

Clark's Nutcracker: The Bird that Builds Forests

By Dr. Diana Tomback

The presentation will cover Clark's Nutcrackers as keystone seed dispersers, and thus forest builders, for many conifers across the montane west; with the focus on Clark's Nutcrackers and Whitebark Pine. With the decline in Whitebark Pine, now a federally threatened species, there is a concern about a decline in nutcracker populations. I will include some data from our work on nutcracker forest community use, annual abundance, and home range size in Yellowstone National Park.



Photo by Micki Long

Clark's Nutcracker.

Dr. Diana F. Tomback is Professor of Integrative Biology at the University of Colorado Denver with expertise in forest ecology and conservation biology. She received a B.A. and M.A. at UCLA and Ph.D. at the University of California Santa Barbara. Author of more than 150 publications and essays, she has conducted research on high elevation and treeline ecosystems, including pioneering studies of the keystone seed disperser Clark's Nutcracker, Whitebark Pine, and related five-needle white pines in parks and forests across the U.S. and Canada. In 2001, Tomback and colleagues started the Whitebark Pine Ecosystem Foundation (WPEF) <http://www.whitebarkfound.org>, a science-based 501 (c)3 non-profit to advocate for Whitebark Pine restoration. She was science lead on the National Whitebark Pine Restoration Plan, a multi-agency strategy in partnership with American Forest and advised by the Washington Office of the USDA Forest Service. She now serves on the U.S. Fish & Wildlife Service Whitebark Pine Recovery Team.



Photo by Jacqueline Russell

BBA February presenter: Dr. Diana F. Tomback.

Please join BBA for our virtual program via Zoom on February 17, 2025 at 7PM. You will need to register in advance for this meeting with the following link before 6 p.m. on the February 17, 2025:

<https://us02web.zoom.us/meeting/register/6DS0VThdT6GzuODT1GPsiQ>

After registering, you will receive a confirmation email containing information about joining the meeting.

Letter from the President

By Micki Long, BAS President

Happy February, everyone! It's time for the Great Backyard Bird Count. If you've participated before, you know that you don't have to stick to your backyard. Go with friends or go solo anywhere you like and bird for at least fifteen minutes. The Count last four days (2/14-2/17, so you can bird in a few places (including your own yard). For more info about how to participate, see <https://www.birdcount.org>. You could even try some new birding spots. Here are Ravalli County hotspots in February: <https://ebird.org/region/US-MT-081/hotspots?yr=curM> Because I'm writing this so early in the month, the top hotspots look a little strange this morning. Middle Burnt Fork is at the top, with Iron Cap second; Lee Metcalf Wildlife Refuge is third. But by the time this newsletter comes out, the Refuge will, undoubtedly, come out on top, as it is a great place to bird in any season. Have fun exploring the www.ebird.org tools and birding in new spots!

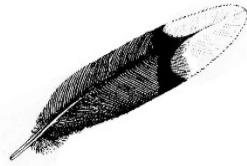


Photo by Micki Long

Great Horned Owl

While it's true that we may not see as many birds and as many brightly colored birds in the winter as we do in other seasons, especially during migration periods, winter birding can bring joys as well. Among them are the birds who start breeding in winter, like the Canada Jay (known as the Gray Jay until 2018). The place I've most often seen these cute little corvids is too high in elevation for me to reach in winter, so I've never seen or heard breeding behaviors. But a winter breeder who makes itself fairly obvious on cold winter nights is the Great Horned Owl. A pair's duet

Last Call for Membership Renewal:

