



# 2016 Nature Mapping Jackson Hole Snake River Float Trip Annual Report

Compiled by Tim E. Griffith: November 22, 2016

# OVERVIEW

2016 was a very exciting year for the Nature Mapping Jackson Hole Snake River Float Trip program! The summer saw a major expansion in the number of float trips offered to us by Jackson Hole Vintage Adventures. We increased the trips from an average of 12 per year to 20 in 2016. This resulted in new records in the number of species counted, total number of participants, new participants and total individuals counted. We are eternally grateful to Mr. DeRosa and his staff for their generosity.

The Nature Mapping float trips were conducted each Sunday from the 1<sup>st</sup> of May until the 25<sup>th</sup> of September. Being able to consistently count the species on the river each week has allowed for a very concise picture of the species utilizing the Snake River corridor from the Wyoming State Route 22 bridge over the Snake River to the take out point at Jackson Hole Vintage Adventures' base camp 8 miles south of the bridge. The boats utilized for the trips were vintage wooden dories built by the staff at Jackson Hole Vintage Adventures. They held a maximum of 6 float participants and an outstanding boatman. On 14 of the floats the boat was full and the remainder of the float trips had 5 participants. This is a large increase in average number of Nature Mappers per float trip.

The increase to 20 float trips this summer yielded a new record of 111 species found during all of the trips. The high species count was 57 on July 1<sup>st</sup> followed closely by 56 species counted on August 7<sup>th</sup> and 55 on August 14<sup>th</sup>. Several of the species counted this summer were new to the program including Baird's Sandpiper, Franklin's Gull, Common Nighthawk, Brown Creeper, American Pipit, and Northern Waterthrush.

Participants in the float trips were very diversified. At least two participants each week were certified Nature Mappers. Floaters were made up of individuals from the ages of 16 to 83 years of age. They came from all points of the compass. In 2016 we had many local participants but we also enjoyed the fellowship of nature enthusiasts from Montana, Missouri, Ohio, Wisconsin, California, New Jersey, Massachusetts, Michigan, New York, Illinois, Idaho, Texas and as far away as Mainz, Germany. Many of these visitors expressed their gratitude for being allowed to experience the nature of Jackson Hole and wanted to know how they could establish programs similar to Nature Mapping Jackson Hole in their home areas.

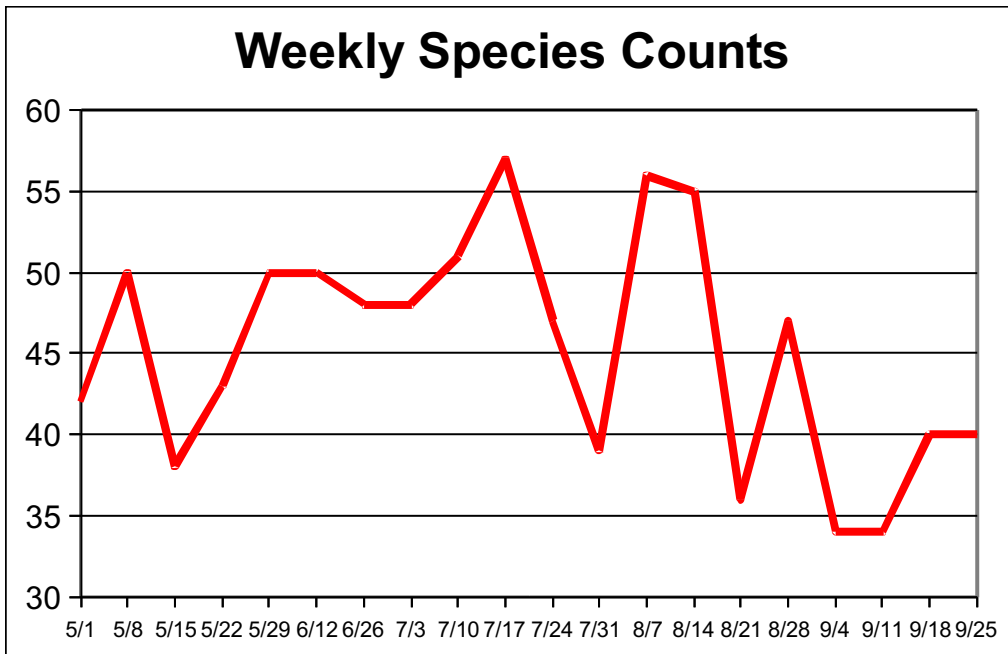
Target species such as Bald Eagle, American White Pelican, Great Blue Heron and 16 other high profile species were entered into the Nature Mapping database. All other species were entered into a spreadsheet and tallied at the end of each week and at the end of the float season. In addition, all bird species seen and counted were entered into the Cornell University School of Ornithology's eBird database.

