

Design a Garden that Attracts & Supports Birds

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Spokane County Master Gardener Foundation

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Design a Garden that Attracts & Supports Birds

by Pamela Brown



Birds are either carnivorous or omnivorous. They are either local native or migratory birds. Their dietary needs are best met by the native plants and insects found here, even when they are migratory birds that have adapted to local conditions.



While adult birds enjoy the bonus of seeds we provide in feeders, they will only establish nests near plants that host insects for their offspring. Young birds require the high protein diet of local insects. Therefore, it is critical to not only plant and protect native plant varieties, but to largely avoid the use of insecticides, particularly non-specific, generally applied insecticides.



Healthy gardens offer a large variety of plants, native and non-native, so there is an abundance of food sources throughout the year – nectar, fruits, nuts, seeds, foliage, pollen, sap, and most importantly – insects. Healthy gardens often have a variety of plant species to reduce the spread of plant diseases. Certain birds (and mammals) will hibernate and require a rich diet in the fall; some birds need to fatten up, and some to hide in nests, tree cavities, or in the ground. Select plants with fall fruits, nuts, and seeds, and prune so that food is left on the plants through the winter.



Migratory birds have predictable migration schedules. Some local species remain in the area over the winter. Plan a planting scheme that provides food at the times specific birds are present in your garden, or would be if the preferred plants and insects were present. (Plant the shrub and they will come!) Know which flowers, seeds, and insects the various birds prefer, and offer a variety. To extend the blooming season, include annuals that bloom over a long period, and deadhead perennials so that they will re-bloom.



To extend the buffet offered by your delicious plants, allow desirable seeds and pods to remain on plants into the fall and winter. The entire garden does not need to be immaculate. Know which plants provide nutrients, and when, and for which birds, and then plan areas where you will maintain fall and winter feeding by leaving the seeds on the plants. Ripening seeds turn tan then dark brown. Entry gardens could be tidy, while farther areas left wilder.



Songbirds are typically seed eaters, and will enjoy both seeds found on plants and in feeders. Local seed eating songbirds include finches, cardinals, juncos, nuthatches, chickadees, and sparrows. Some have tiny, sharp beaks and eat in large groups like finches; some have blunt beaks and crush the seeds, such as grosbeaks; and some grab and go from feeders.



Fruit eating birds have large appetites, including waxwings, orioles, warblers, tanagers, and mockingbirds. They will love any fruit-bearing plants. When those fruits are not in season, supplemental food trays with orange halves, apple slices, and grapes will attract birds.



Birds that prefer insects, often have long beaks to reach into tree bark, include woodpeckers, nuthatches, and robins. In winter, when fewer insects are available in the wild, these birds will enjoy suet and trays with dehydrated insects and mealworms.



FREQUENTLY SEEN NATIVE & MIGRATING BIRDS

CHICKADEES



Black-capped Chickadee



Mountain Chickadee



Chestnut-backed Chickadee

TITMICE



Tufted Titmouse

SHRIKES



Northern Shrike

WAXWINGS



Cedar Waxwing



Bohemian Waxwing

WOODPECKERS



Pileated Woodpecker



Downy Woodpecker



Hairy Woodpecker



Northern Flicker

NUTHATCHES



Pygmy Nuthatches



Red-breasted Nuthatch



White-breasted Nuthatch

KINGLETS



Golden-crowned Kinglet (female)



Ruby-crowned Kinglet (female)



FINCHES AND SPARROWS



Black-headed Grosbeak



Pine Grosbeak



Evening Grosbeak



Indigo Bunting



female



Cassin's Finch



House Finch



Purple Finch



Red Crossbill



Pine Siskin



American Goldfinch



Spotted Towhee



Vesper Sparrow



Chipping Sparrow



Savannah Sparrow



Song Sparrow



Dark-eyed Junco female



Junco male

WARBLER BUNTINGS



Western Tanager



Orange-crowned Warbler



Common Yellowthroat



BLACKBIRDS, ORIOLES



Red-winged Blackbird



Brown-headed Cowbird



Cowbird female



Western Meadowlark



Brewer's Blackbird



Brown-headed Cowbird



Yellow-headed Blackbird

THRUSHES



Varied Thrush



Swainson's Thrush



Western Bluebird



American Robin

LARKS AND SWALLOWS



Violet-green Swallow



Tree Swallow



Northern Rough-Winged sparrow



Bank Swallow



Barn Swallow



Cliff Swallow



Horned Lark

CORVIDS



American Crow



Raven



Black-billed Magpie



Canada Gray Jay

FLYCATCHERS



Western Kingbird



Eastern Kingbird



Western Wood Pewee



Willow Flycatcher



Say's Phoebe

HUMMINGBIRDS



Black-chinned Hummingbird



Calliope Hummingbird



BIRDS OF PREY - RAPTORS



American Kestrel



Osprey



Bald Eagle



Cooper's Hawk



Sharp-shinned Hawk (more square tail)



