MARCH 2021

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.

VIRTUAL PROGRAM Monday, March 8th, 2021:

"Project Nest, A Yellowstone Citizen Science Project: Red-tailed Hawks, Swans & Loons" *with Barbara Tylka*

2020 was the first year for Project Nest as a Yellowstone National Park Citizen Science Project. The work mainly concentrates on collecting data on Red-tailed Hawk nesting areas for data comparison from 2011–2015. Red-tailed Hawks were selected as an index species because of their ubiquity in the northern range of Yellowstone. Observations will be used to evaluate population trends and to use them as indicators of habitat change in the park.

Nest monitoring of water birds has vastly expanded from previous years—both Trumpeter Swans and Common Loons will be observed. These birds are easily disturbed and even a short time off the nest can result in egg failure. A major focus of this project is on-site visitor education at Swan, Wolf, and Grebe Lakes. By educating visitors, we hope to increase nesting success.

In this virtual program, Barbara Tylka will be presenting information about Trumpeter Swans, Common Loons, and Red-tailed Hawks in Yellowstone and what the project hopes to accomplish during the upcoming nesting season this spring. By the end of the presentation, she hopes that SAS members will be moved to sign up as Project Nest volunteers!

After 30 years as a general surgeon, Barbara Tylka retired from practice and moved to Bozeman. Since then, she has indulged her love of Yellowstone National Park (YNP) by working retail at Yellowstone Lake and by volunteering in the YNP Citizen Science Program. Since moving here in 2017, Barbara has volunteered three years on the Yellowstone Phenology Project, designed to monitor environmental change over time across a 5,000-ft-elevation gradient within the park. When Project Nest came to fruition, Barbara joined that as well. This year, Barbara is taking on a much bigger role as lead for this initiative and welcomes you to learn more about the project and what it entails.

If you would like to attend the Monday, March 8, 2021 virtual program, please register at: https://attendee.gotowebinar.com/register/2718076719651066636. Share our virtual program using hashtags #ProjectNest and #YNPCitizenScienceProject.

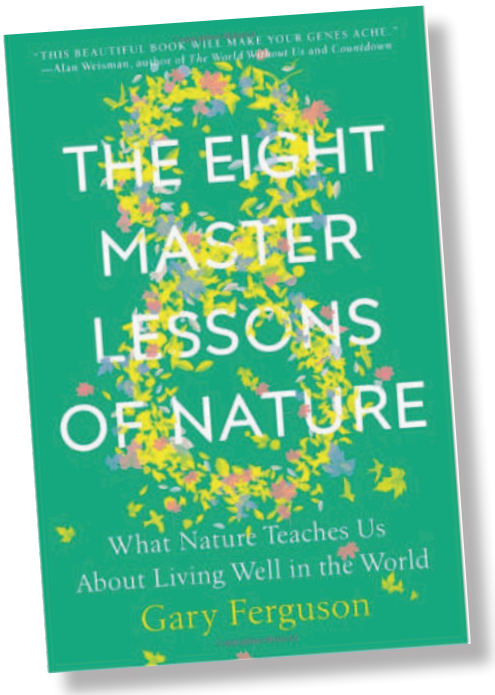
SAS programs are free and open to the public. Our programs feature a special guest speaker the 2nd Monday of each month, September through May. ***Join us for a virtual social at 6:30 pm. Announcements and the program begin at 7:00 pm.*** *For more information on SAS Program Meetings contact Kyle Moon at* programs@sacajaweaaudubon.org

Photos (top to bottom): Barbara Tylka; Red-tailed Hawk nest on the Blacktail Plateau; project volunteer Mary Maj. All photos by Barbara Tylka.

March SAS Book Club

Spring is so close we can taste it...and yet it is such a comfort to stay inside and curl up with our books! If you're looking for the March selection to cuddle with...here you go!

The book is: *The Eight Master Lessons of Nature: What Nature Teaches Us About Living Well in the World* by Gary Ferguson.



