



Sacajawea Audubon News

Sacajawea Audubon Society builds on an interest in birds to promote the conservation of our natural environment through enjoyment, education, and action.

Monday, September 13th, 2021 Monthly Program—IN PERSON AND VIRTUAL:

“The Angling Adventures of Silas Goodrich and Rudyard Kipling: An Epitaph for Montana’s Lost Water” with Patrick Byorth



Patrick Byorth

TROUT fishing emerges deep in Montana’s history, from the fishing cultures of the Salish, Kootenai, and Pend Oreille peoples, to Silas Goodrich, William Clark, and Rudyard Kipling. Even the earliest territorial legislature adopted a fishing regulation a quarter century before statehood. However, Montana’s fishing and water history diverged

for a century, while appropriators diverted water and trashed streams and wetlands with little regard for fish or wildlife. A public awakening to Montana’s diminished air and water quality and declining fish and wildlife shifted the tide, with a new constitution and water policy reforms recharting a route where fish, aquatic life, and wetlands gained some recognition. After 50 years of restoration, will invasives, complacency, climate change, or commercialization unwind our progress? What’s next for Montana’s rivers, wetlands, and water dependent wildlife?

Patrick Byorth is the District 2 Commissioner for the Montana Fish and Wildlife Commission, as well as the Montana Water Director for Trout Unlimited’s Western Water and Habitat Project. He joined the Montana Water Program at Trout Unlimited as a staff attorney in August, 2009 and became Montana Water Director in 2013. His work at Trout Unlimited focuses on restoration of instream flows and habitats to benefit native and wild fishes through community-based efforts, water transactions and water policy reform. His natural resource work began in 1986, after earning a B.A. in biology and chemistry from Carroll College and in 1990 an M.S. in fish and wildlife management from Montana State University. He spent nearly

17 years as a fisheries biologist with Montana Fish, Wildlife, and Parks working to restore Arctic Grayling, Yellowstone Cutthroat and Westslope Cutthroat trout in their native waters. As a fisheries biologist managing the renowned wild trout fisheries of the Madison and Gallatin river basins, Patrick watched over mountain lakes, reservoirs, and streams large and small. During a building boom in the area, he was deeply involved in permitting and land use planning issues, attempting to ensure streams and fisheries were not overlooked by development.

Pat shifted gears in 2006, entering the legal profession to focus on water law, instream flow restoration, and water policy reform, earning a J.D. at the University of Montana School of Law in 2009 and was admitted to the Montana Bar, Montana Federal District Court, and the 9th Circuit Court of Appeals. Patrick served as President of the Montana Chapter of the American Fisheries Society and was recognized as the Chapter’s Fisheries Professional of the Year in 2006. He is the founding Chairman of Montana Aquatic Resources Services, Inc., an aquatic mitigation company innovating new strategies for restoring Montana’s streams, lakes and wetlands. Patrick served as Vice Chair of the Greater Gallatin Water Council. He joined the board of the Four Corners Community Foundation in 2017. In 2019, Montana Governor Steve Bullock appointed him to the Montana Fish and Wildlife Commission to represent Southwest Montana.

Our monthly presentations will resume in person on September 13 with the option to join virtually. **We are following the Gallatin County Health Department’s Covid-19 Guidelines and will cancel the in-person meetings if needed.**

Join us in person at Hope Lutheran Church, 2152 W. Graf (off of S. 19th) OR virtually by registering at: <https://attendee.gotowebinar.com/register/3408914173169938192>. You will receive a confirmation email with information about joining the webinar. Share our virtual program using hashtags #sasbirds, #Anglingadventures, and #Montanalostwaters.

*SAS programs are free and open to the public. **Social begins at 6:30 PM. Announcements and the program begin at 7:00 PM.** For more information on SAS Program Meetings contact Kyle Moon at programs@sacajaweaudubon.org*

BIRD-FRIENDLY CATIO AND GARDEN TOUR

Wednesday, September 15th, 6:30 PM
at the yard of Artist Deborah McKenna

www.deborahmckennaart.com

This tour is for cat and bird lovers alike. Be inspired and gain ideas on providing outdoor spaces for cats while keeping birds safe. From Deborah's website:

"It is our passion to keep our cats and wild birds safe by creating an enclosure for the cats. This Kitty Condo-Catio-Canopy Walk begins in my art studio with a cat door that accesses the great outdoors through a series of enclosed platforms, bridges, spiral staircase, tunnel, and magnificent garden... all designed to keep our cats safe from predators AND to keep our local bird life safe from the cats."



