

A Songbird Primer

By Mary Taylor Gray

The evening was calm and beautiful, the sky sparkled with stars...Suddenly there burst on my soul the serenade of the rose-breasted bird, so rich, so mellow, so loud in the stillness of the night that sleep fled from my eyelids. Never did I enjoy music more.

John James Audubon, 1834, upon hearing the song of a rosebreasted grosbeak

I tot I taw a puddy tat... I did! I did taw a puddy tat!

Tweetie Bird, upon seeing Sylvester the Cat.

Dickie birds, garden birds, passerines, perching birds, little brown jobs (LBJ's), tweetie birds. There are a million names for the many small, twittering birds we know as songbirds.

So what is a songbird?

Any bird that sings a pretty song could be called a "song bird." For our purposes we'll talk about those busy, familiar perching birds, or passerines, that sing melodious songs. (For technophiles, "true" songbirds are those belonging to the suborder *Passeres*.)

Songbirds comprise an estimated 50% of all bird species. Included are larks, swallows, crows, titmice, nuthatches, creepers, wren-tits, dippers, wrens, mocking-birds, thrushes, warblers, flycatchers, pipits, waxwings, shrikes, starlings, vireos, blackbirds, tanagers, sparrows, and finches.

Though lumped into one category, songbirds are really very different from one another, encompassing a range of feeding strategies, body designs and behaviors. Take beaks, for example, Grosbeaks (meaning literally "large beak") have thick, heavy bills for cracking open seeds. The bizarre, crossed-over beak of the crossbill is specialized for getting at seeds in pine cones. Nuthatches and creepers have longer, pointy bills for probing into bark. Robins have stabbing bills for grabbing insects from grass. Swallows have wide bills that open in a gape, then snap shut around flying insects. Generalists like crows have a bill in between those of seed and insect-eaters. Adapted for different ecological niches, many different species can live in the same habitat — nuthatches and creepers on the trunks of trees, warblers and chickadees among the foliage, towhees on the ground.

Diversity Of Habitat And Species

Colorado with its wide variety of wilderness and urban habitats — is home to an even wider variety of songbirds. On the plains we can see longspurs, meadowlarks, and lark buntings. In riparian areas look for warblers, orioles. blackbirds, and finches, Our mountain forests attract crossbills, grosbeaks, tanagers, siskins, jays, and nuthatches. On the tundra are rosy finches and pipits, with warblers in willow thickets. Our own backyards provide important

habitat for a large variety of resident and migrating songbirds. And because Colorado is at the edge of many species' ranges, wooded areas along our eastern reservoirs and waterways are good places to see both eastern and western races of birds like the northern oriole (Bullock's and Baltimore) and the dark-eyed junco.

rose-breasted grosbeak



The rituals of bird courtship provide a song and dance act for wildlife watchers. Males are dressed up in brightly colored plumage to attract females and warn competing males. Meadowlarks point their beaks up and jump in the air to display their yellow breasts. Red-winged blackbirds flash their scarlet wing patches (or epaulets), as they sing, proclaiming (both visually and vocally) territorial ownership and their fitness as mates. Many songbirds display by crouching and fluttering their wings rapidly or fanning their wings and tail and marching in front of the female. But singing is the main way a songbird struts his stuff.

Bird song is usually associated with breeding, though some birds, like the dipper, sing throughout the year. A song is a long series of uninterrupted sounds given in a pattern. Technically, even the tapping of woodpeckers and the booming of prairie-chickens are songs. Males do most of the singing, and songs serve to proclaim territory, warn off other males and attract a mate. Or sometimes birds may just sing out of sheer joy of being alive!

The syrinx, or voicebox, of a bird is located at the bottom of the windpipe, not up top like ours. Birds lack vocal cords but achieve their marvelous melodies by expelling air across delicate membranes in the syrinx, controlling the pitch via muscles attached to these membranes.

Birds usually sing from one or more favorite perches. Watch the birds in your backyard or a meadow-lark in a grassy meadow, and you'll soon identify each songster's perches. Most songbirds have two or more songs, though the brown thrasher has a repertoire of more than 3000 songs. Some birds sing a soft "whisper song" while sitting on eggs, possibly an expression of contentment. Studies indicate birds must learn to sing, but have an inherent "blueprint" for the song of their own species. Bluebirds raised hearing no bird song ignored recordings of other species' songs, but showed great interest when played a typical bluebird song, which they learned in five minutes.

