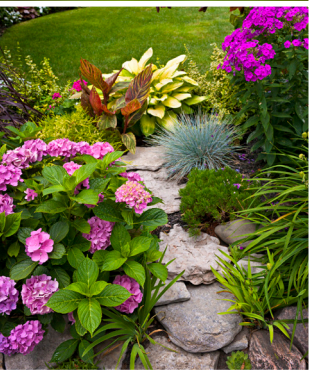


How to create your own **BACKYARD** **WILDLIFE HABITAT**



Lake Hills Greenbelt Ranger Station
15416 SE 16th St, Bellevue, WA

DESIGNING YOUR OWN BACKYARD WILDLIFE HABITAT

Your home is your habitat. As our cities and towns grow, wildlife lose their habitat. But you can help.

The Lake Hills Greenbelt Ranger Station Backyard Sanctuary began as many suburban gardens do: with trees, a lawn, and a few shrubs. Today the garden provides the essential requirements for numerous species. Making a few small changes in your yard can have a major impact for wildlife. You can help wildlife and have a beautiful backyard too! Here's how:



1. PROVIDE THE 4 BASIC NEEDS

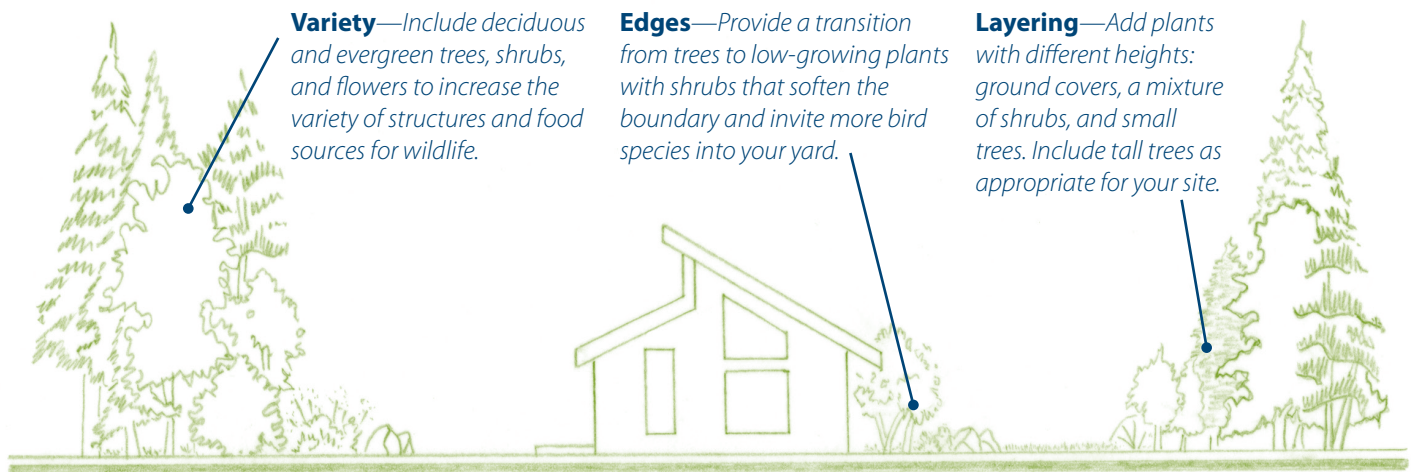
Food—Seeds, berries, nuts, flower nectar, insects

Water—Birdbaths, ponds, puddles, streams

Shelter—Trees, shrubs, brush piles, rock walls, hollow logs, dead trees (snags), wildlife houses

Space—Corridors, open space, sanctuaries, and backyards

2. CREATE DIVERSITY

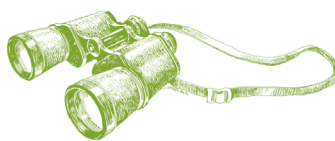


Variety—Include deciduous and evergreen trees, shrubs, and flowers to increase the variety of structures and food sources for wildlife.

Edges—Provide a transition from trees to low-growing plants with shrubs that soften the boundary and invite more bird species into your yard.

Layering—Add plants with different heights: ground covers, a mixture of shrubs, and small trees. Include tall trees as appropriate for your site.

