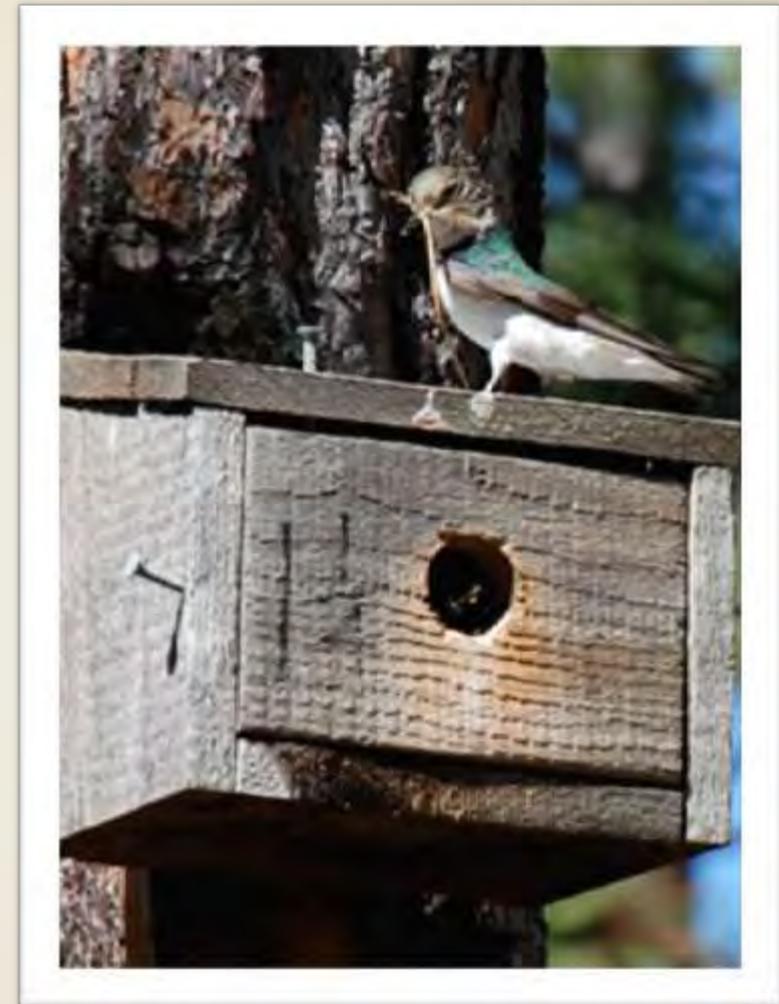


Why Put Up Nest Boxes?

- * Promotes and enhances biodiversity and conservation.
- * Excellent substitutes for the holes previously found in old tree. In young woodlands and plantations, and in many parks and gardens there may be plenty of food for small birds but few places for birds to nest.
- * Many North American species will gladly use man-made cavities for nesting. Local birds that will use nesting boxes include: bluebirds, chickadees, wrens, titmouse, nuthatches, swallows, finches, phoebes, flickers, woodpeckers, and kestrels. Much depends on the type of the box, where it is located, and its surroundings.
- * An added benefit is being able to watch nesting birds go through the process of raising a new brood. Whether you are a keen gardener, bird lover, or a family with school age children, you are sure to find the whole experience of bird conservation interesting and educational.



Violet-green Swallow

Western Bluebird

Sialia mexicana

BREEDING

- * Open, riparian, burned, or cutover woodlands, other open country with scattered trees.
- * May have two broods during nesting season
- * Rare cowbird host

DISPLAYS

- * Courting male sings and flutters in front of female, wings half open, tail spread, then perches beside and preens female, and may offer food

NEST

- * Often builds nest in snags or in a standing dead tree
- * Often in woodpecker-excavated cavity; loose cup of grass, weed stems, pine needles, twigs, occasionally with hair or feathers.
- * Both male and female build the nest
- * The nest is placed 2 - 50 feet above the ground