In contrast to a song, a call is a short note or series of notes given for a specific reason — as a warning, out of fear, to keep in contact with mates or flock members. While no two bird species have the same song, species that flock together, like nuthatches, chickadees and titmice, have similar call notes.

The Cycle Of Songbird Life

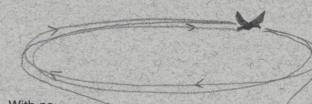
Birds are tied to the calendar. Migrate in, court, mate, nest, incubate, brood, fledge young, fatten, migrate out. Many species entering Colorado in spring can be found in wooded riparian areas along eastern streams and rivers. Some stay on the grasslands while others move into the foothills and montane forests for nesting. In late summer when the young have fledged, they move even higher to the subalpine forests and alpine tundra. Here they find abundant food as these mountain habitats reach the height of their growing season. Then the process is reversed; the birds move back down the slopes, out across the plains, then to their wintering grounds. Most Colorado songbirds migrate out of state in winter to habitats where resources are more abundant. Recent studies indicate our western birds winter mainly in western Mexico, while eastern birds move to Costa Rica. the Yucatan, Caribbean and eastern Latin America. Some of our species, like gray jays and Clark's nutcrackers. migrate altitudinally within the state, moving to lower elevations where food is more available. Come winter. mountain dwellers like Steller's jays and mountain chickadees show up at foothills feeders.

Raising Babies

The young of most songbirds are altricial — born naked, blind and helpless. Both adults usually rear the young. The peeping and gaping mouths of the nestlings trigger a feeding response in the parents. The adult bird's feeding response is so strong that when a bird's nest is destroyed, it may feed the young of another bird, sometimes even a different species. A cardinal was observed feeding the gaping mouths of goldfish used to begging from people.

Flocking and Larking

After the young have fledged (left the nest) many birds form large flocks, often with other species, and begin feeding in preparation for migration. Huge flocks of redwinged blackbirds, one of males and another of females and young, roost in the marsh by night, descending on fields and meadows by day to feed. Blackbirds, grackles, cowbirds and starlings may gather in raucous flocks numbering a million birds. Birds flock for an age-old reason — safety in numbers. There are many more watchers so each individual spends more time foraging, and the alarm call of one alerts the entire group. The sudden flush of the flock may confuse predators, and the chances of being the one nabbed by a predator, out of hundreds in a flock, are small. Mixed flocks take advantage of differing species skills. Downy woodpeckers, with close-focusing vision, rely on the broader-sighted chickadees and titmice as sentinels. Flocking may also improve feeding success. A group can overcome the territorial defenses of a few individuals and move into an area to feed. In mixed flocks each species forages in its niche woodpeckers peck into the bark, nuthatches scour the bark surface, chickadees and titmice glean the leaves reducing competition for food.



With no trees to provide song perches, grassland songbirds perform wonderful song flights, called larking, to make themselves seen and heard in spring. The male horned lark wings high in the air and circles, his singing audible high overhead, then folds his wings and plummets straight down, pulling up just above the ground. Our state bird, the lark bunting, is a joy to watch in spring as the courting male flies high up then sails down in a gentle spiral on stiff, outstretched wings, singing musically.

larking pattern

The Silent Spring Looms

"It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh.'

In 1962 Rachel Carson's Silent Spring addressed the problem of pesticides and their cedar waxwing destruction of wildlife. Thirty years later additional humancaused threats to songbirds mean the "silent spring" still Discussions of songbird decline these days focus on

neotropical migrants. These are forest and grassland birds that breed in North America but winter in Mexico and Latin America — the "neo," or new world, tropics. Most of America's songbirds are neotropical migrants. Surveys in the eastern U.S., where the best information is available, show 71% of the neotropical migrant species have declined between 1978 and 1987. Some states show as much as 85% of their neotropical migrant species declining, based on data from the U.S. Fish and Wildlife Service's Breeding Bird Survey.

Colorado is seeing declines in 41% of its species. Why is this happening? Migratory birds can be affected in one or more of their ranges — where they breed, the areas they migrate through, and the range where they spend the winter. The tendency is to point the finger at Latin America, but the causes lie both north and south of the border — fragmentation of breeding habitat in the U.S. and Canada, loss of wintering habitat in Mexico, the Caribbean, Central and South America, and problems

In their North American breeding grounds, songbirds are suffering a multiple whammy. Historically songbirds bred in the vast forests of the eastern U.S. and the riparian habitats and deciduous forests of the west. Unceasing development has reduced these blocks of forest to fragments, replaced them with newer forests of different vegetation, or destroyed them completely. Not only is there less forest habitat, but competition for it has increased. And without the protection of dense forest, these little birds are now much more exposed to predation.

