MISC0267

LANDSCAPING WITH NATIVE PLANTS

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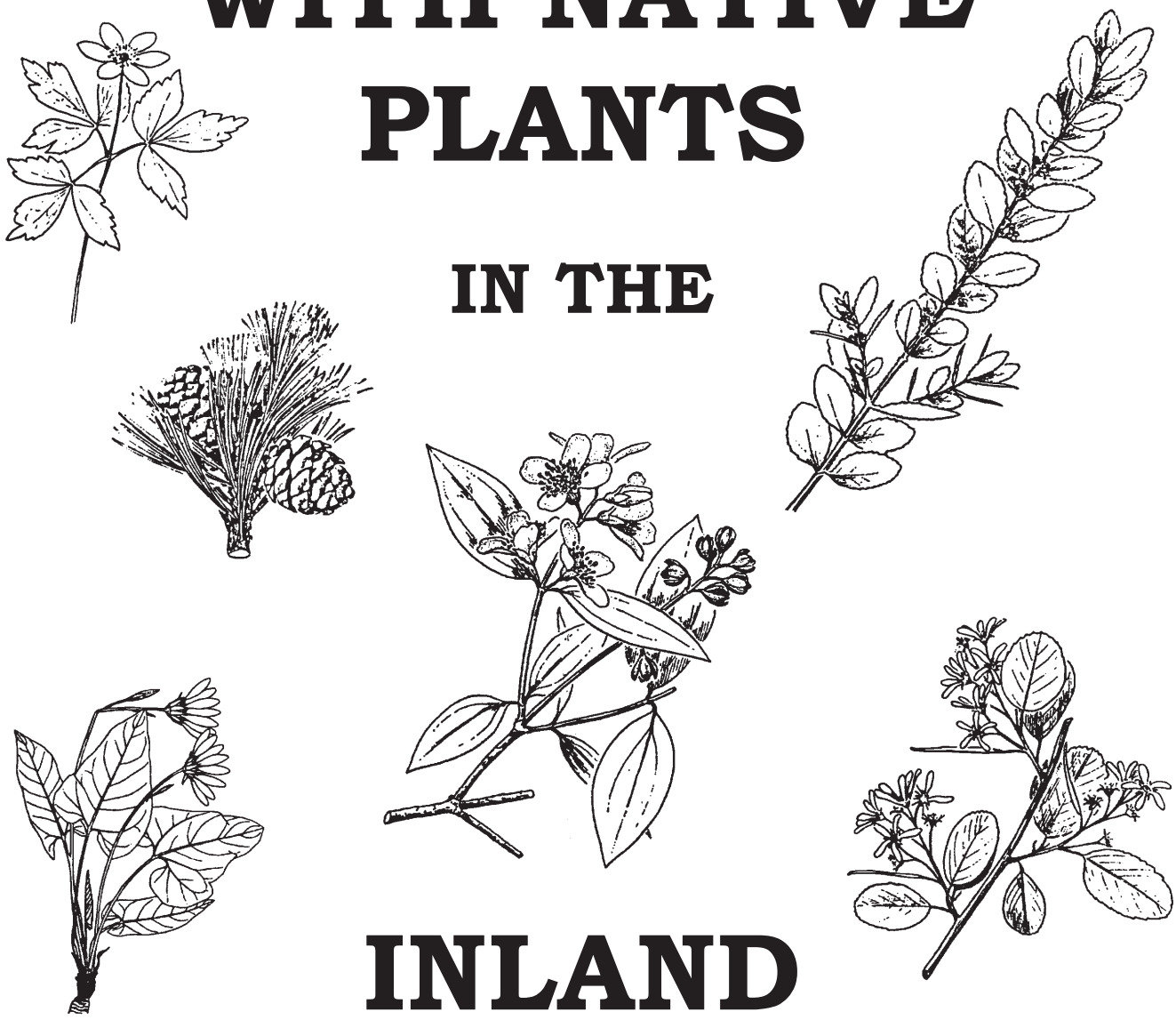

INLAND NORTHWEST

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WHY NATIVE PLANTS ARE IMPORTANT

The term "native," when used to describe plants, refers to a plant's place of origin. A native species is one that occurs in a particular region as a result of natural forces and without known or suspected human cause or influence. In the Inland Northwest, we think of native plants as those that were here before the exploration and settlement by European peoples.

Plants native to an area have become closely matched with local soils, climate and wildlife. Over time, they have formed a complex web of relationships with microorganisms, insects, wildlife and even other plants. This web creates biological diversity that is crucial in a healthy, sustainable environment. Our native plants and their association with other organisms make the Inland Northwest a unique area.

Placing individual native plants into existing landscapes does not provide much ecological value to a site. Rather, it is *areas* of native plant communities or groupings that restore biological diversity. Large natural areas are best, but many small areas can sustain biological diversity in a region. It is important to protect existing natural areas and it is beneficial to create or restore them where they no longer exist.

Landscaping with native plant communities results in a less formal looking, more natural landscape. Once established, these areas require less watering, mowing, pruning and fertilizing than more formally landscaped areas. This results in less work for busy people and reduces our need to add fertilizers, pesticides and other products to our environment. Also, native plants provide a vital link to our region's character that is too often lost with modern landscapes of lawns and plants that are popular from coast to coast.

Many people have the mistaken impression that native plants are scraggly and unattractive. The truth is, native plants in landscapes are often denser, leafier and more heavily flowered than their counterparts in the wild. This is because plants in the wild are surviving on whatever their natural habitat provides. In most cases this is very limited water (less than 17 inches of annual precipitation), nutrients, and light. Even a little bit of care given to native plants results in a big response in vigor, growth, leaf area and color.

Plants that originated somewhere else may be very well adapted to our Inland Northwest, but are still not considered native. "Hybrids" and "cultivars" have been bred to have certain characteristics such

"Native plants in landscapes are often denser, leafier and more heavily flowered than their wild counterparts."

Arrowleaf Balsamroot

as color, bloom size, compact form, etc. These are often propagated vegetatively from plant tissues in large quantities for shipment all over the U.S. Because they are not produced by seed, there is little or no genetic variation. Native plants produced from seed are cross-pollinated and maintain the variability of the gene pool. Genetic diversity is what enables plant populations to withstand environmental changes over time.

TERMS

"Native" refers to a species' place or region of origin. A native species is one that occurs in a particular region as a result of natural forces and without known or suspected human cause or influence.

Mock Orange

Habitat: a place where a plant or animal lives. Each plant or animal species has a set of certain requirements that must be met for it to survive.

Population: a group of individuals of a single species that live and interbreed in an area. A viable population has sufficient genetic diversity to withstand changes in the environment.

Individual: all individuals of a species differ slightly in their abilities to adjust to a range of environmental conditions. These differences represent diversity within species.

Plant community: a group of plants associated with their physical environment. (Certain plants grow in open, dry sites while others occur in shaded, moist sites.) Each plant community has a large and diverse web of organisms and relationships dependent on it. When we remove a plant community from an area we remove a lot more that goes with it. However, when we protect or restore plant communities, we preserve or bring back more than just the individual plants.

Bio-diversity: the variety of life in all levels of organization including individuals, populations, communities and ecosystems.

Genetic diversity: the variation within the gene pool which enables a species to evolve with changing environmental conditions and survive into the future.

Ecosystem: any area with complex systems of living and non-living components and relationships. (An ocean, a forest, an urban area, a grassland, a desert are all examples of ecosystems.) Through time, species develop complex interactions including competition, predation, decomposition, symbiosis and others. The more species an ecosystem has, the healthier and more stable and sustainable it is considered to be.

PLANNING FOR A NATURALIZED LANDSCAPE

Natural landscapes don't just happen by letting things go. On most home or building sites there have been too many disturbances and introduced plant species for the land to go "back to nature." Natural landscapes need to be designed, planned and managed. The following steps will help you plan for a naturalized area.

1. *Create a simple measured map* of your yard. Include features like existing plants, power lines, water sources, buildings, etc.

2. *Identify existing conditions* such as soil types, sunny and shady areas, good and bad views, existing plants, slopes and availability of water. This will help you select plants that are ecologically adapted to your site.

3. *Write down all activities and areas* that should be accounted for in the final design, such as wildlife habitat, vegetable garden, play area, etc. Determine which activities match site conditions that are compatible with the activity. For example, a sunny area that is accessible to the kitchen is ideal for a vegetable garden. An area shaded by large trees is ideal for a woodland garden with native ferns and groundcovers. Make a plan that organizes these areas and activities on the map.

4. *Evaluate your existing plants* and determine if any of them are inappropriate for their current location or are not healthy. Some plants may need to be removed. Don't hesitate to remove that old, overgrown forsythia that you have to prune every year to keep it in bounds or those top-heavy lilacs that get moldy every summer.

5. *Prioritize areas* in terms of high, moderate and low water use. In general, water usage corresponds to the amount of maintenance an area requires. Keeping higher maintenance plants such as lawns, flowers and vegetable gardens close to your home increases the enjoyment and use of these areas.

6. *Create practical lawn areas* that are easy to maintain and reflect how you will use them. A practical lawn area reduces the need for fertilizers and pesticides that can pollute our surface and groundwater resources. Lawns should be consciously designed outdoor living spaces for games, entertaining or a foreground for flower and shrub beds. Lawns are not appropriate for deep shade or steep slopes.

