Monitoring Bald Eagle and Osprey Nests in Montana by "Citizen Scientists"
By Kay Fulton, BAS President

At the November meeting of the Bitterroot Audubon Society (BAS), Kate Stone, an ecologist for the MPG Ranch who coordinates field trips and Citizen Science projects for Bitterroot Audubon, will summarize the results of our Bald Eagle and Osprey citizen science projects.

Female Bald Eagle incubating in a nest along the Bitterroot River.

Bald Eagles have undergone a remarkable recovery throughout their range. In Montana, nesting pairs increased from only 12 in 1980 to almost 650 in 2012! The sheer number of nests has stressed the ability of managing agencies to monitor Bald Eagle populations. In the spring of 2013, Bitterroot Audubon put out a plea for members of the general public to help monitor the Bald Eagle nests in the Bitterroot Valley. The response was overwhelming: over 100 people from all over Montana responded. Many had never participated in an Audubon Citizen Science project before. Because of the large response, some volunteers agreed to map and observe Osprey nests instead of Bald Eagles. Volunteers ended up monitoring the occupancy and productivity of over 30 Bald Eagle nests and 100 Osprey nests, mostly in western Montana.

How many nests were active? How many failed? How many young were produced? You will see some amazing pictures taken by the volunteers, showing the variety of conditions under which these species nest. Be prepared to be recruited for this project for next year! It is truly an amazing experience.

Come join Bitterroot Audubon for this fascinating program, Monday, November 18th, 7:00 P.M. at the Lee Metcalf National Wildlife Refuge, 4567 Wildfowl Lane, north of Stevensville. The public is invited. Contact Kay Fulton at 642-3794 for further information.

Seeking Sponsors For The Audubon Adventures Program
By Leslie Nyce, BAS Education Committee Member

Every year Bitterroot Audubon offers Audubon
Adventures to teachers around the valley. Geared for grades 3-5, the title for the 2013-2014 kit is “Sharing Our World With Birds”. Participating classrooms will learn about: Raptors: The Birds of Prey, Seabirds: Feathered Ocean Travelers, Hooray for Hummingbirds, and Caring For Our Planet: Join the Action. See the flyer included in this newsletter. The Audubon Adventures program is provided at no cost to teachers because Bitterroot Audubon members generously provide donations to cover the fees for all the materials. Would you like to help a classroom learn about the amazing world of birds? You can sponsor a classroom for $45.95. Partial contributions for half the amount ($22.98) may also be made. To sponsor a classroom, please make your check payable to Bitterroot Audubon and send it to Bitterroot Audubon, Attn: Audubon Adventures, P.O. Box 326, Hamilton, MT 59840. For more information contact Leslie Nyce at 961-3808.

Letter from the President:
By Kay Fulton, BAS President
HELP!! One of our valued BAS members works full time, operates and manages the BAS website and the BAS Facebook page, arranges and leads field trips, researches, sets up and leads citizen science projects, writes documents for BAS regarding conservations issues, writes articles for the newsletter, maintains regular contact with and collaborates with numerous wildlife organizations and agencies around Montana, etc, etc, etc! This person is Kate Stone, and she needs some other people to assist her in accomplishing all she does for us, Bitterroot Audubon members. Please consider giving her (& us) a little of your time so that she can continue to help birds! Contact me if you are willing to do so. Thanks, Kay

Bitterroot Audubon Society is going GREEN
By Sara Ashline and Karen Griffing, BAS Editors
Beginning Fall 2013, Bitterroot Audubon began delivering monthly newsletter electronically. If you haven't already done so, please send us your email address to receive your newsletter via email. Starting this fall, we'll send a meeting reminder by postcard, but the full newsletter will be sent to your email address and is always available at www.bitterrootaudubon.org. This will allow us to reduce printing and mailing costs and waste, while offering full color pictures and expanded coverage of Bitterroot Audubon activities. For those without computer access, we will continue to mail you an individual copy of the newsletter; please send a note to Bitterroot Audubon, PO Box 326, Hamilton, MT 59840 requesting this service. Please send your email address to Susie Duff at audubonmembership@gmail.com to begin receiving your newsletter electronically.