The Dawn Chorus

By Mary Taylor Gray

Maybe they've awakened you on a spring morning when the sky was barely light — the dawn chorus. With disgustingly cheerful, energetic tweeting and chirping, they sing their little bird hearts out. Yet if you manage to pull yourself out of bed at that very early hour, you'll discover the rewards of "getting up with the birds."

Dawn is a wonderful time for enjoying nature, a treat for all the senses. It's cool and damp, animals are more active and visible, colors are richer, the fields and woods and marshes are alive with sounds, even scents are more evident.

So next time the dawn chorus calls you, roll out, not over, and discover the sensory richness of the natural world in early morning.

A Birder's Code Of Ethics

BE THOUGHTFUL OF BIRDLIFE

Be guiet. Move slowly and learn to observe birds without disturbing them. You will see more.

Never handle nests or young. Getting too close to a nest can leave a scent that predators can follow. Never pound on trees to arouse cavity nesters.

Adult birds may abandon the nest and their young. Never expose nests to weather or predators for a picture or for any other reason. Leave the nest site as you

found it. Use tape recorded bird calls sparingly. Overuse of this technique can cause birds to abandon their territories.

BE THOUGHTFUL OF HABITAT

Be careful not to trample sensitive or fragile habitats. Stay on established pathways. Go alone or in

Carpool wherever possible. Stay on established roadways. If you make a new set of tracks, others will follow

Respect all property. Always ask permission to enter private property. Be sure to check with the proper governmental agencies before entering areas. Some sensitive areas are closed to human interference and impact at certain times of year.

BE THOUGHTFUL OF PEOPLE

Keep groups together and keep quiet so all members can also enjoy and share the experience. Assist other birders with shared knowledge.

Treat other resource users as you wish to treated.

This ethics code was developed by the Sacramento Audubon Society and originally printed in Outdoor California.

Everyone has different skill levels and interests.

Perhaps the oddest threat, yet a very serious one, is nest parasitism by cowbirds. Cowbirds lay their eggs in the nests of smaller species, often after destroying the host bird's eggs. Thus the host bird rears cowbird hatchlings and does not produce young of its own species. Songbirds like Wilson's warblers, a primary cowbird host, have evolved mechanisms to combat parasitism. They often recognize cowbird eggs in their nests and eject them or build a new nest "floor" over the offending eggs. But as the forests have fragmented, the forest edge habitat favored by cowbirds has increased, and deep forest songbirds that haven't evolved defenses are now increasingly parasitized.

Even if they manage to breed successfully, birds meet more threats when they head south for winter. Just like in the U.S., Latin American forests are being cut for agricultural, urban and commercial development. Wintering grounds tend to be much smaller than breeding grounds, with birds being localized by species. Think of great numbers of one species concentrating in winter into an area of only a few hundred square kilometers (about 100 square miles). Cutting one patch of forest to put up a resort hotel can be devastating.

Getting to and from these winter and summer ranges is also tricky. Birds tend to funnel through fairly small but vital staging areas where thousands of birds congregate in particular spots to feed and rest. The descent of 18,000 to 20,000 sandhill cranes each spring on the San Luis Valley is a good example of this. Wipe out or reduce these migratory staging areas, and the birds with nowhere to feed and rest after flying hundreds or thousands of miles - will die.

Partners In Flight/Aves De Las Americas

Partners in Flight/Aves de Las Americas, the Neotropical Migratory Bird Conservation Program (NTMB), is an international initiative that promotes the conservation of forest and grassland birds and their habitats, both in North and Latin America. NTMB is a cooperative effort involving federal, state and local government agencies, conservation, environmental and philanthropic groups, industry, professional organizations and the academic community. Started in 1990 by the National Fish and Wildlife Foundation, it has five components - population and habitat monitoring, management,

partnerships. Among the goals and projects underway are a "Sister-Park" program with Latin American countries; habitat inventories to assess the condition and to restore degraded habitats;

evaluation and



Colorado Birding Groups Join Us!

Boulder County Audubon Society (Boulder County) 4641 Almond Lane, Boulder 80301.

President: Mike Smith Phone 719-530-2646 (Two to four field trips/month)

Please contact for the Audubon chapter nearest you.

> Colorado Bird Observatory (Colorado, state-wide) 13401 Piccadilly Road, Brighton 80601.