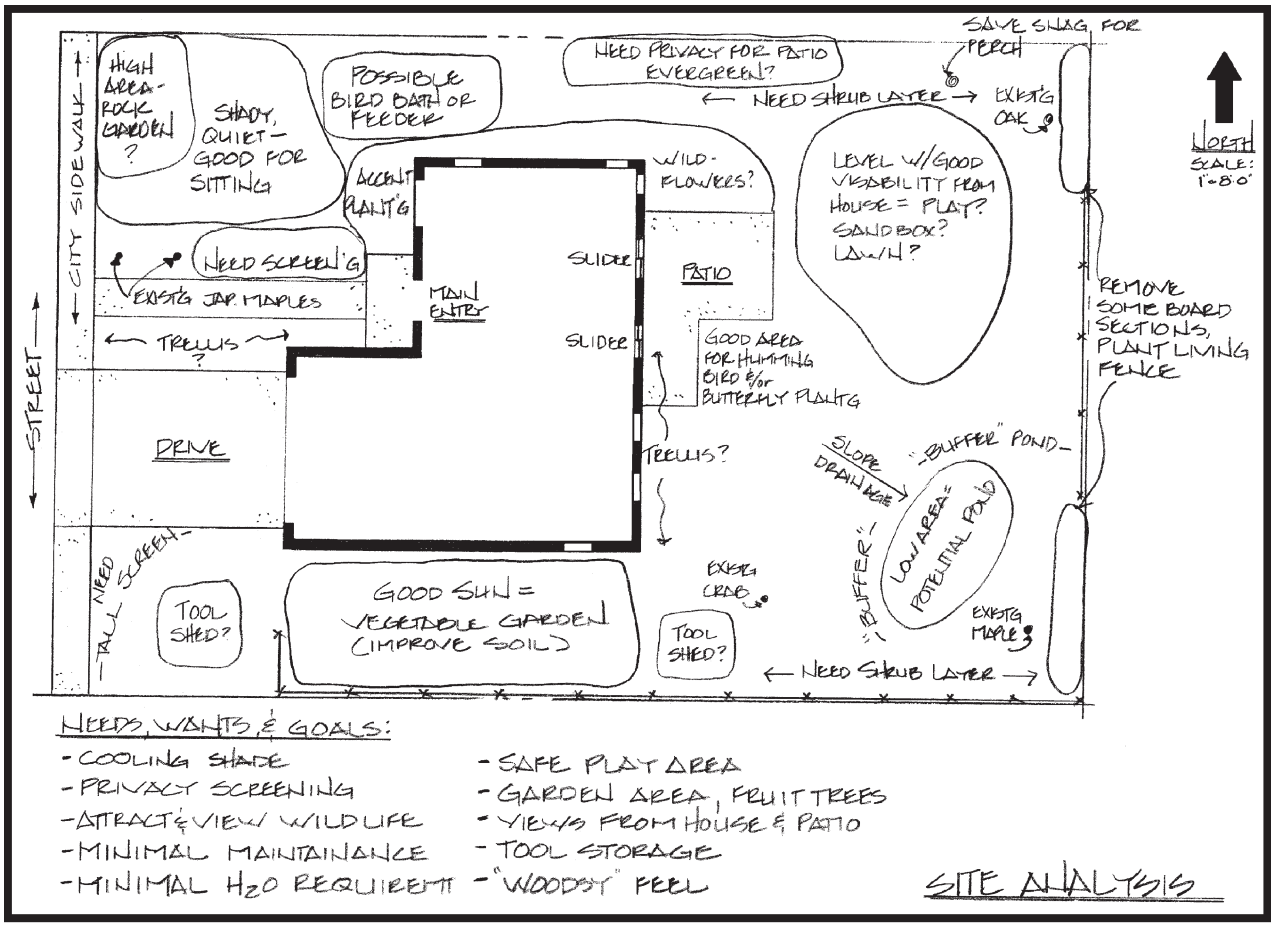
"Water usage corresponds to the amount of maintenance an area requires."

7. To attract wildlife, add native plants that produce berries or seeds. Birds, butterflies and small animals typically prefer the berries and seeds of native plants over those of introduced plants.

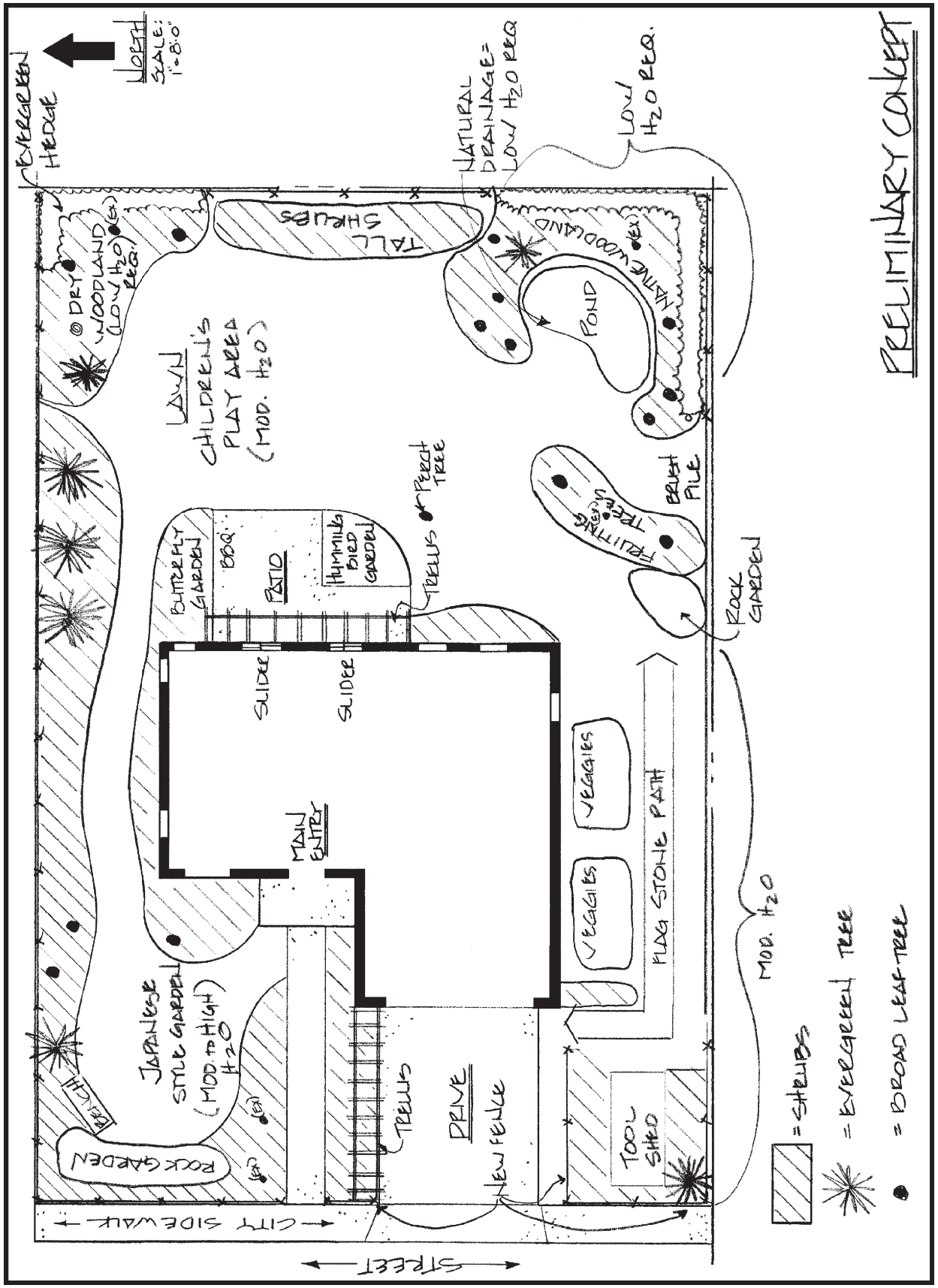
8. Replace sheared hedges planted in straight lines with a "hedgerow." A hedgerow contains various sized trees and shrubs, allowed to grow in their natural form, and provide food and nesting sites for birds as well as the screening and privacy you may desire.

9. As the distance from your house increases, develop native plant communities that create a natural transition to adjacent natural areas.