EGGS

- * Pale blue to bluish-white, occasionally white, unmarked
- * .8 inch in size (21mm)
- * The female typically lays 4-6 eggs
- * Female incubates the eggs and it takes 12- 14 days for eggs to hatch
- * Chicks are born Altricial- Immobile, downless, eyes closed, needing to be fed

DIET

- * Includes earthworms, snails, other inverts; especially berries.
- * Young presumably fed primarily insects.
- * Hawking often from low perch catching insects near ground



House Finch

Carpodacus mexicanus

BREEDING

- ✓ Arid scrub, open woodland, urban areas, cultivated land.
- ✓ May have one to three broods per nesting season
- ✓ Uncommon cowbird host is western United States, but common host in eastern United States

DISPLAYS

- ✓ Courtship: singing male follows female, fluttering wings; hops about female with raised tail, drooped wings, raised head and crest feathers, continues singing.
- ✓ Female may sing short song

NEST

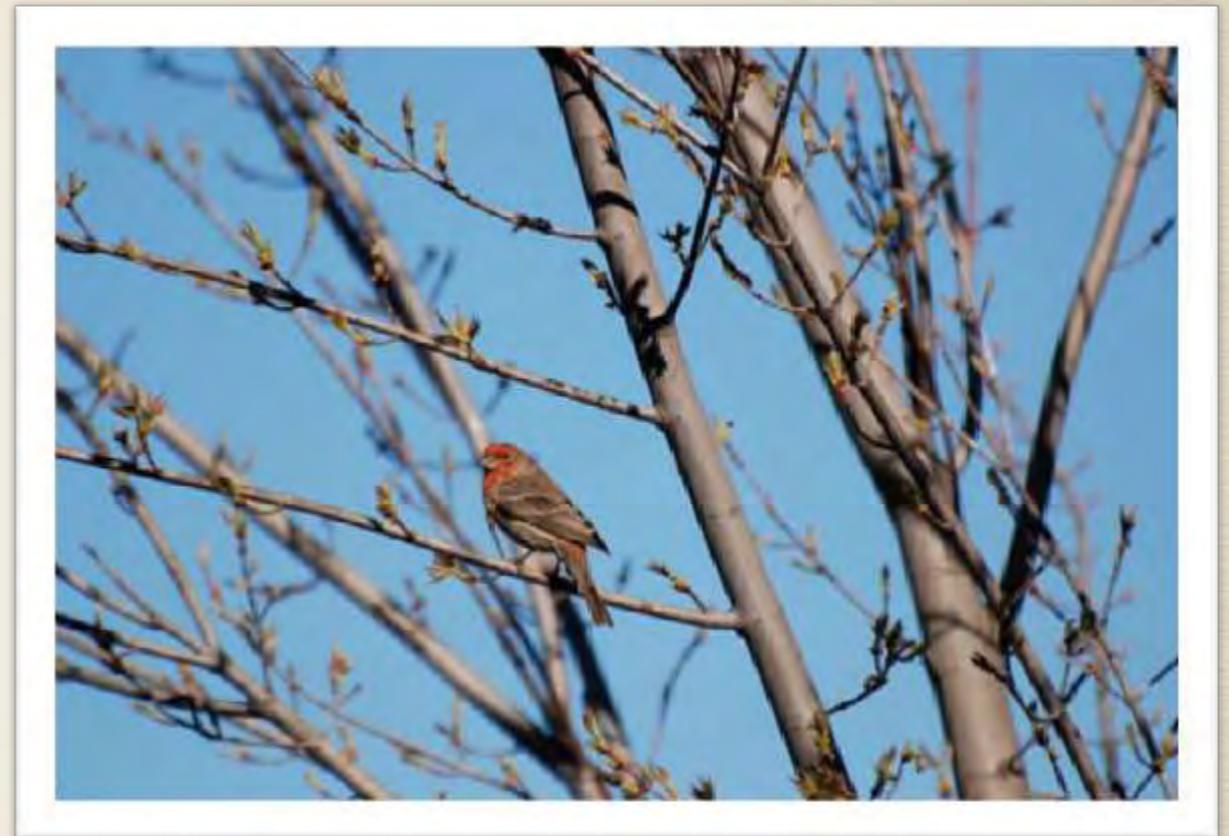
- ✓ Variable placement includes appropriation of other species' nests; of twigs, grass, debris, leaves, rootlets, hair.
- ✓ Nest often reused for later broods
- ✓ Female builds a cup shaped nest
- ✓ The nest shape is typical of songbirds: Hemispherical inside with a rim height several times the diameter of the eggs with a deep depression in the middle
- ✓ Often builds nests in deciduous trees 5 -35 feet from the ground
- ✓ May build nests in buildings