Northern Harrier



OWLS



Great Horned Owl



Western Screech Owl



Northern Pygmy-Owl



Barn Owl

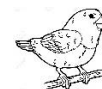
WATERFOWL	NIGHTHAWKS, SWIFTS	Ring-billed Gull (1)	Acorn Woodpecker (5)	Chestnut-backed Chickadee (3)	Brewer's Sparrow (3)
Snow Goose (3)	Common Nighthawk (2)	California Gull (2)	Williamson's Sapsucker (5)	NUTHATCHES, CREEPER	Fox Sparrow (2)
Ross's Goose (4)	Common Poonwill (3)	Herring Gull (3)	Red-naped Sapsucker (2)	Red-breasted Nuthatch (1)	American Tree Sparrow (3)
Greater White-fronted Goose (3)	Black Swift (5)	Iceland Gull (4)	Red-breasted Sapsucker (5)	White-breasted Nuthatch (2)	Dark-eyed Junco (1)
Cackling Goose (2)	Vaux's Swift (3)	Glaucous-winged Gull (4)	Am. Three-toed Woodpecker (4)	Pygmy Nuthatch (1)	White-crowned Sparrow (1)
Canada Goose (1)	White-throated Swift (2)	Glaucous Gull (4)	Downy Woodpecker (1)	Brown Creeper (2)	Golden-crowned Sparrow (3)
Mule Swan* (5)	HUMMINGBIRDS	Scapular Tern (3)	Hairy Woodpecker (1)	WRENS, GNATCATCHER, DIPPER	Harris's Sparrow (4)
Trumpeter Swan (3)	Black-chinned Hummingbird (1)	Black Tern (2)	White-headed Woodpecker (4)	Rock Wren (2)	White-throated Sparrow (4)
Tundra Swan (1)	Anna's Hummingbird (4)	Arctic Tern (4)	Northern Flicker (1)	Canyon Wren (2)	Vesper Sparrow (1)
Wood Duck (2)	Calliope Hummingbird (1)	Common Tern (5)	Pileated Woodpecker (2)	House Wren (1)	Savannah Sparrow (1)
Blue-winged Teal (2)	RAILS, CRANES	Forster's Tern (3)	LOONS	Pacific Wren (1)	Song Sparrow (1)
Cinnamon Teal (1)	Virginia Rail (2)	Red-throated Loon (5)	FALCONS	Marsh Wren (1)	Lincoln's Sparrow (2)
Northern Shoveler (1)	Sora (2)	Pacific Loon (4)	American Kestrel (1)	Bewick's Wren (2)	Swamp Sparrow (4)
Gadwall (1)	American Coot (1)	Common Loon (2)	Gyrfalcon (4)	American Dipper (2)	Spotted Towhee (1)
Eurasian Wigeon (3)	Sandhill Crane (4)	CORMORANTS, PELICANS, HERONS	Peregrine Falcon (3)	KINGLETS	CHAT, BLACKBIRDS, ORIOLES
American Wigeon (1)	SHOREBIRDS	Double-crested Cormorant (1)	Prairie Falcon (3)	Golden-crowned Kinglet (1)	Yellow-breasted Chat (3)
Mallard (1)	Black-necked Stilt (2)	American White Pelican (2)	FLYCATCHERS	Ruby-crowned Kinglet (1)	Yellow-headed Blackbird (1)
American Black Duck* (5)	American Avocet (3)	Great Blue Heron (1)	Ash-throated Flycatcher (5)	THRUSHES	Bobolink (4)
Northern Pintail (1)	Black-bellied Plover (4)	Great Egret (3)	Western Kingbird (1)	Western Bluebird (1)	Western Meadowlark (1)
Green-winged Teal (1)	American Golden-Plover (4)	Snowy Egret (5)	Eastern Kingbird (1)	Mountain Bluebird (2)	Bullock's Oriole (1)
Canvasback (2)	Killdeer (1)	Little Blue Heron (5)	Olive-sided Flycatcher (3)	Townsend's Solitaire (2)	Red-winged Blackbird (1)
Redhead (1)	Semipalmated Plover (3)	Cattle Egret (5)	Western Wood-Pewee (1)	Veery (3)	Tricolored Blackbird (5)
Ring-necked Duck (1)	Mountain Plover (5)	Green Heron (5)	Willow Flycatcher (1)	Swainson's Thrush (2)	Brown-headed Cowbird (1)
Greater Scaup (3)	Upland Sandpiper (X)	Black-crowned Night-Heron (4)	Least Flycatcher (3)	Hermit Thrush (3)	Rusty Blackbird (5)
Lesser Scaup (1)	Whimbrel (5)	WHITE-FACED ILLIS (5)	Hammond's Flycatcher (1)	American Robin (1)	Brewer's Blackbird (1)
Harlequin Duck (4)	Long-billed Curlew (4)	VULTURE, RAPTORS	Gray Flycatcher (2)	Varied Thrush (2)	Common Grackle (5)
Surf Scoter (3)	Hudsonian Godwit (5)	Turkey Vulture (2)	Dusky Flycatcher (1)	MIMIDS, STARLING	Great-tailed Grackle (5)
White-winged Scoter (4)	Marbled Godwit (4)	Osprey (1)	Pacific-slope Flycatcher (1)	Gray Catbird (2)	WARBLERS
Black Scoter (5)	Ruddy Turnstone (5)	Golden Eagle (3)	Eastern Phoebe (5)	Brown Thrasher (5)	Ovenbird (5)
Long-tailed Duck (4)	Red Knot (5)	Northern Harrier (1)	Say's Phoebe (1)	Sage Thrasher (5)	Northern Waterthrush (4)
Bufflehead (1)	Sharp-shinned Hawk (2)	Cooper's Hawk (2)	Loggerhead Shrike (5)	Northern Mockingbird (5)	Golden-winged Warbler (5)
Common Goldeneye (1)	Dunlin (4)	Northern Hawk (1)	Northern Shrike (2)	European Starling (1)	Black-and-white Warbler (5)
Barrow's Goldeneye (2)	Least Sandpiper (4)	Sharp-shinned Hawk (2)	Yellow-throated Vireo (5)	WAXWINGS to PIPITS	Tennessee Warbler (4)
Hooded Merganser (1)	Bald Eagle (1)	Northern Goshawk (3)	Cassin's Vireo (1)	Bohemian Waxwing (2)	Orange-crowned Warbler (1)
Common Merganser (1)	Broad-winged Hawk (5)	Red-tailed Hawk (1)	Warbling Vireo (1)	Cedar Waxwing (1)	Nashville Warbler (2)
Red-breasted Merganser (4)	Swainson's Hawk (4)	Rough-legged Hawk (2)	Red-eyed Vireo (3)	House Sparrow (1)	MacGillivray's Warbler (2)
Ruddy Duck (1)	Red-tailed Hawk (1)	Ferruginous Hawk (4)	CORVIDS	American Pipit (2)	Common Yellowthroat (1)
GALLINACEOUS BIRDS	OWLS	Barn Owl (3)	Flammulated Owl (5)	FINCHES, SPARROWS	Hooded Warbler (5)
California Quail (1)	Spotted Sandpiper (1)	Western Screech-Owl (2)	Great Horned Owl (1)	Evening Grosbeak (3)	American Redstart (3)
Wild Turkey (1)	Solitary Sandpiper (3)	Great Horned Owl (1)	Snowy Owl (4)	Pine Grosbeak (3)	Cape May Warbler (5)
Ruffed Grouse (2)	Lesser Yellowlegs (1)	Willow (5)	Greater Yellowlegs (1)	Gray-crowned Rosy-Finch (4)	Yellow Warbler (1)
Dusky Grouse (3)	Wilson's Snipe (1)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	House Finch (1)	Blackpoll Warbler (5)
Sharp-tailed Grouse (X)	Spotted Sandpiper (1)	Red-necked Phalarope (3)	Red Phalarope (5)	Purple Finch (5)	Palm Warbler (5)
Gray Partridge (2)	Solitary Sandpiper (3)	Red-necked Phalarope (3)	Parasitic Jaeger (5)	Cassin's Finch (2)	Yellow-rumped Warbler (1)
GREBES	Lesser Yellowlegs (1)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Common Redpoll (3)	Townsend's Warbler (2)
Pied-billed Grebe (1)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Hoary Redpoll (5)	Hermit Warbler (5)
Horned Grebe (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Red Crossbill (1)	Black-throated Green Warbler (5)
Red-necked Grebe (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	White-winged Crossbill (4)	Wilson's Warbler (2)
Eared Grebe (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Pine Siskin (1)	TANAGERS to DICKCISSEL
Western Grebe (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Lesser Goldfinch (4)	Western Tanager (1)
Clark's Grebe (4)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	American Goldfinch (1)	Rose-breasted Grosbeak (4)
PIGEONS, DOVES	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Snow Bunting (4)	Black-headed Grosbeak (1)
Rock Pigeon (1)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Grasshopper Sparrow (3)	Lazuli Bunting (2)
Band-tailed Pigeon (5)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Chipping Sparrow (1)	Indigo Bunting (5)
Eurasian Collared-Dove (1)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Clay-colored Sparrow (3)	
White-winged Dove (5)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)		
Mourning Dove (1)	Wilson's Phalarope (2)	Wilson's Phalarope (2)	Wilson's Phalarope (2)		



PLANT FAMILIES

These plant families include specific varieties that will thrive in this region, and will provide either cover/shelter, food, nesting sites, and/or roosting sites. Look at the longer “Plants that Birds Love” list for additional information. When possible, select native varieties within each family.