4-H Wildlife and Entomology Premiums
By Jim Story, BAS Treasurer
The Bitterroot Audubon Society (BAS) will be awarding $25 in premiums for the best 4-H Entomology and the best 4-H Wildlife projects at the 2014 Ravalli County Fair. In an effort to encourage and stimulate more interest and awareness in our natural world among the youth in our county, BAS has been providing premiums in 4-H wildlife/entomology for the past 5 years, and will continue to do so. The two 2013 recipients of the premiums presented an outstanding insect collection and an excellent wildlife poster, respectively. Hopefully, our small contribution will contribute to an increase in wildlife, entomology, and similar 4-H projects in Ravalli County.

Bitterroot Audubon Photography Workshop
Are you interested in learning about photographing wildlife or how to use your camera to take better shots? Bitterroot Audubon Society is offering a Photography Workshop this fall, hosted by BAS member Nathan DeBoer. The workshop includes one evening class with a morning field trip for shooting and instruction. Cost for the workshop will be $20.00/Audubon members and $30.00/non-members. Pre-registration is required and limited to 6 participants. Participants may not sign up for only one portion of the workshop, but must commit to attending both the evening class and the field trip. The workshop is open to photographers of all abilities from beginner to those with more experience. For more information or to pre-register, email Sara at sareevt@gmail.com.

Bitterroot Audubon is on Facebook!
If you use Facebook, please look for Bitterroot Audubon and “Like” us!

Call for Photos
Bitterroot Audubon is seeking images of birds for a feature in our newsletter: Bird Shots. If you have taken a great photo and would like to submit
Hummingbirds!

it spends winter. Ruby-throated hummingbirds, for energy when it’s migrating—traveling between the on an ordinary day. A hummingbird needs even more hummingbird's feathers and bill. The hummer carries visit other plants to swap pollen. Instead, some flowers pollen from other flowers to make seeds, but they can't cientists are studying hummingbirds to find out migratory routes, different plants bloom just in time for the hungry travelers to grab a —that's W

zZzzz....

h, and spiders, their favorite food by insects and spiders. Their wings pump like paddles back their wings to cut headfirst into deep water for fish. They grab a small fish just under the surface. Small squid, little things like krill and are common in their diet. A bee hummingbird is about 8 inches long. It has a beak about the length of its head and tiny feet that are about the size of a pea. Some hummers lay eggs in the stems of plants. A female giant hummingbird usually lays two eggs. She保護s them for two weeks before hatching. Once the young is born, it will be ready to leave the nest. Hummingbirds are amazing creatures! How small are hummingbirds? About how many minutes does it take for a hummingbird to take a sip of nectar? About 20 to 200 times per second. The rapidly speed of 60 miles per hour, about 30 miles per hour, can let them hover in one place called hummingbird style! How many calliope hummingbirds need 65 meals? How many bee hummingbirds need 60 meals? 200 times a second, how many times can a bee hummingbird beak of any hummer. The beak is adapted for nectar. With its long tongue, a hummingbird can reach deep into a flower and use it to get nectar. All this flower-visiting makes a kinds of flowers while searching for nectar. Once, twice, three times, a flower and uses its long tongue to —that's W

with fun, interactive features! There is lots more Audubon Adventures online, with captivating hands-on examples that show these principles at work. With captivating hands-on activities, students learn that we all have a personal stake in the health of the environment and play an important role in its preservation and improvement.

Explore the Natural World With Your Class

Designed for teachers and students in grades 3 – 5, Audubon Adventures offers top-quality nonfiction material from the environmental experts at the National Audubon Society.

Audubon Adventures Classroom Kits introduce students to the essential principles that determine how the natural world operates and feature compelling examples that show these principles at work. With captivating hands-on activities, students learn that we all have a personal stake in the health of the environment and play an important role in its preservation and improvement.

Sharing Our World with Birds!

The classroom kit is correlated to Common Core Language Arts and Next Generation Science Standards, and includes student assessment material.

Student Magazine—You will receive 4 separate magazine sets (32 of each). Each set will thrill and inspire students with vibrant photos and lively illustrations that bring the natural world to life right in your classroom. This year's titles:

- **Raptors - The Birds of Prey**
- **Hooray for Hummingbirds**
- **Seabirds - Feathered Ocean Travelers**
- **Caring For Our Planet: Kids are Taking Action**

Educator Resource Materials—You will receive Educator’s Guides, and online resources for each magazine. This new format will help you easily navigate your way through each topic and present the material to students in an appealing and engaging way. Each includes:

- **Step-by-step teaching plan** for the topic
- Instructions for **hands-on activities** with easy-to-remove reproducible pages
- **Background facts and information**
- **Student assessment pages**
- **Glossary**
- **Correlations to national language arts and science standards.**

Your exclusive FREE gift: Membership in the National Audubon Society including a full year of Audubon magazine. Value $35.

