



# 'TIS THE SEASON TO BE COUNTING



During the Audubon Christmas Bird Count, expert and beginner citizen-scientists tally every bird they spot in an effort to aid avian conservation. **By Tom Dickson**

**O**n a windy Thursday morning in late December, at the Broadway Flying J Truck Stop in Belgrade, two dozen birders gather over coffee and pancakes to hear instructions for their participation in the annual Audubon Christmas Bird Count (CBC).

With route maps in hand, the volunteers break into four groups and head into the parking lot. Over the rumble of idling semis, they call out “Have fun” and “Good luck” before driving off. Each group will look for birds in one of four quadrants of a 15-mile-diameter “count circle” in the lower Jefferson and Madison Valleys between Three Forks and Norris. Within each quadrant, they will follow prescribed routes for the all-day count. Many are familiar with the drill, having taken part in earlier counts around Bozeman and Ennis. “We’re sort of a roving band of birders,” says Melissa Scott, an inter-

national naturalist and tour guide who lives in Bozeman.

I join Scott; her best friend and expert birder, Kathryn Hiestand; John Parker, a retired trails manager for Yellowstone National Park; and Judy Tolliver, a retired university administrator who recently moved to Bozeman from Illinois. We drive 30 miles west to the tiny, handsome town of Willow Creek to begin searching trees, power lines, and skies. Our goal for the next eight hours: Count every single bird we spot.

### Long tradition

The CBC began in eastern states at the turn of the 20th century. Wildlife conservation was in its early stages, and a growing number of people were concerned about declining bird populations. New England ornithologist Frank Chapman, founder of a magazine that later became *Audubon*,

proposed a nationwide bird tally and led the first count on Christmas Day 1900.

Participation in the annual bird survey has steadily grown. In recent years, more than 70,000 people have counted birds in more than 2,000 locations worldwide, mostly in the United States and Canada. That makes the CBC the world’s largest and longest-running survey conducted by citizen-scientists.

Montana bird advocates joined the Christmastime survey in 1908, with a count in Bozeman, and have participated most years since. Bird counts are conducted in roughly 30 locales across the state. Local Audubon chapters usually coordinate the outings, held between mid-December and early January. During a single calendar day, volunteers follow assigned routes, which vary little from year to year, to ensure scientific consistency.

LEFT TO RIGHT: DONALD M. JONES; TOM DICKSON; TOM DICKSON; AUDUBON.ORG



**EARLY RISERS** From left to right: Birders gather to discuss routes and transportation at a truck stop near Belgrade; Melissa Scott scans a cemetery for great horned owls; New England ornithologist Frank Chapman, who founded the Christmas Bird Count in 1900 (photo date unknown). Facing page: bohemian waxwing.





When paired with results of the spring-time North American Breeding Bird Survey, the counts show bird population concentrations, occurrence changes, and upward and downward population trends. Scientists with the National Audubon Society, American Bird Conservancy, other conservation groups, and state and federal wildlife agencies use the tallies to assess the health of bird populations and help guide conservation activities. Because birds are early indicators of environmental changes, the CBC information also helps focus attention on threats facing other wildlife species.

It's also just plain fun. Bird watchers consider the annual survey part of their holiday tradition, meeting up with old friends for a day afield. "It's a great way for birders to see each other in the winter when we might not otherwise," says Scott.

Beginners are always welcome. Bird identification skills aren't essential because experts in each group aid in identification. All that's required is a willingness to look long and hard for winged wildlife.

#### Tombstone owls

Our group's first sighting, by Hiestand, is a northern shrike along a road just outside Willow Creek. Then a flock of Canada geese flies overhead, and Parker pulls a clipboard from his backpack to begin the day's tally. As the five of us walk through town, he, Scott, and Hiestand begin announcing the birds they spot—or, even more impressive, identify by call. It takes a while for Tolliver and me, both novice birders, to see many of the birds even after the others have identified them and pointed directly to their locations ("It's right *there*.")

As expected in a residential area, the initial tally is mostly house sparrows, Eurasian collared-doves, house finches, magpies, and black-capped chickadees. In Parker's truck we drive around town, binoculars out, peering into backyards, especially those with bird feeders. Walking down one alley, Scott hears a distinctive high-pitched trill and points up at a flock of Bohemian waxwings ravaging the berries of a large mountain ash. She explains that the Bohemian can be differentiated from

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its close cousin the cedar waxwing by its larger, plumper size and shape, white markings on the upper wings, and russet (rather than white) undertail. "Also, most cedars migrate south in winter," Scott adds, "so the odds are that we're seeing Bohemians."