Please pay your \$15 membership renewal for 2025. Renew online through our new [BBA website](#) and click on the "Join Now" button to pay with credit card. You can also renew through mail by sending your name, address, email, and check (made out to the Bitterroot Bird Alliance) to:
Bitterroot Bird Alliance Supporting Member
P.O. Box 326
Hamilton, MT 59840

of alternating calls is very special; I never get tired of hearing it as I read in bed on cold winter nights. As you probably know, males are smaller than females but have larger larynx/voice box, which produces a call with a lower pitch. So, listening to the duet, it's easy to identify the male and female hoots. A few times, I've heard a male calling and calling, seemingly in vain. No female responds. In those cases, I always hope he'll find a mate before the breeding season ends. In his new book, *The Courage of Birds*, Pete Dunne explains, "Early nesting gives adult owls the latitude to care for young throughout the summer and fall, increasing survival rates" (88). If you'd like to read a beautiful homage to the Great Horned Owl, read the February 1st episode of Sophie Osborn's blog, [Words for Birds](#). I believe you'll enjoy it at least as much as you did Sophie's excellent presentation to Bitterroot Bird Alliance last November.

I'm so excited for our program this month; Dr. Diana Tomback is an expert on Clark's Nutcrackers! See more info and the Zoom link elsewhere in this newsletter. I hope to see you there!



Great Horned Owlets.

Photo by Micki Long

Upcoming Field Trips:

Mission Valley Raptors

Feb 22, 2025 (Day Trip)

Join BBA's Alex Kearney and Five Valley Audubon's Steve Flood for a trip to Mission Valley at the south end of Flathead Lake.

While the focus will be raptors of the area, we will discover other wintering species and perhaps the very beginning signs of spring migration. We will meet at two locations to organize carpools: 7:15 am at the Stevensville Super 1 parking lot and 9:00 am at Allards's Stage Stop Gas Station, Hwy 93, St. Ignatius. We will return to the Bitterroot Valley by the late afternoon. Bring clothing for short walks from the cars, snacks, lunch, and water. We'll make several bathroom stops. Call Alex Kearny for details at 406-360-2345.

Teller Wildlife Refuge's Great Blue Heron Rookery Viewing

May 8th, 2025 (5:30 PM to 8:00 PM)

Join BBA's Alex Kearney and Teller Wildlife Refuge's Nicole Ballard to view one of the Bitterroot Valley's Great Blue Heron rookeries. The parents should be busy at this time getting the next generation of herons off to a good start. Meet at the north end of Chaffin Road, approximately 2.5 miles north of "The Barn" (located on Chaffin Road). Scopes and field glasses are suggested, but will also be provided for viewing. Call Alex Kearny for details at 406-360-2345.

In Memoriam: Judy Hoy

The Bitterroot Bird Alliance board is sad to share the news that our dear friend and long-time board member Judy Hoy passed away on January 17th. She served on our board from 1987 to 2023! We are making a donation to Wild Skies Raptor Center on her behalf. You can read her obituary and offer comments and condolences on the Brother's Mortuary website:

<https://www.brothersmortuary.com/obituary/judith-hoy>. We'd like to share a few remembrances from our board and members:

Recollections of Judy Hoy: One Remarkable Bird

Skip Horner Bitterroot, Bird Alliance Board Member

Soon after I joined the Audubon Board in 2008, eager to meet other birders, Judy sent a nine paragraph, 1200-word email to the entire Board regarding birth defects and developmental malformations in birds and White-tail Deer, caused, she surmised, by pesticides. MDFWP simply dismissed her evidence, she let us know, which incensed her. She admonished all of us to take up the cause. I wrote her a supportive response, so she sent her 18-page research article on the topic, published in Poultry, Fisheries and Wildlife Sciences. In it were 24 graphs, 110 citations, and 54 close-up photos of malformed animal eyeballs, penises and thymuses, as gory as that sounds, all taken by Judy. I just wanted to go birdwatching, but Judy educated us in deeper wildlife issues that Audubon, and everyone, should address. For years she continued her drive to highlight these abnormalities as harbingers of more serious future issues, not just for White-tails and other wildlife, but potentially for humans as well. Only the wise took her seriously.

One could only marvel at her energy and her persistence. She suffered rebukes in her science, mostly from those less informed, but she carried on. Over the phone she'd start with a short diatribe about the idiots in Helena. Then she'd mellow into indignant humor, her voice cackling merrily. She admitted she was a bit weird, but she couldn't help it because these issues were real and no one was taking them seriously.

