



American Robin



Goldfinch



Turkey Vulture

This reference guide is for identifying and learning about birds in the Learning Garden. Birds are an important part of any garden, whether it is a wild forest or a city park or your own backyard. Birds help control pests, they are colorful, pollinate or otherwise spread seeds, provide song, can even provide warnings and are fun to watch. There are many types of birds that come to the garden for many different reasons. Of course the birds come to eat, but what they choose to eat varies. They also come to look for a mate or they were simply just flying by. Not all birds can be seen in all seasons. This guide will help you determine the type of bird you would like to attract in your own garden or identify birds through their color, diet, activity or season.

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[Bird Evolution and History]

Hundreds of millions of years ago birds arrived on Earth as flying dinosaurs, called pterosaurs. Approximately 150 million years ago these flying dinosaurs were either joined by or evolved into feathered creatures. Popular scientific belief is that birds also descended from two legged running dinosaurs creating such birds as the dodo or ostrich. It is easy to believe that a stork or heron descended from a pterosaur or that the dodo is a distant cousin of T Rex.*

As dinosaurs died out in the late Cretaceous period (over 70 million years ago) birds began looking more like they are today and came in various sizes, habitats and traits.**

There are many species of birds today that live in all types of habitats. Birds can adapt to habitats that may seem harsh to survival. For example, in the desert birds may get their water from seeds or insects. In Arctic areas birds roost in snowdrifts or form moving packs to stay warm. Other birds migrate based breeding, food sources or weather.

The most interesting thing about birds is the ability to fly. Bird wing shape varies widely and is designed for type of flight. Some birds soar like eagles, others, such as hummingbirds can hover in one spot. In the example of penguins the wings are not to fly in the air, but rather to fly under water.***



There are both migratory and year round birds in the Learning Garden; predatory and foraging birds; as well as forest and open prairie birds.


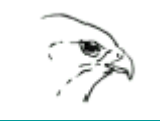






*Information and page pictures from <http://www.pbs.org/lifeofbirds/evolution/>.

**Information from <http://www.nhm.org/site/research-collections/dinosaur-institute/dinosaurs/birds-late-evolution-dinosaurs>

***All preceding information from: <http://birds.audubon.org/birdid/resources/natural-history>







Bird Anatomy

Bills

SHAPE	TYPE	ADAPTATION
	Cracker	Seed eaters like sparrows and cardinals have short, thick conical bills for cracking seed.
	Shredder	Birds of prey like hawks and owls have sharp, curved bills for tearing meat.
	Chisel	Woodpeckers have bills that are long and chisel-like for boring into wood to eat insects.
	Probe	Hummingbird bills are long and slender for probing flowers for nectar.
	Strainer	Some ducks have long, flat bills that strain small plants and animals from the water.
	Spear	Birds like herons and kingfishers have spear-like bills adapted for fishing.
	Tweezer	Insect eaters like warblers have thin, pointed bills.
	Swiss Army Knife	Crows have a multi-purpose bill that allows them to eat fruit, seeds, insects, fish, and other animals.

Bird Anatomy

Feet

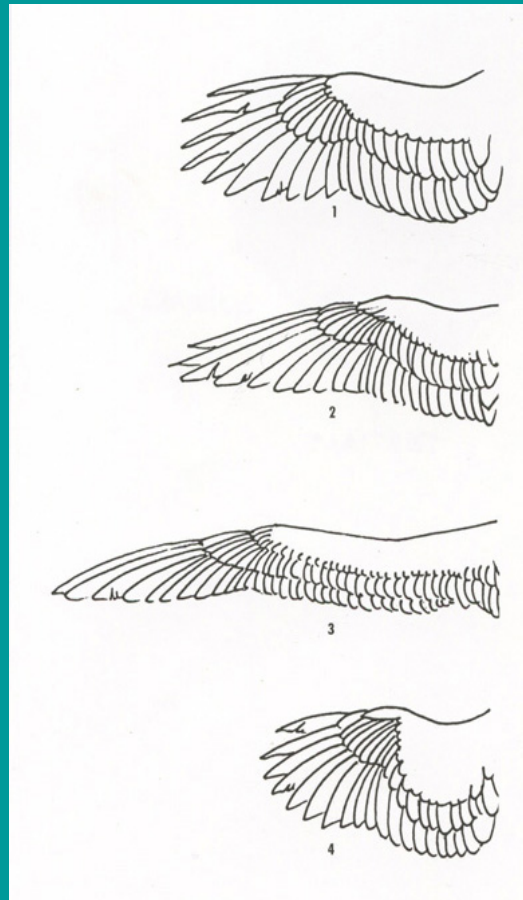
SHAPE	TYPE	ADAPTATION
	Grasping	Raptors like Osprey use their large curved claws to snatch fish from the water.
	Scratching	Pheasants and other birds that scratch the soil for food have nail-like toes.
	Swimming	Ducks and other webbed lined swimming birds use their feet like paddles.
	Perching	Robins have a long back toe, which lets them grab a perch tightly.
	Running	Many fast-running birds have three toes rather than four.
	Climbing	A woodpecker's hind toes enable it to climb without falling backward.