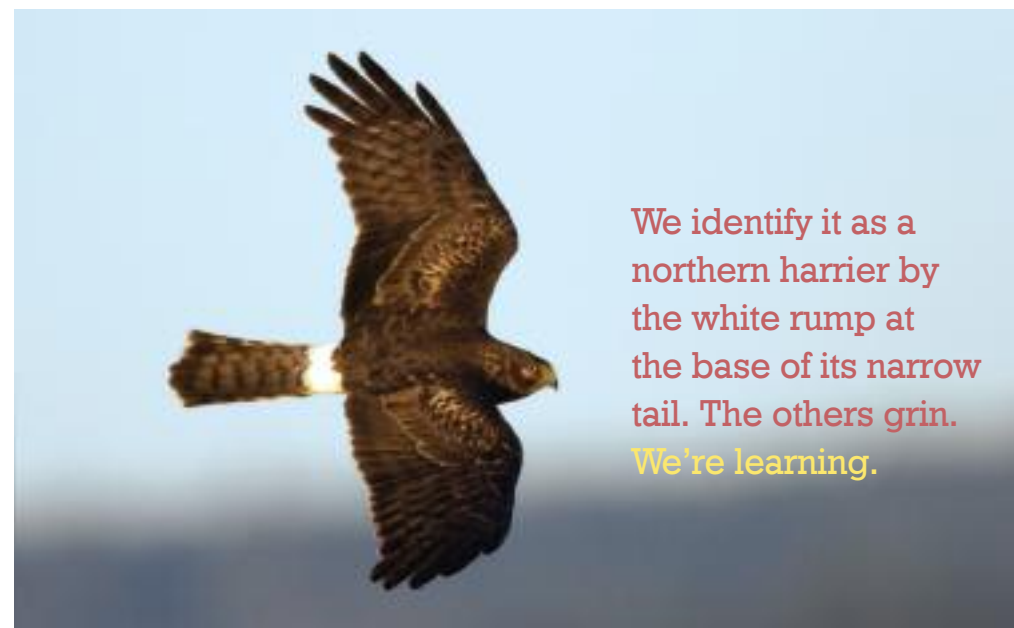
At around 10 a.m. we drive to a nearby cemetery, established in 1864. Before we're even out of the truck, Hiestand hears a Townsend's solitaire—a single, lonely whistle—then points to it in a tall juniper. As we wander past headstones beneath stands of towering Douglas fir, she spots several raptor pellets beneath a tree. Pellets are undigested food that some birds regurgitate. "If you break them up and see small rodent bones, the pellet is probably from an owl," Hiestand says, showing us the lower jaw of a mouse. Encouraged that at least one of the large raptors is in the grove, we scan the branches until Scott spots a great horned owl that immediately flies off. As we try to relocate it, she offers a tip: "Listen for magpies." Sure enough, several are making a racket in the distance. We head in that direction and

quickly spot the magnificent owl standing with shoulders hunched, amber eyes glowing in the shade of the dark tree limbs just 20 feet overhead, and surrounded by its black-and-white tormenters. Scott says birders regularly see certain species in the same spots year after year during the CBC. "We can go to a place like this cemetery and know ahead of time we'll have a pretty good chance of seeing, in this case, a great horned owl," she says.

#### Raptor ID

Next we drive along country roads, crisscrossing the valley, the Tobacco Root Mountains rising to the southwest. Parker slows down whenever we see open water in a stream, river, ditch, or spring-fed pond. In a bush near one ditch he spots a tree sparrow, its russet cap distinguishing it from the abundant house sparrows also perched there. Rough-legged and red-tailed hawks soar over open pastures, the former looking for meadow voles and the latter for slightly larger prey such as cottontails. Parker points out that redtails this time

**KEEPING TRACK** Clockwise from below right: John Parker tallies birds on a chilly morning; Kathryn Hiestand examines owl pellets for clues as to what species they might have come from; at an evening debriefing session over cider and chicken chili, group leaders submit their tallies, which are then forwarded to a volunteer who produces a statewide summary. Biologists with Audubon, other avian conservation groups, and state and federal agencies use the information to assess the health of bird populations.