During Covid, Judy and I wrote a column together for the Bitterroot Audubon newsletter. At first we called it Weird Birds, and we got a good cackle discussing candidates. The first installment highlighted the Hoatzen, also known as the Stinky Turkey. It lives in the Amazon, sports outrageous plumage, eats only leaves, and has prodigious bad breath. It is distinctly weird. But we decided that the word 'weird' was insensitive, so we changed it to Remarkable Birds. It was a short run, but it helped define Judy—often humorous, always committed, sometimes a bit weird, consistently remarkable—one of a kind.

Kate Stone, Bitterroot Bird Alliance Board Member

I have so many fond memories of Judy, from first encounters on the BBA board, to field trips to her home and rehabilitation center before she retired, to wonderful corgi encounters. She helped me on several research projects, and I helped on several of hers. We also traded gardening and cooking secrets, and she recently gifted me with a box of art supplies, revealing a side of her past I didn't know existed.

In volunteering to capture and transport injured raptors for Wild Skies Raptor Center, I encountered few people who didn't know of Judy. Many of them had taken creatures of all kinds to her in the past, had called asking for advice which she freely gave, or had seen her do a public presentation with education birds. She really was a giver, and her passing is a huge loss to our community.

I believe strongly in the validity of the observations Judy made over the years and think we will all regret not listening to her more. Miss you Judy! Thinking of you Bob!



Photos by Kate Stone

Left: Unwilling to let a single deer carcass go by without an exam, Judy jumped right in to help us place carcasses on her property for the Bitterroot Valley Winter Eagle Project. Our team documented malformations in over 200 deer, providing Judy with a large dataset to work with. She told me her winter field jumpsuit was originally her father's!

Right: Judy described herself as spry as a coyote because of the special salts she took and recommended to many people. In 2018, she hopped into the back of this vehicle more nimbly than I did and kept up lively conversation throughout our ride around the property.

Brooke Tanner, Wild Skies Raptor Center

I first met Judy over 15 years ago, and from the very beginning, it was clear she was one of the most genuine and authentic people I've ever known. From day one, Judy was a mentor and supported me in starting Wild Skies, offering unwavering reliability and encouragement over the years. She was a true champion for wildlife, steadfast in her dedication to be their voice and advocate. Thinking of Judy will always make me smile; she was a remarkable human being. I feel fortunate to have had her in my life.



*Photos by Brooke Tanner
Judy helps release a Bald Eagle after successful rehabilitation.*

Tribute to Judy Hoy, Gretchen Langton, Bitterroot Bird Alliance Member

ever have that friend, who shares your love for birds, who you call when you see something mystifying or extraordinary or egregious? And you know that this conversation will spark an hour long chat that may or may not stick to the topic but is still so interesting and informational that it never seems like a waste of time. Someone scientifically driven, with little patience for fools, deadly serious, who still likes a good joke. Judy was all this in spades.

When I told Judy that I never seemed to have enough time to watch birds around my house, she suggested I set up some feeders up outside my bathroom window. She nailed it. I have a perfect view from the window and I often gave Judy the "Throne Report." I wish I could have given her this morning's report: three Juncos and one Hairy Woodpecker vied for position on the suet feeder while three Juncos, four House Siskadees, and two Red-Breasted Nuthatches took turns cracking black oil sunflower seeds.

Known of Judy for years prior to actually getting to know her on a personal level, as her reputation for taking on local officials and farmers alike was legendary. Her scathing Haiku poetry published in the Bitterroot Star about malformations and the idiocy of man were epic. She was the person my Nana would call when she found an injured wild animal; not just birds. I had begun to call her "The Rachel Carson of the Bitterroot" behind her back well before I approached her at the Ravalli County Museum some 17 years ago.

