

Nature Mapping Newsletter, February 2014

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Jackson Moose 101 -- Aly Courtemanch

Moose are one of the most-recorded species by Nature Mappers, probably because they are among the most beloved animals in Jackson. Over the past 6 years, Nature Mappers have contributed 2,520 moose observations to the Wyoming Game and Fish Department's Wildlife Observations Database!

Most moose in Jackson Hole are migratory, spending their winters at low elevations and then migrating to higher elevations during spring and summer. During winter, moose feed primarily on aspen, willows, and other woody shrubs. During summer, they incorporate highly nutritious forbs, such as geranium, buttercups, and lupine, into their diets to gain protein for muscle growth and fat for the upcoming winter. Moose have evolved to thrive in cold winter conditions, and they can become heat-stressed during both summer and winter. During winter with their thick winter coats, moose begin to overheat when the temperature is above 23 degrees Fahrenheit and during summer, above 57 degrees Fahrenheit.

The Jackson moose population has been in steady decline for nearly two decades, from a high of approximately 3,500 moose in the 1980s to an estimated 500 today. Calf production and survival has also decreased, from an average of 48 calves per 100 cows from 1963-1993 to an average of 23 calves per 100 cows from 2003-2012. The apparent causes of the decline are complex and likely include depleted habitat on winter ranges; severe and expansive wildfires on summer ranges; predation from a suite of predators; diseases and parasites, such as carotid artery worms; and warming temperatures. Other sources of mortality, such as getting caught in fences and moose-vehicle collisions, also contribute.

To learn more about this topic, attend a free presentation **Moose Revealed: Identification, Ecology, and Challenges** on **Tuesday, February 18th from 6–8 pm**: see calendar below.

Moose Day – Aly Courtemanch

Nature Mapping's Moose Day is an annual event that brings together trained citizen scientists and professional biologists to spend a wintry morning scouring Jackson Hole for moose observations. This is the event's 6th year of this event, and is a collaboration between Nature Mapping and the Wyoming Game and Fish Department (WGFD), with the goal of gathering information on moose distribution and population trends. Last year, 75 citizen scientists and biologists (from WGFD, Bridger-Teton National Forest, Grand Teton National Park, and the Teton Science Schools) traversed Jackson Hole by skis, snowshoes, snowmobiles, and cars to record 58 individual moose on Moose Day. Citizen scientists work in teams and are assigned specific areas to survey, stretching from the Buffalo Valley to Hoback and Snake River Canyons. They record the location, number, gender, and approximate age of all of the moose they see. Not only is this a fun and educational event for everyone involved, but the observations provide valuable data to the WGFD. Moose Day observations help fill a data gap for private lands in town and in rural subdivisions, lands which the WGFD does not actively survey. All of the observations are entered into both the Nature Mapping database and the WGFD's Wildlife Observation Database, which is used for everything from environmental commenting, research study design, and tracking population and distribution trends.

This year, **Moose Day will take place on Saturday, March 1, from 7 a.m. to Noon**. If you're interested in volunteering (It's not too late!), please contact Frances Clark, frances@jhwildlife.org See calendar below.

Volunteer Update

Welcome New Volunteers: Paul Hood held a training in Driggs for those anxious to do Nature Mapping in Teton County on the other side of the Pass: Colin and Mary Chris Boeh, Anna Dwinnell, Chi and Rene Melville, Alice Stevenson, and Dan Willerts.

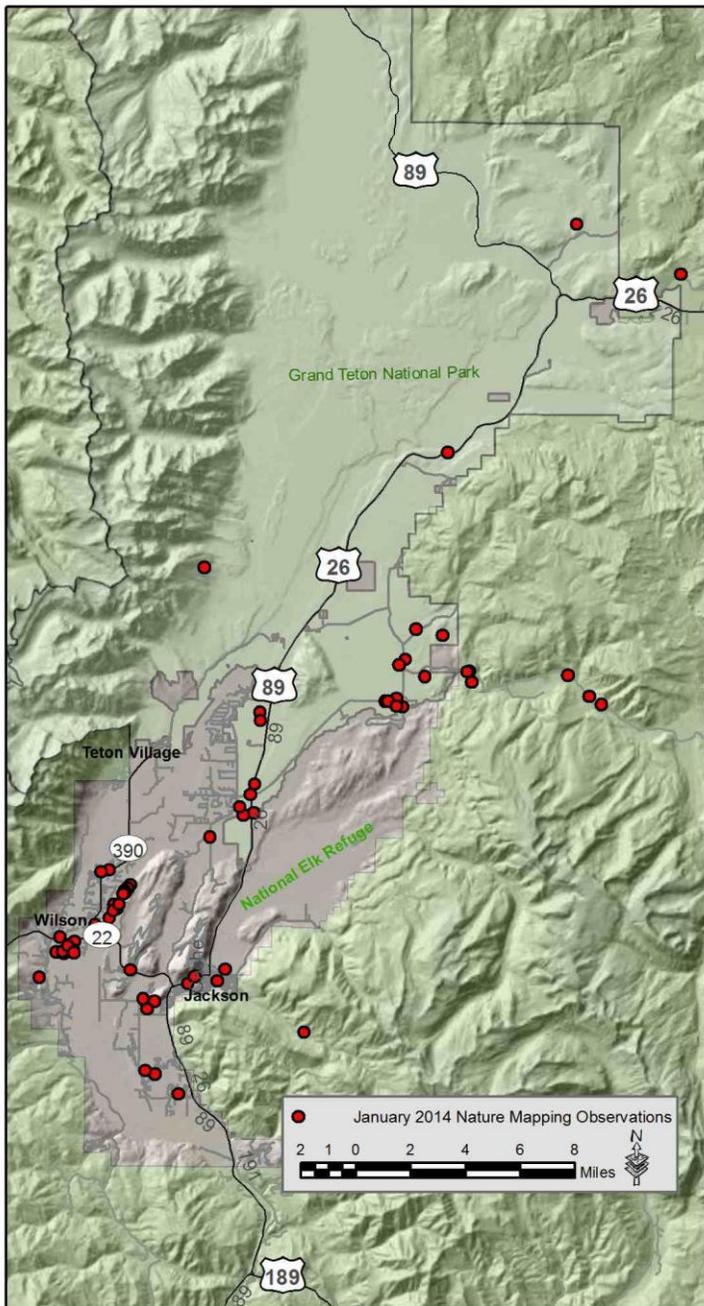
Data Verification: The other day a Nature Mapper asked, "Why is there an N next to my observations?" The "N" indicates that the sighting has not been verified yet by our team of biologists: Susan Patla, Aly Courtemanch and Susan Marsh. For instance on Jan 22, Paul "pulled" downloaded all the latest observations and sent them out to our reviewers. Frances reported 62 pronghorn at 10,000 feet in Grand Teton National Park on Doane Peak!!! Susan Patla figured out how Frances erroneously entered the coordinates. Oops! Other typical errors include entering the wrong date or species code, not to mention an occasional misidentification. One observation that sneaked by was "northern five-lined skink", reported in our January newsletter. Not yet verified, it turned out Paul Hood, our data manager, had entered it as a test observation in for the new mobile website we're working on. For a while the small amphibian created quite a stir. We have deleted it from the data base. In our new format, once an observation has been verified it will have a "V" next to it.