Again, we express our deepest gratitude to A.J. DeRosa and the entire staff of Jackson Hole Vintage Adventures for their outstanding efforts in making the 2016 Nature Mapping Jackson Hole Snake River Float Trips a huge success.



# 2016 HIGHLIGHTS

TOTAL NUMBER OF SPECIES COUNTED: ..... 111  
 BIRD SPECIES COUNTED: ..... 100  
 MAMMAL SPECIES COUNTED: ..... 10  
 AMPHIBIAN SPECIES COUNTED: ..... 1

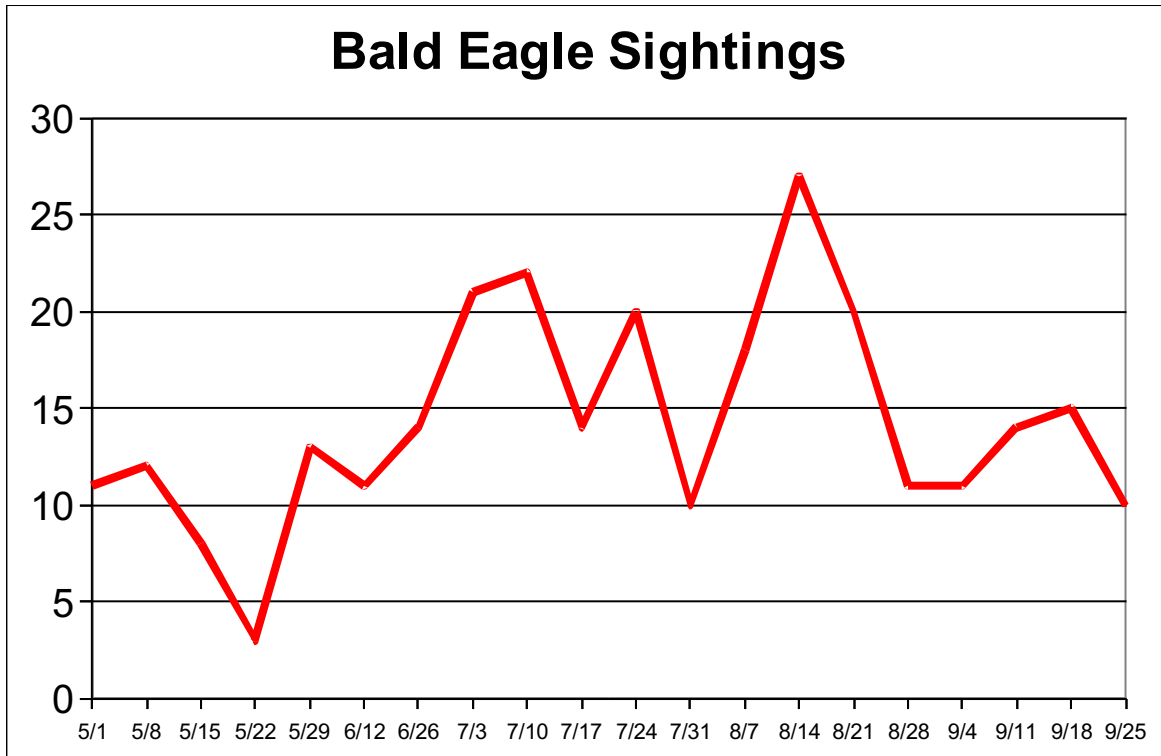


TOTAL NUMBER OF INDIVIDUALS COUNTED: ..... 8,658  
 TOTAL NUMBER OF OBSERVERS: ..... 52  
 NEW PARTICIPANTS: ..... 43  
 CERTIFIED NATURE MAPPERS PARTICIPATING: ..... 31