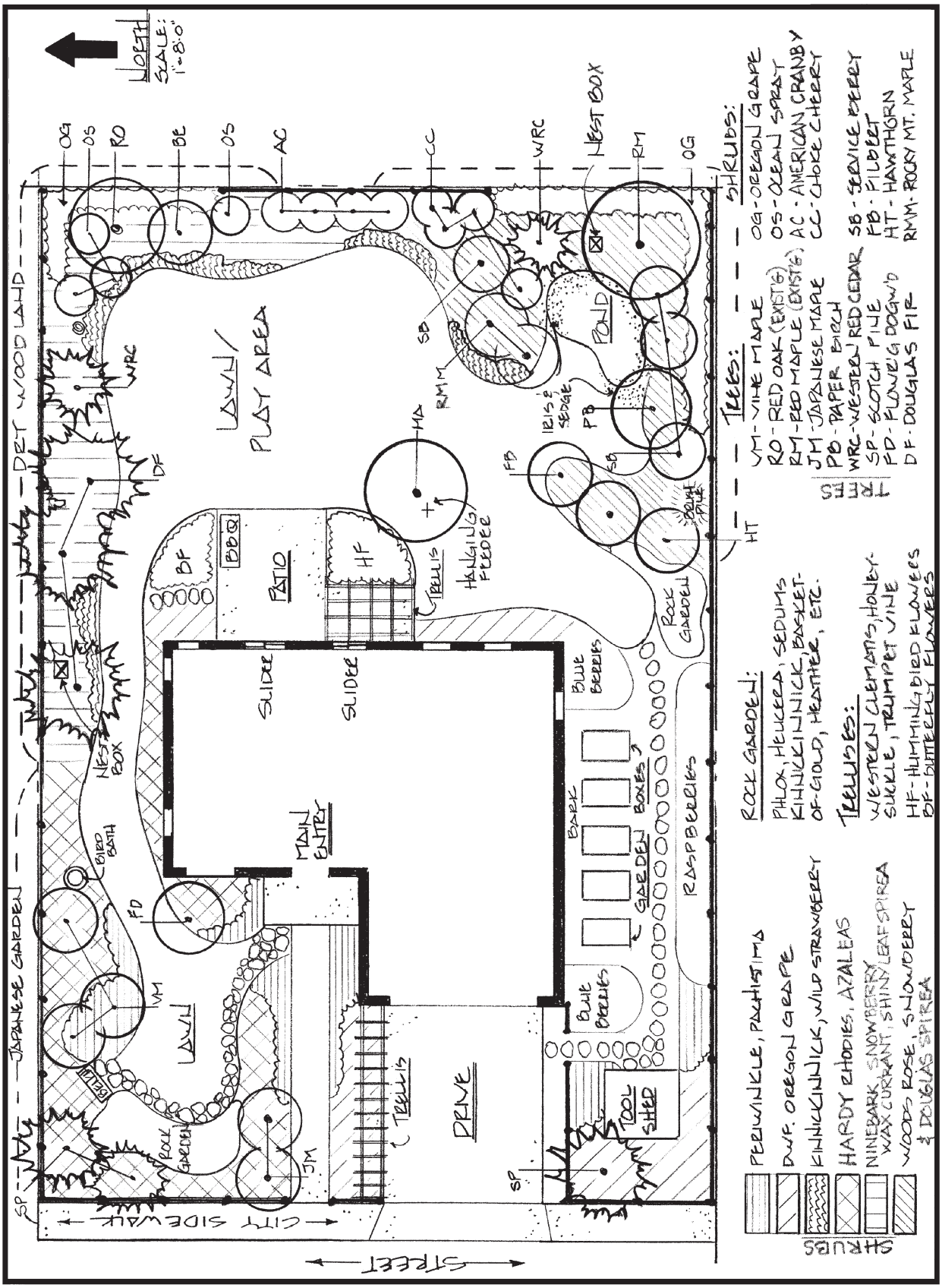
An evaluation of existing conditions and future possibilities is sketched in bubble diagrams to outline preliminary ideas for the landscaping.



Experiment with different designs using bubble diagrams. Try to develop several alternatives.



Testing ideas on paper is easier than rearranging plants in the yard.



INCORPORATING NATIVE PLANTS INTO EXISTING LANDSCAPES

It is not necessary to remove all the existing plants in your yard in order to revitalize it. However, placing individual natives here and there does not provide much ecological value. To improve the natural beauty and function of your site, plan for adn add native plant groupings.

In nature, plants grow “in association with” other plants because they share needs that are met by conditions in that particular area. Conditions such as full sun, filtered light, dry or wet ground, and gavelly or rocky soil affect which plants can survive there. Some plants are quite adaptable and can grow in a variety of conditions while others are quite site specific. To ensure their survival you need to know where they occur in nature and find or create those conditions in your yard.

“To improve the natural beauty and function of your site, add native plant groupings.”

Consider the shapes and sizes of the plants as well as the site conditions. Think about overhead wires, nearby structures, proximity to other plants, etc. Select plants that when full grown will not be crowded or cause damage to other things.

When combining native plants with introduced plants be sure to keep plants with similar water and soil requirements together. If dry-loving native plants are mixed with plants that require even moderate watering, the natives may get root rot, sucker profusely and spread aggressively.

PROVIDING WILDLIFE HABITAT

Washington State loses about 30,000 acres of wildlife habitat each year. That displaces lots of animals, birds, insects and other creatures that end up unable to reproduce, starving to death or being killed on our highways. This is a huge threat to regional biodiversity that is crucial to any healthy ecosystem.

By naturalizing more areas of our landscapes we can preserve, restore and protect wildlife habitat. Here are some tips from the Washington State Department of Fish and Wildlife for providing food, shelter, water and space in your landscape:

"Out of the way brush and rock piles are havens for squirrels."

BEFORE BUILDING ON PROPERTY

Visit your site with the contractor and determine the maximum area to be disturbed during clearing and construction. Clearly mark the area so heavy equipment operators can stay within the boundaries.

You can save money and wildlife habitat by digging up native plants that would be destroyed during construction and replanting them later. Dig plants with as much of the root mass as possible and put them in plastic pots. Fill sawdust or loose potting soil around the roots and water well. Store them in a shaded area and keep them well watered until you can replant them.

It is important to save topsoil on your site, too. Topsoil in any area contains mycorrhizae, organic matter and other natural components of your site that will aid in re-establishing a healthy landscape. Have the equipment operator first scrape off topsoil and store it off to the side of the construction area. After construction, move this soil back to where you will be landscaping. It's another way to save money and produce healthier plants.

Be sure that concrete suppliers don't dump excess concrete or wash out their trucks on your site. Buried concrete or the calcium from truck washout will interfere with future plantings.

LANDSCAPING WITH WILDLIFE IN MIND

Having birds, bees and other little creatures in your yard is not just nice for your viewing and listening pleasure…it's also a form of natural pest control for all those plant-eating insects we call pests.

Use groupings of native plants in your landscape. They have been sources of food and shelter for local wildlife for centuries.

Designate areas in your landscape for berry and seed producing trees and shrubs. Include ones that bloom at different times in the season for pollen-collecting insects.

Reduce the size of your lawn to whatever is appropriate for you and your family's needs. Besides requiring water, fertilizer and occasional pesticides, lawns do not benefit wildlife. Replace unneeded lawn space with native shrubs, grasses or wildflowers.

Create a variety of vertical heights in the landscape. Plant some shrubs near tall trees and use shorter native grasses or flowers in front. Also, mix deciduous and evergreen plants to provide seasonal interest for you and the wildlife.

Provide year-round sources of water. Ponds and waterfalls are popular garden elements now, but even simple birdbaths will be magnets for wildlife. Any water holding device will work…ceramic saucers on stumps, inverted garbage can lids in the ground, free standing troughs and hanging saucers in trees are all ideal. Immersible water heaters are available in some garden stores to keep water from freezing in winter. If members of your family happen to be cats, put bells on their collars so they can't sneak up on bathing birds.

Leave snags and rocks. Dead trees, called snags, are important sources of food and shelter for birds. More than 40 species of birds in Washington use snags for nests. If you don't like the looks of a dead tree in your yard, train a vine to climb it or hang bird feeders from it but leave it there for ones who like it. A tall tree that has died can be cut off to a height of 20' to eliminate the danger of it blowing over in a storm. Out-of-the-way brush and rock piles are havens for little birds, squirrels, frogs and toads.

"Many species depend on the lush growth near streams for food, shelter and water."

STREAMSIDES AND LAKESIDES

If you live along a waterway, your property is very valuable to wildlife. Retain as much of the natural vegetation as possible. (See your county's "Critical Areas Ordinance" and "Shorelines Master Program" for required buffer zone areas.) Many species depend on the lush growth near streams for food, shelter and water…the three most important needs in their lives. Riparian zone vegetation also prevents erosion, decreases flood damage and helps purify and recharge our aquifers. Contact your county's Conservation District or Washington Department of Ecology for help in restoring and managing streamside areas.

WETLANDS

Like riparian areas, wetlands are very important to wildlife and water quality, yet over 50% of America's wetlands have been altered or destroyed by development and construction. A wetland is an area of land that is saturated by surface or groundwater all or part of the year. Wetlands support vegetation adapted to saturated soils. If you are unsure if your property contains a wetland, contact the

Department of Ecology, Conservation District or Department of Fish and Wildlife in your area. They can provide information about protecting, restoring and enhancing wetland areas.

IN YOUR PLANNING, DON'T FORGET TO...

- **Maximize undisturbed areas**
  As much as possible, provide large areas without buildings, paving, or paths. Provide some "undisturbed" sanctuaries and safe travel corridors for sensitive wildlife.

- **Concentrate & contain human activity areas**
  Disturbance to wildlife can be lessened if areas with busy human activity are put close together and kept as small as possible. Avoid putting busy human activities in good existing wildlife habitat.

- **Preserve existing trees**
  Old well-established trees or ones that form clumps are especially valuable. Avoid putting new features or structures where they will damage existing trees. Remember that a tree's roots grow far out from its trunk, and construction too close to the roots may affect the tree.

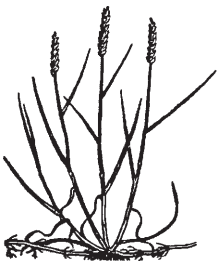
- **Provide opportunities for viewing wildlife**
  Locate and shape human activity areas, such as patios and decks, so that wildlife can be viewed from those locations. Also, consider views from inside the house.

- **Respect the wisdom & logic of nature**
  Nature is the best model for a healthy and valuable wildlife habitat. In nature, things are the way they are and where they are because of complex ecological relationships. Nature understands this perfectly, while we have only incomplete knowledge. For some ideas of how nature provides for wildlife, look at the arrangements of plants along a stream or pond, around a meadow, or in a forest. The amount and arrangement of plants in a good backyard habitat should be similar to these natural areas. Let the natural world be your best teacher.