Evergreen Trees (20' or more)	Deciduous Trees (20' or more)	Evergreen Shrubs
Abies – Fir Picea - Spruce Pinus – Pine Pseudotsuga – Douglas Fir Thuja plicata – Red Cedar Tsuga - Hemlock	Acer – Maple Alnus - Alder Betula – Birch Celtis - Hackberry Cornus – Dogwood Crataegus - Hawthorn Fagus – Beech Larix - Larch Liquidambar - Sweet Gum Malus – Crabapple Morus - Mulberry Populus – Aspen and Cottonwood Prunus – Cherry and Plum Quercus – Oak Salix - Willow Sorbus – Ash	Cotoneaster Ilex – Holly Juniperus - Juniper Mahonia – Oregon Grape Pyracantha – Fire Thorn Rhododendron – Rhododendron & Azalea Thuja occidentalis – Arborvitae Tsuga - Hemlock
Deciduous Shrubs	Vines	Groundcovers
Amelanchier - Serviceberry Aronia - Chokeberry Callicarpa – Beautyberry Cornus – Dogwood Holodiscus - Oceanspray Ribes – Currant Rosa – Rose Rhus – Sumac Ribes - Current Rubus – Blackberry Salix - Willow Sambucus – Elderberry Symphoricarpos - Snowberry Vaccinium – Blueberry, Huckleberry Viburnum - Viburnum	Campsis – Trumpet Vine Lonicera - Honeysuckle Vitis – Grape Parthenocissus – Virginia Creeper	Arctostaphylos uva-ursu- Kinnikinnick Fragaria – Wild Strawberry Mahonia repens – Creeping Oregon Grape
Perennials	Annuals	Grasses
Aquilegia – Columbine Aster - Aster Bellis perennis – Daisy Coreopsis - Coreopsis Digitalis - Foxglove Echinacea – Coneflower Helianthus – Perennial sunflower Heuchera – Coral Bells Lobelia – Cardinal Flower Monarda – Bee Balm or Bergamot Penstemon - Beardtongues Rudbeckia – Black-Eyed Susan Symphotrichum - Aster	Centaurea - Cornflower or Bachelor's Buttons Helianthus – Annual Sunflower Tagetes - Marigold Zinnia - Zinnia	Andropogon - Beargrass Miscanthus – Maidengrass Panicum – Switchgrass Pennisetum – Millet Schizachyrium - Bluestem



PLANTS THAT BIRDS LOVE

PLANTS TO GROW ** means Native	Prefers: S Sun P Partial Sh Shade	Prefers: A Avg. M Moist D Dry	VALUE Food for birds Cover Nesting material	WHEN	BIRDS THAT WILL ENJOY
Abies grandis ** – <i>Grand Fir</i>	P, Sh	A	Cover, insects, cones, nesting sites	Winter cover	Cone seeds: crossbills, jays, juncos, nuthatches, finches, nuthatches, chickadees, towhees, grosbeaks Nesting: tanagers, grosbeaks, robins
Abies lasiocarpa ** – <i>Subalpine Fir</i>	S, P, Sh	A	Cover, insects, cones, nesting sites	Winter cover	Cone seeds: woodpeckers, nuthatches, juncos, chickadees, crossbills, siskins, grouse, owls
Acer – <i>Maple</i> Acer negundo – <i>Box Elder</i>	P, S	M	Catkins with seeds	Summer	Seeds: grosbeaks, purple finches, pine siskins, goldfinches, robins Nesting: nuthatches Insects: chickadees, nuthatches, wrens
Alnus glabrum ** <i>Douglas Maple</i> Alnus glutinosa – <i>Black Alder</i> Alnus rubra ** – <i>Red Alder</i>	S, P	M	Catkins with seeds	Fall	Cover: many birds Seeds: Finches, jays, tanagers, grosbeaks, sapsuckers, wood warblers, nuthatches, pine siskin, mallards, great blue herons, goldfinches Insects: Tanagers, buntings, grosbeaks Nesting: jays
Amelanchier alnifolia ** – <i>Saskatoon Serviceberry or Juneberry</i>	P, S	A	Purple berries	Flowers: early summer; Fruit: Late summer	Fruit: woodpecker, robin, thrush, cedar waxwings, flicker, bluebird, towhees, chickadees, grosbeaks, jays, tanager, junco, kingbird, rouse, house finch Nesting: hummingbirds
Andropogon – <i>Bluestem or Beargrass</i>	S	A		Cover: summer Seeds: winter	Seeds: juncos, sparrow Nesting: meadowlarks, quail Nest-building materials
Aquilegia – <i>Columbine</i>	P, Sh	A	Nectar in flowers	Spring to Summer	Nectar: hummingbirds
Arctostaphylos uva-ursi ** – <i>Kinnikinnick</i>	S, P	D	Bright orange-red berries	Fall	Fruit: many ground-eating birds
Aronia - <i>Chokeberry</i>	P, S	A	Black & red berries Cover	Fall	Fruit: Black-capped chickadees, jays, cardinals, downy woodpeckers, goldfinches, mockingbirds, robins
Aster spp. <i>Asters</i>	S, P	A	Seeds	Fall	Seeds: goldfinches, sparrows, chickadees, nuthatches, titmice, towhees, buntings, grouse, turkeys Leaves: grouse, wild turkeys
Betula nigra - <i>River Birch</i> Betula occidentalis ** <i>Water Birch</i> Betula papyrifera ** <i>Canoe or Paper Birch</i>	S, P	M	Seeds and flower buds		Seeds & buds: juncos, jays, pine siskins, titmice, chickadees, cedar waxwings, goldfinches, purple finches, towhees, wood ducks Insects: chickadees, warblers Catkins: grouse
Callicarpa - <i>Beautyberry</i>	P, S	A	Purple fruits	Fall Winter	Fruits: Mockingbirds, robins, brown thrashers, towhees