"A riveting manifesto for the millions of people who long to forge a more vital, meaningful connection to the natural world to live a better, more fulfilling life. With new insights into the inner workings of nature's wonders, Ferguson presents a fascinating exploration into how many of the most remarkable aspects of nature are hardwired into our very DNA. It is a dazzling statement about the powers of physical, mental, and spiritual wellness that come from reclaiming our relationship with Mother Nature."

WHEN: March 17th, 2021 (as always, the third Wednesday of the month)

TIME: 6:30–7:45 pm

WHERE: VIRTUAL ONLY. Please contact Elisabeth Swanson at elsswa@gmail.com or (406) 570-8325 and let her know you would like to attend and she will send you a link. Please try to sign in 10 minutes prior to the meeting time so that we can begin on time.

Happy Trails and Happy Reading!

~ Sherry Staub (563) 370-0757

SACAJAWEA AUDUBON SOCIETY OFFICERS AND COMMITTEE CHAIRS

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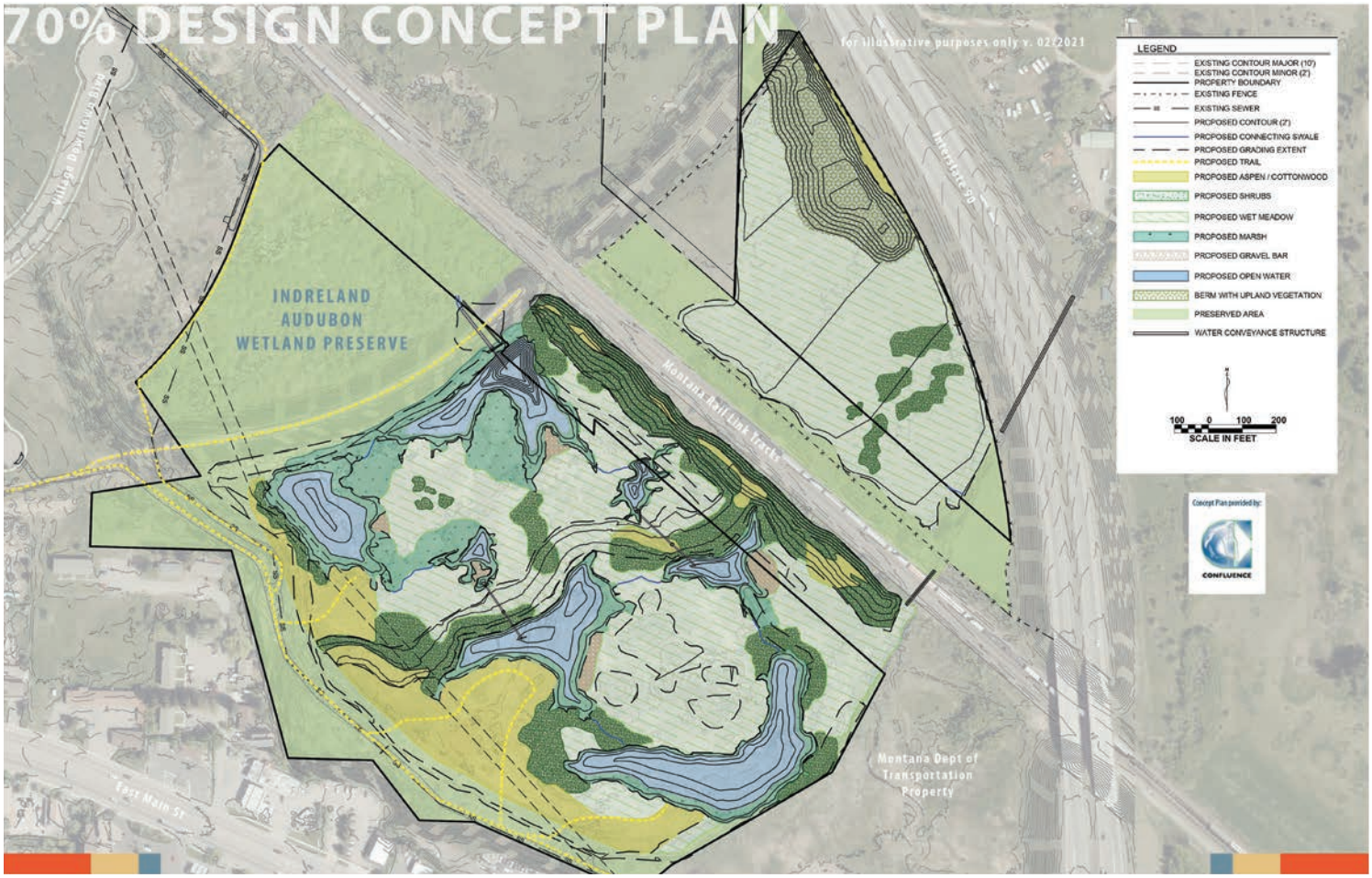
SACAJAWEA AUDUBON SOCIETY