EGGS

- ✓ Bluish-white or pale bluish-green, sparsely marked with brown, black streaks
- ✓ Female lays 4-5 eggs
- ✓ .8 inch in size (21mm)
- ✓ Female incubates the eggs, taking 12-14 days for chicks to hatch
- ✓ Chicks are born Altricial- Immobile, downless, eyes closed, needing to be fed
- ✓ Young can fly after 11 - 19 days and tended by both male and female

DIET

- ✓ Consumes virtually no insects
- ✓ Feeds nestlings almost all seeds which includes grains, sunflower seeds, etc.
- ✓ Finches mainly pick up items from the surface of soil and sand



American Kestrel

Falco sparverius

BREEDING

- ✓ Open or partly open habitats with scattered trees
- ✓ Will also nest in cultivated and urban areas

DISPLAYS

- ✓ Male flies rapidly in wide circles above perch, bends quivering wingtips down
- ✓ Calls, occasionally joined by the female before re-alighting on perch
- ✓ Pair bow, female constantly calling

NESTS

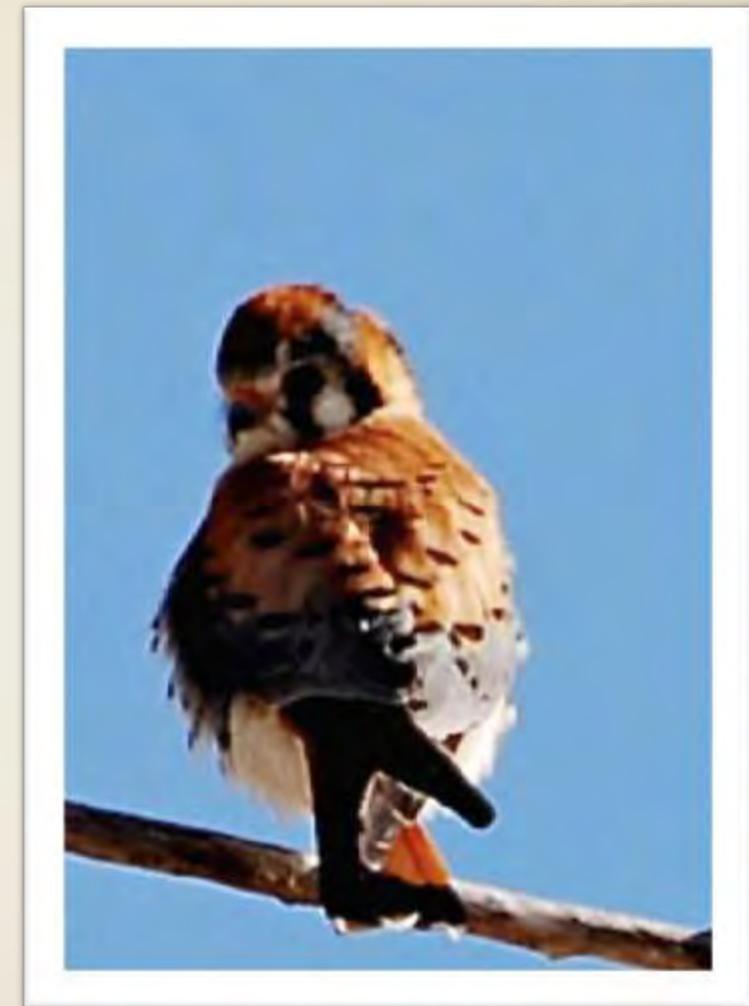
- ✓ Often builds nest in snags or in a standing dead tree
- ✓ Often in woodpecker-excavated cavity
- ✓ Little, if any nesting material
- ✓ Nests are located 12 - 80 feet from the ground