3. OBSERVE



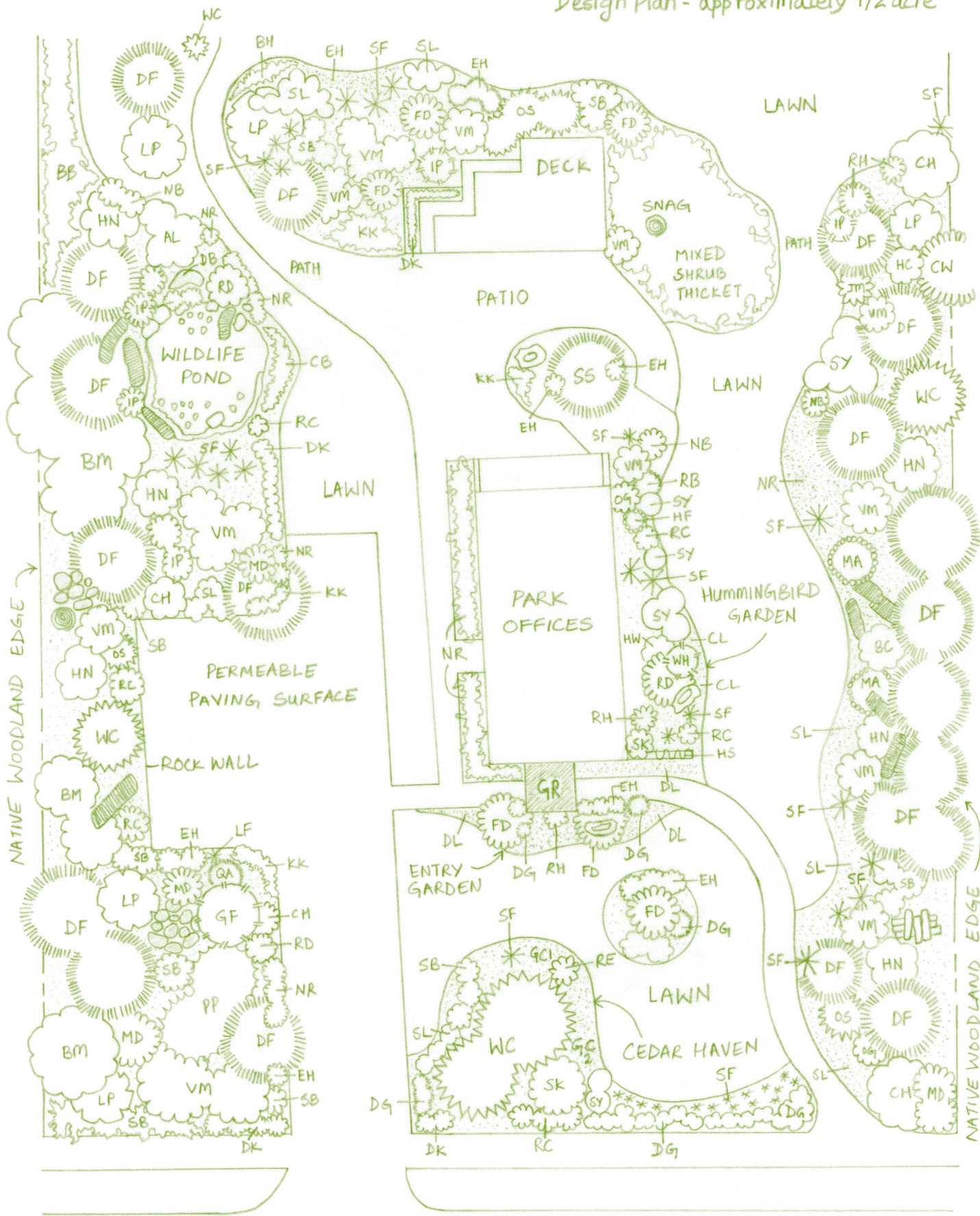
Be sure to include sitting areas inside and outside your home where you can watch your backyard wildlife.

As you wander through the garden, look for examples of how the design provides the basic needs for wildlife: food, water, shelter, space. Also notice how the use of different plants, the development of edges between habitats. Look at how the creation of layers increases the diversity of the habitat. Think about how you can provide these elements in your own backyard.