INDRELAND AUDUBON WETLAND PRESERVE

UPDATE: MAR. 2021



Indreland Audubon Wetland Preserve 70% Design Summary

Prepared by: R. McEldowney, PWS; Confluence Consulting Inc.; and John Edwards, RG, CEG

Sacajawea Audubon Society (SAS) and Confluence Consulting, Inc. (Confluence) are excited to announce that the Indreland Audubon Wetland Preserve (IAWP) 70% design has been completed and approved by the SAS board of directors. The purpose of this article is to provide a general description of the basis of design and some of the innovative design features that will make this project a success for wildlife and the community. When reviewing this article, please refer to the map (above) that illustrates the design features.

The IAWP was set aside by SAS to conserve and enhance a wetland community in an urban setting. The site will function as an environmental study area offering education about wetland ecology that is accessible to all ages. SAS aims to document the effect of human influence on wetland communities and inspire the conservation, restoration, and enhancement of other wetlands. SAS strives to have an impact on wetland conservation that extends beyond the Gallatin watershed.

This 70% design will showcase the role of beaver as a keystone species in creating wetland habitat. The interspersion of open water areas, marshlands, wet meadows, willow, and alder-dominated areas—as well as cottonwood and aspen forest habitat—create numerous niches to support a diverse array of flora and fauna that maximizes the productivity of the site at numerous trophic levels.

continued on page 4

70% Design Summary *(continued from page 3)*

The design provides a significant improvement in wetland function, particularly with regard to general wildlife habitat diversity, water quality improvements, short and long term surface water storage, food chain support, and groundwater discharge. The design also provides for visitor access and infrastructure consistent with conserving the wetland resource while offering a place of respite in an urban area.

The Indreland Audubon Wetland Preserve is comprised of two parcels—the North Parcel and South Parcel—which occur north and south of the railroad tracks, respectively. Proposed wetland enhancement activities differ considerably between the two parcels.

NORTH PARCEL

The North Parcel contains a few small wetlands but is currently dominated by smooth brome (an upland grass species) and is located between Interstate 90 on its north and east sides and the railroad on its south and west sides. An historic railroad berm occupies the northwestern boundary. Onsite investigations of groundwater depths in 2020 revealed that groundwater is relatively shallow. Analysis of the limited data set suggests that excavation of approximately two feet of soil will be sufficient for the establishment and development of approximately six acres of emergent wet meadow. This type of wetland will be seasonally wet in the spring and early summer, and then be expected to dry out over the course of the summer months. Persistent open water or complex habitats are not proposed for the North Parcel.

The conversion of the North Parcel to a more diverse, seasonally wet meadow provides several ecological improvements for sensitive wildlife species, general wildlife habitat, short and long term surface water storage, production export/food chain support, and site uniqueness.