Tour is limited to 15 people. To register, contact Vicki Saab at victoriaannsaab@gmail.com with the subject line **Catio**. We will provide the address to those that pre-register.

SACAJAWEA AUDUBON SOCIETY OFFICERS AND COMMITTEE CHAIRS

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President	Chris Nixon pres@sacajaweaaudubon.org
Vice President	John Edwards vicepres@sacajaweaaudubon.org
Treasurer	Mary Schlosser treas@sacajaweaaudubon.org
Secretary	Emma Narotzky sec@sacajaweaaudubon.org

Board Members

Billy Burton	billyburton@sacajaweaaudubon.org
Travis Kidd	education@sacajaweaaudubon.org
Vicki Saab	vickisaab@sacajaweaaudubon.org
Aaron Clausen	aaronclausen@sacajaweaaudubon.org
Kyle Moon	programs@sacajaweaaudubon.org
Loreene Reid	loreener@sacajaweaaudubon.org
Forrest Rowland	forrestrowland@sacajaweaaudubon.org

Activity Leaders

Education Chair	Travis Kidd education@sacajaweaaudubon.org
Conservation Co-Chairs	Paulette Epple conservation@sacajaweaaudubon.org Adele Pittendrigh adelep@sacajaweaaudubon.org
Field Trips, Bird Sightings	John Parker birdsightings@sacajaweaaudubon.org
Hospitality	Looking for Volunteer hospitality@sacajaweaaudubon.org
Membership	Loreene Reid membership@sacajaweaaudubon.org
Newsletter	Terri Narotzsky & Kelsi Tjernagel newsletter@sacajaweaaudubon.org
Programs	Kyle Moon programs@sacajaweaaudubon.org
Website	Lou Ann Harris webmaster@sacajaweaaudubon.org
Social Media	Looking for Volunteer
Wetlands Preservation	Loreene Reid wetlands@sacajaweaaudubon.org
Book Club	Elisabeth Swanson elsswa@gmail.com
Newsletter Design	Amy Kelley Hoitsma aok@mcn.net



Turn your passion into action: Become an Indreland Audubon Wetland Preserve Busy Beaver

The Indreland Audubon Wetland Preserve (IAWP) Busy Beavers are going strong! With 38 current members, the volunteer team has had a successful first season. Learn more about what we've been up to and how you can join below!

WHAT IS IAWP BUSY BEAVERS?

IAWP Busy Beavers is a long-term volunteer team operated by Sacajawea Audubon Society and Gallatin Watershed Council (GWC). Becoming an IAWP Busy Beaver is a great way to take care of rivers and streams within the Lower Gallatin Watershed, meet community members, receive free educational workshops, deepen your understanding of watershed health, and get outside! No prior experience necessary; all ages are welcome. You will receive training in all volunteer areas of interest.

HOW TO VOLUNTEER

All volunteers must attend a mandatory training session. Beyond that, the minimum commitment to be a 2021 volunteer will be 10 hours of volunteer service per year. Volunteer activities will vary year to year but may include:

- A. Restoration Projects: Wetland restoration (cleanups, invasive species removal, native plantings), river cleanups, dog waste cleanups, willow collecting and planting, tree planting, beaver mimicry projects, and more.
- B. Project Monitoring and Maintenance: Invasive weed extraction, bird nest counts, tree watering and wrapping, mulching, fence repair, photo point monitoring, and more.
- C. Watershed Ambassador and Watershed Educator: Conduct science experiments and lessons with children, act as a host at trailheads, provide wetland tours at the Indreland Audubon Wetland Preserve, etc.

GWC, SAS, and other partner organizations offer free educational workshops throughout the year for IAWP Busy Beavers and community members to gain a greater understanding of the watershed we all call home.

UPCOMING IAWP BUSY BEAVERS WORKSHOPS & EVENTS:

IAWP BB Workshop #4: An Exploration of Local Avian Habitat with Forrest Rowland. Thursday, September 23rd, 6:30 PM-7:30 PM @ IAWP. RSVP at <https://www.signupgenius.com/go/9040e4eaea823a7fa7-iawp>



IAWP Busy Beavers monitor piezometers. Standing: Brooke Helstrom; kneeling: Kirstan Miller. Photo by Doug McSpadden.