LAKE HILLS GREENBELT WILDLIFE HABITAT DEMONSTRATION GARDEN

Design Plan - approximately 1/2 acre



4. PRACTICE NATURAL YARD CARE

Create a safe environment for your family, pets, wildlife and the environment by practicing the following guidelines:

☘ Healthy Soil

Dark colored soils are rich in organic matter which is an indicator of rich, fertile soils. Amending the soil with compost every spring improves soil texture and feeds the beneficial organisms in the soil, which in turn creates healthy plants.

☘ Limit Lawn

Reduce the size of your lawn. Mow higher and mow regularly. Leave grass clippings as mulch. If weeds are a big problem, only spot spray with herbicides. Broadcast applications of 'weed and feed' products are toxic to humans, pets, wildlife and our environment.

☘ Right plant, Right place

Choose plants to match soil, water and sun conditions in your yard and group them by their needs of soil, water and sun.

☘ Avoid Pesticides

If you see a bug, do not assume it is going to harm your plant. It can be a 'beneficial' bug that is a natural predator for the problem pests. If a pest or weed problem develops, opt for the least toxic solution. Avoid chemical pesticides as much as possible.

☘ Smart Watering

Always water deeply and infrequently. Use soaker hoses and drip irrigation to deliver water to the root zone. Mulch the beds to prevent evaporation. Prevent runoff into storm drains.



5. EXPAND YOUR IMPACT

Corridors

Work with your neighbors to create corridors that provide cover for wildlife moving to and from different food sources or nesting places to food sources.

Sanctuaries

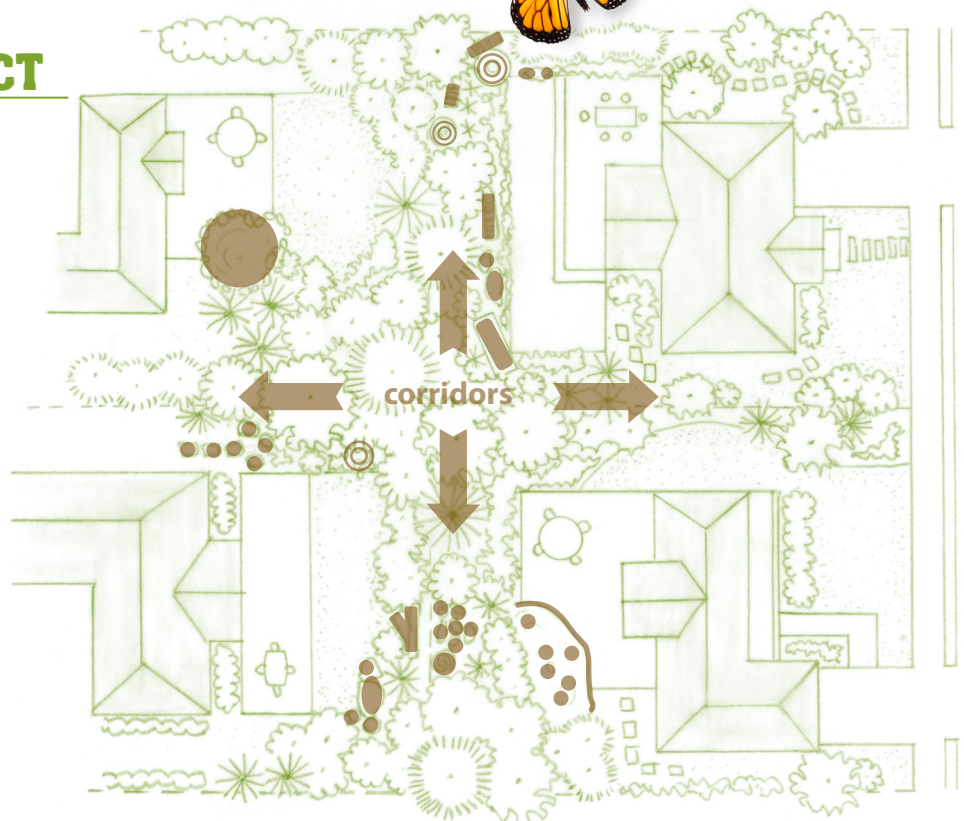
Set aside a quiet area that you visit only occasionally. Clump vegetation to provide for secluded habitat and leave some plants unpruned to provide dense shelter.