Executive Director: Mike Carter Phone 303-659-4348

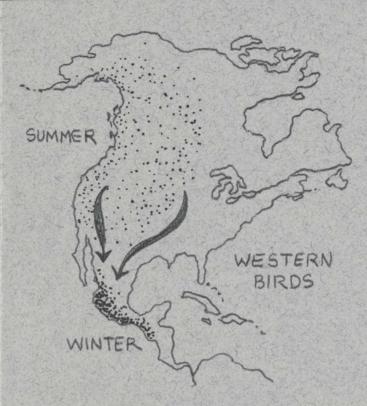
western tanage

Colorado Field Ornithologists (Colorado state-wide) 13401 Piccadilly Road, Brighton 80601 President: Mike Carter Phone 303-659-4348 (Annual meetings, monthly field trips)

Denver Field Ornithologists (Denver Metro area) c/o Zoology Dept., Denver Museum of Natural History, City Park, Denver 80205. President: Norm Erthal Phone 303-424-6747 (Field trips every Sat and Sun, year around)

Grand Valley Audubon Society (Mesa County) 639 Peony Dr. Grand Junction 81503 President: Susan Bliss (Two to four field trips/month)





monitoring of neotropical migrant populations in specific sites and across ranges; joint conservation efforts and coordination of management among federal, state and private landholders in North and South America; development of international education and information programs and solutions that integrate biological, economic and sociological concerns.

"Partners in Flight brings experts together at an international level to lead the way in management of these species," explained Mike Carter of the Colorado Bird Observatory. "We want to help traditional wildlife management agencies become active in songbird conservation.' CBO is taking an active role in Partners in Flight, and a workgroup: Colorado Partners In Flight, is working within our state as part of the international effort.

You Can Help

Want an active role in songbird conservation? You can help by getting involved with organizations like the Colorado Bird Observatory and the Audubon Society. Volunteer to help out on the breeding bird survey through the Breeding Bird Atlas Partnership. Support environmental and conservation organizations that are working for habitat as well as species conservation. Get involved at the local level in county and city land-use planning. Community groups have been effective in halting development projects they felt would destroy wildlife habitat and degrade their neighborhoods and their quality of life.

Reader Survey Results

Thanks, again, for answering our reader survey. From your responses we seem to be doing a good job giving you the information you want (whew!). Most (88%) of you said the technical level of our writing was just right, though 9% thought it was not technical enough and 3% thought it was too technical. Most (95%) said we were doing an effective job informing you about nongame and endangered wildlife, and 90% felt we were doing a good job letting you know about places to watch wildlife.

Most (52%) of you classified yourselves as general public; 19% of you are educators; 8% are wildlife professionals; and 21% of you have a specialized wildlife interest (birdwatcher, nature photographer).

You want articles on, (ranked from most to least important):

Animal behavior

Current wildlife watching

opportunities · Wildlife management

 Wildlife communities · Natural history of Colorado

wildlife Funding issues

Volunteer opportunities

· Human/animal behavior

Wildlife research

· Letters to the editor (very distant last)

We also learned that

60% of you contribute to the Nongame Check-off (thank you!); 30% of you don't; and 10% of you used to, but don't anymore. Reasons for not contributing are (in descending order): you don't receive refunds (note: designate an amount to contribute even without a refund if you wish), you don't do your own taxes (note: direct your accountant to include the contribution), you pay too much already, and you didn't know about it. Those who do contribute learned about the Check-off from the tax form, though a few heard about it on TV, radio or a billboard.

You also suggested more tips and specifics on where and how to see animals, ensuring statewide coverage and expanding the format. We have read all your comments, and we are responding to your interests as best we can. Thanks again, and feel free to write us anytime! 🖐 🖏

DOW Working For Wildlife

Report: Songbirds

Dune Ridge State Wildlife Area is located five miles southeast of Sterling. The area covers 385 acres; 118 acres remain in native grasses. Straddling the South Platte River, Dune Ridge includes riparian channels, river benches, agricultural fields, and the combinations of habitat that make the area attractive to many wildlife species. Dune Ridge has long been, and will continue to be, a hunting destination for people seeking pheasant, quail, turkey, and deer. But this year the Division of Wildlife (DOW) is also taking steps to make Dune Ridge SWA a destination for people seeking to view and enjoy

Wildlife Technician Mike Etl, responsible for the management of Dune Ridge State Wildlife Area, is in the early stages of making the area a songbird haven. Working with DOW Wildlife Biologist Tim Davis, Etl has developed a five-year plan for the Dune Ridge songbird project. According to Etl, a ten-acre portion of Dune Ridge has been set aside for development specifically to attract and protect songbirds. This protected area is located near the compound and headquarters area.