Judy was giving one of her incredible bird presentations and had various birds in boxes. She would reach into a box with her leather glove and two curly pony tails bobbing, slowly rising to present, seated upon her lap, a Great Horned Owl with one eye, or a Turkey Vulture missing part of one wing. The awe in the room was palpable as viewers aged 5 to 85 were able to see birds up close in a way they might never have the opportunity to see again. After she was finished, I approached to volunteer in any way to help her and our friendship was forged.

It was here where the adventures began. I had the privilege of babysitting Judy's menagerie on several occasions when she and Bob were able to get away, so I had to learn which birds get brown mouse-cycles, which ate white mouse-cycles, what the doves ate, and how to feed the cadre of raccoons. I accompanied Judy to the Stevensville High School where she was giving a presentation about chemical malformations in ungulates in the Bitterroot and my job was to pass around malformed White-tailed deer skulls and listen to the cheerleaders squeal in horror. I was so proud to be able to write a very detailed article about her in the Bitterroot Star that Judy edited over and over and over until it met with her approval. One day she called me to ask if I wanted to see something special. My young daughter and I went to the front of an adult Bald Eagle Judy was trying to rehab who she was guessing got lead poisoning from a pile of old tires. To stand two feet away from a bird that large and gaze into its intelligent eyes was magical. One day when a tractor Fire cut down a burning Cottonwood snag on our ranch with three fuzzy owlets atop it, Judy rescued them and released them.

I continually peppered Judy on the phone with novice questions.

I just saw an owl with eyes in the back of its head! What is it?

No, Silly. That's a Pygmy Owl and those dark spots that look like eyes are designed to spook predators.

I'm hearing much hooting outside my house in the pines? Who are they?

Those are Great Horned Owls looking for love. Its January!

I just saw a black bird bigger than a Crow but smaller than a Raven?

They are interbreeding. You may have seen a Craven!

Judy stumped her once when I reported seeing a batch of 18 turkey babies trotting along single file with a tom up front and a hen in the rear. "Hmm," she said, "That's unusual." A week later, she called me with her theory that because there were so many predators about, maybe the turkeys were taking a new approach to security.

I learned a great deal from my friend Judy. She was an author, a scientist, an artist, a gardener. I admired her intellect, her tenacity, her moxie, and her unwavering stance on the importance of exposing wrongdoing and protecting the environment and caring for sick and/or injured creatures. She loved creatures with all her heart and was their best possible advocate. She was a one-of-a-kind human and one of my she-ros. My heart goes out to Bob, her partner in crime for nearly 60 years, and their respective families.



Photo by Kate Stone

Judy and Bob opened up their property to a carcass and camera station for the Bitterroot Valley Winter Eagle Project. We were alarmed and curious to see the deer carcasses disappearing so quickly. Cameras revealed the most rotund raccoons I have ever seen, direct descendants of raccoons Judy rehabbed and released over the years.



Photo by Kate Stone

One of Judy's major duties for the Bitterroot Bird Alliance board was organizing Welcome Back Waterfowl Day, where she'd sometimes bring education birds and delicious lemon bars.

Jim Story, Bitterroot Bird Alliance Board Member

Without question, Judy Hoy was the Bitterroot Valley's premier environmental watchdog for the past 40 years or more. She was tireless in her efforts to identify man-caused threats to wildlife and humans. Judy really cared about wildlife, serving as one of Montana's few raptor rehabilitators for many years. She touched the lives of countless children over the years with her numerous talks and live-bird presentations to school groups. Judy made the Valley a better place for all things living. She will be missed.