Snags

Many birds depend on snags for food and shelter. Before removing a tree, ask your arborist about transforming it into a snag.

Seasons

Use plants that bloom and fruit at different times of the year. Provide summer and winter protection with evergreen trees and shrubs.



Legend:

Snag	Woodpile	Birdbath
Rock Pile	Logs	Dust Bath (DB)

WHY USE NATIVE PLANTS?

Plants native to our region are adapted to our climate and soils and require less care than exotic or nonnative plants. Wildlife, in turn, are adapted to our native vegetation both directly by the fruit, berries, and nectar they produce and indirectly through the insect species they support.

Native plants should not be collected from public lands. Plant salvages for areas that are destined for development are organized through King County. Information is available about the King County Native Plant Salvage Program at <http://www.kingcounty.gov/environment/stewardship/volunteer/plant-salvage-program.aspx>.

RESOURCES

Native plants are now available at many plant nurseries. Ask specifically for our Pacific Northwest natives when shopping. Annual plant sales held by the Washington Native Plant Society and the King Conservation District offer a wide range of species.

Further information on native plants and habitat design may be obtained from the following.

Washington Native Plant Society, <http://www.wnps.org/>

King County, <http://green.kingcounty.gov/GoNative/Index.aspx>

Washington Department of Fish and Wildlife, <http://wdfw.wa.gov/living/landscaping/index.html>

King County Library System, <http://www.kcls.org/>



THE LAKE HILLS GREENBELT WILDLIFE HABITAT DEMONSTRATION GARDEN

is a certified Backyard Wildlife Sanctuary. While fulfilling the four basic needs of wildlife, it exhibits a diverse community of native flora of the Pacific Northwest. The garden can be divided into several specialty gardens for ease of demonstration.

Entry Garden: The dish rock under the Flowering Dogwood (FD) is an example of a natural birdbath. Native roses edge the Park Office, while daylilies provide seasonal color to the garden.

Cedar Haven: The large Western Red Cedar is the dominant feature of this garden. It demonstrates use of plants like Redwood Sorrel (GC1) and False Lily of the Valley (GC2) that forms a beautiful ground cover under the dry shade of the cedar tree.

Pond Garden: Water makes great wildlife habitat. There are many species who require it for all or part



of their lifecycle. By providing berry producing plants, tall and short shrubs and trees and many levels of entering the water you can build food, shelter and space into your water habitat. It's good to add a waterfall that will not only attract wildlife to your pond but help prevent mosquitoes from using it as well.

Hummingbird Garden: Hummingbirds love both sun and shade. They need a source of food and water (dish rock as birdbath). Native plants like Columbine



(CL), Hardy Fuchsia (HF), Honeysuckle (HS) and Salmonberry (SY) provide a variety of food sources. Hummingbirds also need to eat protein which they can get from insects and pollen. Decaying logs and rock piles provide a habitat for insects. Moss and lichens on the Hawthorn tree (HW) provide them with nesting material.

Native Woodland Edge: The tall trees like Douglas firs (DF), Big-leaf Maples (BM) and Western Red Cedar (WC) form the tall layer. Smaller trees/shrubs like Hazelnut (HN), Vine Maple (VM), Oceanspray (OS) and Indian Plum (IP) form the middle layer. Low shrubs/ferns like Evergreen Huckleberry (EH), Salal (SL), Western Sword Fern (SF) and ground cover like Kinnikinnick (KK) and Dwarf Oregon Grape (DG) form the bottom layer.

DESIGN PLAN LEGEND



Snag—A dead or dying tree that is still standing is called a snag. It provides a habitat for birds, insects and small mammals. The insects are a food source for birds like woodpeckers.



Woodpile—An undisturbed stack of old wood, branches and twigs in a quiet corner of the garden attracts frogs and beneficial insects (beetles).



Logs—As fallen trees decay, hollow spaces form providing excellent nesting grounds for small species. The decomposing log also enriches the soil in the garden.