Details: Explore the IAWP with Forrest Rowland, an avian and wildlife enthusiast and naturalist photographer.

Volunteer Appreciation Event. Wednesday, September 29th, 5:00-7:00 PM @ IAWP

Details: Mingle with your fellow Busy Beavers and win prizes!

ONGOING VOLUNTEER OPPORTUNITIES:

Piezometer Monitoring. Mondays from 8:00 AM-11:00 PM @ IAWP. RSVP: Email outreach@gallatinwatershedcouncil.org

Tree Watering at McLeod Park. Tuesday evenings @ McLeod Park (behind 3330 Sundance Drive). RSVP: Email outreach@gallatinwatershedcouncil.org

To learn more and to apply, visit: <https://bozemanwetlands.org/WP/2021/06/07/become-a-busy-beaver/>





BIRD NOTES

..... by John Parker

This summer there were a number of exciting birds found in this area, ranging from large waders to warblers. Two of the most interesting are birds that breed in Montana, but had never been documented in the southwestern corner of the state.

Early in the evening of May 27, while working in her office at her south Bozeman home, Beth Madden saw an owl fly into the side of the house while being pursued by magpies.



Flammulated Owl by John Parker

Running outside, Beth was able to chase off the magpies before they could do any more harm. As she bent to see if the owl was injured it flew to a nearby fir tree and perched snugly against the trunk. With such a close-up view of the owl, Beth realized it was a **Flammulated Owl**. It remained on the same perch until dark, when it opened its eyes, roused itself and flew off into the night. Flammulated

Owls breed as close as the mountains south of Helena, but surprisingly they have never been documented in Gallatin or any of the surrounding counties.

As Dave Story was beginning a Breeding Bird Survey early on the morning of June 24th, along Camp Creek Road west of Bozeman, he heard a call that didn't register as one of the local breeding bird songs. After mulling it over, Dave returned to the same location to try and verify what he thought the song might be. Vindication. Almost immediately upon arriving at the spot Dave heard the distinctive "REEbeer" or "Free beer" song and was able to get a recording of southwestern Montana's first **Alder Flycatcher**. Alder Flycatchers breed to the north primarily in Canada, with a slight dip into Montana along the Rocky Mountain Front. Alder Flycatchers are exceptionally rare in the western United States, as their migration path sweeps to the east as they make their way back and forth to their winter range in the western Amazon.

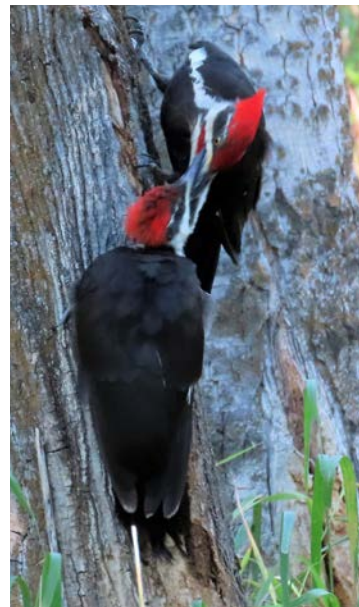
Many local birders were able to get close observations of the very accommodating **American Bittern** that spent five days at the Cherry River ponds in northwest Bozeman. Drew Berdo first discovered the bittern on May 15th. Many



American Bittern by John Parker

of the birders who came to the ponds looking for the bittern, first heard the gulping calls of the bittern, which is sometimes called the "Pump Bird." Bitterns are known for their cryptic markings and habit of posing with their neck and head pointed skyward to blend into the cattails or reeds. This bird was so unfazed by people that at times it could be found standing on the trail around the ponds.

As **Pileated Woodpeckers** have become increasingly common near Bozeman over the past twenty years, and especially the last



Pileated Woodpecker by Robin Wolcott

five years, they have been mentioned less frequently in this column. Until now there had been scant evidence of actual breeding in the Gallatin Valley and surrounding mountains. On August 12th as Robin Wolcott was walking the Sourdough Nature Trail in south Bozeman she heard and then tracked down two Pileated Woodpeckers. Robin was able to get photos of the two woodpeckers, which confirmed that it was an adult male Pileated feeding a juvenile female. Young Pileated Woodpeckers can be definitively aged by the fact

that their eyes are dark brown, before developing into the yellow color of adults.