PLANTS TO GROW ** means Native	Prefers: S Sun P Partial Sh Shade	Prefers: A Avg. M Moist D Dry	VALUE Food for birds Cover Nesting material	WHEN	BIRDS THAT WILL ENJOY
Campsis radicans- <i>Trumpet Vine</i>	S, P	A	Nectar in flowers		Nectar: Hummingbirds
Celtis occidentalis – <i>Hackberry</i> Celtis reticulata – <i>Netleaf Hackberry</i>	P, S	D	Purple berries	Late summer to winter	Fruit: bluebirds, evening grosbeaks, mockingbirds, robins, thrashers, towhees, woodpeckers, wood warblers, flickers, bunting
Cornus alternifolia- <i>Pagoda Dogwood</i>	P, S	M	Blue or white fruits (drupes)	Summer	Fruit: mockingbirds, robins, wrens, bluebirds, pileated woodpeckers, kingbirds, bunting, thrushes, kingbirds
Cornus racemosa <i>Gray Dogwood</i> Cornus stolonifera** - <i>Red-osier Dogwood</i>	P, S, Sh	M	White fruit	Late summer	Fruit: flickers, tanagers, woodpecker, kingbird, robin, thrush, grouse, mockingbirds, sparrows
Coreopsis - <i>Coreopsis</i>	S	A	Seeds after flowering	Fall	Seeds
Cosmos - <i>Cosmos</i>	S	A	Seed after flowering	Fall	Seeds: juncos, house finches, sparrows
Crataegus spp – <i>Hawthorn</i> Varieties: <i>Columbiana</i> ** <i>Douglasii</i> **	P, S	A	Apple-like fruits	Fall, into winter	Fruits: robin, purple finch, all grosbeak, cedar waxwing, jays, mockingbirds, flicker, thrush, sparrow Cover (thorns) & Nesting: hummingbirds Insects: chickadees, warblers, bushtits
Digitalis – <i>Foxglove</i>	P, S	A	Tubular flowers Seeds	Summer Fall	Flower nectar: Hummingbirds, goldfinches
Echinacea – <i>Coneflower</i>	P, S	A	Seeds	Summer Fall	Seeds: Goldfinches, bluebirds, many songbirds
Fragaria spp- <i>Wild Strawberry</i>	P, Sh	A	Fruits	Summer	Fruit: flicker, thrush, cedar waxwing, towhees, robin, grouse, quail, grosbeak
Grape	S	A	Grapes	summer	Fruits: jays, cardinals, goldfinches, mockingbirds, robin, mourning dove
Helianthus - <i>Sunflower</i>	S	A	Black seeds	Summer & fall	Seeds: many, mourning doves, quail, blackbirds, buntings, chickadees, finches, goldfinches, meadowlarks, nuthatches, sparrows, titmice
Holodiscus discolor** <i>Oceanspray</i>	S, P	D	Cover shrub choice for hedgerow		
Ilex glabra – <i>Inkberry</i>	S, P	A	Red berries Cover Thorns	Summer	Fruits: jays
Ilex verticillata <i>Winterberry</i>	S, P	A	Brilliant red berries Cover	Fall and Winter	Fruit: robins, flickers, jays, and many like other in Ilex family
Ilex vars. - <i>Holly</i>	P	A	Red berries Cover	Fall, into winter	Fruit: flickers, bluebirds, mockingbirds, robins, jays, thrashers, cedar waxwings

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Juniperus occidentalis** - <i>Western Juniper</i> Juniperus scopulorum- <i>Rocky Mountain Juniper</i>	S	D	Green or blue berries Cover	Fall	Berries: Grosbeaks, jays, robins, downy woodpeckers, mockingbirds, quail, cedar waxwings, junco, swallows, warblers, purple finch, flicker, thrush Nesting: bluebirds, chickadees, sparrow, robins, mockingbirds, juncos, warblers
Larix occidentalis** – <i>Western Larch</i>	S, P	M	Cover, seeds		Needles: Grouse Seeds: Crossbills, grouse, pine siskin, nuthatch, purple finch, goldfinch Nesting: tanager
Liquidambar - <i>Sweet Gum</i>	S	A	Spiky brown pods	Fall	Seeds in pods: black-capped chickadee, cardinals, goldfinches
Lobelia cardinalis- <i>Lobelia or Cardinal Flower</i>	S, P	A	Tubular flowers	Late summer, early fall	Flower nectar: hummingbirds
Lonicera - <i>Honeysuckle</i>	S, P, Sh	A	Tubular flowers, later berry-like fruits	Blooms spring; late summer fruits	Flower nectar: hummingbirds Fruit: goldfinches, mockingbirds, robins, thrush, grosbeaks, sparrow, cedar waxwings, bluebirds, chickadees, finches Nesting: mockingbirds, sparrows, catbirds
Mahonia repens** <i>Creeping Oregon Grape</i>	S, P	D	Fruit: blue berry		
Malus - <i>Crabapple</i>	S	A	Tubular flower and fruit; Nesting sites in cavities for several species	Summer	Flower: hummingbirds Fruit: woodpeckers, cedar waxwings, catbirds, robins, mockingbirds, evening grosbeak, flicker, house finch, many songbirds
Miscanthus gracillimus- <i>Maidengrass</i>	S	A	Seeds		Seeds
Monarda – <i>Bee Balm</i>	S, P	A	Blossoms many colors	Late summer	Flower nectar: Hummingbirds
Morus - <i>Mulberry</i>	S	A	White, pink or purple blackberry-like fruits (female trees only) Many species find cover and nesting sites	Summer	Fruit: jay, catbird, woodpecker, waxwing, kingbird, goldfinch, bluebirds, grosbeak, mockingbird, purple finch, warbler, robin, scarlet tanager, wood thrush, titmouse, flicker, tanager
Panicum – <i>Switchgrass</i>	S, P	A	Tiny seeds and cover	Fall	Quail, sparrows
Parthenocissus <i>Virginia Creeper</i>	P, Sh	A	Blue-black fruits Nesting sites	Fall	Fruit: black-capped chickadees, woodpeckers, mockingbirds, robins, tufted titmice, white-breasted nuthatches Nesting: house finches, bushtits
Penstemon – <i>Beardtongues</i>	S, P	A	Tubular flowers		Flower nectar: hummingbirds