For more information and to order call: 800-340-6546
it for consideration, please email the jpeg image, with a brief description, to BASeditors@gmail.com.

Lee Metcalf NWR, Stevensville, MT  
New to birding? Beginner Bird Walks at the refuge sponsored by Bitterroot Audubon and Five Valleys Audubon are held the third Saturday of each month. Meet at the Refuge Visitor's Center on November 16th at 10AM for a two hour bird walk. Bring binoculars if you have them. Contact the refuge at (406) 777-5552 for more information.

Bitterroot Audubon 2014 Calendar  
Looking for a Christmas present? How about giving a 2014 Bitterroot Audubon Calendar? It features local birds of the Bitterroot Valley, with photos, drawings and natural history tips. Calendars are available at many valley locations, including: Missoula - Naturalist's Mercantile Stevensville - Lisa Archer Silks Hamilton - Chapter One Book Store, Sam's Spade Garden Tools and Wares, The Paper Clip, Lakeland Feed, Art Focus, Bitterroot Drug, Robbins Hallmark Darby - Deb's Restaurant  
Plus, they can be found at most of the Holiday Craft Shows in November and December. For more information, contact Becky Peters at bitterrootcalendar@gmail.com

**Bird Shots**

American Tree Sparrow, observed in late October in the Bitterroot. This sparrow winters in Montana.

*Courtesy Kate Stone*
### Officers

<table>
<thead>
<tr>
<th>Officer</th>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Kay Fulton*</td>
<td>642-3794</td>
</tr>
<tr>
<td>Vice-Pres. &amp;</td>
<td>Fred Weisbecker*</td>
<td>375-9317</td>
</tr>
<tr>
<td>Conservation Chair</td>
<td>John Ormiston*</td>
<td>363-5464</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Jim Story*</td>
<td>961-4689</td>
</tr>
</tbody>
</table>

### Directors & Committee Chairs

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBA Program</td>
<td>Sherry Ritter</td>
<td>777-7409</td>
</tr>
<tr>
<td>Website &amp; Field Trips</td>
<td>Kate Stone*</td>
<td>381-1115</td>
</tr>
<tr>
<td>Education</td>
<td>Leslie Nyce*</td>
<td>961-0181</td>
</tr>
<tr>
<td>Newsltr Eds &amp;</td>
<td>Sara Ashline*</td>
<td>961-5455</td>
</tr>
<tr>
<td>Membership</td>
<td>Susie Duff*</td>
<td>777-2929</td>
</tr>
<tr>
<td>Hospitality</td>
<td>Rosan Stover</td>
<td></td>
</tr>
<tr>
<td>Scholarship</td>
<td>Skip Horner*</td>
<td>961-0197</td>
</tr>
<tr>
<td>Publicity</td>
<td>Becky Peters*</td>
<td>777-2487</td>
</tr>
<tr>
<td>At large</td>
<td>Judy Hoy*</td>
<td>642-6840</td>
</tr>
<tr>
<td>At large</td>
<td>Campbell Massey</td>
<td>381-0197</td>
</tr>
<tr>
<td>At large</td>
<td>Alex Shaffer*</td>
<td></td>
</tr>
</tbody>
</table>

* Board Member

### Chapter Only Membership

The Bitterroot Audubon Chapter 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.

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
</tr>
<tr>
<td>State:</td>
<td>Zip:</td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
</tbody>
</table>

Send this application with $15 to:

Bitterroot Audubon Society
PO Box 326
Hamilton, MT 59840-0326

### NATIONAL AUDUBON SOCIETY MEMBERSHIP APPLICATION

Become a member of the National Audubon Society and Bitterroot Audubon [Chapter Code C1ZN580Z]. You will receive Audubon magazine, Bitterroot Audubon Newsletter and a membership card. Introductory membership is $20.

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
</tr>
<tr>
<td>State:</td>
<td>Zip:</td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
</tbody>
</table>

Send this application and your check to:

Audubon
Membership Data Center
PO Box 422250
Palm Coast FL 32142-2250