Author Event: Rebecca Heisman and *Flight Paths*

By Kate Stone

Bitterroot Bird Alliance, Chapter One Book Store, and MPG Ranch are excited to host a virtual happy hour to discuss the book *Flight Paths* with science writer Rebecca Heisman on Wednesday April 2 at 5:00 pm. You may recognize Rebecca's name from outlets like Audubon magazine, Living Bird, Scientific American, the American Bird Conservancy and others. Rebecca describes *Flight Paths* as follows:

"Did you know that one of the first ways to measure bird migration was counting the silhouettes of night-migrating birds as they passed in front of the full moon? Or that British radar operators during World War II were mystified by "angels" appearing on their screens that turned out to be seabirds in flight? Or that scientists today can tell roughly where a bird spent the winter by analyzing the ratios of hydrogen, carbon, and sulfur isotopes in its feathers? *Flight Paths: How a Passionate and Quirky Group of Pioneering Scientists Solved the Mystery of Bird Migration* is my first book and tells the incredible scientific story of *how* we know what we know about bird migration, tackling the methods scientists use to track this amazing natural phenomenon — from the origins of bird banding to the latest in high-throughput genetic sequencing and space-based tracking systems — chapter by chapter."

We are really lucky to have such a distinguished author discuss her work with us. One reason this book is so special is that it discusses an acoustic monitoring project that took place in the Bitterroot Valley, with many BBA members participating!

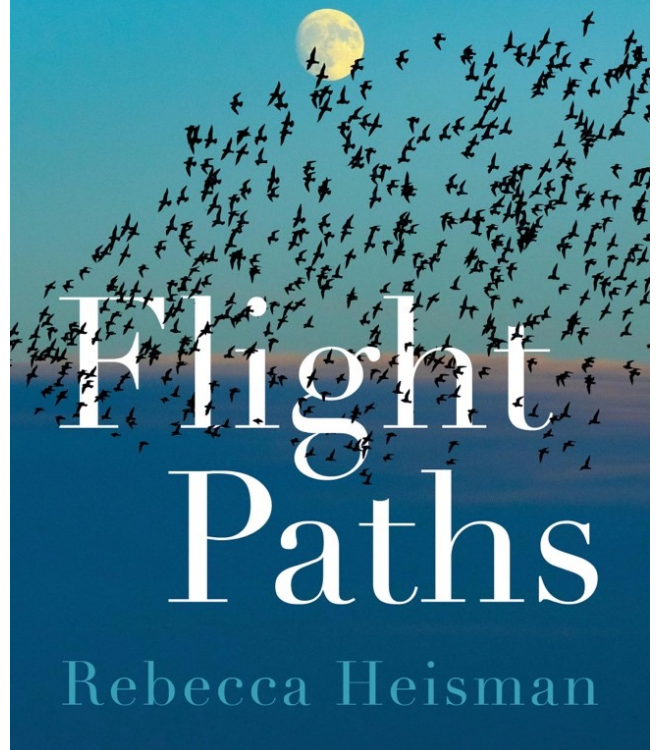
You will need to pre-register for this event, and we'll post more details on the event calendar on our website. In the meantime, you need to mark your calendars and get reading!! We strongly encourage you to order this book from Chapter One. There are also multiple copies available within the Montana Library System.



You can scan this QR code to take you right to the event page on the BBA website!



How a Passionate and Quirky Group
of Pioneering Scientists Solved the
Mystery of Bird Migration



Bitterroot Bird Alliance Website:

We thank you for your patience as we've transitioned to a NEW WEBSITE!!

Please check it out

at: <https://bitterrootbirdalliance.org>

You'll find our newsletter, calendar of events, and many birdy resources. **And don't forget: it's easy to [renew your membership](#) on the website.**

Thanks to Chuck at Irestone Web Design for helping us make the move.