# BALD EAGLE INFORMATION

BALD EAGLES COUNTED: ..... 285  
HIGH EAGLE COUNT: ..... 27 on 8/14/16  
LOW EAGLE COUNT: ..... 3 on 5/22/16  
AVERAGE EAGLE COUNT: ..... 15



## TOP 10 SPECIES COUNTED

1. COMMON MERGANSER: .....	996
2. SPOTTED SANDPIPER: .....	849
3. CANADA GOOSE: .....	648
4. TREE SWALLOW: .....	563
5. MALLARD: .....	429
6. CLIFF SWALLOW: .....	360
7. AMERICAN ROBIN: .....	326
8. YELLOW WARBLER: .....	315
9. YELLOW-RUMPED WARBLER: .....	310
10. BALD EAGLE: .....	285

## ANNUAL SPECIES REPORT

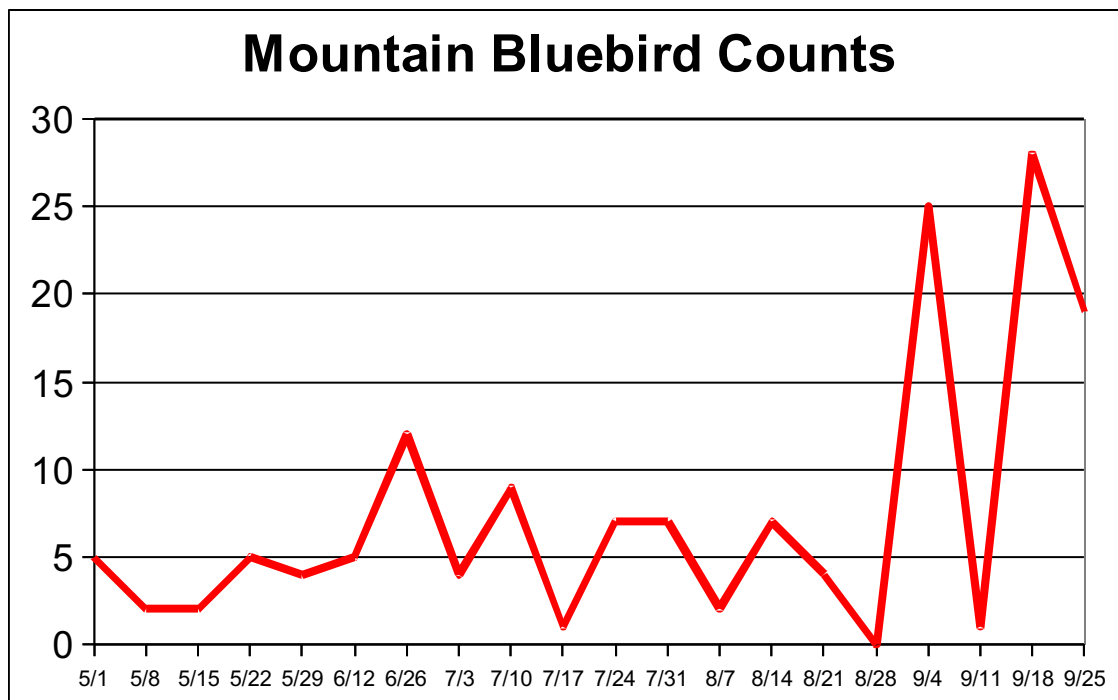


# **INTERESTING MIGRATION and USE PATTERNS:**

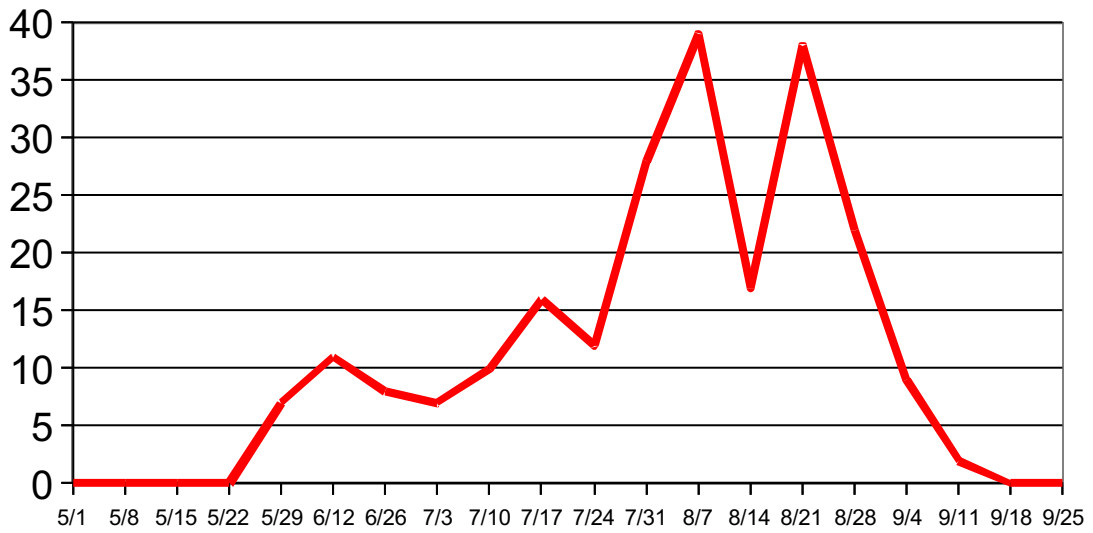
Over the past few years program coordinators have desired to show how important the Snake River corridor is to migrating species. Because of this year's weekly float trips, we were able to show a very detailed picture of the use patterns and migration timing of several important species along the 8 miles of river habitat. The following are a few of the graphs we were able to put together to show weekly use by species of importance. The species chosen were those where consistent numbers of individuals were counted each week and there were obvious variations in their use and movements. Of particular interest are the frequency and movements of the Mountain Bluebird, Cedar Waxwings and all of the swallow species. Large spikes in the numbers of many of the species were noted only because the floats took place on a weekly basis. On one trip in late July a large flock of Cliff Swallows (145) lined the supports under the St. Rt. 11 bridge. This was the highest count for this species for the year and probably represented a large number of migrating individuals from other areas of the valley.

In addition, many of the unique species found this year were during prime migration periods. Four Baird's Sandpipers, Lesser Yellowleg, Solitary Sandpiper and 17 California Gulls were found during the typical fall migration period. These species typically will use the Snake River corridor for their annual migration south and west.