EGGS

- ✓ White/pinkish-white, marked with browns or lavender marks
- ✓ Eggs are 1.4 inches in size (35 mm)
- ✓ Female lays 4-5 eggs
- ✓ Eggs are incubated by female with lesser help from the male
- ✓ Incubation time is 29 - 31 days
- ✓ Kestrel chicks are born Semialtrical - Immobile, downy, eyes closed, and needing to be fed by both parents
- ✓ Young are able to fly after 30 - 31 days

DIET

- ✓ Predominately insect eaters including, spiders, mites, snails, slugs, worms, millipedes, sowbugs, etc.
- ✓ May eat lizards, snakes, salamanders, frogs
- ✓ May eat small mammals including anything from shrews to ground squirrels and rabbits, but most often rodents
- ✓ Occasionally eats other birds
- ✓ Kestrels are hovers and pouncers - hovering before swooping or dropping down on prey



MOUNTAIN CHICKADEE

Parus gambeli

BREEDING

- ✓ Likes to nest in Coniferous trees, including nests placed in trees that bears cones: pines, spruces, junipers, firs, etc.
- ✓ May have two broods per season

DISPLAYS

- ✓ Male and female give series of high-pitched calls in precopulatory display
- ✓ Female will lunge and emit explosive snakelike hiss if disturbed on nest

NEST

- ✓ Like to nest in natural or woodpecker-excavated cavity.
- ✓ Nests are lined with moss, fur, feathers, shredded bark
- ✓ Nests are located 4 - 8 feet in trees

EGGS

- ✓ Eggs are white and .6 inches in length
- ✓ Occasionally spotted with reddish-browns
- ✓ Female lays 5 - 9 eggs
- ✓ Incubations is 14 days
- ✓ Chicks are born Altricial- Immobile, downless, eyes closed, needing to be fed
- ✓ Young are able to fly after 21 days
- ✓ Young fed by regurgitation until 4 days old

DIET

- ✓ Predominately insect eaters including, spiders, mites, snails, slugs, worms, millipedes, sowbugs, etc.
- ✓ Diet also includes coniferous seeds
- ✓ Chickadees are bark gleaners - gleaning from foliage and occasionally from branches



TREE SWALLOW

Tachycineta bicolor

BREEDING

- ✓ Open country, woodland edges usually near water
- ✓ 1 brood is typical
- ✓ Migrate to Central America in winter

NESTS

- ✓ Tree hole or cavity
- ✓ Nests are lined with grass or feathers
- ✓ Likes snags, fence posts, 5 feet or higher from ground

EGGS

- ✓ 4 - 6 white eggs, .8 inch long
- ✓ female incubates eggs for 13 - 16 days
- ✓ Chicks are born Altricial- Immobile, downless, eyes closed, needing to be fed
- ✓ Young fledge 16 - 24 days
- ✓ Young are fed by both male and female
- ✓ Juveniles are often seen as attendants at nonkin nests but do not serve as helpers; instead they attempt to steal food from nestlings and parents!
- ✓ House Sparrows, Bluebirds and House Wrens compete for nests cavities

DIET

- ✓ Primarily insects and berries when no insects available
- ✓ Aerial forage - while in continuous flight, captures flying insects



WHITE-BREASTED NUTHATCH - *Sitta carolinensis* (WB)

RED-BREASTED NUTHATCH - *Sitta canadensis* (RB)

PYGMY NUTHATCH - *Sitta pygmaea* (P)