This summer Etl is planting food plots of wild sunflowers and proso, both favorite food sources for songbirds. He also will plant native vegetation and other kinds of wildflowers and woody vegetation attractive to many species of songbirds. A large variety of trees and shrubs will be planted for cover, food, and nesting opportunities. He plans to construct a pond in the area. next summer.

Etl is building nestboxes for birds already in the area and for those he hopes to see in the future. He has arranged for scout troops and other volunteers to construct high-quality wooden nestboxes for the songbird refuge. Currently, the nestbox project is targeted to meet the needs of bluebirds and kestrels.

Etl expects that Dune Ridge will become an important area for both songbirds and birders. Dune Ridge State Wildlife Area is open to the general public for birdwatching, as well as, other wildlife activities. For more information on Dune Ridge SWA, call: Bud Smith,

Northeast Regional Information Specialist, (303) 484-2836.

mountain bluebird 1991 Non-Game Tax Check-off

Doing Well, Thanks To You!

black-throated gray warbler

The Nongame and Endangered Wildlife Income Tax Check-off has always been the number one tax check-off for Coloradans, and you've given the program

first-place support again this year. Wildlife enthusi-

asts disguised as Colorado taxpayers had contributed \$366,423 to the Nongame and Endangered Wildlife Income Tax Check-off Fund by the end of May 1992. At that time last year, the fund had collected only about \$268,000.

Thanks to almost 59,000 contributors, averaging \$6.25 per person, things look mighty encouraging for nongame and endangered wildlife this year. And we still have another month to tally our totals! By law, only Nongame Check-off contributions collected by June 30 will be

credited to this year's available funding for nongame and endangered wildlife projects. Any funds collected later than June 30 will be placed in next year's funding base. Please remember: You can contribute to the

Nongame and Endangered Wildlife Program any time of year by sending donations to the Nongame Wildlife Fund, c/o the Colorado Division of Wildlife, 6060 Broadway, Denver, Colorado 80216.

And from all of the nongame and endangered wildlife species that benefit from your generosity and care: THANK YOU VERY MUCH! 2,

Colorado's Wildlife Company wildlife Heritage coupon
Yes I want to help preserve Colorado's wildlife heritage. Enclosed is my check for \$ (Please make your check payable to Colorado's Wildlife Company/DOW. This is a tax deductible contribution will directly support the Watchable Wildlife and Nongame and Endangered Wildlife Programs.)
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Please add the following friends of wildlife to your mailing list: Name Name

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Mail to: COLORADO'S WILDLIFE COMPANY, Colorado Division of Wildlife, 6060 Broadway, Denver, CO 80216

Pawnee National Grasslands Birding Loop

DESCRIPTION: A premier prairie birdwatching tour; the grassland checklist contains over 200 species, including grassland birds, migrant waterfowl, and shore-birds. The box elder/willow riparian area at the Crow Valley Campground is like an oasis amidst the dry short-grass prairie, attracting a variety of eastern and mountain birds. "Birding on the Pawnee by Automobile or Moun-

tain Bike" is available from the Pawnee National Grassland Headquarters, 2009 9th St., Greeley, Co. 80631; (303)353-5004. kingbirds. Murphy Reservoir offers good shorebird and waterfowl viewing.

OWNERSHIP: USFS, PVT.

SIZE: thirty-six mile self-guided tour CLOSEST TOWN: Briggsdale SEASONS: spring, summer, fall

northern oriole

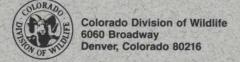
VIEWING

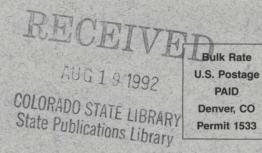
INFORMATION: Good chance to see and hear "larking" (singing courtship flight) of lark buntings, horned larks, meadowlarks, and longspurs late May through June. Prairie birds to watch for include mountain plovers, chestnut-collared and McCown's longspurs, burrowing owls, long-billed curlews. In the campground, streamside riparian habitat attracts a great variety of birds April through June, and late August through October — warblers, thrushes, flycatchers, orioles,

RECREATIONAL FACILITIES: restrooms, camping, water

(Excerpt from the Colorado Wildlife Viewing Guide, a guide to 110 wildlife viewing sites statewide. Available late August of 1992 for \$6.95 from the Colorado Wildlife Heritage Foundation, 6060 Broadway, Denver, CO 80216 (303) 291-7212.

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