Birdbath—A simple birdbath like the 'dish rock' provides water to all the wildlife in the garden. Locate this water source in a sheltered spot that provides afternoon shade.



Rock Pile—A loose, dry, stack of rocks has crevices that provide shelter and hiding places for beneficial insects and small mammals.



Dust Bath (DB)—Birds can use a dust bath to clean their feathers. A small area of exposed sandy soil, in a partly sunny location is perfect.

Mixed Shrub Thicket—Thickets of mixed plant species are more attractive to wildlife than a single species. It provides a variety of food and nesting habitats. The thicket in our garden is a combination of Salmonberry (SY), Thimbleberry (TB), Red-twig Dogwood (RD) and Ninebark (NB).

Ground Cover (GC1, GC2)—The canopy of large trees like the Western Red Cedar creates a dry, shady area under which only certain plants survive. Redwood Sorrel (GC1) and False Lily of the Valley (GC2) are some groundcovers that thrive well in dry shade.

Green Roof (GR)—Drought-tolerant ground covers like sedums and alpine strawberries thrive well on a green roof and attract butterflies and other insects.

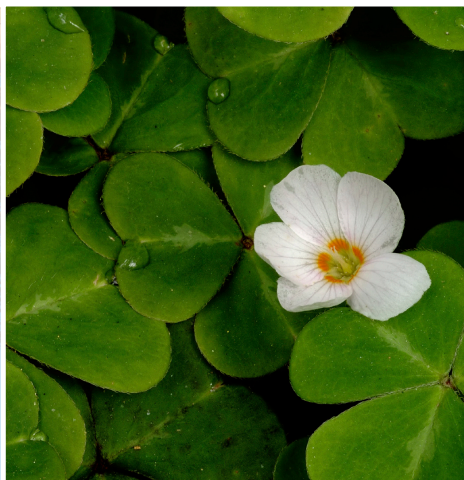
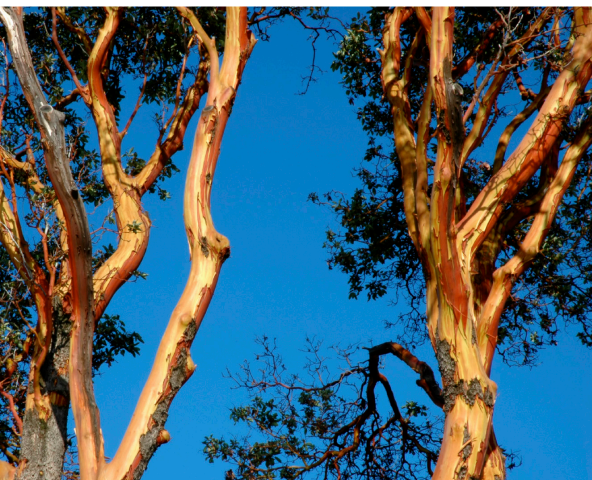