The month of September is arguably the best month of the year for birding. In early September the shorebird migration is still near its peak and the raptor migration will be building throughout the month. If that isn't enough to keep you busy, the peak passage of all of the passerine family groups will occur during September. So, whether you chose to climb a mountain to view raptors, or watch for warblers in your backyard, the opportunities to enjoy birds are nearly limitless this month.

SACAJAWEA AUDUBON FALL 2021 FIELD TRIPS

THREE FORKS – HEADWATERS STATE PARK

Saturday, September 4

Trip Leader: Robin Wolcott (p) 406-581-5418; email pajaros@wewolcotts.com (email preferred)

Meet at 7:45 AM at the Museum of the Rockies. Carpool and leave at 8 AM.

Early September is the peak of fall migration with an amazing diversity of birds passing through Montana. This field trip will take advantage of the many birding opportunities in the greater Three Forks and Headwaters State Park areas. This trip will last until mid to late afternoon, so bring a lunch and anything else you may need for a full day in the field. Bring a scope if you have one. Bring your enthusiasm and your flexibility. *14-person limit*

To reserve a spot on the trip or for more information please contact the trip leader.

HARRISON RESERVOIR

Saturday, September 11

Trip Leader: John Parker (p) 406-586-5863; email conundrumjp@gmail.com

Meet at 7:45 AM at the Museum of the Rockies. Carpool and leave at 8 AM.

The emphasis of this trip will be on waterfowl and shorebirds, while exploring all the shorelines and other habitats around Harrison Reservoir. September is the peak of the fall migration,

so we will likely be making other stops on the way to and from Harrison Reservoir to look for other migrants. This trip will last until mid to late afternoon, so bring a lunch and anything else you may need for a day in the field. Scopes will be especially useful on this trip, as many of the birds will be distant. *12-person limit.*

To reserve a spot on the trip or for more information please contact the trip leader.

CENTRAL PARK POND

Saturday, October 2

Trip Leader: Don Profota (p) 406-579-3200; email dprofota@gmail.com (email preferred)

Meet 8:30 AM at the Museum of the Rockies. Carpool and leave by 8:45 AM.

This trip is scheduled for the beginning of the fall waterfowl migration when a wide variety of ducks should be arriving from their northern breeding grounds. The ducks will be done with their post breeding molt (no more brown ducks!) and in their full breeding plumage once again. Central Park is an ideal location for close viewing and an opportunity to see waterfowl in greater detail than on most of this area's lakes. A variety of other birds such as early Trumpeter Swans, grebes, and loons are possible. If time allows, we may visit other locations in the Manhattan area looking for other migrants. This trip will last 3-4 hours. Scopes will be especially useful. *12-person limit.*

To reserve a spot on the trip or for more information please contact the trip leader.



Missouri Headwaters State Park photo by Amy Kelley Hoitsma

Meet Mary Geis, the Montana Biologist Who Spent 30 Years Studying Bluebirds

By Jewel Alston (reprinted from allaboutbirds.org)

In the foothills outside Bozeman, Montana, there's a winding path known as the Mountain Bluebird Trail. For more than 50 years it's been a breeding ground for intellectual curiosity and bluebirds alike. On cool summer mornings, sky-blue Mountain Bluebirds twitter from fence lines, bringing food to little chicks thriving in more than 300 wooden nest boxes.

The trail has come a long way since 1969, when it sported just 12 nest boxes fashioned from cans and milk jugs. It began its transformation in 1975, thanks to the work of Mary Geis, a biologist who transcended social norms of the day and blazed a trail through male-dominated graduate school. Over the course of nearly 30 years, Geis collected detailed records of nearly 1,500 [Mountain Bluebird nests](#).

Each nesting season, Geis and a small group of volunteers kept meticulous notes and submitted data to the Cornell Lab of Ornithology's North American Nest Record Card Program. This historic collection, along with 30 others, is being transcribed and digitized as a part of the [Nest Quest Go!](#) project. Now 95 years old, Geis is one of the few living contributors to the collection, with a life story that encompasses major shifts in society and technology.

“Besides the pleasure we all get from having the swooping swallows, the flashing bluebirds, and the musical wrens and chickadees around... I am also convinced that they have a beneficial effect on insect populations in our area.”