Clark's Nutcrackers: Taza Schaming, a PhD. candidate at Cornell University, has been conducting vital research on the relationship of Clark's Nutcrackers and Whitebark Pine using our Nature Mapping data. Taza won't be in the field in spring 2014 and, therefore, needs your help by recording (1) when nutcrackers are coming to feeders and (2) whether the birds are breeding in the area: specifically fledglings and juveniles. Even a few accounts of juveniles will be good evidence of nutcrackers breeding. Please continue to help Taza. See our Nature Mapping website for more info about these fascinating birds: <http://www.naturemappingjh.org/content/doc/Clarks%20Nutcracker%20Info.pdf>

January 2014 Data - Paul Hood

This January, 17 Nature Mappers entered 169 observations: 68 of mammals: 8 species—mostly moose (49); 101 birds: 30 different species, including commonly House Finches and Black-capped Chickadees, but also Sharp-tailed Grouse, a Hermit Thrush, Northern Saw-whet and Boreal Owls. Frances Clark entered the most observations this month. (Data entered as of February 1st, 2014, and not yet verified)

It is not too late to enter your 2013 data. We would love to have all 2013 data in by March 10th to count at the Pot Luck.



Data Map: Here are the locations of observations in January. We would very much like to have data points throughout the valley: your neighborhood counts! And it is fun to get out for a Nature Mapping drive every week or so. The observations add up and help us determine trends over the seasons and throughout the years.

Keep on Mapping!

Calendar:

Tuesday, February 18, 6-8 p.m. Moose Revealed: Identification, Ecology, and Challenges. Why do some moose get white patches of hair or lose hair in the winter? Where do moose go in the summer? What are “cropped ears” and why should we look for them? This presentation will answer many of your moose questions. Presented by two Wyoming Game and Fish

Department biologists: Aly Courtemanch, Jackson Wildlife Biologist, and Ben Wise, Jackson Disease Biologist. Jackson Hole and Greater Yellowstone Visitor Center. 532 N. Cache St. Jackson. A great preparation for Moose Day!

Saturday, March 1 – 7 a.m.-12 noon. Moose Day. We still need volunteers to survey moose throughout Teton County. Using Nature Mapping protocols, Nature Mappers work with partners to survey assigned areas. Contact Frances at frances@JHwildlife.org to join this important project. We thank Morgan Graham, Data specialist with the Teton Science Schools for volunteering his time, and Paul Hood, Nature Mapping Data Manager, for their dedication to this project.

Monday, March 17 – Annual Nature Mapping Pot Luck and Silent Auction – Center for the Arts, 5:30- 9 p.m. Come gather with good company and food, bid on silent auction items, and hear Dr. Mark Elbroch of Panthera present: The Secret Lives of Cougar Kittens: Birth to Dispersal. More information to come.

Talon Nights:Raptor Identification and Conservation Series, sponsored by the Teton Raptor Center in partnership with Nature Mapping-- Keep an eagle eye out for this spring program on raptor identification. This three part series will help you develop skills in raptor ID and give you great insight into when, where and how to find raptors in the valley. **March 18th, April 15th and May 20th** from **5:30-7:30 pm** at the **Old Wilson School House**.

And other related programs:

- **February 25, Tuesday, Teton County Library 6:00 p.m. “Managing Rangeland for Sage Grouse”** Two USDA specialists will show us what a sage grouse sees, help us understand what this sagebrush species needs for survival, and how to manage rangeland habitat for its benefit. <http://tetonplants.wordpress.com/>



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