PLANTS TO GROW ** means Native	Prefers: S Sun P Partial Sh Shade	Prefers: A Avg. M Moist D Dry	VALUE Food for birds Cover Nesting material	WHEN	BIRDS THAT WILL ENJOY
Picea engelmannii** <i>Engelmann Spruce</i> Picea pungens- <i>Colorado Spruce</i>	S	M	Cover, winged seeds Nesting		Cover: chickadees, nuthatches, owls, woodpeckers Seeds: chickadees, nuthatches, crossbills, siskins, goldfinches, evening grosbeaks Nesting: many birds Needles: grouse
Pines albicaulis**- <i>Whitebark Pine</i> Pinus contorta var. 'latifolia'** <i>Lodgepole Pine</i> Pinus monticola** <i>Western White Pine</i> Pines ponderosa** <i>Ponderosa Pine or Western Yellow Pine</i>	S, P	D	Seeds in cones Insects High branches for roosting Cover Roosting sites Nesting sites	Seeds in fall	Seeds (50% of the diets of many birds): woodpeckers, black-capped chickadees, nuthatches, jays, finches, crossbills, grosbeaks, blue grouse, goldfinches, mourning doves Needs and buds: grouse Roosting sites: migratory robins Nesting sites: mourning doves, purple finches, warblers Ponderosa Seeds: juncos, finches, siskins, grosbeaks, sparrow, chickadees Ponderosa Roosts & Nesting Sites: eagles, hawks
Platanus x acerifolia- <i>London Planetree or sycamore</i>	S, P	M	Roosting sites in branches Seed-filled fruits Nesting materials Nesting sites		Fruits w seeds inside: cedar waxwings, chickadees, goldfinches, pine siskins, house finches, purple finches, mallards Nesting sites: woodpeckers Nesting materials: hummingbirds use fluffy flower down Nesting sites in cavities: woodpeckers, flickers, chickadees, titmice, bluebirds, tree swallows, screech owls
Populus tremuloides**- <i>Quaking Aspen</i>	S	M	Seeds and leaf buds	Winter	Seeds: goldfinches, grosbeak, great blue heron, grouse, quail, shrikes Nesting sites: many species use the cavities
Prunus spp – <i>Cherry & Plum varieties</i> Prunus virginiana**- <i>Chokecherry</i>	S, P	A	Fruits: Cherries Cover shrubs- particularly chokecherry which creates a thicket Chokecherry fruits are bitter; only grouse enjoy	Summer	Fruit: grosbeaks, cedar waxwings, blackbird, tanager, grouse, robins, catbirds, thrushes, flickers, jays, cardinals, downy woodpeckers, goldfinches, mockingbirds, robins
Psuedotsuga menziesii**- <i>Douglas Fir</i>	S	D	Cover Roosting sites		Seeds: nuthatches, crossbills, juncos, siskins
Pyracantha – <i>Firethorn</i>	S	A	Orange or red pomes (look like berries)	Fall, winter	Fruits: Quail, jays, grosbeaks

PLANTS TO GROW ** means Native	Prefers: S Sun P Partial Sh Shade	Prefers: A Avg. M Moist D Dry	VALUE Food for birds Cover Nesting material	WHEN	BIRDS THAT WILL ENJOY
Quercus - Oak	S	A	Nuts: Acorns High branches for roosting Nesting sites Dense cover	Fall	Nuts: Nuts and insects: chickadees, titmice, flickers, grouse, jays, meadowlarks, nuthatches, mourning doves, thrushes, wood ducks, mallards, quail, grosbeaks, woodpeckers Male flowers: grosbeaks Nesting sites: tanagers
Rhododendron- Rhododendron and Azalea	P, Sh	M	Cover shrubs Flowers		Cover: many species Flower nectar: hummingbirds Insects: warblers Nesting sites: grosbeak Buds: grouse
Rhus glabra** - Smooth Sumac Rhus trilobata** - Oakleaf sumac	S, P	A	Yellow berries Cover	Fall and winter	Fruits: Bobwhites, chickadees, towhees, flickers, goldfinches, mockingbirds, robins, thrush, warblers, wild turkey, catbird, thrush, sparrows, phoebe
Ribes alpinum** - Alpine Current Ribes aureum** - Golden Current	S	A	Tubular flowers		Flower nectar: hummingbirds
Rosa nutkana** – Nootka Rose Rosa woodsia** - Wood's Rose	S	M	Rose hips Cover shrub, as naturalized or hedgerow	Rose hips in winter	Nesting sites: buntings, towhees, sparrows Fruit (rose hips): cedar waxwings, wood thrush, robin, bluebirds, grosbeaks, grouse, goldfinch, chickadees, mockingbirds
Rudbeckia- Black Eyed Susan	S	A	Seeds		Seeds: favorite food for finches, house finches, goldfinches; also chickadees, sparrows, nuthatches, towhees, titmice
Salix bebbiana** - Bebb Willow Salix scouleriana** - Scouler Willow	S, P, Sh	M	Seeds in catkins Cover shrub, as naturalized or hedgerow		
Sambucus cerulean** Blue Elderberry Sambucus racemose var. melocarpa** - Black Elderberry	P, S	A	Black-purple berries Cover shrub, as naturalized or hedgerow	Summer	Fruits: robins (even before ripe), bluebirds, jays, cardinals, goldfinches, finches, towhees, thrashers, sparrow, mockingbirds, mourning doves, titmice, white-breasted nuthatches, flickers, woodpeckers, robins, grosbeaks, wax-wings, titmice
Schizachyrium Bluestem	S	A	Seeds	Late summer	Seeds
Sorbus – Mountain Ash	S	A	Orange or red berries High branches	Fall	Fruits: Robins, white-breasted nuthatches, cedar wax-wings, grouse, grosbeaks, thrashers, catbirds
Symphoricarpos albus** Snowberry	S, P	D	White berries	Fall, winter	Fruits: grouse, songbirds

PLANTS TO GROW ** means Native	Prefers: S Sun P Partial Sh Shade	Prefers: A Avg. M Moist D Dry	VALUE Food for birds Cover Nesting material	WHEN	BIRDS THAT WILL ENJOY
Syringa – <i>Lilac</i>	S, P	A	Spring blooms	Spring	Flower: hummers Seed: chickadees, finches, grosbeak
Thuja occidentalis - <i>Arborvitae</i> Thuja plicata** - <i>Western Redcedar</i>	S, P	A	Blue or green berries Cover and high branches	Fall into winter	Cardinals, waxwings, mockingbirds, mourning doves, robins
Tsuga heterophylla** - <i>Western Hemlock</i> Tsuga mertensiana** - <i>Mountain Hemlock</i>	S, P	A	Cones with seeds Nesting sites Cover shrubs		Seeds: warblers, chickadees, pine siskins, crossbills, grosbeaks, thrushes, robins, grouse Nesting sites: warblers, robins, juncos, goldfinches, jays Cover Shrubs: chickadees, titmice, juncos and many other species
Vaccinium - <i>Blueberry</i>	P, S	A	Fruits: Berries	Spring to fall	Fruits: bluebirds, chickadees, grosbeaks, jays, robins, mourning doves, titmice, flickers, towhees, kingbirds Cover and Nesting Sites: sparrows
Vaccinium - <i>Huckleberry</i>	S, P	A	Purple berries	Fall	Fruits: jays, mourning dove, robin
Viburnum lentago- <i>Nannyberry</i>	S, P	A	Blue-black fruits Cover shrubs		Fruits: robins, flickers, waxwings
Viburnum trilobum – <i>Cranberrybush</i>	S, P	A	Red or black fruit	Fall	Fruits: grouse, wild turkeys, brown thrasher, cedar waxwings, bluebirds, grosbeaks, purple finches, robins, flickers
Weigela spp- <i>Weigela</i>	S, P	A	Flowers	Summer	Flower nectar: Hummingbirds



PLANTS TO AVOID (get complete info at Spokane Co. Noxious Weed Control Board)

SHRUBS THAT CAN BECOME INVASIVE

Chaenomeles – Flowering quince
Polygonum – Japanese knotweed
Rhus typhina – Staghorn sumac