BREEDING

- ✓ WB prefers deciduous forest and uses mixed deciduous-coniferous forest, woodland, forest edge. Prefers mature stands with decaying large trees
- ✓ RB prefers coniferous and uses mixed deciduous-coniferous forest, woodland, forest edge. Prefers mature stands with decaying large trees
- ✓ P prefers pine forest especially ponderosa, yellow, and Jeffrey, and Pinon-juniper woodlands
- ✓ Winter residents

DISPLAYS

- ✓ Courtship feeding

NESTS

- ✓ In cavities excavated by woodpeckers or natural cavities
- ✓ Nests are lined with soft bark shreds, hair and feathers
- ✓ WB nests are 10 -60 feet from ground
- ✓ RB nests are 5 - 40 feet from ground
- ✓ P nests uses conifer snags 6 - 60 feet from ground

EGGS

- ✓ Small white to white-pinkish eggs with reddish brown spots
- ✓ Egg size is .6 - .8 inches
- ✓ Female lays 5 - 8 eggs
- ✓ WB and RB Female incubates eggs for 12 days
- ✓ P Female incubates eggs for 15 - 16 days
- ✓ Chicks are born Altricial- Immobile, downless, eyes closed, needing to be fed
- ✓ WB and RB young fly 14 - 21 days
- ✓ P young fledge 20 -22 days
- ✓ Young are fed by both male and female

DIET

- ✓ RB, WB, and P predominately insect eaters including, spiders, mites, snails, slugs, worms, millipedes, sowbugs, etc. In winter eats conifer seeds, acorns, and nuts
- ✓ All three are bark gleaners - foraging on tree trunks and branches, includes excavating and drilling in the bark



White-breasted Nuthatch

HOUSE WREN

Troglodytes aedon

BREEDING

- ✓ Open woodlands, shrublands, farmlands, and suburbs
- ✓ 2 broods occasionally 3 broods
- ✓ Migrate to Mexico in winter
- ✓ Rare cowbird hosts

DISPLAYS

- ✓ Male sings while quivering wings and tail raised
- ✓ Female quivers wings
- ✓ Male usually starts the nest to try and attract the female. Will often build crude "dummy" nests

NESTS

- ✓ Will use natural holes, cavities, other bird nests
- ✓ Uses deciduous trees, ground level to 20 feet
- ✓ They use twigs and grass and line the nest with fine material
- ✓ Readily use nest boxes

EGGS

- ✓ White with brown marks .6 inch long
- ✓ Female lays 5 - 12 eggs
- ✓ Female and Male incubate eggs for 13 days
- ✓ Chicks are Altricial- Immobile, downless, eyes closed, needing to be fed
- ✓ Young fledge 12 - 18 days
- ✓ Male and Female often destroy eggs of other house wrens and other species nesting by