Bitterroot 2024 Christmas Bird Count Summary

By Larry Barnes

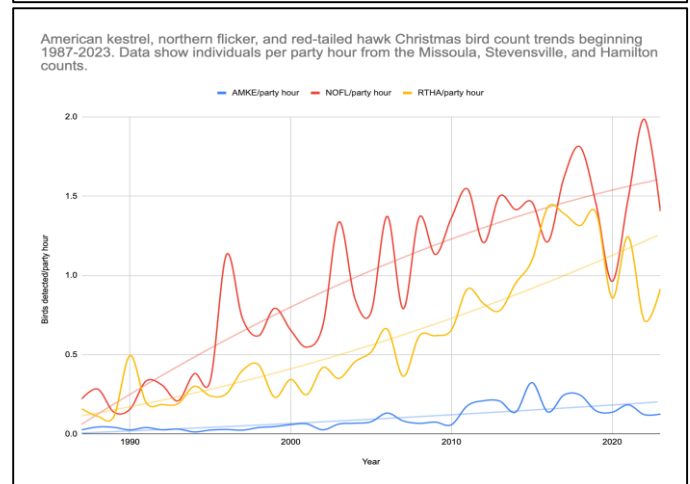
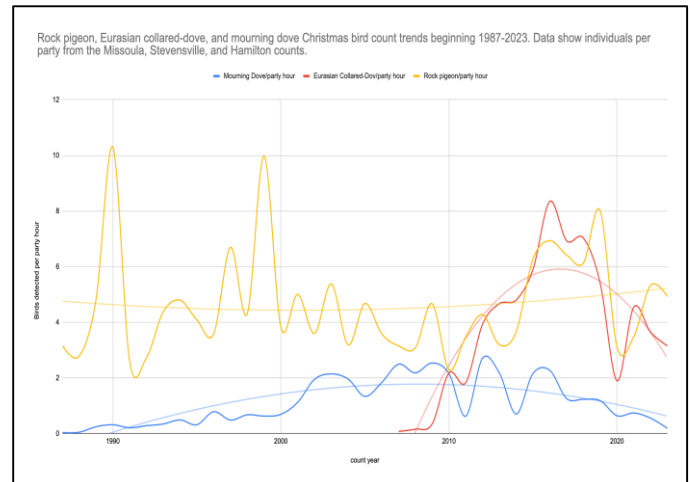
The Hamilton Christmas Bird Count was born in 1987 when John Ormiston organized it for the first time. John had a 40-year career as a biologist for Montana Fish and Game and later as the wildlife biologist for the Bitterroot National Forest. John was the count compiler for all but one of the previous 37 years.

In 2023 I participated in the count for my first time and volunteered when John asked for someone to take it over. As a Montana newcomer and newly retired biology teacher I thought it would be a good way to learn my new bioregion and meet some of its like-minded people.

This year we collectively saw 59 species (56 during the actual count plus 3 during the count week) and 4,794 individuals on the Hamilton Christmas Bird Count. The average values over the 38 count years are 66 species and 7,326 individuals. The large variation in these values over the years (54-79 species and 2,295-16,523 individual birds) combined with weather and number of annual participants, makes it hard to say that the species count and number of individuals were down in any meaningful way.

Nevertheless, there were a few notable observations. Alex Kearney discovered a small flock of Greater White-fronted Geese during count week, which was a first in 38 years. Counters observed 21 Trumpeter Swans, a species first detected in 2007 and seen only

7 times in the last 18 years; during this time the highest count was 6. Sharon Barnes, Bucky Ballou, and I were startled to see 14 Sandhill Cranes *quietly* flying over Nan Christiansen's property. Cranes had been seen just three times previous to this, and only one at a time. Only 8 Rough-legged Hawks were counted, which was the lowest number ever detected (average is 38 individuals).



I was curious to see how the three pigeon/dove species have changed over the years. Both native Mourning Doves and non-native Eurasian collared-doves are newcomers to the Hamilton area, arriving for the first times in 1989 and 2008, respectively. The Mourning Doves poked along in small numbers ranging from 0 to 9 until 2002. Beginning in 2004 Mourning Dove numbers increased dramatically with up to 209 seen annually. But in the most recent three years, their populations decreased to 10, 13, and 0 this year (one small flock was seen during count week by John Ormiston).

Three species (Red-tailed Hawk, American Kestrel, and Northern Flicker) may have actually increased over the preceding decades. American Kestrels are declining in parts of the nation so this is a nice trend

(if it actually is one) to see here in western Montana.

