SacajaweaAudubonNews

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

October 2016

Calendar at a Glance

Oct 7th-9th	**Bridger Raptor Festival**
Oct 10th	**SAS Meeting**
Oct 15th	**Madison Valley IBA Survey**
Oct 16th	**Big Belt Raptors Field Trip**
Oct 20th	**SAS Book Group Meeting**
Oct 22nd	**Ennis Lake Waterfowl Field Trip**

Madison Valley IBA Survey

Join Sacajawea Audubon Society for the next Madison Valley IBA survey **October 15th**. For more information contact Paulette Epple at 580-6186 or conservation@sacajaweaaudubon.org.

Grizzly Bears of Yellowstone
The History of a Large Omnivore and the Future of a Species

Monday Oct 10th, 2016 at 7pm
Hope Lutheran Church
2152 W. Graf Street in Bozeman

Join Sacajawea Audubon on October 10th for a a talk on the natural history of Yellowstone's grizzly bears with Dr. David Mattson. Dr. Mattson will tell us what makes grizzly bears unique; how and when they got to North America and the Yellowstone region, and the following process of extirpation during 1800-1950; what makes Yellowstone's grizzlies unique, especially when it comes to diet and foods; and, in light of that, why Yellowstone's grizzly bears are severely threatened by on-going losses of food and other environmental deterioration.

Dr. Mattson has more than 35 years of professional training and experience focusing on the ecology and management of grizzly bears and mountain lions as well as the role of science in natural resources policy. He holds degrees in Forest Resource Management and Forest Ecology, and a doctorate in Wildlife Resource Management.

Prior to his retirement in 2013, Dr. Mattson was Research Wildlife Biologist, Leader of the Colorado Plateau Research Station, and Western Field Director of the MIT-USGS Science Impact Collaborative, all with US Geological Survey. He is currently Lecturer and Senior Visiting Scientist at Yale School of Forestry & Environmental Studies, Research Associate with the Northern Rockies Conservation Cooperative, and Adjunct Faculty with Northern Arizona University.

Dr. Mattson's research on the habitat and behavior of Yellowstone's grizzly bears dates back to 1979. From 1984-1993 he held primary responsibility for investigating grizzly bear diet, habitat use, and relationships with humans as a member of the Interagency Grizzly Bear Study Team. He has authored numerous publications on the ecology and demography of Yellowstone's grizzly bear population.

Sacajawea Audubon meets every 2nd Monday of the month, September through May. Our meetings are held at Hope Lutheran Church, 2152 W. Graf (off of S. 19th). Come for the social, beginning at 6:30 p.m. A short chapter meeting starts at 7 p.m. with the program following after. Our programs are free and open to the public.

-Photo by Jim Stewart

Upcoming SAS Field Trips

Big Belt Raptors

Sunday, October 16th, 2016
Trip Leader: Steve Hoffman
406-461-5714
shoffman@mtaudubon.org

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

This is an opportunity to visit Montana's newest hawkwatch site, with one of the founders of Hawkwatch International. Mid October is the peak period of the Golden Eagle migration through central Montana, and at this location the eagles are flying by at very close range affording stunning views. Many other late season raptor migrants, such as Bald Eagles, Northern Goshawks, and Rough-legged Hawks use this same corridor during migration. This location in the Big Belt Mountains east of Canyon Ferry Reservoir, is worth the trip just for the fabulous views of the reservoir and the mountains of south-central Montana. From Bozeman it is a two hour drive, and then another 1.4 mile (900 ft. elevation gain) hike to the hawkwatch site.
Participants limited to 20

Ennis Lake Waterfowl

Saturday, October 22nd, 2016
Trip Leader: John Parker
406-586-5863
conundrumjp@gmail.com

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

This should be near the peak time for migrating waterfowl. Ennis Lake is one of the premiere staging areas for migrating waterfowl in southwestern Montana. Thousands of ducks can be spread across the lake on any given day. As is typical with high concentrations of birds, there is always the possibility of a rarity being found. Bring a lunch as we'll be out until at least mid-afternoon. Also, remember to bring plenty of warm clothes as it will likely be cold and windy.
Participants limited to 15

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

Bridger Raptor Festival

October 7–9, 2016

The annual Bridger Raptor Festival celebrates the largest Golden Eagle migration in the U.S. Festival activities include educational programs on raptors for all ages, raptor viewing, nature walks, lectures, and information booths with local conservation organizations.

Enter the MRCC "Winging It" Raffle

Visit the MRCC booth at the Raptor Festival to enter the "Winging It" raffle. All proceeds will directly support the Center's birds and earn you a chance to win great prizes donated by local businesses. This year, The "Winging It" grand prize is a 2016/2017 adult Bridger Bowl Ski pass. Tickets are $5 each or 5 for $20.

Keynote Speech: Dr. Marco Restani

Friday, October 7 • 7:00 pm • Museum of the Rockies
Dr. Marco Restani, *President*, MRCC Board of Directors, will give the keynote speech titled, "Avian Migration: Pattern and Process, Risk and Reward."

All events are free!

Winning the Burdock Battle

Burdock Warriors!