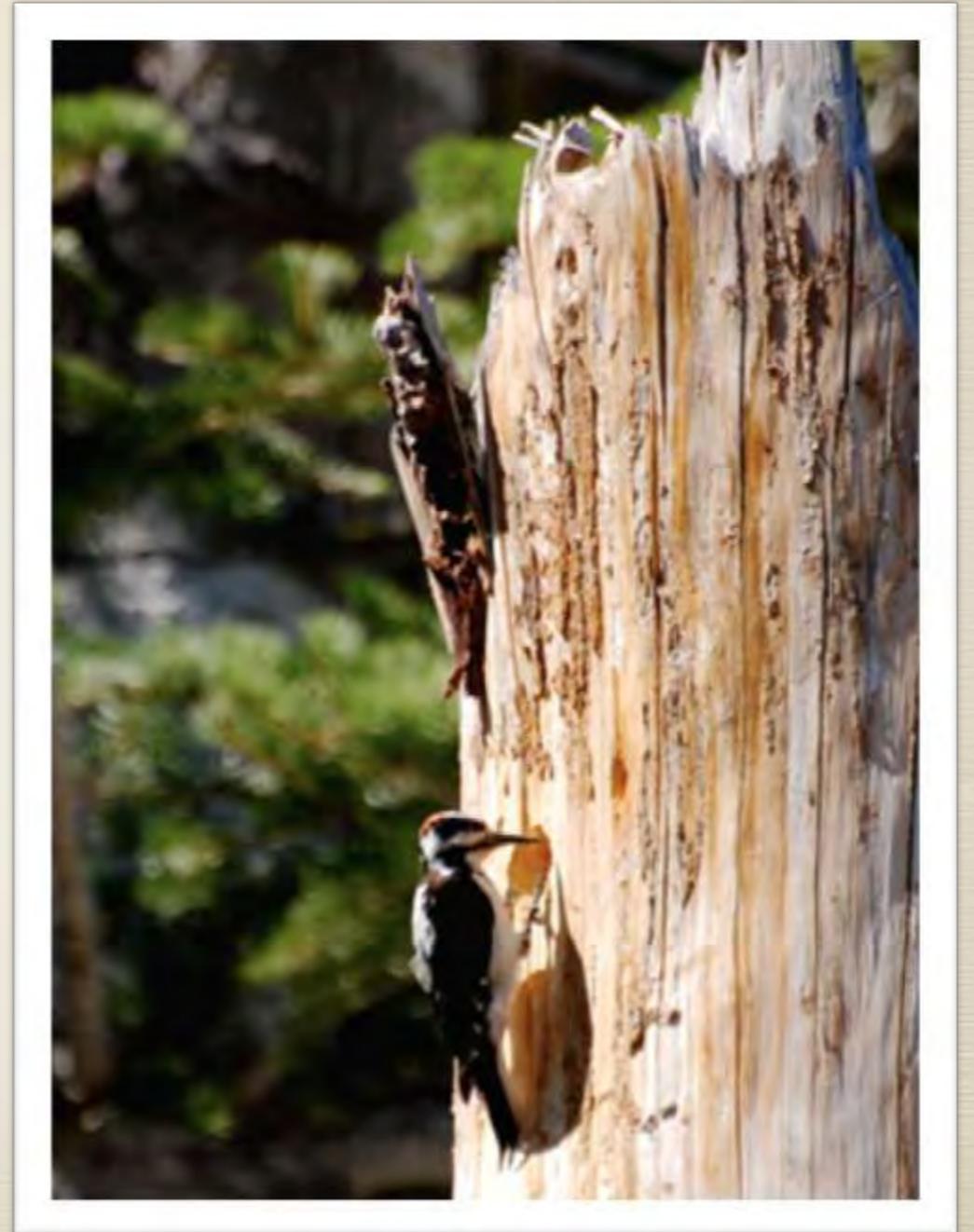
DIET

- ✓ Insects eaters - including, spiders, mites, snails, slugs, worms, millipedes, sowbugs, etc
- ✓ Predominately Ground gleaners and also can be seen gleaning foliage

Tips for Putting Up Bird Nesting Boxes

Put your nest box up asap, so it weathers and birds will be acclimated to it by nesting season.