http://www.normanbirdsanctuary.org/beak_adaptations.shtml

Bird Anatomy

Wings

1. Long, wide wings are used by soaring birds such as hawks, eagles and ravens. A wing is considered long when it exceeds the length of the bird's body
2. Narrow and pointed wings are used by fast flying birds such as swallows, swifts and many migratory birds.
3. Long and narrow wings are used by gliding birds such as gulls and terns.
4. Wide and round wings are used for short, fast and quick-escape flight birds such as grouse, pheasants and owls



http://sandyscottblog.blogspot.com/2013_05_01_archive.html



BIRDS OF THE LEARNING GARDEN

- | | |
|---|--|
| • <u><i>Corvus brachyrhynchos</i></u> American Crow | • <u><i>Buteo jamaicensis</i></u> Red Tailed Hawk |
| • <u><i>Spinus tristis</i></u> American Goldfinch | • <u><i>Selasphorus rufus</i></u> Rufous Hummingbird |
| • <u><i>Turdus migratorius</i></u> American Robin | • <u><i>Melospiza melodia</i></u> Song Sparrow |
| • <u><i>Poecile atricapillus</i></u> Black Capped Chickadee | • <u><i>Pipilo maculatus</i></u> Spotted Towhee |
| • <u><i>Pheucticus melanocephalus</i></u> Black Headed Grosbeak | • <u><i>Cyanocitta stelleri</i></u> Steller Jay |
| • <u><i>Psaltiriparus minimus</i></u> Bushtit | • <u><i>Cathartes Aura</i></u> Turkey Vulture |
| • <u><i>Junco hyemalis</i></u> Dark Eyed Junco | • <u><i>Ixoreus naevius</i></u> Varied Thrush |
| • <u><i>Psaltiriparus minimus</i></u> Killdeer | • <u><i>Aphelocoma californica</i></u> Western Scrub Jay |
| • <u><i>Passerina amoena</i></u> Lazuli Bunting | • <u><i>Piranga ludoviciana</i></u> Western Tanager |
| • <u><i>Zenaida macroura</i></u> Mourning Dove | • <u><i>Meleagris gallopavo</i></u> Wild |
| • <u><i>Colaptes auratus</i></u> Northern Flicker | |
| • <u><i>Pandion haliaetus</i></u> Opsrey | |
| • <u><i>Dryocopus pileatus</i></u> Pileated Woodpecker | |
| • <u><i>Sitta canadensis</i></u> Red Breasted Nuthatch | |

This list is not exhaustive. See *Other Birds of The Willamette Valley* on Page 16 for more birds that are not pictured in this guide.



AMERICAN CROW – One of the most commonly seen birds, crows will eat just about anything off the ground but usually go for earthworms, insects, seeds and fruit. Crows will also rob chicks from nests and steal from other birds. Crows are rarely alone, can be aggressive and are always inquisitive.



AMERICAN GOLDFINCH – The Goldfinch is the state bird of our neighbor to the north, Washington State. More common in winter they can be seen year round in the Pacific Northwest. Goldfinches will cling to weeds while eating the seeds (as shown in the picture on page 2) and follow a strictly vegetarian diet.



AMERICAN ROBIN – In many parts of the United States robins are a sign of Spring, however there are just as many parts where the robin is a year round bird. Robins are the quintessential worm eating bird although they feast on insects, berries and other fruits as well. Robins will live most anywhere from cities to forests.



BLACK CAPPED CHICKADEE – These birds can be found in any habitat in the northern parts of United States and southern Canada. They are year round residents grabbing seeds to eat while perched in a tree.