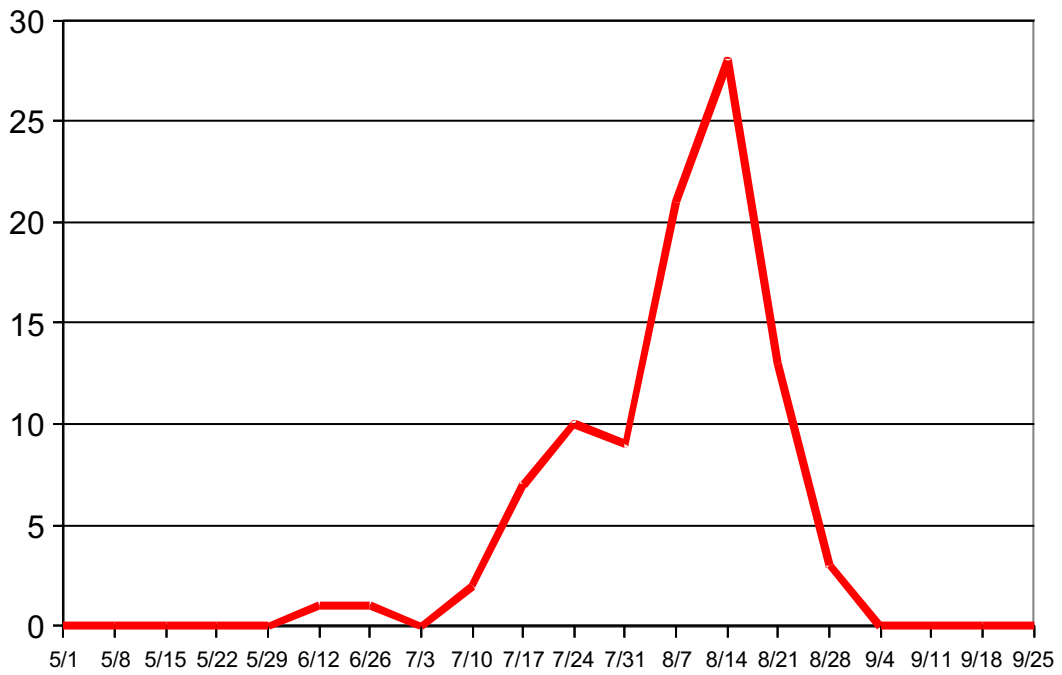
If we are able to continue the weekly float trips in the future, we will be able to compile detailed maps and graphs to show individual species uses and movements.