Geis discovered her passion for ornithology as a teenager, during afternoon outings with the Natural History Club in her hometown of Oyster River, New Hampshire. At the time, she recalls knowing “the difference between a magpie and a robin,” but she was keen to learn more. During World War II, Geis studied zoology at the prestigious women-only Smith College in Massachusetts. Upon graduation in 1947, she took biologist jobs on Martha's Vineyard and in Washington, D.C., and then taught natural history to elementary students for the Massachusetts Audubon Society.

After years of living in the Northeast, Geis was longing to explore the world. Leaving behind a reluctant boyfriend, she took off to California's Sierra Nevada mountains and the Yosemite School of Field Natural History. In 1951, at age 25,



Mary Geis (left) and Lou Ann Harris in 2007, at work on the Mountain Bluebird Trail near Bozeman, Montana. Geis turned over the project to Harris in 2009, when Geis was about 82. Photo courtesy Lou Ann Harris.

she graduated at the top of her class and worked as a forest ranger for a year before applying to graduate school.

Cornell University and the University of Montana offered Geis admission to their masters programs, and she chose to continue her adventure out West—only to face men who didn't think ornithology was a shareable space. “Men didn't believe women should be doing that sort of thing,” Geis said, noting that her professors used to seat her in the back of the classroom where it was hard to hear. “I had to ask to be moved to the front,” Geis told me.

Despite the challenges of being the only woman, Geis stayed focused on her studies. Scooting around in her motorboat on Flathead Lake in Montana, Geis counted nests of Canada Geese to investigate their population fluctuations and inform hunting and management practices. In 1954, she published *Biology of Canada geese (Branta canadensis moffitti) in the Flathead Valley of Montana* and became the first woman to publish an academic paper for the University of Montana's forestry school.

Shortly after graduation, Geis married her fiancé, Anthony, and settled down in Bozeman, Montana. There she taught at a public school and became involved with the Sacajawea Audubon Society, where she met Louis Moos, the founder of the local bluebird trail. When she took over the project from Moos in 1979, the Mountain Bluebird population was just a fraction of what it is today.



Students at the Yosemite School of Field Natural History. Mary Geis is in the top row, second from right. She graduated in the top of her class, in 1951 at age 25. Photo by Ralph Anderson/Yosemite Online Library.

“I was doing it because I got interested in what was going on,” Geis said. “I wanted to know why this bluebird nested here, what destroyed its nest, and what that sparrowhawk [American Kestrel] was doing on the birdhouse.”

In a 1980 report she took note of the practical value of birds—what today we would call their “ecosystem services,” writing: “Besides the pleasure we all get from having the swooping swallows, the flashing bluebirds, and the musical wrens and chickadees around... I am also convinced that they have a beneficial effect on insect populations in our area.” In a back-of-the-envelope calculation using some of her nest box data, she credited the local Tree Swallows with eating some 1,000 pounds of insects each summer.

When Geis wasn’t recording observations collected from the trail, she was leading nature walks for the Bozeman Women’s Activities Group, teaching natural history for the Sacajawea Audubon Society, or leading Girl Scout troops. A fellow women’s group hiker, Karin Utzinger, recalled, “It’s like going out with a guide or a naturalist. She knows the flowers, the birds, even the scat.” Geis led these group hikes every Tuesday into the early 2000s, when she was well into her 70s.

In 2009, Mary Geis passed the torch to Lou Ann Harris, who currently runs the Mountain Bluebird Project. “When she started taking me on the trail, she taught me everything she knew and nothing fazed her,” Harris told me. The project now has three separate trails, where volunteers help conduct weekly nest checks from April–August. To this day, these volunteers are still reporting nest records to [NestWatch](#).

All told, when combining nest records from the Moos, Geis, and Harris eras, the group has amassed more than 50 years of data on Mountain Bluebirds. Geis and her volunteers began collecting this data using pencil and paper. Now nest checkers enter data by computer or smartphone, and scientists can aggregate those records with others across the continent, via NestWatch.

What fueled Geis through so many decades of research and teaching? “Intellectual curiosity, I guess,” she said, noting that it helps to be born with a sense of adventure and, perhaps, a bit of patience. When it comes to developing knowledge, she said, “It’s not a matter of time, it’s a matter of wanting to know.”



BRIDGER RAPTOR FESTIVAL

OCTOBER 1, 2 & 3, 2021



The Bridger Raptor Festival is an annual event held the first weekend in October in and around Bozeman, Montana. The festival, which is free to the public, centers around one of the largest known Golden Eagle migration count sites in the United States. Since 1991 a raptor migration count has taken place every fall at the Bridger Bowl ski area in the Gallatin National Forest just north of Bozeman.