We identify it as a northern harrier by the white rump at the base of its narrow tail. The others grin. We're learning.

of year usually have a darkish head, light undertail, and russet overtail, while rough-leggeds have a lighter head, a dark "wrist" or carpal, and a dark band toward the end of the undertail. Tolliver then spots a dark raptor soaring low over a meadow, and she and I identify it as a northern harrier by the white rump on the base of its narrow tail. The others grin. We're learning.

The group stops for lunch along the nearly frozen Jefferson River at the Williams Bridge Fishing Access Site. Two trumpeter swans—distinguishable from the nearly identical tundra swan by their French horn-like call—rise up from the river mist and fly off. As we eat our sandwiches, two adult bald eagles overhead take turns flipping over in midair and touching talons with the other. "It's a bit early for this type of mating activity, but I guess they're taking advantage of the nice weather," says Parker.

Then we start to see ducks, a few common goldeneyes but mostly mallards. Flock after flock, likely coming off stubble fields on nearby ranches, fly overhead. By day's end we'll have counted more than 1,300 mallards. I start wishing I'd brought my shotgun but keep my thoughts to myself. We're supposed to be counting birds, not shooting them.

Back on the road, Parker tells us the birds using water and denser vegetation on the

lowlands are less active in the afternoon. Now we'll scan higher country for raptors and ground birds such as common redpolls, snow buntings, and horned larks. Sure enough, he soon spots a flock of roughly 50 horned larks. The birds land on a stubble field several hundred yards away and immediately vanish. "Once they are on the ground they're virtually impossible to see," Parker says. Over the next two hours we spot several juvenile bald eagles, two adult golden eagles, several roughleggeds, a dark-phase redtail, and a few hundred more mallards.

#### Heading back

At 4 p.m. we return to Willow Creek and make one last slow drive through town, spotting more common feeder birds. Then we hit a spring-fed pond teeming with waterfowl. Despite the low light, Parker identifies 11 species, many of them long gone from most

To find a CBC near you this holiday season, along with dates, contact information, and meeting sites, visit the Montana Audubon website [mtaudubon.org](http://mtaudubon.org) and look for "Citizen Science" under the heading "Birds & Science."

other waters of Montana. In addition to those we'd already seen, he spots a lesser scaup, a greater scaup, tundra swans, a ring-neck, a canvasback, pintails, a Barrow's goldeneye, an American wigeon, and several gadwalls. I'd been out with hunters who knew their ducks, but I'd never seen a display of waterfowl identification like that.

By this time the five of us are chilled to the bone. Even though the thermometer stayed in the 30s most of the day, the wind made mittens, wool hats, and down jackets essential. I make a note to bring warmer boots next time—there's a lot of standing around on frozen dirt roads—and also a thermos of hot soup to go along with my sandwich.

By 5:15 p.m. we see warm lights coming through the windows of a home tucked into the woods along the Gallatin River. One of the volunteers has offered to host a post-count potluck. Vehicles converge on her driveway like chickadees to a feeder. Inside, we stand around the warm, humid kitchen ladling chicken chili and stew from crockpots into mugs. We swap sightings and marvel over especially noteworthy sights, such as the Virginia rails one group saw.

Parker sits off to the side to tally our group's sightings. We saw a total of 33 different species, he says, down a bit from the 40 to 45 he usually spots in the Willow Creek quadrant during the CBC.

I later learn that a total of 32 counts were held across Montana in 2014, with 671 observers in 250 field parties. The volunteers spotted a total of 229,442 individual birds and 139 species. Most abundant were mallards (52,989), Canada geese (39,147), and Bohemian waxwings (25,690). Among the more unusual species were two gyrfalcons, one Iceland gull, three snowy owls, one American pipit, and one turkey vulture.

Tolliver, the Illinois transplant, tells me over a cup of hot cider that she enjoyed the chance to see birding spots with others who like to watch wildlife. "I'm new to the area, so I was looking for something to do to meet fellow nature lovers and learn about birds around here," she says. "Everyone has been so welcoming, but I expected that. Birders are great people—gentle, serious, and funny at the same time. They're nice people to hang out with." 🐾