Design tips courtesy of *Urban Wildlife Series, Landscape Design for Wildlife.*

GETTING RID OF WEEDS

You may have noticed while hiking that healthy, native settings are free of weeds and aggressive non-native plants. You also may have noticed that if weeds are taking hold, they tend to be around disturbed areas such as parking lots, restrooms or trail edges. This is because over time, in undisturbed natural areas, the soil has developed a natural mulch layer of decomposing plant debris. Even in open sunny areas such as the Columbia Basin, there is a crust that develops between the shrubs and bunch grasses that is impervious to weed seeds.



Quackgrass

In areas that have been disturbed by grazing, farming, road construction, home building and development, native vegetation has been cleared and the top layer of soil has been removed or irreversibly altered. When this happens "pioneering" species (generally aggressively spreading introduced species) take hold and grow at the expense of native vegetation. It is possible to restore these areas to natural plant communities by following these guidelines. If it seems like a lot of work, think about it in terms of being work up front that will pay off later on in reduced or little maintenance. All weed control measures are most effective when weeds are young and before they have gone to seed.

1. Get rid of existing weeds or turfgrass. In some areas it may be practical to cultivate with a tractor or rototiller, or even to pull weeds by hand. However, cultivating and digging brings weed seeds closer to the surface so watch for new weeds and re-cultivate until they stop emerging. *Caution:* Canada thistle and quackgrass that get cut up into pieces during cultivation will resprout from each piece so cultivating is not recommended.

2. In some cases herbicides may be the best option. It is necessary to know which weeds you are controlling before you choose herbicide products. Some herbicides require a Pesticide Applicators License to purchase and use them. For information on licensing, contact your county's Cooperative Extension office.

Products that **do not** require a license for purchase or application are:

Roundup—This herbicide kills both broadleaf weeds and grasses but will not prevent weed seeds from germinating. Spray growing weeds according to label directions. Wait at least three weeks to see if new weeds germinate and re-spray if necessary. You can usually plant within two weeks of the last Roundup application but check the product label for any exceptions.

2,4-D Products—Herbicides containing 2,4-D are broadleaf herbicides. They kill all plants except grass type plants. 2,4-D is often combined with other herbicides such as MCPP or dicamba for increased effectiveness. Re-treatment may be necessary. CAUTION!!! It may be necessary to wait up to 4 months after application before replanting in the area, depending on the ingredients of the product you use. Read the label first!

GETTING THE SOIL READY

Once the area is weed free, take a good look at the soil. If it is a good loamy soil (dark colored, holds together somewhat when you squeeze a damp clump of it in your hand) you probably don't have to add organic matter. If the soil is dry, sandy, light colored and devoid of any humus whatsoever, you have the following two choices:

Loamy soil

1. Decide to plant the area with plants native to dry, well-drained sites and don't plan on watering much (or at all) once plants are established.

2. Decide to amend the soil with organic matter, which will create a more fertile soil that holds moisture. This will allow you to choose among a greater choice of plants. Examples of soil amendments include commercially and home prepared compost, rotted sawdust and packaged steer manure. Bulk quantities can be purchased from landscape companies, nurseries and soil and bark suppliers.

If you do add organic matter to the soil, do it to the whole planting area, not just the planting holes. Amending just planting holes can result in root-bound plants that will not establish roots into the surrounding soil.

Soil amendments

PLANTING NATIVE PLANTS

If possible, water the planting area before planting. If water is NOT available to the site, do your planting early in the spring or in fall so plants can get established during seasonal rains. If the rains don't come, you'll have to hand-carry water to new plants to ensure survival. In dryland sites where supplemental water is not available, the smaller plant you use, the more chance there is for its survival. Large containerized plants or balled and burlapped stock are risky additions if adequate water is not available during the establishment phase.

The actual planting of native plants does not differ from the planting of non-native landscape plants. It is best to have planting holes dug before plants are brought to the site. Dig the hole so that it is twice the width of the root system and deep enough so that the junction of roots and trunk will be at ground level.

Bare root plant

Native plants in nurseries are generally available in 1, 2 or 5-gallon containers. Some trees may come in larger pot sizes or with the rootballs balled and burlapped. Some trees or shrubs are available as bare root plants in the early spring.

Bare root plants are deciduous plants that have been dug without any attached soil. Roots must be kept moist until planting. Soak in water no more than six hours and either wrap in moist burlap or temporarily bury the roots in moist sawdust, sand or soil until planting time.

Balled and burlapped (B&B) plants are dug from nurseries with soil around their roots and wrapped with biodegradable natural burlap. Keep this wrapped rootball moist until planting time. Plant so that the rootball is even with or an inch or two higher than ground level.

Balled and burlapped plant

After the plant is in the hole, remove all wire, cords or twine and loosen the burlap around the trunk area. Fill the hole half to two-thirds full and use a knife or scissors to cut off the top portion of the burlap. Remove it before filling up the rest of the planting hole. When backfilling with soil, just use the native soil; do not backfill with amended soil.

Containerized plants usually come in plastic or fiber pots. Remove containers before planting. If roots have filled the pot and are circling, make several vertical slices into the root clump

Containerized plant with pot removed

to cut those circling roots. Then spread apart the root clump as much as possible.

As with balled and burlapped plants, set the plant into the planting hole so that the top of the root mass is at or slightly above the ground level. Backfill with native soil, making sure roots remain spread out in the hole while filling it in. Water again until the root area is saturated.

Limit pruning at planting time to removal of dead or damaged branches and removal of rubbing or crossed-over branches.

MAINTENANCE IN NATURALIZED LANDSCAPES

WEED CONTROL

During the first year or two, eliminate weeds that compete with your plants for water and nutrients. Controlling weeds is important because of the tendency of weeds in disturbed areas to spread aggressively and overtake an area. Trees, shrubs and groundcovers need to be free of weed competition during the first 2 or 3 years of establishment. Call your county's Noxious Weed Board or Cooperative Extension office for help in identifying weed problems and selecting the best management options for the site.

Tips

- Use mulches around new plants to prevent weed growth.
- Use a square of weed barrier fabric around each new plant.
- Use base protectors (plastic ventilated tubes) around trunks of newly planted trees to prevent damage from string trimmers, weed whackers and gnawing animals.

Chokecherry

WATERING

Many native plants can survive in nature with little or no water. Unlike introduced plants, which may die during times of drought, drought tolerant natives will survive, but may become dry or brittle until the next seasonal rainy period. This is okay. Our "green trained eyes" may tell us that this is unsightly because we have come to see unchanging green lawns and plants as normal all summer long. Remember, though, this is NOT normal. It is only large amounts of water applied through the summer that keep landscapes green. Learn to "see" natural landscapes differently and you will begin to appreciate the subtle changes in colors and textures that occur naturally as the season progresses.

There are two exceptions to this advice. First, any new plant, whether it is drought tolerant or not, will need water until it becomes established. This may take a season or two. Another exception is when fire safety is an issue. In fire prone areas, keep areas near your home and outbuildings watered and green. For other "firesafe" landscaping practices, use the booklet entitled *Landscaping for Wildfire Prevention* which is listed on page 38 of the reference section of this publication.

Ocean-spray

Watering established native plantings

It is not necessary to water established native plantings on a regular basis. Monitor the application of water throughout the growing season and adjust it according to plant needs. How much does a plant need? There's no easy rule to follow here. The younger the plant, the smaller its root system, which makes it more susceptible to drought. A layer of mulch around plants will conserve soil moisture. Watch the leaves on trees, shrubs and perennials and when you notice wilting or dry edges of leaves, that's a sign of extreme thirst. While plants are very young, soil moisture should be replenished frequently. As they mature, taper off on watering to once a week or less. Fully established plantings may never need irrigation. For the most efficient watering system, see the drip irrigation section in this publication (page 26).

GRASSES FOR UNWATERED AREAS

This information is for property owners who want to establish grasses that will survive in the Inland Northwest without supplemental watering. Grasses listed here, sometimes called "dryland grasses" are hardy to at least USDA zone 5 (-20°F) and can survive with 17 inches of annual precipitation or less. They survive these climatic conditions by going dormant (not dying) during winter and again during the hot dry months in summer. When dormant, grasses turn yellow or tan in color. Between times of dormancy they are green. Before their summer dormancy, unmowed grasses will produce seeds on stalks that are taller than the leaves of grass.

Most dryland grasses are "bunch grasses" meaning they grow in closely spaced clumps rather than spreading out into a sod-like cover. The resulting grassland will cover the ground, but because of its clumpy nature, will not be smooth like turfgrass lawns.

Dryland "bunch grass"

Listed below are several grasses that will grow in Inland Northwest sites. The last column shows whether they are native to the Inland Northwest or introduced. Select the ones with characteristics that fit your needs or call the seed suppliers listed at the end of this paper and they can advise you about appropriate mixes for your area. Either way, you need to know how many inches of precipitation your site receives annually.