Festival activities center around raptor viewing and feature nature walks, talks on raptor identification, live raptors from the Montana Raptor Conservation Center, and entertaining educational programs and activities for all ages. Sacajawea Audubon Society is the education co-hosts of the festival and provides hands-on activities for families, including Build A Nifty Nestbox, Binocular Blitz Game, Sketch-A-Bird, Passport to Education, and the Great Migration Game.

Friday night is the kickoff of the festival with the film *“Scouting 13 Million Sky Raptors”* with Wes Larsen and a special presentation by Steve Hoffman, founder of Hawkwatch International and HawkWatch International’s Director of Conservation Science, Steve Slater. The Friday night event will be held at the Ellen Theatre in Downtown Bozeman. On Saturday and Sunday, the festival moves up to Bridger Bowl Ski Area at both the Jim Bridger and Saddle Peak Lodges.

For more information and for the event schedule and program descriptions as they are posted, please visit bridgerraptorfest.org.

CALLING ALL VOLUNTEERS!!

Sacajawea Audubon is proud to be the educational host for the Bridger Raptor Festival this year, but we are in need of volunteers. Help kids build a Nifty Nest Box, Sketch-A-Bird, or play the Great Migration Challenge and Binocular Blitz. Or provide a friendly and welcoming face to help direct festival goers.

Available time slots for all activities are:

Friday, October 1, 2021

- 12:00 PM to 3:00 PM: Setup at Bridger Bowl!
- 6:00 PM to 7:00 PM: Welcome attendees to Film & Keynote Speaker event at the Ellen Theatre

Saturday, October 2, 2021 at Bridger Bowl!

- 9:30 AM to 12:30 PM
- 12:00 PM to 3:00 PM

Sunday, October 3, 2021

- 9:30 AM to 12:30 PM
- 12:00 PM to 3:00 PM

If you have three hours of time to donate to this fun-filled festival, then contact Travis Kidd at education@sacajaweaaudubon.org or sign-up at: <https://signup.com/go/xEbFsbD>

Golden Eagle (subadult) by Kyle Dudgeon

BRIDGER RAPTOR FESTIVAL

a migration celebration

**KICKOFF EVENT:
FRIDAY, OCTOBER 1ST
7:00 PM at the
ELLEN THEATER,
DOWNTOWN BOZEMAN**

Sacajawea Audubon Society kicks off the Bridger Raptor Festival weekend on Friday, October 1st at the Ellen Theatre in Downtown Bozeman. The event features a film and a trio of wildlife biologists and raptor experts.

The raptor migration monitoring network in the western United States has yielded important scientific information about the health and long-term trends of more than a dozen raptor species that migrate through western North America. Enroute from their northern nesting grounds (many originate in Alaska) to spend the non-breeding season in more southern climes (as far as south as Argentina), these top-of-the-food chain aerial predators serve as valuable indicators of large scale ecosystem health and change.

The feature film “*Scouting 13 Million Sky Raptors*,” is hosted by wildlife biologist Wes Larson. Wes is on a mission across the United States to find the next generation of conservationists. This film highlights efforts by a dedicated team of conservationists on a remote mountain top in Eastern Nevada, who have been keeping watch for over 30 years. Their mission? To count and record every single raptor and bird of prey that flies past to keep track of their populations. Over the years, HawkWatch International has counted over 13 million birds across their network of observation sites. Since hawks sit on the top of the food chain, any drastic changes in their populations signals problems with the balance of their ecosystem.

HawkWatch International (HWI) Founder Steve Hoffman and HWI Director of Conservation Science Steve Slater will chronicle the efforts of developing this expansive raptor migration monitoring network. They will share key findings from these long-term raptor monitoring efforts, with a special focus on the results of 29 consecutive seasons of scientific raptor counts conducted each fall along the crest of the Bridger Mountains, above Bridger Bowl Ski Area.

Steve Hoffman has devoted his entire 41-year career to wildlife conservation. Steve founded HWI in 1986, and has authored more than 50 publications and reports on raptor migration, ecology and conservation. Steve continues to coordinate the local Bridger Raptor Migration Project (through Bozeman-

based Sacajawea Audubon Society). He also runs his own nature-based tour company, Merlin Birding & Nature Tours, LLC (also headquartered in Bozeman).



