

Watershed Events

Glenn and Gibson Creeks Watershed Council
Summer 2022



Backyard Biodiversity

What you do in your yard makes a big difference!

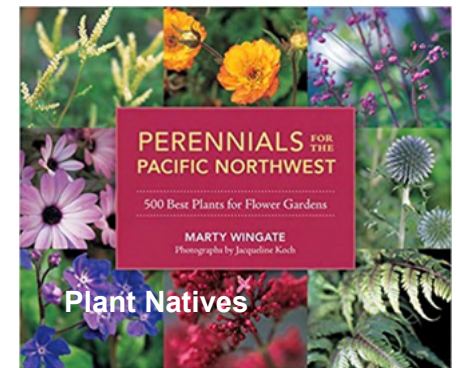
Biodiversity loss is real. We are in the middle of the sixth extinction. Conditions are not improving. The May 6, 2019 UN report estimates over 1 million species globally are threatened, and as many as 120 species go extinct daily. <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>

As scientists looked for areas of importance for biodiversity conservation, rain forests, estuaries, floodplains, wetlands and riparian corridors emerged as critical habitat. These are also places that attract humans.

When these scientists looked to restoration with the goal of increasing biodiversity, places with the most potential were rain forests and those natural features associated with human development. Restoration biologists became very interested in the urban and suburban environment.

It is an exciting time to be an urban gardener. Any one particular yard or woodlot could be an important steppingstone in maintaining connectivity, or it could play an important role in keeping habitat value above a critical threshold for some species. It could be yours.

This issue looks at what we can do as urban and suburban gardeners to maximize the food and shelter we provide to as many species as possible. The rewards are beauty, a never failing theater of interest, and the knowledge that your garden adds to biodiversity.



<https://www.pacifichorticulture.org/articles/your-urban-backyard-habitat-can-support-biodiversity/>



Creating Backyard Biodiversity

All species, including humans, have similar needs for survival. The fulfillment of those needs will look different depending on the species, but basic needs remain the same. From microscopic to megafauna and fauna, all living things need food, water and shelter. The more variety (or niches) you are able to provide, the greater the biodiversity potential.

Limit the use of pesticides. Diverse gardens have fewer pests due to the thriving food chain in a biodiverse garden. Pesticides can cause collateral damage, often to the very parts of your garden you want to encourage. The impact of pesticides is not limited to the area of application. They drift into the air, wash into our drinking water, and contaminate everything they touch. They have been linked to human health risk. Natural gardens are the healthiest and the most diverse.

Plant Natives. Native plants are adapted to local soils and weather conditions. They already coexist with local pollinators. They require less care and provide more food and shelter to the variety of life you want your garden to host. If you have enough variety, the food they provide will include nectar, seeds, nuts, fruits, berries, foliage, pollen, and insects. The shelter they provide will extend from the tip of the top branch or frond to the lowest root extension in the soil and will host an incredible variety of creatures.

There are many references for information about trees, shrubs and flowers native to our region. Here are two that are comprehensive and user friendly:

Metro

<https://www.oregonmetro.gov/sites/default/files/2018/01/24/native-plants-willamette-valley-yards-booklet.pdf>

This booklet, Native Plants for Willamette Valley Yards provides 54 pages of information about creating backyard biodiversity.

Audubon

<https://www.audubon.org/native-plants/search> This site allows the user to select native plant information by zip code.



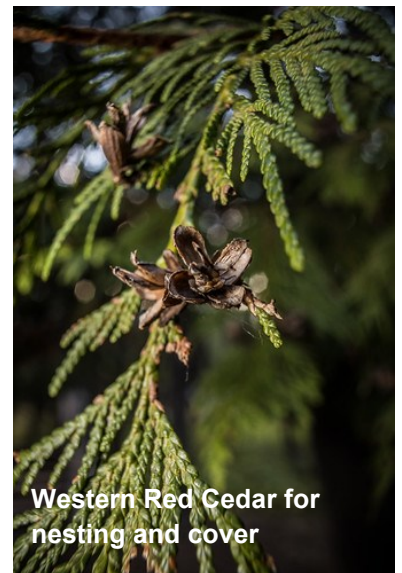
Columbine for nectar



Pacific Flowering Dogwood for Fruit



Showy Milkweed for Nectar



Western Red Cedar for nesting and cover

Add a Water Feature: It can be as simple as a low spot in your yard that collects water, or as elaborate as a backyard water fountain. Running or bubbling water is especially attractive to birds. Butterflies are attracted to “puddlers”, shallow dishes of water filled with gravel, rocks and sticks. Mineral salts and mashed fruit can also be added to these butterfly stations. Amphibians, insects and reptiles will appreciate a ground level water dish partially filled with mud and gravel.



