stones of habitat throughout the landscape than a singular acreage goal.
 - What are the key species we should be looking for?
 - There is a science gap/barrier for native bees. Little is known about a lot of species and there is a lot of variation in life cycles and specific species needs.
 - What does connectivity for pollinators really mean?
 - What are the linkages between anchor sites, planting strips, back yards?
 - Bigger habitats have a lot of benefits, but smaller sites also have value.
 - Need to look at the connected links and the “deserts”. Are there opportunities for change across industrial landscapes?
 - Site management considerations:
 - There is a need for a practical management training/discussion
 - Site prep, site prep, and more site prep for small to large sites
 - Don't overlook aesthetics on small sites
 - Winter conditions considerations
 - How much bare earth do we really need?
 - Restoration is focused on dense planting, but bees need some bare ground for nesting
 - Plant material resources:
 - Portland Metro area effort to propagate forest forbs on a large scale- currently field testing species
 - Institute for Applied Ecology is working on prairie seed needs and opportunities for production
- **Monitoring:**
- Current efforts:
 - City of Portland PAWMAP monitoring is focused on streams and macroinvertebrates. It would be good to have more organized surveys of terrestrial invertebrates, birds, water quality, and other habitat surveys.

- Port of Portland is working on field trials of site prep and seeding for pollinators looking at protein and nutritional content for seed mixes. Bridgetown Bees have aviaries on Port property. Xerces is doing pre and post monitoring on Government Island.
- Community scientists engaged in bio blitz efforts around the region. Could these support pollinator corridor work?
- Several acres of pollinator habitat is planted at Baltimore Woods. Neighbors are planting milkweed with some effort to monitor for monarchs.
- WMSWCD has 22 pollinator sites and is currently monitoring vegetation. They are working on developing a community/ citizen science monitoring effort following Xerces protocols. The Backyard Habitat Certification Program has some involvement as well.
- Other groups are very interested in training and could help to pull together training opportunities, example of mason bee class for Master Gardeners.
- Metro has two large areas (17 and 40 acres) on the closed St. Johns Landfill; one has been being seeded with native wildflowers and the other is in site preparation. No pollinator monitoring at this point, but planning to implement the maritime northwest protocol.
- Are there opportunities to create pollinator habitat in restoration projects creating young forests? For example, seed wildflowers and install shrubs for temporary (10-20 years?) pollinator habitat while forest establishes?
- Resource needs:
 - We want to learn/monitor but also provide opportunity for public education/ interest. Are there people out there that already know pollinators?
 - Audubon has done an amazing job developing community science volunteers. The City contracts with Audubon, are there other opportunities for this model working with Xerces?
 - How much expertise do we need to monitor effectively, how deep does the knowledge need to be? How do we measure restoration uplift?
 - Technical expertise is a big issue, even with taxonomists at universities. Xerces is training a pool of people, but how do we engage them?
 - There is a fairly active community of butterfly enthusiasts and an emerging group for dragonflies. Basic visual guides help, but sometimes you need a microscope to discern bee species. Princeton Press just published a backyard beetle book- east of the Rockies. Discover Life is another resource.
 - Maritime NW does a good job of habitat health assessments. What other resources are out there for monitoring/ assessments? Xerces produced a guide to habitat assessment created for agricultural settings. This could be adapted.

Summary discussion

- The habitat discussion generated a lot more questions than answers.
 - How do we carry the current effort to next level?
 - Are there opportunities for WMSWCD and other partners to share their experience with other groups starting to implement projects?
 - What does a regional discussion on pollinator needs look like?

- How do we create landscapes that bring people in and promote more pollinator habitat across the landscape?
- There is a desire to monitor the results/ uplift of the work, but we need more practice/application.
- Monitoring protocols require training to be accessible. There is a current effort with WMSWCD to test volunteer training
- There is a need for local references. We don't have a comprehensive list of pollinators in the area.

Resources:

NRCS Tech Note for Oregon:

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_041919.pdf

Host of Xerces Resources Available Here: <http://www.xerces.org/pollinators-pacific-northwest-region/>

The Pollinator Stakeholders Report: <http://www.xerces.org/wp-content/uploads/2008/06/Pollinator-Conservation-in-the-Portland-Metro-Area.pdf>

Native host plants and nectar sources for Western Willamette Valley Butterfly Species (WMSWCD):
<http://www.wmswcd.org/content.cfm/what-we-do/native-planting>

Bloom table (Metro) See Appendix B in:

http://www.oregonmetro.gov/sites/default/files/06092014_westside_trail_appendix_C_report_3_design_framework.pdf

The Meadowscape Handbook – *Coming April 2016!* <http://www.wmswcd.org/programs/pacific-northwest-urban-meadowscape/>

Pocket Guide to Identifying Bees of Portland (PP&R and Xerces- in the process of being updated)

Habitat Landscape Design created this video for the 2015 Fall Orchard Bee Association Convention that took place in Portland and Hood River: <https://vimeo.com/154440471>