

The list below provides examples of trees, shrubs, ground covers and perennial plants for hedgerows. These plants grow well to 600 feet above sea level, starred (\*) plants grow in wet soils, and (•) indicates plants easily maintained to 5'.

**Proper site selection and plant requirements must be considered in hedgerow planning.**

**A Sun tolerant plants that grow over 25'**

<u>Botanical Name</u>	<u>Common Name</u>
1. Abies grandis	Grand Fir
2. Acer macroplyllum	Big Leaf Maple
3. Alnus rubra	Red Alder(*)
4. Calocedrus decurrens	Incense Cedar
5. Castanea mollissima	Chinese Chestnut
6. Chrysolepis chrysophylla	Golden Chinquapin
7. Fraxinus latifolia	Oregon Ash(*)
8. Ilex species	Holly
9. Juglans cinerea	Butternut
10. Picea species	Spruce
11. Pinus ponderosa	Ponderosa Pine
'Willamette Valley '	
12. Populus trichocarpa	Black Cottonwood
13. Prunus subcordata	Klamath Plum(*)
14. Pseudotsuga menziesii	Douglas Fir
15. Quercus garryana	Oregon White Oak
16. Robinia pseudoacacia	Black Locust
17. Thuja plicata	Western Red Cedar

**B Sun tolerant plants that grow under 25'**

18. Malus spp.	Apple
19. Arbutus spp.	
20. Ceanothus velutinus	Tobacco Brush
21. Crataegus douglasii	Hawthorn
22. Crataegus oxycantha	English Hawthorn
23. Diospyros kaki	Japanese Persimmon
24. Diospyros virginiana	American Persimmon
25. Eleagnus umbellata	Autumn Olive
26. Malus fusca	West Coast Crabapple
27. Myrica pennsylvanica	Bayberry
28. Ribes sanguineum	Red fl. Currant(*•)
29. Ribes divariculatum	Black Gooseberry(*•)
30. Ribes nigra	Black Currant(*•)
31. Rosa nutkana	Nootka Rose(•)
32. Salix fluviatilis	Columbia Riv. Willow(*)
33. Salix hookeriana	Hooker's Willow(*)
34. Sambucus cerulea	Blue Elderberry(*)
35. Spiraea douglasii	Western Spiraea(*)
36. Vaccinium corybosum	Blueberry(*•)

**C Plants that tolerate shade**

37. Chrysolepis chrysophylla	Golden Chinkapin
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38. Cornus nuttallii	Western Fl. Dogwd(*)
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39. Corylus cornuta	Hazel(*)
40. Physocarpus capitatus	Ninebark
41. Polystichum munitum	Sword Fern
42. Sambucus racemosa	Red Elderberry(*)
43. Prunus virginiana	Chokecherry

**D Plants tolerate partial shade to shade**

44. Acer circinatum	Vine Maple (*)
45. Amelanchier alnifolia	Serviceberry
46. Berberis aquifolium	Oregon Grape(•)
47. Cornus stolonifera	Red-osier Dogwood(•)
48. Gaultheria shallon	Salal(•)
49. Holodiscus discolor	Ocean Spray
50. Lonicera involucrata	Twinberry(•)
51. Oemleria cerasiformis	Indian Plum
52. Philadelphus lewisii	Mock Orange
53. Rhamnus purshiana	Cascara Sagrada
54. Taxus brevifolia	Western Yew(*)
55. Vaccinium ovatum	Evgreen Huckleberry(•)

**E Edge plantings**

56. Achillea millefolium	Yarrow(•)
57. Berberis nervosa	Cascade Or. Grape(•)
58. Calendula officinalis	Calendula(•)
59. Cichorium intybus	Chicory(•)
60. Foeniculum vulgare	Fennel(•)
61. Frageria chiloensis	Wild Strawberry
62. Gaultheria shallon	Salal(•)
63. Lavendula angustifolia	English Lavender(•)
64. Medicago sativa	Alfalfa(•)

**Pond edge**

65. Typha latifolia	Cattail(*)
66. Ledum grandulosum	Labrador tea(*)

**Bamboo**

67. Phyllostachys aurea	Yellow Groove(*)
68. Phyllostachys bambusoides	Giant Timber (*)
69. Phyllostachys nigra	Black Bamboo(*)
70. Phyllostachys bissetii	Bisset Bamboo(*)
71. Phyllostachys congesta(*)	
72. Phyllostachys meyeri(*)	

# A Guide To Multi-Functional Hedgerows In Western Oregon

- Enhance Wildlife Habitat
- Diversify Farm Income
- Reduce Soil Erosion
- Decrease Wind Damage
- Conserve Water
- Create Boundary Borders and Privacy Screens

**Hedgerows**, also known as shelterbelts or windbreaks, are rows of trees, shrubs, and low growing plants that divide or border fields and/or suburban lots. In England, many farms are surrounded by ancient hedgerows that conserve soil and water, provide a home to wildlife, and serve as barriers. In the United States a similar tradition never developed, although trees were sometimes left along field margins. In the 1930's, tree planting for windbreaks on the prairies, was supported by the USDA's Shelterbelt Program.

In recent years, with renewed interest in sustainable farming methods, the many benefits of hedges have been rediscovered.

### ***Enhance Wildlife***

Hedgerows provide habitat for a large variety of mammal, bird, reptile, and insect species, many of which are beneficial. Some examples of Northwest native plants that attract wildlife are oak, madrone, cedar, blue elderberry, hawthorn, Oregon ash, serviceberry, Oregon grape, salal and kinnikinnick.