SOUTH PARCEL

Proposed habitat improvements on the South Parcel are designed to increase habitat diversity and interspersion on the site, thereby increasing ecological niches and associated flora and faunal diversity. Perhaps the biggest change is the addition of 3.3 acres of open water habitat, ranging in depths from two to 16 feet across seven ponds. The design includes the bottom release of cool water from a 16-foot-deep pond that, because of its depth, causes the water column in the pond to stratify into temperature bands with the coldest water occurring at the bottom of the pond. During late August and September when water temperatures can be their most lethal for cold-water fish and aquatic organisms, this cool water discharging from the site will provide refuge from extreme water temperatures. Experience with this design in Montana has demonstrated a consistent reduction of 5-10° F between water temperatures flowing into a site and the water being discharged from a bottom release pond such as intended for the South Parcel.

Shrubby thickets and forested areas add structural complexity and habitats sought after by numerous neotropical migrant species. Their proximity to open water, wet meadow, and marshy habitats makes these habitats even more productive and appealing to a variety of species, leading to increased biodiversity and abundance of individual species found on the site. The addition of the forested area, particularly along the southwest portion of the South Parcel, adds a visual buffer for resident and migrant waterfowl from development along East Main Street and from planned visitor trails in that part of the Preserve.

NEXT STEPS

The next steps in this project are to complete the 100% design, submit the design to regulatory agencies for review, and prepare permit applications for regulatory approval. Once we have the permits in hand, we will solicit bids for construction, and hopefully begin construction in the Fall of 2022 or Winter of 2023. Future newsletter articles are planned to keep SAS members up to date on the project. For more information, to comment or support the Indreland Audubon Wetland Preserve go to www.bozemanwetlands.org.