I made some charts from John's data that showed some trends in the above data. Wondering what the nearby Stevensville and Missoula counts would reveal over the same period, I used the Audubon database to make charts combining all three count circles. The combined data mirrors the changes I saw in the Hamilton data, increasing the likelihood that the changes are real and not the result of random chance.

What does it all mean? It's always hard to know for certain, but the lack of snow (and minimal ice) likely accounts for the many cranes and Trumpeter Swans and the few Rough-legged Hawks. The rising Mourning Dove winter populations in the early 2000s may have been a result of milder winters. Their subsequent decline may be related to competition with their Euro-dove cousins.

Sign up for Action Alerts

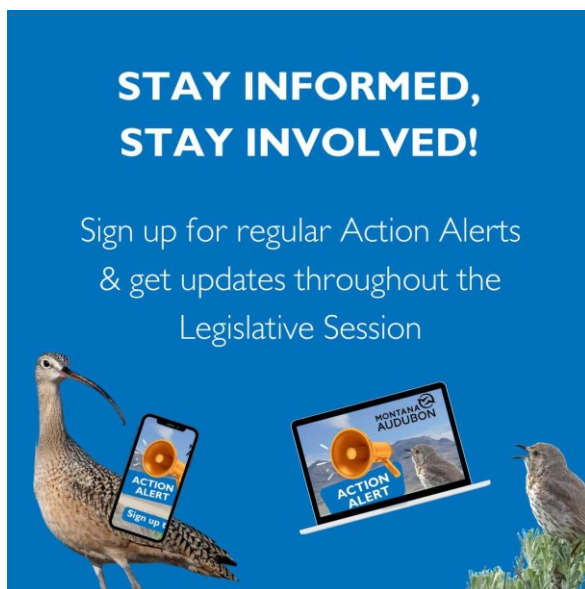
By Lauren Smith, MT Audubon

The Montana legislative session is in full swing! Sign up for Montana Audubon's Action Alert emails to stay informed and engaged. Throughout the session, you'll receive regular emails that share:

- Updates on priority bills
- Resources for testifying and reaching lawmakers
- Information to help you make an impact

To read the most recent Action Alert and to sign up, visit the Montana Audubon website:

<https://mtaudubon.org/conservation-policy/action-alert/>



Save the date for the 2025 Wings Across the Big Sky Birding Festival

Join us in Missoula, May 30-June 1, 2025, for Montana Audubon's Wings Across the Big Sky Festival, hosted with Five Valleys Audubon Society. Enjoy local field trips, inspiring speakers, and engaging presentations. Registration opens in March 2025!

Calendar of Events

- Monthly:** Beginner Bird Walk at Lee Metcalf NWR, 3rd Saturday of each month, Stevensville, MT 10AM-12PM.
- Feb 14-17:** Great Backyard Bird Count; see President's Letter in this newsletter for more information.
- Feb 17:** BBA Meeting/Program; Clark's Nutcracker: The Bird that Builds Forests, By Dr. Diana Tomback. 7PM via Zoom.
- Feb 22:** Mission Valley Raptors Field Trip, see newsletter inset for details.
- Mar 17:** BBA Meeting/Program; details TBA, 7PM.
- Apr 21:** BBA Meeting/Program; details TBA, 7PM.
- May 8:** TWR's Great Blue Heron Rookery Viewing field trip; see newsletter inset for details.
- May 19:** BBA Meeting/Program; details TBA, 7PM.
- May30-Jun1:** Save the Date: *Wings Across the Big Sky* Festival; Missoula, MT. Further details TBA.

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Chapter Only Membership

The Bitterroot Bird Alliance Only Membership is \$15/year. These members will be supporting local chapter activities, receive the full color e-newsletter, and enjoy Chapter benefits. To join as a Chapter Only Member, complete this form.

Name: _____
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State: _____ Zip: _____
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Send this application with \$15 to:

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NATIONAL AUDUBON SOCIETY MEMBERSHIP APPLICATION



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