### ***Diversify Farm Income***

Trees, shrubs, and herbaceous plants can be selected for additional sources of income. Some products that can be grown in the hedgerow are: nuts, fruits and berries, medicinal herbs (leaves, flowers, seeds, bark and roots), seeds for collection, nursery stock, flowers, floral greenery, willows for craft material, and secondary wood products such as; lumber, veneer, and firewood. Encouraging game birds can provide the landowner with potential sources of revenue. Quail, pheasant, and sage grouse are a few game birds found in Oregon.

### ***Hedgerows can enhance the beauty, productivity and bio-diversity of farms.***

#### ***Reduce Soil Erosion***

Water flow from rain and irrigation, as well as, clean cultivation and vacant field borders can increase erosion potential. Hedgerows provide a barrier that can slow water flow and trap soil particles, this is especially useful along waterways.

#### ***Decrease Wind Damage***

Wind can disturb pollination and damage fruit and flowers when plant parts thrash against each other. Plants under wind stress put energy into growing stronger roots and stems. The result is smaller yields and delayed maturity. Strong winds cause grain and grass crops to lodge making harvest more difficult. Properly designed hedgerows can reduce wind speed by up to 75% and improve crop performance.

#### ***Conserve Water***

Well planned hedgerows retain water and reduce evaporation by blocking drying winds in summer.

#### ***Create Borders and Privacy Screens***

Hedgerows are attractive borders. They can serve as privacy screens along road sides and between properties. As they mature and become dense they can reduce noise, dust, and function as barriers.

#### ***Establishing and Maintaining***

Establishing hedgerows is a long term commitment. With proper planning and care it will take approximately four to eight years to establish a hedgerow and thirty or more years to reach maturity.

A North-South planting direction is the ideal, but not essential, in hedgerow placement. When possible, they ought to be placed perpendicular to prevailing winds.

The location, function, and size of hedgerows are the largest factors influencing plant selection. The

enclosed plant and resource list provides examples of what is available locally. Plantings can be from 2" to 4" plant tubes or one gallon containers. Some bareroot plants are more difficult to establish.

Avoid plants that are an alternate host for pest and disease problems or that have invasive characteristics. Some perennial species such as blackberry, which are endemic, can function as excellent wildlife habitat and food crops but are highly invasive and will require frequent maintenance.

Hedgerow layout is determined by the location, function, and plants selected. Hedgerows are always longer than they are wide. Although a single line of trees will provide some benefits, four or more rows of plants will offer optimal advantage for windbreaks, water and soil conservation, and habitat adequate for wildlife. The plants that are the tallest at maturity are placed in the center row with shorter ones interplanted between and along the edges. A diverse variety of plants is most beneficial.

Soil preparation is one of the keys to successful plant survival. An easy way to establish planting areas in existing grass/pasture is to apply a thin layer of compost or manure followed by a layer or two of cardboard and cover with a mulch like straw or leaves. In large areas this may not be practical so cover crops can be utilized. These crops improve soil fertility, reduce weeds, and attract beneficial insects. When planting in heavy clay soil, the ground could be tilled in spring and planted with cover crops, such as: crimson clover in early spring followed by buckwheat, till or disc in late summer and replant with a late sowing of an over-wintering cover-crop: crimson clover, field peas, and/or vetch. Till again in spring. The ideal time for planting is in March or April so that plants will have time for root establishment. Amendments, such as compost or manure, can be applied as a top dressing.

There are a variety of techniques to inhibit unwanted plants within the hedgerow. The simplest method is to leave alleys between plant rows for mowing, cultivation, or mulching until plants are well-established. Mulching heavily with leaves, straw,

sawdust, or cardboard is effective. If other means are used to establish the hedgerow it is essential that the riparian zone (river, creek, pond, etc.) be protected from any contamination. As plants mature they will eventually shade out most annual weeds. Ideally, an area 6' to 8' wide around the hedgerow can be mowed, flailed, or tilled for weed management, fire protection, and rodent control. If need be, protect young plants from animals with wire mesh, plastic coated cardboard, or other materials.

Depending on the plants selected, some supplemental water may be needed for the first three years. This water can be supplied by swales, furrows, flood and/or drip irrigation. Overhead crop irrigation can be extended to water these plantings.

### ***Costs of Establishment***

Planting hedgerows does not have to be expensive. Seedling plants are available at low cost, and propagating from existing plantings is feasible.

There are government programs available to assist landowners with hedgerow development. Many counties have Riparian Lands Tax Exemption Programs and Wildlife Habitat Conservation and Management Programs.

### ***For additional information contact:***

Agro-Ecology Northwest  
Pacific Northwest Hedgerow Project  
1161 Lincoln Street  
Eugene, Oregon 97401  
(541)342-1160 Jude Hobbs

Oregon State University Extension  
Marion County  
3180 Center Street N.E. #1361  
Salem, Oregon 97301  
(503)588-5301 Daniel McGrath

Oregon Department of Fish and Wildlife  
170 N.E. Vandenberg Avenue  
Corvallis, Oregon 97330-9446  
(541)757-4186 Steve Smith

***Plant resources:***

Hortus Northwest  
P.O. Box 379  
Hubbard, Oregon 97032  
(503)570-0859 (800)704-7927  
A Pacific N.W. Native Plant Directory and Journal

Oregon Association of Nurserymen  
2780 SE Harrison Street Suite 102  
Milwaukie, Oregon 97222  
(800)342-6401  
List of nurseries.