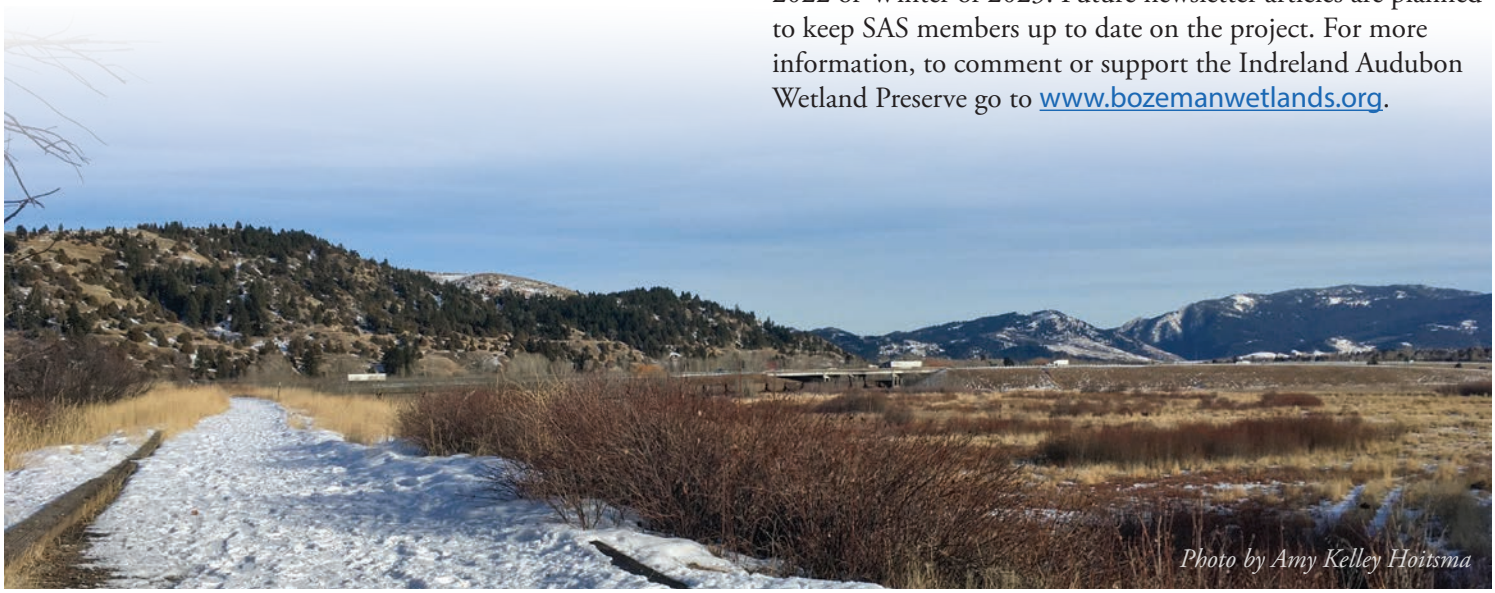


Photo by Amy Kelley Hoitsma

BIRD NOTES

by John Parker

Even though we are deep into winter, there are still occasional birds that surprise us with their appearance that make us wonder about their survival strategies amid the vagaries of the weather. With the continuing development of the Gallatin Valley, **Sharp-tailed Grouse** are increasingly uncommon, so the single Sharp-tailed Grouse that Matt Keefer discovered January 12th at the Aspen Pointe complex in Bozeman was a nice find. Several other people were able to see this bird in the same area over the next several weeks.

As noted last month, single **Sandhill Cranes** were seen on both the Three Forks and Ruby Valley Christmas Bird Counts, which is quite rare. Even more unexpected were the pair of Sandhill Cranes that Dawn and Les Inafuku spotted in a field near the Cobblestone fishing access site in the lower Madison River Valley. This small early winter bump in Sandhill Crane sightings could be attributed to the lack of snow cover and mild temperatures up to that point in time.

In this corner of Montana, no one ever expects to see a **Varied Thrush** at any time of year. So, you could imagine Beth Horn's surprise when a Varied Thrush appeared in the dead of winter at her feeder near West Yellowstone on January 24th. I know of only three other late winter records for Varied Thrush in this area. On the West Coast, Varied Thrush are sometimes colloquially known as "Alaska Robin" or "Winter Robin" for their habit of showing up at feeders during snow storms or cold spells.

Two days before the thrush sighting, Wally Johnson had a **Western Bluebird** briefly inspect his feeder in south Bozeman. There are only a handful of records of Western Bluebird for Gallatin and the surrounding counties. This Western Bluebird is the first winter record for anywhere in southwestern or eastern Montana, though they are occasionally seen during winter in the Helena and Missoula areas.

Western Meadowlarks don't usually make it into the sightings' column, but this month is the exception. On January 24th, Mary and John Griffith saw three Western Meadowlarks south of Bozeman on the fence line along South Third. The week before they may have seen five meadowlarks, but they weren't able to stop due to traffic. During the winter it's very unusual to see Western Meadowlarks upslope on the east side of the valley where the snow cover is deeper, but it is more common during winter that meadowlarks can be found further

Varied Thrush photo by Mick Thompson

to the west in the Three Forks area. That said, the 17 Western Meadowlarks Lou Ann Harris, Stephanie Nelson, and Adele Pittendrigh counted along Cooper Road near Willow Creek on February 4th was totally unexpected.

As I'm writing this and watching the chickadees swarm the feeders, we are well into our third consecutive day of sub-zero weather. Hopefully, when you are reading this there will be a hint of spring in the air, and the first spring migrants will be arriving shortly. During the first couple of weeks in March many of us will be out looking for our first bluebird or crane of the year. But the big show in March are the millions of ducks and geese advancing to the north across the continent. In this region, these huge waves of waterfowl will be pushing the limits of the retreating ice on lakes large and small. Locally, ice off typically occurs between the third week of March and early April. By the middle of March large flights of **Northern Pintail** and **American Wigeon** will be the first ducks to arrive in large numbers, followed shortly by **Gadwall**, **Green-winged Teal**, and **Bufflehead**. By the last week of March, the numbers and variety of waterfowl will be at their peak. It's possible on a trip to one of southwestern Montana's larger lakes at this time of year to see 15–20 different species of ducks numbering in the thousands. And as a bonus, along with the vast numbers of ducks that mass late in March, is the spectacle of **Snow Geese** and **Tundra Swans** headed to the high Arctic. Wishing everyone a grand start to spring and many bluebird days ahead!