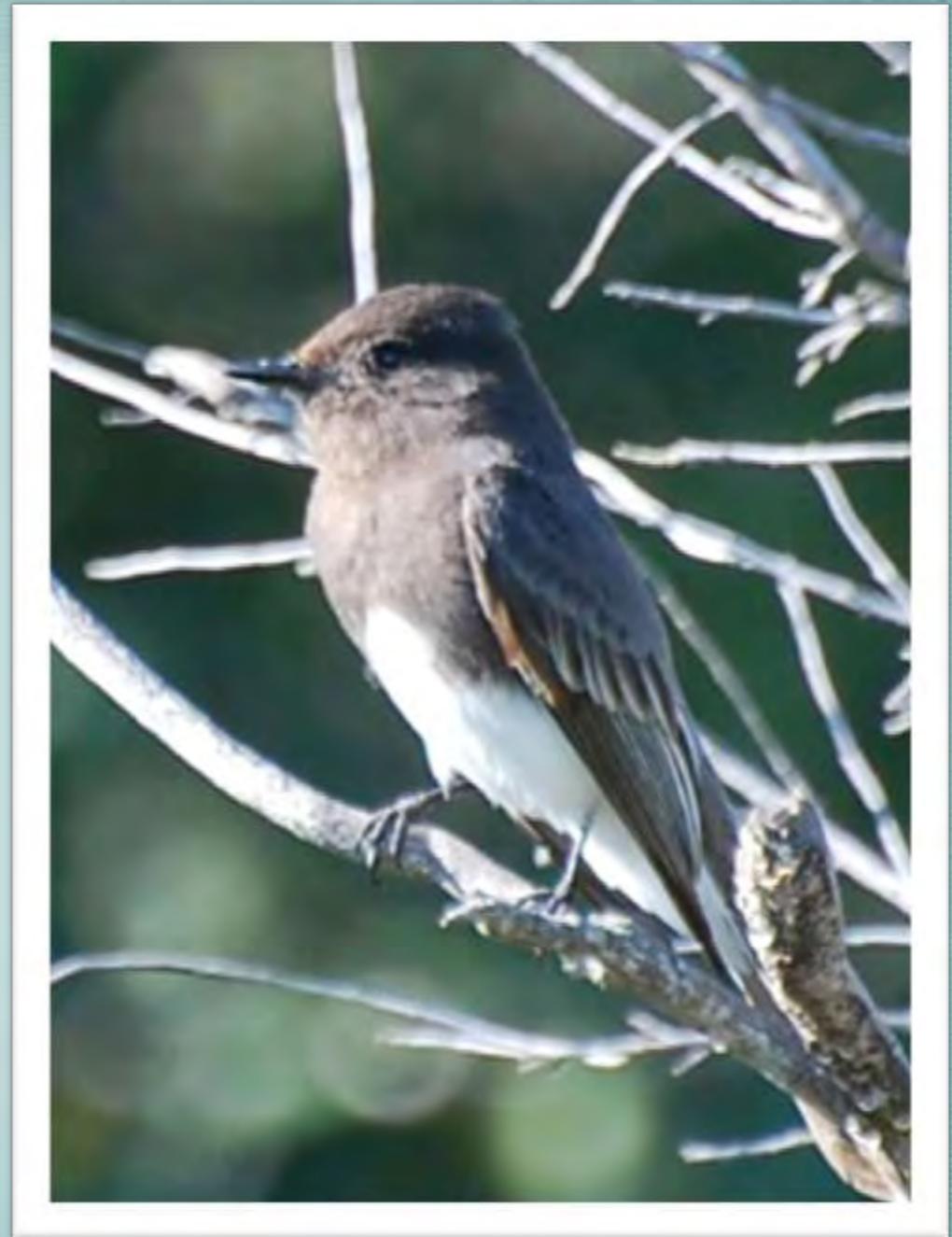
- ✓ Site nest boxes so that they are sheltered from the wind, rain and strong sunlight. If they are in full sun, the chicks could overheat and die.
- ✓ Position boxes at the appropriate levels for each type of bird. Do not put a perch on the front of the box. It makes it easy for predators.
- ✓ Avoid putting up boxes in busy areas of the garden, such as near a bird table or feeders. Robins and wrens in particular look for nesting sites in good cover.
- ✓ Don't line the box, birds will do this themselves. Leave pet or your own hair out in spring for them to collect. Don't leave out knitting wool or man-made fibers as these can be dangerous.
- ✓ Bird boxes should be cleaned out in the autumn when there's no risk of disturbing the occupants. Diseases and parasites can easily spread to new occupants. Clean the box out with a 10 to 1 bleach/water solution.
- ✓ Your box might not be used in the first year, as birds often choose a nesting site during the autumn, winter or early spring. Persevere — leaving your box up in winter may provide a useful roost in bad weather.



Hairy Woodpecker

For more information on birds in Plumas County check out the Plumas Audubon Website: plumasaudubon.org

Information on birds from: THE BIRDER'S HANDBOOK, A Field Guide to the Natural History of North American Birds by Ehrlich, Dobkin, and Wheye (1988)



Black Phoebe