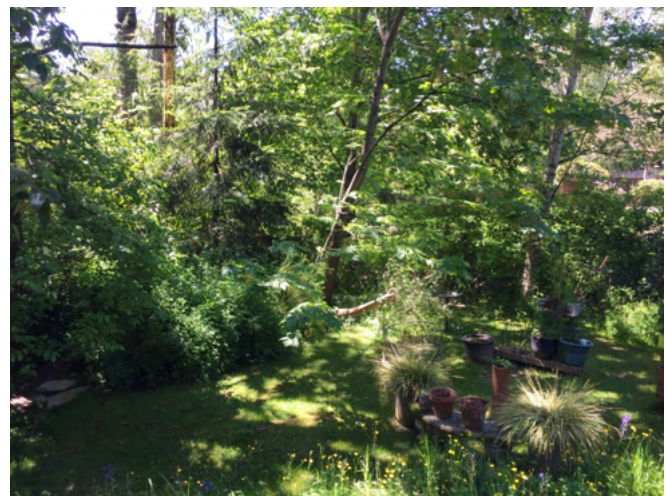
Shelter

Trees, shrubs, brush, wood piles, dead tree snags, rock piles, all make good shelters for life from bugs to birds. Greater variety adds more opportunity for homes. Height variation, different levels, habitat holes - all are factors to consider when creating homes. It is important to provide nesting places for young, hiding places for both predators and prey, shelter from the elements. If natural shelters are not available, consider constructing nesting boxes for birds, bee blocks, or other artificial shelters.



Control Invasives

Invasive species are a problem because they eliminate biodiversity. One invasive species such as English Ivy or Shiny Geranium can turn your backyard into a monoculture. Early detection and action make eradication and / or control possible. For example, it may not be practical or even possible to eliminate every dandelion in your yard. Dandelions are some of the earliest pollinators blooming. But, if you want to avoid an entire yard of dandelions, uprooting them before they go to seed will provide control.



Enjoy your biodiversity

The last way to add biodiversity to your garden is to enjoy it. When taking the time to enjoy your garden, you will notice more of nature around you and discover more ways you can enhance your garden. Increasing biodiversity is an ongoing process.

Updates to two biodiversity projects in the Glenn and Gibson Creeks Watershed



Glenn Creek Dam at Salemtowne

Glenn Creek Dam at Salemtowne update

The dam across Glenn Creek at Salemtowne is the longest standing project in the Glenn and Gibson Creeks Watershed Council (GGWC) work plan. Steep step pools create a barrier to fish passage. The water in the pool behind the dam fails temperature and dissolved oxygen standards. Bullfrogs, predators of young trout, thrive in thick algae mats. The pond is no longer used for irrigation and the dam has never generated power. The pond wall is collapsing.

GGWC has proposed either removal of the dam and restoration of the pond to wetland marsh or rebuilding the step pool of the existing fish ladder to pass fish, removal of invasive vegetation and replacement with native shrubs and trees.

In the most recent study of conditions at the dam and fish ladder (July 2021), Oregon Department of Fish and Wildlife (ODFW) found that to provide fish passage, the existing structure will need to be modified so that the pond will be at the same level as the creek. They have provided project plans, will do the necessary construction, and they offer to cost share. They await agreement from all parties.

Reestablishing fish passage at this point would reunite the Willamette River floodplain with the upper level of the Glenn and Gibson Creeks watershed. Resident and fluvial fish could start to move upstream. The creeks could flow freely, providing better water quality. The pond area would convert to riparian corridor vegetation, creating habitat for many species.

Wallace Marine Park Rain Garden update



Garden signage explains the rain garden function, stormwater flow, and who depends upon the Willamette River.

Challenges have been the wear and vandalism that can come in public areas, but the project continues to contribute both to biodiversity and to education.

Rain gardens contribute to biodiversity. They add beauty, habitat, and provide a tool to capture, store, and filter stormwater. Wallace Marine Park rain garden was designed for stormwater management and education.