2021 Great Backyard Bird Count A Success

Common Redpoll by Lou Ann Harris.

By Lou Ann Harris

The **2021 Great Backyard Bird Count** (GBBC) held Feb. 12–15 was a great success, despite frigid weather in most of the U.S. The GBBC is a global project sponsored by the Cornell Lab of Ornithology, National Audubon, and Birds Canada. An incredible 6,161 species were recorded from almost 300 thousand checklists submitted.

Here in Montana, 114 total species were seen. Gallatin County led all counties with 79 species, 215 checklists submitted, and 77 participants. Even with subzero temperatures, some of our citizen scientists bundled up and birded around the valley. Many checklists were submitted from backyard feeders where participants could be warm and cozy inside their homes. Some backyard highlights included **Pinyon Jays, Pine Grosbeaks**, **Common Redpolls**, **Gray-crowned Rosy-Finches** and one **Black Rosy-Finch**. On one of the coldest days at Story Mill Community Park Nature Preserve, Paulette Epple found an **American Dipper** foraging in a small opening in the ice on Bozeman Creek. It's amazing how these birds can survive such cold temperatures.

You can submit your checklists from those four days until March 1st. For more information on the GBBC, go to birdcount.org.

WHY I AM A MEMBER OF SACAJAWEA AUDUBON SOCIETY

I have always loved the wetlands on the edge of the northeast side of Bozeman. I have seen literally thousands of Cedar Waxwings gathering for migration when one could run along the railroad spur over the main tracks on a big trestle and then over the freeway. The Northeast Neighborhood has tried numerous times over the years to secure the preservation of this treasured wetland. I joined Sacajawea Audubon Society to show my gratitude for accomplishing this goal and saving the wetlands for the Bozeman community.

~ Jeanne Wesley-Wiese

Jeanne shares her artwork (and plums from her backyard trees) during the Northeast Neighborhood Parade of Sheds tour.

SAS HISTORY PROJECT:

We need your old newsletters!

Do you have old Sacajawea Audubon Society newsletters from 1976 to 2007? We are looking for select months from this span of years to complete our collection. This is part of an effort to create a history of the chapter. Once we have all the newsletters, they will be scanned and then added to our box at the MSU Library Archives & Special Collections. The newsletters are a valuable resource to the activities of SAS throughout the years and will be used to build a timeline. If you have any of the newsletters listed below, please email Lou Ann Harris at montlou311@gmail.com or call (406) 600-3585.

- ❒ MARCH 1976
- ❒ SEPT 1978
- ❒ OCT 1979
- ❒ SEPT, OCT 1985
- ❒ MAY 1986
- ❒ OCT 1993
- ❒ MAY, SEPT 1996
- ❒ SEPT 1997
- ❒ JAN, APRIL, SEPT 2000
- ❒ FEB, APRIL, MAY, OCT, NOV 2001
- ❒ FEB, MARCH, APRIL, MAY 2002
- ❒ MARCH, APRIL, MAY 2003
- ❒ JAN, APRIL, OCT, NOV, DEC 2006
- ❒ JAN, FEB, MARCH 2007

THANK YOU!

Photo by Bradley Tinney.

Plants for Birds: **Quaking Aspen**

- **Scientific Name:** *Populus tremuloides* (Salicaceae family)
- **Height:** 40 to 50 ft.
- **Hardiness:** Zone 2
- **Wildlife Value:** Provides browse, cover, seeds, nest sites, and attracts a wide variety of birds.

Quaking Aspens get an A+ for their landscape appeal and tremendous value to wildlife!