LIST OF PLANTS USED IN THE WILDLIFE HABITAT DEMONSTRATION GARDEN

Code	Plant - Common Name (Latin Name)	Type	Code	Plant - Common Name (Latin Name)	Type
AL	Red Alder (<i>Alnus rubra</i>)	Tree	LF	Lady Fern (<i>Athyrium filix-femina</i>)	Fern
BC	Bitter Cherry (<i>Prunus emarginata</i>)	Shrub	LP	Lodge-pole Pine (<i>Pinus contorta</i>)	Tree
BH	Bleeding Heart (<i>Dicentra Formosa</i>)	Ground cover	MA	Mountain Ash (<i>Sorbus scopulina</i>)	Tree
BM	Big-leaf Maple (<i>Acer macrophyllum</i>)	Tree	MD	Madrone (<i>Arbutus menziesii</i>)	Tree
CB	Cloud berry (<i>Rubus chamaemorus</i>)	Ground cover	NB	Pacific Ninebark (<i>Physocarpus capitatus</i>)	Shrub
CH*	Ornamental Cherry (<i>Prunus sp.</i>)	Tree	NR	Native Rose (<i>Rosa nutkana, Rosa rugosa</i>)	Shrub
CL	Western Columbine (<i>Aquilegia formosa</i>)	Ground cover	OG	Oregon Grape (<i>Mahonia aquifolia</i>)	Shrub
CW	Black Cottonwood (<i>Populus trichocarpa</i>)	Tree	OS	Ocean-spray (<i>Holodiscus discolor</i>)	Shrub
DF	Douglas Fir (<i>Pseudotsuga menziesii</i>)	Tree	PP	Ponderosa Pine (<i>Pinus ponderosa</i>)	Tree
DG	Dwarf Oregon Grape (<i>Mahonia nervosa</i>)	Shrub	QA	Quaking Aspen (<i>Populus tremuloides</i>)	Tree
DK	Kelsey's Dogwood (<i>Cornus sericea 'Kelseyi'</i>)	Shrub	RB	Red Huckleberry (<i>Vaccinium parvifolium</i>)	Shrub
DL*	Daylilies (<i>Heemerocallis sp.</i>)	Shrub	RC	Red-flowering Currant (<i>Ribes sanguineum</i>)	Shrub
EH	Evergreen Huckleberry (<i>Vaccinium ovatum</i>)	Shrub	RD	Red-twig Dogwood (<i>Cornus sericea</i>)	Shrub
FD	Flowering Dogwood (<i>Cornus florida</i>)	Tree	RE	Red Elderberry (<i>Sambucus racemosa</i>)	Tree
GC1	Redwood Sorrel (<i>Oxalis oregana</i>)	Ground cover	RH	Rhododendron (<i>Rhododendron sp.</i>)	Shrub
GC2	False Lily of the Valley (<i>Maianthemum sp.</i>)	Ground cover	SB	Snowberry (<i>Symphoricarpos albus</i>)	Shrub
GF	Grand Fir (<i>Abies grandis</i>)	Tree	SF	Western Sword Fern (<i>Polystichum munitum</i>)	Fern
HC*	Horsechestnut (<i>Aesculus hippocastanum</i>)	Tree	SK	Saskatoon (<i>Amelanchier alnifolia</i>)	Shrub
HF*	Hardy Fuchsia (<i>Fuchsia sp.</i>)	Shrub	SL	Salal (<i>Gaultheria shallon</i>)	Shrub
HN	Hazelnut (<i>Corylus cornuta</i>)	Tree	SS	Sitka Spruce (<i>Picea sitchensis</i>)	Tree
HS	Honeysuckle (<i>Lonicera ciliosa</i>)	Vine	SY	Salmonberry (<i>Rubus spectabilis</i>)	Shrub
HW	Douglas Hawthorn (<i>Crataegus douglasii</i>)	Tree	TB	Thimbleberry (<i>Rubus parviflorus</i>)	Shrub
IP	Indian Plum (<i>Oemleria cerasiformis</i>)	Shrub	VM	Vine Maple (<i>Acer circinatum</i>)	Shrub
JM*	Japanese Maple (<i>Acer palmatum</i>)	Tree	WC	Western Red Cedar (<i>Thuja plicata</i>)	Tree
KK	Kinnikinnick (<i>Arctostaphylos uva-ursi</i>)	Ground cover	WH	Western Hemlock (<i>Tsuga heterophylla</i>)	Tree

* non-native species

Note: Some plants that you buy in nurseries have been genetically sterilized. They will not produce nuts, seeds or berries. Make sure you get non-sterile plants by asking the nursery or else the plants will not have food value for most wildlife.





YOUR YARD CAN BE A BACKYARD WILDLIFE SANCTUARY

1 application/2 certifications



Washington
Department of
**FISH and
WILDLIFE**

SPECIAL THANKS TO:

Recreational Equipment, Inc. (REI), Bellevue, which adopted the Urban Wildlife Project for 2 years as its community service project, coordinating volunteer recruitment and training for the volunteer workdays; University of Washington **Department of Landscape Architecture** students and Sally Schauman, Chair who contributed to the backyard design and for lending assistance during installation; **Community volunteers** who donated their time, tools, and expertise to create the Urban Wildlife Project ranger station gardens; **Marenakos Rock Center**, Issaquah, WA, which contributed rocks for the rockery and entry garden; and **Luce Logging**, Issaquah, WA, who donated the nurse logs.

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**Bellevue Parks &
Community Services**