EXTRA VIGOROUS PERENNIALS TO WATCH OUT FOR

Achillea millefolium – Yarrow (not the varieties you might buy in containers or seed packets)
Convallaria majalis – Lily-of-the-valley
Coronilla varia – Crown vetch
Galium odoratum – Sweet woodruff
Gaura lindheimeri ‘Whirling Butterflies’ – Whirling Butterflies
Lanum maculatum – Dead nettle
Lysimachia nummularia – Creeping Jennie
Lysimachia punctata – Loosestrife
Mentha spp. – Mint
Physalis alkekengi – Chinese lanterns
Physostegia virginiana – False dragonhead
Polygonum cuspidatum – Japanese knotweed
Prunella spp. – Self heal
Romneya coulteri – Matilija poppy
Viola wittrockiana – Violet

EXTRA VIGOROUS GROUNDCOVERS THAT COULD GET OUT OF CONTROL

Aegopodium – podagraria – Bishop’s weed
Anemone Canadensis – Meadow anemone (yes there are beautiful varieties you might purchase)
Coronilla varia – Crown vetch
Hedera helix – English ivy
Houttuynia cordata ‘Chameleon’ – Chameleon plant
Ranuncula – Creeping Buttercup (my most annoying weed in my garden)
Vinca major ‘Variegata’ – Variegated Periwinkle (not Vinca minor which has a much smaller leaf)

NOXIOUS WEEDS (some are pretty, some have seeds, but all cause tremendous problems)

Acroptilon repens – Russian Knapweed* (pink thistle-like blossom on billowy perennial)
Alliaria petiolate – Garlic Mustard* (lush upright green foliage w white blossoms- takes over SO FAST)
Anchusa officinalis – Common Bugloss* (biennial w/ fiddleneck blue blossom)
Berteroa incana – Hoary Alyssum* (airy, meadow look, but deadly to livestock)
Centaurea biebersteinii – Spotted Knapweed* (most recognized Spokane County noxious weed!)
Centaurea diffusa – Diffuse Knapweed* (fine leaved w/ tiny scattered flowers)
Centaurea solstitialis – Yellow Starthistle* (spreading, rigid, spiny annual w/ toxic yellow blossoms)
Chondrilla juncea – Rush Skeletonweed* (resembles dandelion w/ 10’ taproot)
Cirsium arvense – Canada Thistle* (tall perennial w/ purple flowers)
Echium vulgare – Blueweed or Viper’s Bugloss* (tall biennial w/ beautiful blue flower spikes)
Euphorbia esula – Leafy Spurge* (upright leafy plant causing blindness)
Euphorbia myrsinites – Myrtle Spurge* (low, succulent-looking plant that actually spits out seeds)
Hieracium aurantiacum – Orange Hawkweed* (hairy rosettes with erect orange bloom)
Hieracium wall subgenus – Yellow Hawkweed* (aggressively matting perennial w/ yellow blossoms)
Kochia scoparia – Kochia* (annual w/ lance-shaped leaves, no bloom, but toxic to livestock)
Lepidium draba – Hoary Cress or White Top* (looks like tall alyssum)
Leucanthemum vulgare – Oxeye Daisy* (perennial resembling Shasta Daisy)
Linaria dalmatica – Dalmatian Toadflax* (tall perennial w/ yellow snapdragon-like blossom)
Lythrum salicaria – Purple Loosestrife* (water-needy, showy, erect perennial w/ violet blossoms)
Myriophyllum spicatum – Eurasian Watermilfoil* (submersed perennial w/ feathery leaves)
Onopordum acanthium – Scotch Thistle* (largest thistle w/ spiny painful branches, pink blossoms)
Solanum rostratum – Buffalobur* (spiny, hairy annual w/ pretty yellow flowers)
Tribulus terrestris – Puncturevine or Goathead* (annual w/ yellow bloom then tire-piercing bur)



GUIDELINES FOR SUPPLEMENTAL FEEDING



Clean out the feeder regularly to prevent disease. Use a stiff brush, hot water, and if you use a mild detergent, rinse thoroughly. Allow the feeder to dry before adding seed. Provide only what will be consumed in 2-3 days to avoid spoiling, contaminating, or getting wet.



Avoid over-crowding by spreading out feeders. Keep the ground under any feeder clean of empty shells and bird droppings. Rake before putting out new seeds. Some bird species will prefer to eat seeds on the ground (Quail, Juncos) so allow them to “clean up” before you “clean up”.



Birds are territorial. Chaos caused by over-crowding can cause fighting, and spread of disease.



Many birds hit windows when flying away from feeders, particularly if escaping predators. Feeders should be 3' or less, or more than 10' from windows.



Store the seeds in a dry place to protect from mildew and rodents. Buy and provide only the seeds that the local birds prefer. Observe what seeds are not being consumed, and stop buying mixes that include those seeds. Do not buy seeds that would attract undesirable birds (i.e. Starlings)

	White Millet	Red Millet	Milo	Black oiled Sunflower	Hulled Sunflower	Peanut kernel	Nijer Seed	Cracked Corn	Safflower Seed	Suet
Quail	*	*	*	*				*		
Titmouse				*		*				*
Woodpecker				*		*				*
Chickadee				*					*	*
Nuthatch				*						*
Bluejay			*			*		*		
Sparrow	*				*			*	no	
Grosbeak				*					*	
House Finch	*			*	*					
Pine Siskin				*			*			
Goldfinch	*	*		*			*			*
Towhee	*			*						
Junco	*			*						*
Bunting	*									
Starling			*							



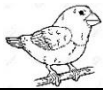
When to Supplement: Spring: The need for supplemental feeding is acute in spring, when last season's fruits and seeds are gone and birds are nesting, laying eggs, and feeding. Females need calcium, available in crushed eggshells and oyster shells.

Summer: Nestlings and fledglings need protein. Offer mealworms, oatmeal, cornmeal, banana, peanut butter, suet, berries, etc.





Fall: Migrating birds need to fatten up before their journey. Offer winter treats early.


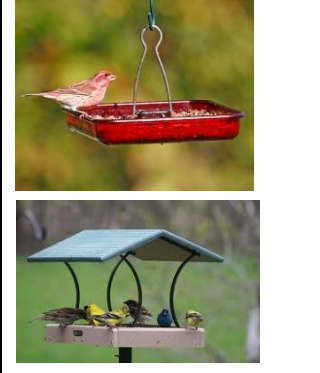
Winter: Birds will gain and lose 10% of their body weight each day. They eat early morning and dusk, so have feeders filled per their schedule, especially nuts a