HawkWatch International Founder Steve Hoffman

Steve Slater, Ph.D., joined HWI in June 2006. Much of Steve’s recent work has focused on Golden Eagles, including monitoring, transmitter deployment and tracking, and risk assessments. Steve has also served as a principal investigator in research on the impacts of invasive cheatgrass, fire, and prey declines on West Desert (Utah) Golden Eagles, Ferruginous Hawks, and Burrowing Owls. He has overseen research on the potential risks of proposed wind developments to local, migratory, and wintering Golden Eagles, the potential impacts of oil and gas development on nesting raptors in Utah and Wyoming, and the ability of perch-deterrent devices to exclude raptor power line perch use in Southwestern Wyoming. Steve has also been involved in HawkWatch’s long-term nesting and migration surveys. His work also focuses on identifying current and emerging threats to raptors, information needs, potential future research projects, and translating raptor science into conservation action. Currently, Steve serves on Utah’s Bureau of Land Management Resource Advisory Council and as the facilitator for the Utah Eagle Working Group.



Sacajawea Audubon Launches *the 30th Season of Raptor Counting Atop the Bridgers!*

As the Sacajawea Audubon Society celebrates the start of the 30th consecutive annual Bridger Raptor Migration Count, consider joining this year's official raptor counters—Mia Cignoni and Evan Farese—for a day or more at the survey site above Bridger Bowl. Mia and Evan, both highly experienced field biologists, have been recruited as the official season-long observers for the fall 2021 season to scientifically document all raptors migrating along the crest of the Bridger Ridge.

Sacajawea Audubon Society is again partnering with HawkWatch International (HWI) for the 5th consecutive season to continue this critically important project. HWI initiated these scientific, season-long counts in 1992. A total of 17 raptor species are recorded each season, including Golden & Bald Eagles, Sharp-shinned and Cooper's Hawks, Red-tailed and Rough-legged Hawks, Northern Harriers, Northern Goshawks, American Kestrels, Peregrine and Prairie Falcons and many other raptor species. These migrants originate primarily from breeding areas throughout western Canada and Alaska. Their over-winter destinations include a wide range of latitudes (varying by species), from the American West and Mexico to Central and South America.

The primary goals of the Bridger Project are to assess the status and long-term trends of Golden Eagles and other raptors using this Rocky Mountain flyway, and to monitor landscape-level environmental changes using these widespread, apex predators as valuable barometers of ecological health. You too can take part in this long term study as a citizen scientist. So contact the project leader, grab your binoculars and/or scope and earn your wings as a raptor counter for this year's study.

GOLDEN EAGLE COUNT TRENDS

Golden Eagle counts in the Bridger Range have generally totaled from 1,000 to 1,800 per season, with up to 150 or more tallied on a single migration day (maximum Golden Eagle numbers are generally observed during the first two weeks of October). However, it is noteworthy that autumn

migration counts of Golden Eagles at this and other western sites have shown significant declines, particularly from 2000 through 2010. Importantly, in recent years Golden Eagle counts seem to have stabilized. The cause of the long-term Golden Eagle decline is not fully understood, but these findings in the Bridgers (and counts conducted elsewhere in the western U.S.) have stimulated additional Golden Eagle research across the western United States.

RAPTOR VIEWING TIPS

The best overall raptor viewing for a variety of migrant raptors atop the Bridgers is from mid-September through mid-October. Counts are conducted daily (weather permitting) from 27 August through 31 October. The general public is invited to join Evan and Mia to witness one of nature's most spectacular phenomena as these majestic birds fly south for the winter.

Additional volunteer observers are needed to help conduct these counts so Mia and Evan can take one day off each week to rest and resupply. For those in good physical condition, it is a 2-hour hike to the observation point (2,200-ft. elevation gain). Anyone wishing to volunteer please contact project coordinator Steve Hoffman at swhoffman0322@gmail.com or 406-461-5714. Folks are welcome to visit hawkcount.org or sacajaweaaudubon.org to obtain the daily count totals.