Common name	Latin name	Min. precip. per year	Height in feet	Native/ Introd.
Tall Fescue	*Festuca arundinacea*	16"	1–3'	I
Turf Type Tall Fescue	*F. elatior arundinacea*	16"	1–2'	I
Hard Fescue	*F. duriuscula*	14"	1–3'	I
Turf Type Hard Fescue	*F. longifolia*	14"	<2'	I
Idaho Fescue	*F. idahoensis*	10"	>2'	N
Sheep Fescue	*F. ovina*	10"	1–2'	I
Prairie Junegrass	*Koeleuia ccristata*	12"	1–2'	N
Big Bluegrass	*Poa ampla*	10"	>2'	N
Canby Bluegrass	*Poa canbyi*	10"	1–2'	N
Sandburg Bluegrass	*Poa sandbergii*	8"	1–2'	N
Bottlebrush Squirreltail	*Elymus elymiodes*	6"	1–4'	N
Columbia Needlegrass	*Stipa columbiana*	14"	<2'	N
Green Needlegrass	*Stipa viridula*	16"	1–3'	N
Crested Wheatgrass	*Agropyron cristatum*	10"	1–3'	I
Crested Wheatgrass hybrid	*A. cristatum x desertorum*	10"	1–3'	I
Std Crested Wheatgrass	*A. desertorum*	10"	1–4'	I
Streambank Wheatgrass	*Elymus lanceolatus*	8"	<2'	N
Bluebunch wheatgrass	*Agropyron spicatum*	10"	1–2'	N
Indian ricegrass	*Oryzopsis hymenoides*	8"	1–2'	N
Siberian Wheatgrass	*Agropyron fragile*	6"	1–2'	I

Average annual rainfall data for areas in eastern Washington

Colfax	19”	Pullman	22.6”
Colville	20”	Ritzville	12.2”
Davenport	14.2”	Rockford	21.6”
Deer Park	25.2”	Spokane	17.2”
Newport	25.7”	Wilbur	13.7”

WHEN TO PLANT

Even dryland grass seeds require moisture to germinate and grow so plant in late fall to take advantage of rainy weather. Fall planted seeds will not actually germinate until spring. If planted too early in fall, they may germinate before winter and be killed in freezing weather. Save some of the seed for filling in bare spots in the first or second year.

WEED CONTROL PRIOR TO PLANTING

It is essential for dryland grasses to be planted in weed-free ground. Weeds are a problem because they aggressively compete for moisture and overtake newly planted areas. Once established, the grasses will outcompete weeds but until the grass seedlings mature, weeds will have the advantage. Do not shortcut the weed control process prior to seeding. If the area is very weedy, it may be best to delay the seeding process for a year and get a handle on the weed problem first.

There are two main types of weeds:

Broadleaf weeds, such as thistle and knapweed, are planted with round, oval or irregularly shaped weeds. Leaves can be of any size.

Grassy weeds, such as cheatgrass and quackgrass, are grass plants that overtake desired grass plantings.

Digging or cultivating

In some areas it may be practical to cultivate with a tractor or rototiller, or even to dig weeds by hand. However, cultivating and digging brings weed seeds closer to the surface so watching for new weeds and re-cultivation may be necessary before planting grass seed. Canada thistle and quackgrass that get cut up into pieces during cultivation will resprout from each piece so cultivating is not an option. If Canada thistle or quackgrass are present, refer to chemical controls below.

Chemical control

In some cases herbicides may be the best option. Again, it is necessary to know which weeds you are controlling before you choose herbicide products. Some herbicides require a Pesticide Applicators License to purchase and use them. For information on licensing, contact your county’s Cooperative Extension office.

Products that do not require a license for purchase or application are:

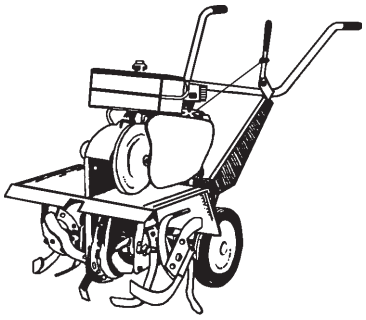
Roundup—This herbicide kills both broadleaf and grassy weeds, but will not prevent weed seeds from germinating. Spray growing

weeds according to label directions. Wait at least three weeks to see if new weeds germinate and re-spray if necessary. You can usually plant seeds within two weeks of the last Roundup application but check the product label.

2,4-D Products—Herbicides containing 2,4-D are broadleaf herbicides. They kill all plants except grass type plants. 2,4-D is often combined with other herbicides such as MCPP or dicamba for increased effectiveness. Re-treatment may be necessary. CAUTION!!! It may be necessary to wait up to 4 months after application before planting new seeds, depending on the ingredients of the product you use. Read the label first!

SEEDBED PREPARATION

After the area to be seeded is free of weeds, till the soil to break up clods. Small areas may be done by hand. In larger areas use a disc, harrow or other cultivation equipment. Work in 20–40 pounds of slow release nitrogen per acre (one-half to one pound per 1,000 square feet) to increase seedling vigor. Finally, roll with a corrugated roller to firm the soil so it will hold moisture and provide a good germinating surface. These steps are necessary prior to all methods of seed application.



Tiller for preparing seedbed

SEED APPLICATION METHODS

The three ways of getting seed into the ground are broadcasting, drilling and hydroseeding. The amount of seed you use will depend on the seeding method, varieties used, and the relative amount of each in the mix. Your seed dealer can help you determine the seeding rate you need. Do not increase this rate. If the seeds are sown too densely, they will not get enough moisture and nutrients.

Broadcasting seed means casting the seed on top of the ground at the recommended number of pounds of seed per acre or square foot. Follow by raking over the seedbed lightly and/or rolling to ensure good seed-to-soil contact. If adequate moisture is sure to be available, the raking and rolling steps may be skipped.

If you are sure that the area you are seeding into is weed free, you can broadcast seed on top of snow or frozen ground in late winter or early spring. Seeds will work themselves into the thawing ground and will germinate when temperatures allow.

Drilling seed is done with a seed driller that deposits seed into the ground to a specific depth. Commercial seed growers and some dealers have seed drills.

Hydroseeding is a cost effective method for seeding large areas (1,000 square feet or more). In hydroseeding, a slurry of seed, water, and fertilizer is “sprayed” onto the ground. Seedbed preparation described above is still necessary prior to hydroseeding. Hydro-seeding companies are listed in the yellow pages of the phone book.

Seed spreader

After Seeding

Although not always practical, a light mulch applied after broadcasting or drilling seeds will help retain ground moisture and prevent surface erosion until the grass takes hold. Mulching is not necessary after hydroseeding.

Supplemental irrigation, if available, is beneficial during spring germination and early growth, but do not irrigate after grass has become established.

WHAT TO EXPECT

Digging out a broadleaf weed

Dryland grasses may be slow to establish and in the first year, it may appear that they are losing the battle to newly emerging weeds. Don't panic or despair. In the second year, they will usually begin to out-compete the weeds. It is sometimes necessary to handpull or spot spray (with Roundup) noxious and other particularly aggressive broadleaf weeds in the first year to allow the grasses to establish. Areas that remain bare after the first year may need to be prepared for reseeding. Rake the area to loosen the soil crust and overseed with the same seed mix.

SEED COMPANIES

The following seed companies are wholesale suppliers of seeds. They may distribute to landowners with large areas or they may refer you to their retail distributors.

Cascade Seed Wholesale Co
Spokane, WA
(509) 534-9431

Grassland West
908 Port Drive
Clarkston, WA 99403
(866) 214-2947
www.grasslandwest.com

L&H Seeds
4756 W SR 260
Connell, WA 99326
(800) 995-0234
www.lhseeds.com

Native Seed Foundation
7312 Perkins Lake Rd
Moyie Springs, ID 83845
(208) 867-1477
http://www.nativeseedfoundation.com/

Sun Mountain Natives
1406 East F Street
Moscow, ID 83843
(208) 883-7611

Rainier Seeds
1404 4th Street
Davenport, WA 99122
(800) 828-8873
www.rainierseeds.com

Seeds, Inc.
c/o Plants of the Wild
PO Box 866
Tekoa, WA 99033
(509) 284-2848
www.plantsofthewild.com

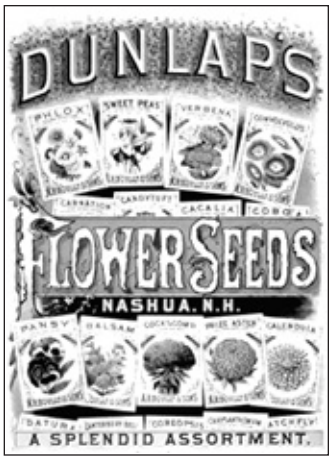
WILDFLOWERS IN NATURALIZED LANDSCAPES

Use of wildflowers (also called native herbaceous plants, native forbs, or native perennials) is desirable in naturalized landscapes because they attract butterflies and beneficial insects as well as adding color and interest at ground level. Like any other plant, wildflowers need to grow in places in the landscape that have the same characteristics of places where they grow naturally.

A few Inland Northwest wildflowers, such as Gaillardia, Western iris and some of the penstemons are available from local nurseries in pots or tublings for transplanting. Plant these as you would other bedding plants and provide water until they become established.

More commonly, wildflowers are available as seed mixes. Truly local seed mixes are available from regional native plant or seed companies. These mixes are collected in and blended for specific local areas or situations. Try to find and use seed mixes for the Inland Northwest.

Seed mixes labeled as "Western US," "Western Mountain States," or "Western Desert States" are selections from a wide geographical range and may contain species that are overly aggressive or noxious weeds in our Inland Northwest area. Aggressive species will spread throughout an area and crowd out native vegetation. Before purchasing or using mixes from a large geographical region, get a list of the plants (and species if listed) they contain and check with your county's Noxious Weed Board to be sure you are not introducing a troublesome species to your property. Plants that are considered noxious weeds can vary from one county to the next or from one state to the next.