BLACK HEADED GROSBEAK – Oregon is a summer breeding ground for the black headed grosbeak. Black headed grosbeaks like dense foliage where they can eat insects and seeds. The best habitat for this bird is the Learning Garden because of its mixed woodland and various smaller plants.



BUSHTIT – These birds are found in [flocks and continuously make noise in the form of chirps and twitters](http://www.gpnc.org/kildeer.htm). They can hang upside down to eat small insects and spiders from plant leaves. A year round visitor to the Learning Garden, the environment here is perfect since Bustits love forests and streams with a side of open land.

<http://www.allaboutbirds.org/guide/bushtit/id>



MOURNING DOVE – Mourning doves will fly onto the ground in the garden to look for snails, seeds and insects. If you see one look for others, they usually come in groups to feed. The mourning dove has a very distinctive coo although only the male makes this sound.



NORTHERN FLICKER – Northern Flickers are actually woodpeckers however you will most likely see them on the ground looking for insects. Their main diet is ants and beetles that they will dig up with their bills. Like woodpeckers the Northern Flicker will drum on tree trunks as a means of communication.



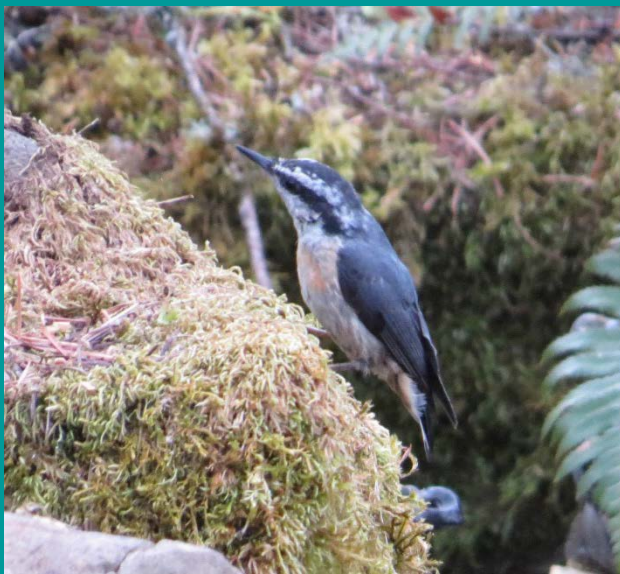
OSPREY – Ospreys are common throughout the Americas but breed in the Pacific Northwest in the summer time. Eating only fish you'll see Osprey in the air over Russell Creek or perhaps returning from the Willamette River with a meal.

<http://ibc.lynxeds.com/photo/osprey-pandion-haliaetus/osprey-seen-during-dyke-marsh-breeding-bird-survey>



Caryn Stoess

PILEATED WOODPECKER – Pileated Woodpeckers look for carpenter ants in dead trees and fallen logs. Their pecking leaves rectangular holes in the wood. Pileated Woodpeckers like our tall western hemlock trees for nesting and searching for food.



Caryn Stoess

RED BREASTED NUTHATCH – These birds live in the north woods and western mountains of North America. Red Breasted Nuthatches hop up and down and sideways over trees looking for insects under the bark. Look for these birds in forested areas.



Caryn Stoess

RED TAILED HAWK – Another year round resident, Red Tailed Hawks are the most common hawk in North America. They eat small animals and are usually seen soaring over open fields. They prefer to perch high on things like telephone poles, fences or trees.



RUFIOUS HUMMINGBIRD – You may hear this bird before you realize what is making that noise! As the male Rufous hummingbirds zip around their wings make a buzzing sound. They zoom from flower to flower drinking the nectar and often chasing each other around the garden. They will come to rest, however, on the fence and allow you to get a good look at them.



SONG SPARROW – Song Sparrows are the most common sparrow in North America. There is a wide variety of differences depending on the region but they all have streaks on the chest. Song Sparrows eat seeds and fruits mainly but will also dine on insects.



SPOTTED TOWHEE – This bird loves hanging out in the bushes just beyond the garden fence and can be heard rustling around. Watch for them to make their way to the fence and then to the garden floor where they scratch around for insects. They also eat seeds and berries.



STELLER JAY – Steller Jays are common in the Western forests where they are often called “camp robbers” since they are quick to attack unattended food. As with other jays, Steller Jays are inquisitive, bold and noisy. Anywhere there is food you will find a Steller Jay.



