



# Gabriel Pollinator Meadow

## Project Information

### A Rare Opportunity

Portland Parks & Recreation (PP&R) is creating a pollinator meadow at Gabriel Park by planting native grasses and wildflowers. Gabriel Park has a variety of natural areas including mature forest, wetlands, shrub lands, and riparian areas. This location was identified as a good opportunity due to its proximity to the natural area, community garden and orchard which will all benefit from the increased pollinator population. Pollinators, like most bees, birds, and other insects, play a crucial role in flowering plant reproduction and in the production of most fruits and vegetables.

Native pollinators have some specific habitat needs that are not common in most landscapes. They need access to bare ground, woody material, and pithy or hollow plant stems for nesting. Some species like bumblebees need a safe place to overwinter in protected spaces like wood piles along a forest edge. Native bunch grasses create open spaces in the meadow for ground nesting bees and a wide variety of flowers for food resources. Butterflies need both host plants for caterpillars to feed on, and nectar resources for food. A meadow at a forest edge provides an opportunity to create a complex pollinator habitat for a lot of different species.

### Creating a Native Meadow

Before the project started, the existing meadow was dominated by pasture grasses and a few, mostly non-native, flowering plants. This lack of diversity provided limited resources for the whole range of pollinators. To be able to reseed the area with a diverse mix of native plants, it is necessary to remove the grasses and weeds on the site, and in the soil seed bank. Seeds can lay dormant until the right conditions are met to germinate. The site preparation process has taken a couple of years to reduce the presence of non-native vegetation and create the bare soil conditions that are necessary for seeding to be successful. This area will be seeded in the fall of 2017 with over two dozen species of native flowers and grasses. To further enhance habitat conditions, the forest edge was planted with a variety of trees and shrubs last spring.

PP&R has used a variety of tools to create the pollinator meadow at Gabriel Park. Methods have included manual, mechanical and chemical techniques to reduce the presence of non-native vegetation. Using our Salmon-Safe certified Integrated Pest Management Program (IPM), staff selected an herbicide treatment that was of minimal risk to the environment, animals and people. These practices are widely accepted and utilized by other conservation organizations to restore native meadows throughout the Willamette Valley.



## Frequently Asked Questions

<b>Will the spray treatment put me, my kids or my dog at risk?</b>	The methods used are designed to protect park users. Materials chosen break down quickly in the environment. Treatments target plants and have low toxicity to humans and animals. For more information, go to the National Pesticide Information Center: <a href="http://www.npic.orst.edu/">www.npic.orst.edu/</a>
<b>Is the treatment safe for the orchard and community garden?</b>	The treatment is applied during dry periods with little to no wind, to avoid drift of the chemical. A mulched buffer and fencing was installed so that people and pets do not accidentally access the site. Signage is always posted during treatment.
<b>What is the spray treatment?</b>	At this site, dilute amounts of glyphosate or triclopyr choline are applied. The material is applied by state-licensed herbicide applicators using backpack sprayers. These chemicals have been scrutinized through extensive research to understand how they might be safely utilized as a tool for controlling weeds.
<b>What activities are planned at this site in the coming months?</b>	The area will continue to be monitored and evaluated by PP&R staff. This fall, a final herbicide application will occur to complete site preparation. Following this work the area will be seeded with over two dozen native wildflower and grass species. Minimal spot treatments using herbicide may occur after reseeding to make sure weedy species are controlled.
<b>What will the meadow look like during and after treatment?</b>	During the site preparation process the weeds in the meadow will die back and new weeds will re-sprout from the seedbank. The repeated treatments are designed to exhaust the existing weed seeds in the meadow to reduce competition for the new native plants. After seeding in the fall of 2017, it will take some time for the new plants to fill in. Native seed broadcast on the site will germinate over the next year and native plants will start to establish on the site.
<b>Who is working on this project?</b>	The original idea for this project was developed with the Friends of Gabriel Park and PP&R staff. A project concept was discussed with the community in the fall of 2015. PP&R staff are implementing the project with volunteer assistance.
<b>Why can't all the invasive plants be removed by hand?</b>	For the seeding to be successful, the site needs to be predominantly bare dirt. It is not feasible to have volunteers repeatedly pull up and haul off all the plants on a one acre site. In dry conditions, pulling plants will leave roots to re-sprout.
<b>What is Integrated Pest Management (IPM)?</b>	IPM is a tool that helps us determine the best way to manage a site. IPM considers several factors including: cost, site appropriateness, effectiveness and risk to people, property and the environment. PP&R's IPM Program was the first Parks Bureau in the nation to receive Salmon-Safe certification and is considered a nation-wide model. Questions regarding the program can be addressed to the IPM Coordinator <b>Nichole Linehan</b> at <a href="mailto:Nichole.linehan@portlandoregon.gov">Nichole.linehan@portlandoregon.gov</a> or <b>503-823-1991</b> . <a href="https://www.portlandoregon.gov/parks/IPM">https://www.portlandoregon.gov/parks/IPM</a>
<b>How can I support this effort?</b>	<ol style="list-style-type: none"><li>1. Respect the fencing and please keep people and pets out of the meadow.</li><li>2. Learn more about local bees from this handy guide: <a href="https://www.portlandoregon.gov/parks/article/585770">https://www.portlandoregon.gov/parks/article/585770</a></li><li>3. Volunteer to participate in a stewardship event with Portland Parks &amp; Recreation: <a href="http://www.portlandoregon.gov/parks/stewardship">www.portlandoregon.gov/parks/stewardship</a></li></ol>

Questions about this project can be addressed by contacting Natural Resource Ecologist,

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