Flower seeds

HOW TO PLANT WILDFLOWER SEEDS

If there are no planting directions supplied with the seed (or if you have collected seed last year and are ready to plant), here are some guidelines to ensure a successful planting:

- Prepare the area to be seeded by eliminating weeds as you would for seeding grasses (see page 11). **This is crucial for successful wildflower plantings!**

- Mix the seeds with slightly dampened sand to help provide even distribution when broadcasting. Use about 4 parts sand to 1 part seed. Spread this mixture as evenly as possible over your area.

Hotrock Penstemon

- Rake the seeded area lightly but do not bury the seed mixture more than 1/4 inch deep.
- Roll the site with a roller to firm the seedbed. All seed will not be covered but that is okay.
- Keep the area moist during germination and establishment phases. Even dryland mixes will require watering until establishment.
- It is generally not necessary to fertilize wildflowers if they are planted in their native habitat. In fact, fertilizing may encourage more weed growth and excessive foliage on the wildflower species.
- Keep weeds pulled, especially during the first season.
- Let all wildflowers go to seed. If you intend to mow or cut back dead foliage, wait until spring. Many wildflowers will reseed themselves and continue to flourish in your landscape. In addition, seeds of native wildflowers provide an important food source for wildlife during winter.

Silky Lupine

SOURCES OF WILDFLOWER SEEDS IN THE INLAND NORTHWEST

Grassland West
908 Port Drive
Clarkston, WA 99403
(866) 214-2947
www.grasslandwest.com

High Altitude Gardens
c/o Seeds Trust
PO Box 596
Cornville, AZ 86325
(928) 649-3315
www.seedstrust.com/has/highaltitudeseeds.html

Native Seed Foundation
7312 Perkins Lake Rd
Moyie Springs, ID 83845
(208) 867-1477
http://www.nativeseedfoundation.com/

Plants of the Wild
PO Box 866
Tekoa, WA 99033
(509) 284-2848
www.plantsofthewild.com

Rainier Seeds
1404 4th Street
Davenport, WA 99122
(800) 828-8873
www.rainierseeds.com

Sun Mountain Natives
1406 East F Street
Moscow, ID 83843
(208) 883-7611
www.sunmountainnatives.com

NATIVE PLANT COLLECTION ETHICS

The recent popularity of native plants has put increasing pressure on native plant communities from collectors.

While WSU Cooperative Extension supports the use of native plants for landscaping, we strongly urge the protection of native plant populations by adhering to these guidelines:

- Do not take a plant from the wild. It is tempting to rationalize that removing one individual or clump could not possibly endanger a whole population. The truth is that it is never just one gardener digging one plant. Numerous plants being removed over time and other physical and environmental pressures cause considerable impact. The one exception to this rule is the rescuing or salvaging of plants that are facing destruction by building and development. Always get permission from the owner prior to entering property or removing plants. *Salvaging plants from the wild for cultivation is especially difficult in the Inland Northwest. Low rainfall and difficult soil conditions combine to make digging plants with large root systems difficult if not impossible. Even small plants can have extensive root systems that recover slowly if at all from transplanting.*

- Some native plants can be propagated by seed. Learn about the propagation and cultivation requirements of each particular plant. (See references for propagating native plants on page 31.) Many plants have very specific requirements for germination and establishment.

- Buy native species only from sources that state explicitly that their plants have been propagated in a nursery. Plants that are *nursery-propagated*, rather than "nursery grown or field grown" will be healthier and better looking than those taken from the wild and will have a much greater success rate.

- Use native plants propagated from Inland Northwest plants. Some botanists are concerned that the genetic integrity of local plant communities is compromised by the introduction of the same species from other regions. While regionally native plants are adapted to local soil, moisture, and seasonal conditions, plants of the same species but different region have adapted to conditions in their native region. The more people ask nurseries about the source of plants, the more pressure is placed to procure plants that are truly regionally native.

- Know which plants are rare. Obtain a copy of *Endangered, Threatened & Sensitive Vascular Plants of Washington* from the Washington State Department of Natural Resources.

"It is tempting to rationalize that removing one plant could not possibly endanger a whole population."

NATIVE PLANTS OF THE INLAND NORTHWEST

Plants on this list are grouped according to size and are listed alphabetically by common name. These plants are native to all or parts of the Inland Northwest area. Most are common to the whole area and some are native only to certain areas or sites.

Use this list to choose plant communities that are suited to the conditions on your site. Plant communities are plants that grow in association with other plants suited for the same conditions. A community type repeats itself, with variations, in similar conditions throughout a region.

The best ideas for developing native plant communities come from your own observations in natural settings. Pay attention to which plants grow in specific conditions such as dry rocky slopes, dry shaded areas, moist shaded areas, moist sunny areas or wetlands, exposed hilltops, etc. Nature is our best teacher, but lists can help. Examples of plant communities are on page 36.

Have fun! Landscaping using nature as a model opens up all kinds of opportunities for learning more about our natural heritage.

TREES

Common Name	Botanical Name	Height in feet	Soil type*					Exposure**			Comments
			A	PM	PD	RM	RD	S	PSH	SH	
Aspen, Quaking	*Populus tremuloides*	20–40	X	X				X	X		suckers in moist sites
Birch, Western Paper	*Betula papyrifera Var. commutata*	50–100	X	X				X	X		catkins
Birch, Water	*Betula occidentalis*	to 50	X	X				X	X		catkins
Cedar, Western Red	*Thuja plicata*	50–100	X	X				X	X	X	evergreen
Cottonwood, Black	*Populus tricocharpa*	100+	X					X			needs ample room
Fir, Douglas	*Pseudotsuga menziesii*	100+	X					X	X		evergreen
Fir, Grand	*Abies grandis*	100+	X					X	X		evergreen
Fir, Subalpine	*Abies lasiocarpa*	50–100	X	X				X			evergreen
Hemlock, Mountain	*Tsuga mertensiana*	100+				X		X	X	X	evergreen, high elevations
Hemlock, Western	*Tsuga heterophylla*	100+				X		X	X	X	evergreen
Larch, Western	*Larix occidentalis*	100+	X	X				X	X		deciduous

*Soil types: **A**daptable to both moist and dry sites; **P**refers **M**oist; **P**refers **D**ry; **R**equires **M**oist; **R**equires **D**ry
Exposure: **Sun; **P**art **S**hade; **S**hade

TREES											
Common Name	**Botanical Name**	**Height in feet**	**Soil type***					**Exposure****			**Comments**
			A	**PM**	**PD**	**RM**	**RD**	**S**	**PSH**	**SH**	
Pine, Lodgepole	*Pinus contorta*	100+	X								evergreen
Pine, Ponderosa	*Pinus ponderosa*	100+	X		X						evergreen
Pine, Western White	*Pinus monticola*	100+	X								evergreen
Pine, Whitebark	*Pinus albicaulis*	50+	X								evergreen, high elevations
Spruce, Engelmann	*Picea engelmannii*	100+				X					evergreen

SMALL TREES/LARGE SHRUBS											
Common Name	**Botanical Name**	**Height in feet**	**Soil type***					**Exposure****			**Comments**
			A	**PM**	**PD**	**RM**	**RD**	**S**	**PSH**	**SH**	
Alder, Mountain	*Alnus incana*	15–20				X		X	X		fixes N; catkins
Alder, Sitka	*Alnus sinuata*	10–25	X	X				X	X		fixes N; catkins
Birch, Water	*Betula occidentalis*	25–30	X	X							catkins
Bitter Cherry	*Prunus virginiana*	20+				X		X	X		fruit
Cascara or Buckthorn	*Rhamnus purshiana*	30	X						X		berries
Ceanothus, Redstem	*Ceanothus sanguineus*	8–10	X					X	X		deer browse
Chokecherry, Common	*Prunus virginiana*	20	X	X				X	X		fruit
Dogwood, Red-Osier	*Cornus stolonifera*	8–12				X		X	X		berries
Elderberry, Black	*Sambucus racemosa var. melocarpa*	8–12				X			X		berries
Elderberry, Blue	*Sambucus nigra var. cerulea*	10–15	X					X	X		berries
Hawthorn, Black	*Crataegus douglasii*	10–20	X					X	X		berries
Hawthorn, Columbia	*Crataegus columbiana*	10–30	X					X			berries
Hazelnut, Beaked	*Corylus cornuta*	3–12	X					X	X		catkins, nuts
Juniper, Rocky	*Juniperus scopulorum*	15–20	X					X			evergreen, Col. River Basin

*Soil types: **A**daptable to both moist and dry sites; **P**refers **M**oist; **P**refers **D**ry; **R**equires **M**oist; **R**equires **D**ry
Exposure: **Sun; **P**art **S**hade; **S**hade

SMALL TREES/LARGE SHRUBS

Common Name	Botanical Name	Height in feet	Soil type*					Exposure**			Comments
			A	PM	PD	RM	RD	S	PSH	SH	
Juniper, Western	*Juniperus occidentalis*	20	X					X			berries
Maple, Douglas (Rocky Mountain)	*Acer glabrum var. douglassii*	20–30	X					X	X		
Maple, Vine	*Acer circinatum*	25				X			X	X	rare in E WA
Mock orange, Syringa	*Philadelphus lewisii*	5–12	X					X	X		fragrant flowers
Mountain Ash, Sitka	*Sorbus sitchensis*	6–12	X					X			berries
Mountain Ash, Western	*Sorbus scopulina*	10–15	X					X	X		berries
Mountain-Mahogany, Curlleaf	*Cercocarpus ledifolius*	6–12						X	X		evergreen, SE WA, NE OR
Ocean-spray or Creambush	*Holodiscus discolor*	5–12	X					X	X		persistent seed heads
Orange Honeysuckle	*Lonicera ciliosa*	20	X					X			berries
Serviceberry	*Amelanchier alnifolia*	8–20	X								berries
Smooth Sumac	*Rhus glabra*	10–15	X					X			persistent seed heads
Willow, Bebb	*Salix bebbiana*	3–15				X		X	X		catkins
Willow, Pacific	*Salix. lasiandra*	30				X		X	X		catkins
Willow, Scouler	*Salix scouleriana*	15–20	X					X	X	X	catkins
Yew, Pacific or Western	*Taxus brevifolia*	15–20				X			X	X	fruit