If you are unable to climb the 2,200 feet to help count, there are other ways you can contribute. Consider sending treats to our counters or making a financial contribution for this important project. The 2021 budget for this important work is \$15,000. Contributions in any amount are most welcome and greatly appreciated!! Please send your check to:

Sacajawea Audubon Society
PO Box 1711
Bozeman, MT 59771

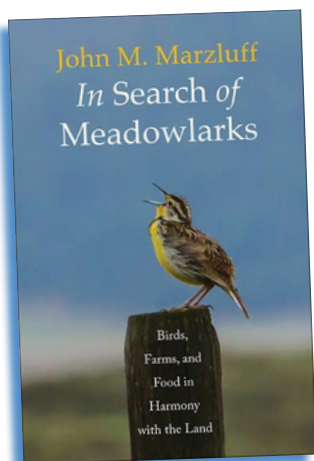
Please reference Bridger Raptor Count on your contribution. THANK YOU!! We look forward to seeing you at the Bridger Lookout or at the Bridger Raptor Festival!



SEPTEMBER SAS BOOK CLUB

September 15, 2021 at 6:30 PM (virtual meeting)

The September book selection is "In Search of Meadowlarks: Birds, Farms, and Food in Harmony with the Land" by John Marzluff (2020. Yale University Press).



In this engaging and scientifically rigorous book, wildlife biologist John M. Marzluff takes a personal approach to sustainable agriculture. He travels to farms and ranches, from Nebraska to California to Montana to Costa Rica, to understand the unique challenges and solutions to sustainable food production.

- **DATE:** As always, we will meet on the third Wednesday, which this month is September 15th.
- **TIME:** 6:30–7:45 PM

SAS is following the Gallatin County Health Department's Covid-19 Guidelines. We had hoped to meet in-person and virtually, but at this time virtual meetings are all we are offering. In-person meetings will be determined at a later date. Please check sacajaweaudubon.org for up-to-date information or contact Elisabeth Swanson at elsswa@gmail.com or 406-570-8325 or Hillary Johnson at RalphHilary@gmail.com.

To join virtually from your computer, tablet, or smartphone go to <https://global.gotomeeting.com/join/604063133>. Please log on about 10 minutes prior to start time so that we can start the meeting promptly at 6:30 PM. You can also dial in using your phone:

(872) 240-3212 Access Code: 604-063-133

New to GoToMeeting? Get the app **now** and be ready when your first meeting starts: <https://global.gotomeeting.com/install/604063133>

Everyone is welcome, even if this is your first time. If you would like to be on the email list for monthly reminders, email Elisabeth at elsswa@gmail.com or 406-570-8325.

UPCOMING BOOK SELECTIONS:

OCTOBER 2021: "A World on the Wing: The Global Odyssey of Migratory Birds" by Scott Weidensaul. Anna Rydell of *BookPage* states: "Weidensaul addresses migratory birds' changing reality and the scientists who work tirelessly to learn more about them and advocate on their behalf to the powers responsible for decimating those birds' lives and rhythms. The plight and toughness of both birds and their human defenders will move you in lasting ways."

NOVEMBER 2021: "Pilgrim on the Great Bird Continent: The Importance of Everything and Other Lessons from Darwin's Lost Notebooks" by Lyanda Lynn Haupt

DECEMBER 2021: "The Tangled Tree: A Radical New History of Life" by David Quammen

JANUARY 2022: "Warblers & Woodpeckers: A Father-Son Big Year of Birding" by Sneed B. Collard III

FEBRUARY 2022: "Vesper Flights" by Helen Macdonald

MARCH 2022: "A Most Remarkable Creature: The Hidden Life and Epic Journey of the World's Smartest Birds of Prey" by Jonathan Meiburg

APRIL 2022: "The Bird Friendly City: Creating Safe Urban Habitats" by Timothy Beatley

"MATING FOR LIFE" Documentary Film

Friday, September 10 at 6:00 PM at the Emerson Center for Arts & Culture

The *Bozeman Film Celebration* and *Bozeman Arts—Live!* invite Sacajawea Audubon Society members to the screening of Cindy Stillwell's documentary, *Mating for Life*, which chronicles the lifelong bonds of Sandhill Cranes. This incredible species, known to mate for life, becomes a metaphor for human bonds and the search for connection and solitude in our

lives. The film screens on Friday, September 10, at 6:00 PM in the Emerson as a part of the BZN International Film Celebration. A panel discussion and exclusive reception with the filmmakers will follow. Passes are available at <http://bzn2021.com/tickets> and will give viewers access to the entire day's programming. Looking forward to seeing you there!

TICKETS: Friday Day Pass or Festival Pass available at bzn2021.com/tickets