We all know and love aspen for its aesthetic attributes—attractive whitish bark, shiny green leaves that shimmer in the slightest breeze, and brilliant golden fall foliage. But those aren't the qualities that birds are looking for. Aspens host a surprising array of insects and caterpillars, which then attract and nourish insectivorous birds such as warblers, kinglets, vireos, and tanagers. Plus, the fruiting catkins provide tiny seeds for seed-eating birds, and the thin bark allows sapsuckers to drill holes to collect sap. Ruffed Grouse feed on the buds and leaves, woodpeckers hollow out cavity nests in the soft wood, and chickadees glean the branches for tiny insects and larvae. And it's not just birds that are attracted to aspen. Mammals ranging from chipmunks and rabbits to deer and moose browse on the twigs, buds, and leaves. The trees even support the larvae of such gorgeous butterflies as Tiger Swallowtail and Mourning Cloak—all this while the trees provide us lovely dappled shade.

Quaking Aspen are native to Montana and take the prize for the most widely distributed tree species in North America. These fast-growing trees usually reach 40 to 50 feet in height. They are easy to grow and extremely hardy. Though aspens flourish best in loamy well-drained soils, they are adaptable to a wide variety of conditions. The two conditions they will *not* tolerate are heavy shade and droughty soils.

Aspens in the wild naturally sucker, sometimes creating entire stands as "clones" with a shared root system. This can lead to some amazing superlatives. A grove of Quaking Aspen in Utah is considered the largest and heaviest organism on Earth, covering more than 100 acres and having nearly 50,000 stems sprouting from one root system. Since the root system doesn't die out as it reproduces, it is also thought to be the oldest living organism with an estimated age of 80,000 years.

Aspens are most appealing when planted in clusters of three or five or more. Create a little grove in your yard and add an understory of shrubs like red-twig dogwood, serviceberries, and spirea. The birds will thank you with their presence!

~ Paulette Epple

Sacajawea Audubon Society
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Bozeman, MT 59771-1771

Change Service Requested

Sacajawea Audubon Society, affiliated with the National Audubon Society, meets on the second Monday of each month, September through May.

Sacajawea Audubon Society's Monthly Newsletter is available electronically to all Sacajawea Audubon Society members September through May.

Deadline for article submission is the 15th of the month preceding the month the articles will appear. Send articles electronically to newsletter@sacajaweaaudubon.org.

Change of Address: If you have a change of address or are away, please notify membership@sacajaweaaudubon.org. Undeliverable mailed newsletters are returned to us for an extra fee.

Find more at the **Sacajawea Audubon Society website** at sacajaweaaudubon.org

BECOME A MEMBER OR RENEW YOUR ANNUAL MEMBERSHIP TODAY!

Sacajawea Audubon Society Membership 2021

Individual or Family
January -December 2021

☐ ***YES!*** I have included $25 for my **2021 SACAJAWEA AUDUBON CALENDAR**

☐ Basic Membership $25

☐ Supporting Membership $50
(Supporting local conservation & education projects)

☐ Thank You for Considering an Additional Donation .....$_____

- ☐ *Bridger Raptor Study*
- ☐ *Education Projects*
- ☐ *Story Mill Park Bird Feeding Station*
- ☐ *Wetland Campaign*
- ☐ *Conservation Projects*
- ☐ *Wherever Needed*

Name _____

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(Street or PO Box)

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(City) *(State)* *(Zip)*

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❖ Sacajawea Audubon Newsletter is sent by email. ☐ *I would like a paper newsletter mailed to me.*

❖ We do not share your information except with National Audubon, so your contact information is safe with us. Please check this box ☐ if you do not want your information shared with the National Audubon Society.

☐ ***YES!*** I have included another $20 to join National Audubon Society

Mail this form and your check to:
Sacajawea Audubon Society
Attn: Membership
PO Box 1711
Bozeman, MT 59771-1711

Thank you for your membership and donation. We look forward to birding with you!

03/21 Newsletter