SHRUBS & SUBSHRUBS

Common Name	Botanical Name	Height in feet	Soil type*					Exposure**			Comments
			A	PM	PD	RM	RD	S	PSH	SH	
Birch, Bog or Dwarf	*Betula glandulosa nana or pumila*	3–6	X	X					X		catkins
Bitterbrush, Antelope Bush	*Purshia tridentata*	1–3						X	X		deer browse
Black Raspberry/ Black Cap	*Rubus leucodermus*	6	X	X				X	X		berries
Blueberry, Early	*Vaccinium ovalifolium*	3–5	X	X					X		berries

*Soil types: **A**daptable to both moist and dry sites; **P**refers **M**oist; **P**refers **D**ry; **R**equires **M**oist; **R**equires **D**ry
Exposure: **Sun; **P**art **S**hade; **S**hade

SHRUBS & SUBSHRUBS										
Common Name	**Botanical Name**	**Height in feet**	**Soil type***					**Exposure****			**Comments**
			A	**PM**	**PD**	**RM**	**RD**	**S**	**PSH**	**SH**	
Clematis, Blue	*Clematis columbianum*	20 spread	X						X		vine
Clematis, White Virginsbower, Western	*Clematis ligusticifolia*	20 spread	X					X	X		vine
Cranberry, High-Bush	*Viburnum edule*	3–6	X	X					X	X	berries
Currant, Golden	*Ribes aureum*	6	X					X	X		berries
Currant, Squaw or Wax	*Ribes cereum*	2–6	X					X			berries
Currant, Sticky	*Ribes viscosssimum*	3–6	X					X	X		berries
False Azalea, Fool's Huckleberry	*Menziesia ferruginea*	2–6	X	X					X		fruit
Goat's-Beard	*Aruncus sylvester*	3–5	X	X					X	X	herbaceous
Gooseberry, Black or Swamp	*Ribes lacustre*	2–5				X		X	X		berries; high elevation
Huckleberry, Black or Big	*Vaccinium membranaceum*	2–5	X	X					X		mountainous woods
Ninebark, Mallow	*Physocarpus malvaceus*	4–6	X					X	X		
Oregon Box, Mountain Lover, Falsebox	*Pachistima myrsinites*	2–3	X					X	X		evergreen
Oregon Grape, Creeping	*Mahonia repens*	1–2	X					X	X	X	berries; evergreen
Oregon Grape, Tall	*Mahonia aquifolium var. glabella*	4–6	X					X	X		berries; evergreen
Penstemon, Shrubby	*Penstemon fruticosus*	1–2	X					X			showy purple flowers
Rabbitbrush, Gray, Big Rubber or Common	*Chrysothamnus nauseosus*	2–5					X	X			yellow flowers late summer
Rabbitbrush, Green or Little	*Chrysothamnus viscidiflorus*	2					X	X			yellow flowers late summer
Rose, Bald-Hip	*Rosa gymnocarpa*	3–5	X					X	X		fruit, SE WA
Rose, Nootka	*Rosa nutkana*	4	X	X				X	X		fruit
Rose, Woods	*Rosa woodsii*	3	X	X				X	X		fruit
Sagebrush, Big	*Artemisia tridentata*	3–5					X	X			
Sagebrush, Cut-Leaf or Three Tip	*Artemisia tripartita*	3					X	X			

*Soil types: **A**daptable to both moist and dry sites; **P**refers **M**oist; **P**refers **D**ry; **R**equires **M**oist; **R**equires **D**ry
Exposure: **Sun; **P**art **S**hade; **S**hade

SHRUBS & SUBSHRUBS

Common Name	Botanical Name	Height in feet	Soil type*					Exposure**			Comments
			A	PM	PD	RM	RD	S	PSH	SH	
Sagebrush, Prairie	*Artemisia ludoviciana*	2					X	X			
Sagebrush, Stiff	*Artemisia frigida*	1 1/2					X	X			rare
Snowberry, Common	*Symphoricarpos albus*	3–4	X					X			berries
Snowberry, Western; Wolfberry	*Symphoricarpos occidentalis*	3–4	X					X	X		berries
Snowbrush, Buckbrush	*Ceanothus velutinus*	3–6	X		X			X	X		evergreen
Soopalallie, Soapberry, Buffaloberry	*Sheperdia canadensis*	3–6	X					X	X		fixes N; berries
Spirea, Subalpine	*Spiraea densiflora s. splendens*	2	X	X				X	X		pink flower
Spirea, Birch-Leaved or Shiny Leaf	*Spiraea betulifolia*	2–3	X	X				X		X	white flower
Spirea, Douglas	*Spirea douglassii*	3–5		X					X	X	pink flower
Spirea, Pyramid	*Spiraea pyramidata*	3				X		X	X		pink flower
Thimbleberry	*Rubus parviflorus*	4	X					X	X	X	berries
Twinberry, Black Honeysuckle, Bearberry	*Lonicera involucrata*	3–6				X		X	X		berries; high elevations
Twinberry, Red Honeysuckle, Utah	*Lonicera utahensis*	3–6	X	X				X	X		berries; high elevations

GROUNDCOVERS

Common Name	Botanical Name	Height in inches	Soil type*					Exposure**			Comments
			A	PM	PD	RM	RD	S	PSH	SH	
Buckwheat, Snow	*Eriogonum niveum*	6	X		X			X			
Buckwheat, Sulfur	*Eriogonum umbellatum*	6	X		X			X			
Kinnikinnick	*Arcotostaphylus uva-ursi*	2–4	X					X	X		berries
Twinflower	*Linnaea borealis*	2–4	X	X					X	X	
Whortleberry, Grouseberry	*Vaccinium scoparium*	6–10	X					X	X	X	berries
Wild ginger	*Asarum caudatum*	6				X				X	

*Soil types: **A**daptable to both moist and dry sites; **P**refers **M**oist; **P**refers **D**ry; **R**equires **M**oist; **R**equires **D**ry
Exposure: **Sun; **P**art **S**hade; **S**hade

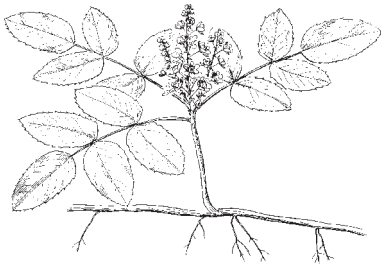
EXAMPLES OF NATIVE PLANT COMMUNITIES

SUNNY AND DRY SITES

Trees	Shrubs	Herbaceous Plants
Douglas fir	Bitterbrush	Arrowleaved balsamroot
Ponderosa pine	Kinnickinnick	Blanketflower
Western white pine	Mock orange	Idaho fescue
	Ocean-spray	Lupine
	Rabbitbush	Phlox
	Sagebrush spp,	Sulfur flower
	Serviceberry	Yarrow
	Snowberry	
	Snowbrush	
	Squaw or wax current	
	Woods rose	

SUNNY AND MOIST SITES

Trees	Shrubs	Herbaceous Plants
Alder	Blue elderberry	Camas
Birch, water or river	Douglas spirea	Rushes and sedges
Black hawthorne	Red twig dogwood	Wild iris
Cascara buckthorn	Thimbleberry	
Cottonwood (in huge areas)	Willow spp.	
Engelmann spruce		
Rocky Mountain maple		
Quaking aspen		
Western larch		



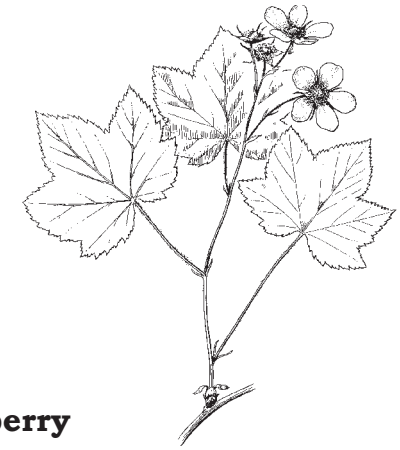
Creeping Oregon Grape

PART SHADE AND WELL-DRAINED OR DRY SITES

Trees	Shrubs	Herbaceous Plants
Douglas fir	Kinnickinnick	Sticky geranium
Engelmann spruce	Mock orange	Sword fern
Grand fir	Ocean-spray	Twinflower
Rocky Mountain maple	Oregon grape	
Western larch	Rose, woods or Nootka	
	Snowberry	
	Snowbrush	
	Spirea, shiny leaf	

MOIST AND SHADY SITES

Trees	Shrubs	Herbaceous Plants
Douglas fir	Pachistima	Bunchberry (acid soils)
Hemlock, western or mountain	Thimbleberry	Ferns, lady, oak and sword
Rocky Mountain maple		Twinflower
Vine maple		Wild ginger
Western red cedar		



Thimbleberry

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Snowberry

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EXTENSION AND GOVERNMENT DOCUMENTS

Backyard Wildlife Sanctuary Information Packet. Available for $5 from Backyard Wildlife Sanctuary Program, Washington State Department of Fish and Wildlife, 8702 N Division St., Spokane WA 99218.