TURKEY VULTURE – Turkey Vultures may seem like they are year round but in Oregon they are summer birds and spend their time here breeding. Turkey Vultures are often seen gliding on thermals above the Learning Garden looking for carrion. They may be seen alone or soaring in small groups.



VARIED THRUSH – Varied Thrushes are found only in the Pacific Northwest. They eat insects in the summer time but dine on berries and seeds in the winter. Listen for their song that sounds somewhat like a referee’s whistle.



WESTERN SCRUB JAY – These birds are loud and like to hang out in the oak trees near the composting piles of the garden. They eat seeds and nuts and occasionally other birds' eggs or young and small animals. The Western scrub jay will often carry its food off and bury it for later consumption, this action helps plant new trees and shrubs.



WESTERN TANAGER – Western Tanagers visit Oregon for breeding in the summer time. Feeding on insects these birds migrate to Central America for winter.



WILD TURKEY – Turkeys eat nuts, berries, insects and snails. They can be seen searching the leaf litter for food. Turkeys do not fly well but do roost in groups in trees at night. In fact, if you see one turkey look for others as turkeys always travel in groups.



DARK EYED JUNCO – Juncos are a type of sparrow and can be found year round in Oregon. Searching for seeds you can see them hopping about and chirping while foraging on the ground. Juncos live all over North America and the coloring varies depending on the region.



KILLDEER – Killdeer are in the plover family and can swim quite well but are not necessarily water birds. Killdeers eat insects, earthworms and may even hunt frogs. They live around the Learning Garden year round and can be seen running a few steps and stopping to look around before running again.

















































LAZULI BUNTING – The Lazuli Bunting is a summer time visitor to the Learning Garden. They like hanging out in shrubs and forage for insects on the ground before migrating down to the coastal areas of Central America.



Other Birds of the Willamette Valley

Bird	Spring	Summer	Fall	Winter
American Kestrel	●	●	●	●
Barn Swallow	●	●	●	
California Quail	●	●	●	●
Cedar Waxwing	●	●	●	●
Common Yellowthroat		●		
Downy Woodpecker	●	●	●	●
Great Blue Heron	●	●	●	●

Great Horned Owl				
House Finch				
House Sparrow				
Lesser Goldfinch				
Northern Harrier				
Purple Finch				
Raven				
Red-Breasted Nuthatch				
Red-Breasted Sapsucker				
Red-Winged Blackbird				

Rock Dove				
Savannah Sparrow				
Starling				
Tree Swallow				
White Crowned Sparrow				
Yellow-Rumped Warbler				

[Interesting Bird Facts]



- The American Goldfinch is the only finch that molts twice a year.
- In the United States the word “buzzard” means vulture and in Europe it means hawk.
- Male Lazuli Buntings have only one song.
- All European Starlings in the United States have descended from the same 100 birds let loose in Central Park in the 1890’s.
- Rufous Hummingbirds have excellent memories for location helping them find the same feeders and flowers year after year.
- Black Capped Chickadees allow brain neurons with old information to die, replacing them with new neurons that allow for adaptation in their environment.
- Great Blue Herons weigh only five or six pounds.
- Steller’s Jays can mimic dogs, cats, squirrels and chickens as well as mechanical objects.
- Male Spotted Towhees sing for up to 90% of the morning until they find a mate, after that it drops to 5%.
- Wild turkeys can swim if necessary.
- The Great Horned Owl is the only animal that regularly eats skunks.
- The California Quail’s top knot is made of six overlapping feathers.
- Song Sparrows of the Aleutian Islands are one third longer and weigh twice as much as their continental counterparts.
- Barn Swallows are the most abundant and widely distributed swallow in the world.

Source of bird facts: Cornell Lab of Ornithology; <http://www.birds.cornell.edu/Page.aspx?pid=1478>

— **More Information** —



Local:

Cascades Raptor Center
32275 Fox Hollow Road
Eugene, OR

Willamette Wildlife Rehabilitation

Call the WILDLIFE HOTLINE
when you find injured, ill, or orphaned wildlife:
541-485-8440
Remember that it is illegal to keep a wild animal.

William L. Finley National Wildlife Refuge
26208 Finley Refuge Road
Corvallis, OR

Online:

Cornell Lab of Ornithology
<http://www.birds.cornell.edu/Page.aspx?pid=1478>

Audubon Society
<http://www.audubon.org/>