Another season of Burdock eradication by SAS volunteers has concluded, and the results are nothing short of spectacular. Have you taken a walk recently at East Gallatin Park, the "M" Trail, Drinking Horse, or the Gallagator Trail? You would be hard pressed to find any flowering burdock in these environments today, where several years ago this nasty invasive plant was flourishing, trapping birds and setting seeds by the hundreds of thousands. A similar story is unfolding on the Story Mill Spur Trail and along the Sourdough Trail. The reason for this amazing turn-around is the dedication and hard work of a group of SAS volunteers who have worked diligently at cutting off flowering burdock before it has a chance to go to seed and sending the plants off for burial in the landfill. With seed heads thus removed from the environment, the biennial burdock plant is thwarted in its effort to propagate.

Hauling out some huge burdock

A Sign of Appreciation

Beginning in late July and working into early September, a total of 37 SAS volunteers met for two-hour work sessions, with clippers and buckets and tarps in hand, removing a total of 4,800 lbs (that's right, almost 2.5 tons!) of burdock plant material from the environment. *We consistently noted that there were fewer plants where we have been focusing our work efforts over the last 3 years and in some areas the burdock is almost gone!* Since seeds can stay viable in the soil for 5 years or more, we will need to continue our efforts for a while.

SAS volunteers who deserve a huge thanks for their efforts at *Knocking Out Burdock* include: Glenda Barnes, Jim Belli, Gina Carolan, Hobart Collins, Martha Collins, Amy Cox, John Edwards, Mary Elke, Andy Epple, Paulette Epple, Barb Gellar, Janice Hand, Lou Ann Harris, John Harris, Janne Hayward, the Hollingsworth family, Kathryn Kelly, Ashley Martens, Rose McCarter, Serena Mercer, Nancy Oslie, Noel Palmer, Oliver Palmer, Sadie Palmer, John Parker, Jill Pratt, Sadie Pratt, Mary Lee Reese, Rick Sanders, Judy Tolliver, Mike Vivion, Beck Ward, Kevin Ward, Emily Weiser, Richard Wolcott, and Robin Wolcott. THANK YOU!!!

Burdock entangled Warbling Vireo

-Paulette Epple
Thanks to Paulette for the photos

Science Corner

Scientists Show Bird Migration Seasonality Responds to Environmental Cues

The seasonality of bird migration is shifting in response to climate change. As a result, birds in the United States are arriving at their northern breeding grounds earlier in spring -- and may be departing later in fall.

Scientists supported by the National Science Foundation (NSF) made the migration shift discovery thanks to information aggregated from two sources: remote-sensing data from weather surveillance radar and ground-based data collected in citizen science databases. The combination of two novel data sources provides new insights into how, and when, migrations occur.

Working with atmospheric scientists, biologists demonstrated that the combination of data yielded robust migration timing indexes. The indexes reflect the movements of millions of birds of many species over large regions. Researchers say the migration indexes can help address a gap in scientists' knowledge about the cues birds use to fine-tune migration timing in response to climate.

They found that temperature likely plays a role in how migrating birds make adjustments in their timing and their routes. The researchers' findings also contradict the idea that a commonly used index of vegetation greenness is a useful cue for migration timing in some locales.

-Adapted from the NSF Press release

Citation: Kelly, J. F., K. G. Horton, P. M. Stepanian, K. M. de Beurs, T. Fagin, E. S. Bridge, and P. B. Chilson. 2016. Novel measures of continental-scale avian migration phenology related to proximate environmental cues. Ecosphere 7(8): e01434. 10.1002/ecs2.1434

Sacajawea Audubon Society
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Mailing Address

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

Sacajawea Audubon News is sent to all Sacajawea Audubon Society members monthly September through May. Deadline is the 15th of the month preceding the month articles will appear. Please send to: **Mary Cloud Ammons, 503 Bozeman, Bozeman MT 59715** or **newsletter@sacajaweaaudubon.org**.

Change of Address: Please notify Karin Jennings at **587-2279** or **membership@sacajaweaaudubon.org** if your address changes. When you move or are away, newsletters are returned to us for an extra fee.

Find more at the **Sacajawea Audubon Society Website** at: **http://www.sacajaweaaudubon.org/**

Sacajawea Audubon Society Officers and Committee Chairs

President	Loreene Reid	600-6666	pres@sacajaweaaudubon.org
Vice President	Lou Ann Harris	600-3585	louann@sacajaweaaudubon.org
Treasurer	Janne Hayward	587-6124	treas@sacajawea audubon.org
Secretary	John Edwards	581-0877	sec@sacajaweaaudubon.org
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	Paulette Epple	580-6186	johnedwards@sacajaweaaudubon.org
Honorary Board Member	Peter Norlander		norlander@q.com

Membership Application

- National, State and Chapter Audubon membership
- 6 issues of ***Audubon*** magazine
- Monthly SAS newsletter September through May
- Support of National & local Audubon conservation efforts

____ $20 Introductory membership
____ Additional donation $ _____*

***All additional donations go directly to your Sacajawea Audubon Chapter.**

Name: _____
Address: _____
City: _____
State: _____ Zip:_____
Email: _____

____ I will go green: Please send me the Sacajawea Audubon newsletter by E-mail only. (Add email address above.)

Mail your check and application to:
Sacajawea Audubon Society
Attn: Membership
P.O Box 1711, Bozeman, MT 59771-1711 (C5ZN510Z)

I am interested in volunteering for:
____ Bird Surveys
____ Assist with educational activities
____ Invasive plant removal
____ Newsletter or website articles
____ Help with refreshments at meetings
____ Participate in chapter Birdathon

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mtaudubon@mtaudubon.org; www.mtaudubon.org For direct contact: shoffman@mtaudubon.org
Montana Bird Hotline: 406-721-9799 to report unusual or out-of-season birds

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