COMPARISON OF BIRD FEEDER TYPES

TYPE OF FEEDER	DESCRIPTION	PROS	CONS	WHICH FOOD	WHICH BIRDS
Tube or Cylinder Feeder 	<p>Elevated, long, narrow, vertical, transparent tube</p> <p>Usually has numerous perches set just below holes through which birds can extract seeds</p> <p>Longer perches attract larger birds, shorter perches will keep large birds away and allow smaller birds access</p> <p>Some types are encased in a cage to deter squirrels</p>	<p>Popular w/ most birds, particularly social types</p> <p>Can feed many birds at a time, so best for birds who socialize in groups</p> <p>You can add a cage to deter squirrels</p> <p>Seeds stay dry and sanitary, as birds do not stand on seeds</p>		<p>All seeds smaller than the holes in the cylinder</p>	<p>Most</p> <p>Especially: Goldfinch Finches</p>
Hopper Feeder 	<p>Container of any shape or size, with closed sides, that contains the seeds, with a tray incorporated below, allowing seeds to drop into the tray (like a hopper)</p> <p>Birds stand on tray edges and eat out of the tray</p> <p>Usually has a roof, where seed is added, and must be opened easily for thorough cleaning</p> <p>Often hangs from branch, post or eave, making it elevated for safety</p>	<p>Holds large quantity, so less frequent refilling</p> <p>Practical for most birds to use</p> <p>As birds stand on narrow tray's edge, they do not spoil seed</p> <p>Walls usually prevent leaks and spoiled food</p> <p>Walls are opportunities for decorating</p>	<p>Easy for predator to dominate (hawk, owl) or invader to steal (squirrel, chipmunk)</p> <p>Seeds left too long will spoil</p> <p>Walls can harbor moisture which permits mildew; protect in wet weather</p> <p>Should be cleaned & dried before use</p>	All seeds	Most birds
Sock or Mesh Feeder 	<p>Hanging tube of fine or coarse mesh, usually nylon or plastic netting, sometimes wire</p>	<p>Best feeder for tiny seeds</p> <p>Many "social" birds can feed together</p> <p>Birds do not contaminate the seed</p>		<p>Fine Mesh: Nyjer</p> <p>Coarse Mesh: Peanuts Corn</p>	<p>Goldfinch Finch varieties</p> <p>Grosbeak Titmouse Sparrow Chickadee</p>
Suet Cage or Solid Block Holder 	<p>Wire or plastic rigid grid designed to hold standard sized molded suet block</p> <p>Block can also be any shape or size held in place, on a stake or hanging</p>	<p>Highly valuable for high protein, high fat foods that birds need, especially during migration periods and during cold winter months</p>	<p>Beware of use in hot weather when rancid fat can harm birds and can be carried to their nest</p>	<p>Suet block or cake (animal or vegetable fat block holding any combination: seeds, nuts, fruit, peanut butter, jelly, cornmeal)</p>	<p>Woodpecker</p> <p>Goldfinch Finches Chickadee Nuthatch Junco Titmouse Jay Bluebird Wren</p>

<p>Hummingbird Feeder</p> 	<p>Transparent container for sugar-rich liquid with tubular devices only long-beaked birds can use; Feeder should have some red, but liquid should not have food coloring added</p>	<p>Hummers will remember exact location and return annually.</p>	<p>Cleanliness is critical.</p>	<p>Nectar or sugary liquid</p> <p>Mix 1 part white sugar to 4 parts boiling water, then cool before adding.</p>	<p>Hummingbird Oriole</p>
<p>Platform Tray Or Dish Feeder (or on the open ground with no feeder)</p> 	<p>Open sided tray, often hanging from branch, post, or eave, but can be setting on the ground, on the deck, on the handrail of a deck, on a pedestal, on a birdbath</p> <p>Dish: Any smooth surfaced, open dish or container; great for jelly, fresh fruit, live mealworms</p>	<p>Popular w/ birds who prefer ground eating; can hold any fruit or seed; Could be any size or shape, so adaptable to your setting or style of house / garden</p> <p>Dish or tray: Can be thoroughly washed</p>	<p>Unless they have drain holes, seed can get wet and be ruined; work best in dry months or under cover. Food can become contaminated if birds stand on it and if not cleaned weekly</p>	<p>Any seeds</p> <p>Mealworms: Bluebird Robin Oriole Thrasher Wren</p> <p>Fresh fruit: Robin Cedar Waxwing Tanager Grosbeak Thrush Mockingbird</p>	<p>Juncos Doves Sparrow Quail</p>

EXAMPLES OF COMBINATION FEEDERS



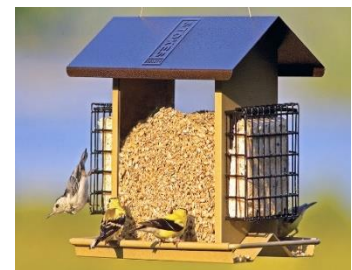
Tube / Hopper



Tube / Platform



Suet / Platform



Suet / Hopper



YOU A CRAFTY OR ARTISTIC BIRDER?

If you decide to create your own bird feeder, incorporate the positive characteristics that are noted on the chart, and be wary of any disadvantages. For instance, after you sketch out your bird feeder design, you could adjust the size of the tray or the size of the roof if that addresses a possible disadvantage, while still maintaining your artistic vision. Be sure to address all the pragmatic considerations, such as location of the bird feeder, frequency of cleaning, time to set out each year, and what seeds to provide.



DIY Tube Feeder



Pottery Platform Feeder



Hollowed Out Log Platform



Elegant Hopper Feeder



NESTING BOXES:

Location: Locate boxes where you can enjoy the birds, monitor the boxes, and access them for annual cleaning. Locate houses away from feeders. Provide 4 or less boxes per species per acre. Put one box per tree or post. Face the box toward the north or east, not the hot south or west. Bluebird and swallow boxes both need to be spaced by 75 yards.

Security: Boxes should be securely screwed to post, wall, or post. Monitor the boxes and remove squirrels, mice, snakes, insects, and invading birds, particularly in late winter. You can deter invaders with cones, wire baskets at the entry holes, slippery covers on posts, and careful location.

Cleanliness: Boxes should be hinged for annual pre-spring cleaning. Parasitic insects, molds, bacteria that could kill baby birds, must be removed in between broods. If you have a box without hinges, remove one side and install hinges and a clasp for cleaning ease. If insects invade, use a bird-safe insecticide; also you can coat inside top with bar soap.



Ventilation: to keep the box cool and safe, leave gaps between roof and sides of box, or drill holes just below the roof.

Drainage: Provide a sloped, overhanging roof to keep water out. Drill entrance hole with an upward slant. Locate ventilation holes close to the overhanging roof. Cut away all four corners of the box floor, and recess the floor ¼" or more.

Accessibility: Entering birds and leaving nestlings need help. Roughen up the surfaces inside and outside, below the access hole, with grooves, wire mesh, or cleats. Do not provide a perch, which would allow predator birds, and are not necessary. Do not provide multiple-box types, as only Purple Martins, starlings, and house sparrows use them, and you do not want to invite them. Local birds prefer not to share. The size of the hole will determine which birds will visit, in addition to box size and height above ground. A roof overhang can prevent squirrels or larger birds from pecking a larger opening.

Hinged Panel: Either roof or one side should be hinged. Top / roof is best for peaking inside without disturbing nesting birds. Opening sides are easiest for cleaning out, but nestlings could fall out. If baby birds fall out, pick them up and return them immediately. Mother birds will not abandon them! They have poor smelling abilities.