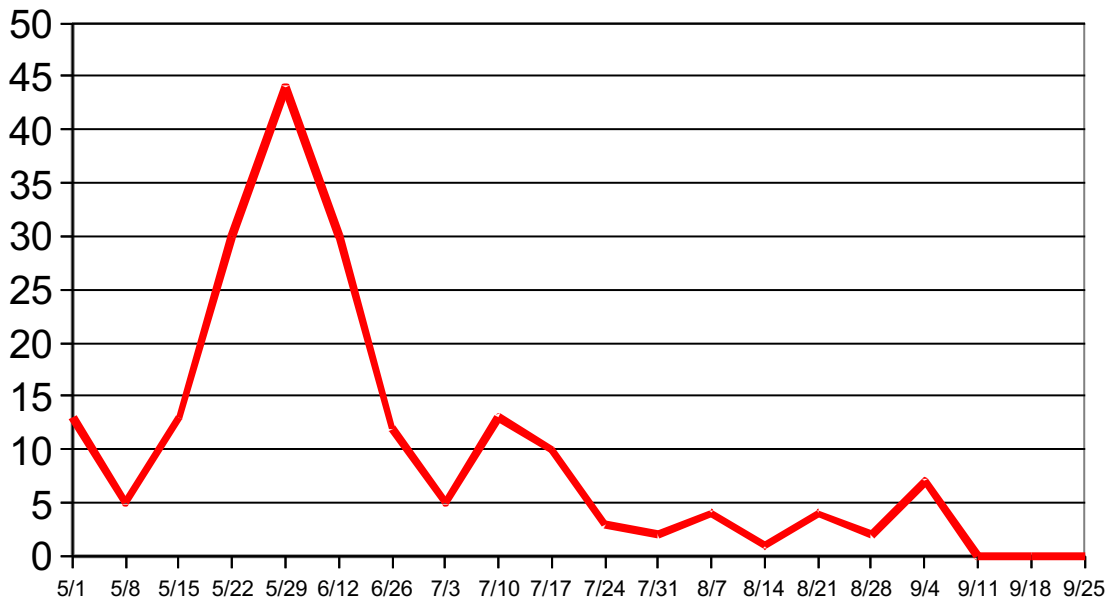
## Cedar Waxwing Sightings



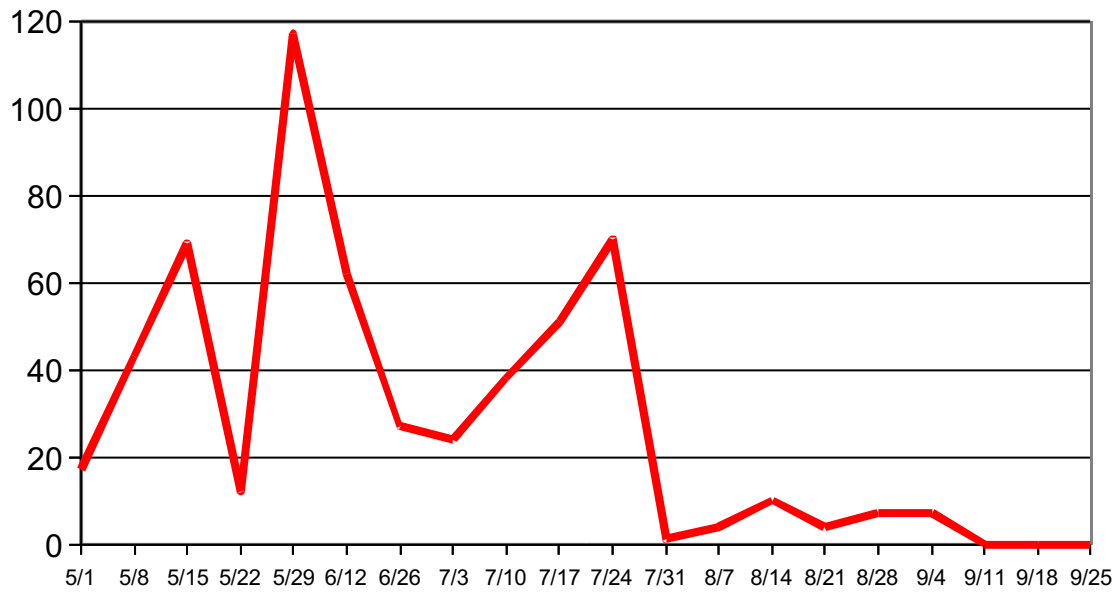
## Western Wood Pewee Counts



## American White Pelican Sightings

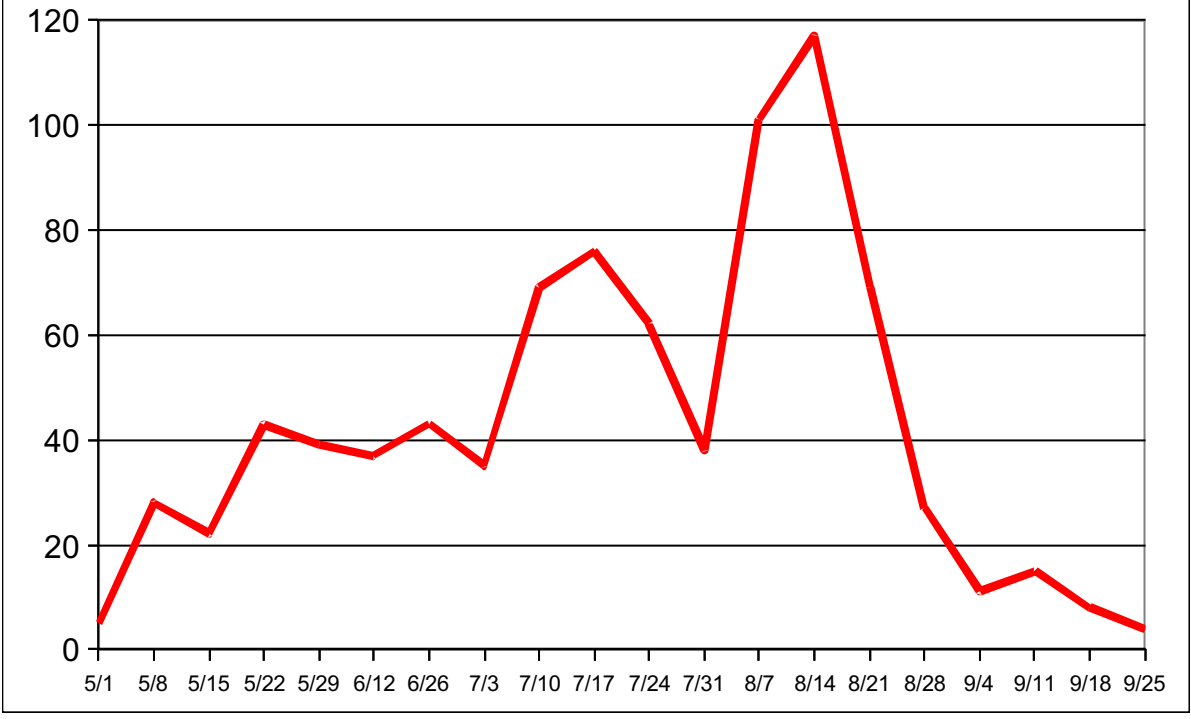


## Tree Swallow Counts





# Spotted Sandpiper Counts



# CONCLUSIONS:

The 2016 Nature Mapping Jackson Hole Snake River Float program was one of the most successful to date. A record 111 species were counted. A record number of 52 different individuals participated in the program. We added 8 float trips to the schedule, and the average of 40 species counted per trip is also a record for the program.

The number of certified Nature Mappers also increased this year from 18 in 2014 (the last year complete records are available) to 31 in 2016, 20 of whom was their first year participating in the float trips. In addition, we were able to ensure there was at least one experienced birder on each float trip in 2016. This staffing by experienced birders helped increase the number of new participants because they were less intimidated and felt more comfortable. It also provided a great opportunity for those new individuals to gain needed experience in identifying birds visually and through their songs since many birds are not seen but are identified through their songs.

For the 4<sup>th</sup> straight year the number of adult and juvenile Bald Eagles increased along the mapped stretch of river. It has been suggested by area wildlife biologists that there are at least 8 active Bald Eagle nests along or adjacent to this part of the Snake River. Five of these nests can be viewed while floating the river which made it possible to monitor the progress of the young eagles as they prepared to leave the nest. In addition, there were several instances of older juveniles entering the area and quickly being driven out by adult eagles. This was witnessed at least 3 times during the summer and early fall. A 3<sup>rd</sup> or 4<sup>th</sup> year juvenile was routinely viewed perched along the river in the last mile of the float. Perhaps next year this individual will be able to find a mate and nest in the lower reaches of the float where there is a lack of nesting activity.

Past annual reports have remarked on the disruption of the river habitat by the building and maintaining of the dikes on both sides of the river along the floated stretch. This man-made disturbance has undoubtedly caused some disruption of wildlife movement and utilization but one of the pluses is the increase in the number of Yellow-bellied Marmots now calling the area home. This year saw a marked increase in the number of Marmots sighted along the rocky dikes on the southern side of the river. There has also been an increase in the sighting of Green-tailed Towhees and Long-tailed Weasels, both species who are known to utilize such habitat.

We continue to explore ways of making the reporting of the species along the Snake River in a more concise way. As stated in other annual reports, trying to input hundreds of individual sightings in the Nature Mapping database on a weekly basis is troublesome. It is one of the biggest reasons for lower individual participation in previous years. With this year's record 8,658 individuals counted during the 20 floats, trying to enter each sighting would have been problematic. We will continue to try to make decisions that will lead us to a protocol which will be meaningful and important to users of the database.

Again, we wish to offer praise and thanks to A.J. DeRosa and his fabulous staff for their dedication to this important program. Without their efforts and friendship, we would not be able to continue expanding and improving this vital wildlife monitoring program.

Questions or comments are encouraged.

Respectfully Submitted this 18<sup>th</sup> day of November, 2016

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