Ecology and Culture of Selected Species Useful in Revegetating Disturbed Lands in the West, by Clinton Wasser. US Dept. of Interior and Fish and Wildlife Service, 1982.

Ninebark

Field Guide to Forest Plants of Northern Idaho, by Patricia Patterson, Kenneth Neiman, and Jonakea Tonn. General Technical Report INT-180. Ogden, UT: US Department of Agriculture, Forest Service, Intermountain Research Station; 1985.

Landscaping for Wildfire Prevention, by Yvonne Carree, Chris Schnepf and Michael Colt. Station Bulletin #67. A University of Idaho, Idaho Department of Lands and US Forest Service cooperative project, 1998. Available for $3 from Extension Forestry, U of I College of Forest, Wildlife and Range, Moscow ID 83844-1140.

Landscaping with Native Plants in Kittitas County, by Mary Anderson. A Department of Natural Resources, WSU Extension/Kittitas County, and City of Ellensburg cooperative project, 1995. Call DNR at 1-800-523-8733 to request a copy.

Northwest Native Plants, Identification and Propagation. King County Department of Natural Resources, Water and Land Resources Division, 700 5th Ave., Suite 2200, Seattle, WA 98104.

Waterwise and Native Plants for Missoula County. Missoula, MT, 1996: MSU Extension, 126 W Spruce, Missoula, MT 59802. 406-721-4095.

MAGAZINE

Wild Ones Journal, A Newsletter of Wild Ones
PO Box 1274
Appleton, WI 54912-1274
http://www.epa.gov/greenacres/wildones

AGENCIES AND ORGANIZATIONS

County Conservation Districts provide technical assistance with conservation plantings, forestry, watersheds, riparian zones, and wetland construction. Some districts have annual tree sales for conservation and wildlife plantings. Look in telephone directories under "County" listings.

County Noxious Weed Control Boards provide on-site assistance for noxious weed identification; chemical, cultural and mechanical control recommendations; long-term control plans; weed photo guides and use of backpack sprayers. Look in telephone directories under "County" listings.

Cooperative Extension Offices (supported jointly by state land grant universities and counties) provide educational materials and programs on topics including horticulture, landscaping, gardening, weed and pest management and natural resources. Some offices provide classes and workshops and/or support Master Gardener Programs. Look in telephone directories under "State University, Cooperative Extension" listings and under "County Cooperative Extension Office."

Smooth Sumac

Department of Ecology (Washington State) provides technical assistance through the "Shorelands and Environmental Assistance Program" with riparian zone vegetation management plans.
4601 N Monroe St., Suite 202, Spokane, WA 99205 509-456-2796

Department of Fish and Wildlife (Washington State) provides information through the "Backyard Wildlife Sanctuary Program" on how to best offer food, shelter and water for wildlife.
8702 N Division St., Spokane, WA 509-456-4082

Department of Natural Resources (Washington State) provides on-site assistance with plans for forested lands, wildlife habitat, riparian areas, and firesafe homesites.
PO Box 190, Colville, WA 99114-1090 1-800-527-3305

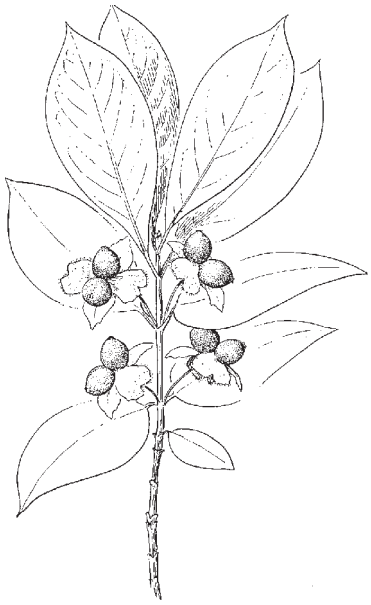
Native Plant Society (state) is a non-profit organization in most states dedicated to appreciation and preservation of native plants. Local chapters have newsletters, regular meetings.

Washington Native Plant Society
6310 NE 74th St, Ste. 215E
Seattle, WA 98115
(206) 527-3210
www.wnps.org

Montana Native Plant Society
PO Box 8783
Missoula, MT 59807-8783
www.mtnativeplants.org

Idaho Native Plant Society
PO Box 9451
Boise, ID 83707
www.idahonativeplants.org

FINDING NATIVE PLANTS



Bearberry Honeysuckle

The Inland Northwest has many wholesale suppliers of native trees, shrubs and plants for landscape use, but finding them in retail garden centers is not always easy. Retailers have been reluctant to carry them because consumer demand for them is much lower than for non-natives. This is changing though and some retail centers are adding them to their standard inventory. Many will special order natives for you if you request them and give them some lead-time. The more requests retailers get, the more willing they will be to stock them. Native plants give independently-owned retail nurseries a competitive edge over national chain stores.

Retail native plants may look a little different from other nursery stock. They may not be leafed out or flowering at the time of sale as are plants from California or west side nurseries. Don't balk at purchasing these undeveloped plants, though. The optimum time for planting anything is before it leafs out.

Please call or fax nurseries for plant lists, delivery area, shipping fees, minimum orders and other business terms. *Remember that other retail nurseries and garden centers may carry some natives and can special order them upon request.*

W=wholesale only R=retail

Apple Creek Propagators (W)
260 Kings Row Rd
Bonners Ferry, ID 83805
(208) 267-5305
www.applecreekpropagators.com

Bonners Ferry Nursery (W)
3040 District Two Rd
Bonners Ferry, ID 83805-5191
(208) 267-3020
www.bfntrees.com

Bitterroot Native Growers (W)
c/o Bitterroot Restoration Inc.
445 Quast Lane
Corvallis, MT 59828-9406
(406) 961-4991
www.bitterrootrestoration.com

Buffalo-berry Farm
51 East Lake Ford Rd
McCall, ID 83638
(208) 634-3062
www.buffaloberryfarm.com

Bremer's Nursery (W)
75164 Hwy 2
Moyie Springs, ID 83845
(208) 267-4501
www.bremersnursery.com

Clifty View Nursery (W)
312 Clifty View Rd
Bonners Ferry, ID 83805
(208) 267-7129
www.cliftyview.com

Cold Hardy Plant Material (W)
PO Box 714
Bonners Ferry, ID 83805
(208) 267-2798
www.coldhardyplants.net

Daniel's Nursery (W)
2198 Hwy 25 South
Kettle Falls, WA 99141
(509) 738-2633
www.danielsnursery.com

Firwood Wholesale Nursery (W)
8403 W Burroughs Rd
Deer Park, WA 99006
(509) 276-8063

Grassland West (Seeds only, W&R)
908 Port Drive
Clarkston, WA 99403
(866) 214-2947
www.grasslandwest.com

Great Basin Natives (R)
PO Box 360114
Holden, UT 84636
(435) 795-2303
www.greatbasinnatives.com

Greenacres Nursery
18605 E Appleway
Greenacres, WA 99016
(509) 328-1922

Hash Tree Company (W)
1199 Bear Creek Rd
Princeton, ID 83857
(208) 875-1000
www.hashtree.com

High Altitude Gardens
c/o Seeds Trust
PO Box 596
Cornville, AZ 86325
(928) 649-3315
www.seedstrust.com/has/highaltitudeseeds.html

Kinder Gardens (W&R)
1137 S Hwy 17
Othello, WA 99334
(509) 488-5017

L&H Seeds
4756 W SR 260
Connell, WA 99326
(800) 995-0234
www.lhseeds.com

Lawyer Nursery (W)
6625 Montana Hwy 200
Plains, MT 59859
(800) 551-9875
www.lawyernursery.com

Methow Natives
19 Aspen Lane
Winthrop, WA 98862
(509) 341-4060
www.methownatives.com

Native Seed Foundation (Seeds only, W)
7312 Perkins Lake Rd
Moyie Springs, ID 3845
(208) 867-1477
http://www.nativeseedfoundation.com/

Nature's Enhancement ($100 minimum, W)
2980 Eastside Hwy
Stevensville, MT 59870
(406) 777-3560

Plants of the Wild
PO Box 866
Tekoa, WA 99033
(509) 284-2848
www.plantsofthewild.com

Prairie Bloom Nursery (R)
5602 State Rte 270
Pullman, WA 99163
(509) 332-4425

Rainier Seeds
(Seeds only, W & R)
1404 4th Street
Davenport, WA 99122
(800) 828-8873
www.rainierseeds.com

Sun Mountain Natives
1406 East F Street
Moscow, ID 83843
(208) 883-7611
www.sunmountainnatives.com

Thompsons Wholesale Nursery LLC (W)
39110 N Sherman Rd
Deer Park, WA 99005
(509) 276-7399

Wildlands Inc.
1941 Saint Street
Richland, WA 99354
(800) 288-8328
www.wildlands-inc.com

Wildlife Habitat Institute
(W, minimum $ for Retail)
1025 E Hatter Creek Rd
Princeton, ID 83857
(208) 875-1246
http://whn-online.com/

Alpine Wildseed (W, R)
1308 N Alder #1
Ellensburg, WA 98226
(509) 933-3063
www.lspcowboy.com/aws

Derby Canyon Natives (W, R)
PO Box 385
Peshastin, WA 98847
(509) 548-9404
www.derbycanyonnatives.com

NOTES

College of Agricultural, Human, and Natural Resource Sciences

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