Beauty: Wood is an excellent material. ¾" thick red cedar is durable and does not need treatment. Pine would be suitable if painted with latex paint (outside only). Dull, light colors would reflect heat and be less attractive to predators. Gourds, pottery, concrete, and plastic houses can work well. If assembling, glue first and use rust-proof fasteners.

The primary purpose is to provide safe nesting sites, so value construction over beauty: ventilation, drainage, accessibility, cleaning, etc.





NEST BOX & NESTING SHELF INFORMATION

SPECIES	Box Floor Size (in inches)	Box Height (in inches)	Entrance Height (in inches)	Entrance Diameter	Placement Height: feet above ground
American Robin*	7x8	8	-	-	6-15'
Bluebird (all types)	5x5	8-12	6-10	1-1/2"	4-6'
Chickadees and Juncos	4x4	8-10	6-8	1-1/8"	4-15'
Flycatcher	6x6	8-12	6-10	1-1/2"	5-15'
Titmice	4x4	10-12	6-10	1-1/4"	5-15'
Brown-headed Pygmy and Red-breasted Nuthatches	4x4	8-10	6-8	1-1/4"	5-15'
White-breasted Nuthatch	4x4	8-10	6-8	1-3/8"	5-15'
Warblers	5x5	6	4-5	1-1/8"	4-8'
Barn Swallow*	6x6	6	-	-	8-12'
Tree and Violet-green Swallow	5x5	6-8	4-6	1-1/2"	5-15'
Downy Woodpecker	4x4	8-10	6-8	1-1/4"	5-15'
Hairy Woodpecker	6x6	12-15	9-12	1-1/2"	8-20'
Northern Flicker	7x7	16-18	14-16	2-1/2"	6-20'
Pileated Woodpecker	8x8	16-24	12-20	3x4"	15-25'
Red-headed Woodpecker	6x6	12-15	9-12	2"	10-20'
House Wrens	4x4	6-8	4-6	1-1/4"	5-10'
Barn Owl	10x18	15-18	4	6"	12-18'
Screech Owl and Kestrel	8x8	12-15	9-12	3"	10-30'
Osprey**	48x48				
Red-tailed Hawk **	24x24				
Wood Duck	10x18	10-24	12-16	4"	10-20'
Great Horned Owl**	24x24				

*Nesting Shelf: platform with three sides and an open front

** Platform with no sides



Chickadees and Juncos



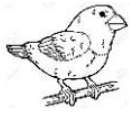
Screech Owl and Kestrel



Osprey and Eagle



Barn Owl



BIRD GARDEN WORKPLAN



Area: _____ Sunny _____ Part
 Shade _____ Shady _____

What plants are already there:

Tree(s) _____ Shrub(s) _____

Perennial(s) _____ Vine(s) _____

Birds you have (or hope to have) and when

BIRDS	J	F	M	A	M	J	J	A	S	O	N	D

Over the year, add and subtract dots to help you plan other areas and other years.

What These Birds Need (green for existing plants, a different color for plants to add)

	Cover Shrubs	Colorful Flowers then Seeds	Seed or Berry Producers	Insects	Supplemental Seeds / Fruit in Feeders
Winter					
Spring					
Summer					
Fall					

Over the year, add and subtract observations about what plants produce and what birds like.



BIRD GARDEN WORKPLAN – *example*

Area: *east of deck*

Sunny____ Part Shade__X__ Shady____

What plants are already there:

Tree(s) *50' Pine, 5' weeping cherry* Shrub(s) *(1) 5' Japanese Pieris, (3) 4' Juniper, (2) Holly*

Perennial(s) *(5) Daylilies* Vine(s) *none*

Birds you have (or hope to have) and when *(do your best; correct over time)*

BIRDS	J	F	M	A	M	J	J	A	S	O	N	D
<i>Quail</i>		X	X		X			X	X	X		
<i>Juncos</i>			X	X	X	X						
<i>Western Goldfinches</i>	X	X	X	X	X	X	X	X	X	X	X	X
<i>Hummingbirds</i>				X	X	X	X					
<i>Black capped Chickadees</i>	X	X	X	X	X	X	X	X	X	X	X	X
<i>Pine Siskine</i>	X	X	X	X	X	X	X	X	X	X	X	X
<i>Northern Flicker</i>							X	X	X	X		

Over the year, add and subtract dots to help you plan other areas and other years.

What These Birds Need (use green for existing plants, a different color for plants to add)

	Cover Shrubs	Colorful Flowers; then Seeds	Seed or Berry Producers	Insects	Supplemental Seeds / Fruit in Feeders
Winter	<i>Juniper</i>	<i>Primrose</i>	<i>Holly-berry</i>		Suet Black-oil sunflower
Spring	<i>Juniper</i>	<i>Pieris – flower</i> <i>Weeping Cherry</i> <i>Digitalis</i> <i>Dianthus</i>	<i>Serviceberry</i>	<i>Pine</i>	Black-oil sunflower Nyjer
Summer	<i>Juniper</i>	<i>Pieris-seed</i> <i>Coneflower</i> <i>Bee Balm</i>	<i>Inkberry</i>	<i>Pine</i>	Black-oil sunflower Nyjer
Fall	<i>Juniper</i>	<i>Aster</i> <i>Joe Pye Weed</i>	<i>Holly-berry</i>	<i>Pine</i>	Suet Black-oil sunflower

Over the year, add and subtract observations about what plants produce and what birds like.

LINKS ABOUT BIRDS

A good site to learn about the specific birds in Washington state:

http://www.whatbird.com/browse/objs/All/birds_na_147/38/Location/274/Washington

<https://avibase.bsc-eoc.org/checklist.jsp?region=USwasp>

<http://www.wabirder.com/spokane.html> (where the Spokane County Checklist can be found)

Sites with information about plants that support birds:

http://www.almanac.com/sites/default/files/d6/shrubs_trees_0.pdf

<http://www.birdsandblooms.com/birding/attracting-birds/plants-and-trees-that-attract-birds/>

To learn about local events, subscribe to the local Audubon newsletter, or read about birds:

<http://www.spokaneaudubon.org>

To follow birders in the local and global community:

<https://ebird.org/about/resources>

To learn about great hiking / birding outings:

<https://wabirdguide.org/spokane-and-vicinity/>

LINKS ABOUT NATIVE PLANTS

Washington Native Plant Society, Northeast Chapter: <http://www.nechapterwnps.org/> This is full of excellent information and a huge plant directory, with photos and a lot of critical information.

SUGGESTED BOOKS TO READ

Attracting Birds, Butterflies, and other Backward Wildlife, 2004

by David Mizejewski, Naturalist with National Wildlife Federation (First and Second editions)

Garden Secrets for Attracting Birds, 2010

By Rachael Lanicci

Natural Gardening for Birds: Create a Bird-Friendly Habitat in Your Backyard, 2001

By Julie Zickefoose

Bird-by-Bird Gardening: The Ultimate Guide to Bringing in Your Favorite Birds – Year after Year, 2006

By Sally Roth

Birdscaping Your Garden, 1998

By George Adams

The Pacific Northwest Gardener's Book of Lists,

By Ray and Jan McNeilan