



Moose Day Summary Report 3rd Annual - February 27, 2011

2011 marks the third annual Moose Day survey conducted in collaboration with the Wyoming Game and Fish Department. Volunteer assistance was provided by Nature Mapping Citizen Scientists, Wyoming Game and Fish Department and the Bridger-Teton National Forest.

In 2011, 60 areas of varying size were surveyed by 46 trained Nature Mapping Citizen Scientist observers. These observers dedicated a combined total of 88.75 hours searching which equates to a total effort of 137.5 hours (number of people x hours spent searching).

The 67 search areas were located between Pacific Creek and Buffalo Valley on the north end of Jackson Hole to the Hoback and Snake River Canyons to the south. Six survey areas were added in 2011 with only 1 moose observed in the new areas. Surveys were conducted between daylight (approximately 7:00 AM) and noon by car, skis, foot or snowmobile (Gros Ventre drainage) as appropriate for the area. Observers used public access and vantage points, obeyed winter range closures and accessed private lands by permission. Detailed search area maps were provided for each observer. Detailed protocols are available upon request.

All moose observations were entered into the Nature Mapping on-line database. Only live moose were recorded while deceased moose, tracks and other sign were omitted.

124 individual moose were observed in 2011 (Figure 1). This number is an increase from previous years.

<u>Year</u>	<u>Date</u>	<u>Total Moose Observed</u>
2009	April 18	95
2010	February 27	86
2011	February 27	124

Since 2009's survey was conducted in April, a direct comparison is not appropriate. Both 2010 and 2011 were conducted in late February thereby allowing for a comparison between years even though 6 new search areas were added where one additional moose was observed.

Weather:

Weather conditions were a sunny day with temperatures in the teens rising into the 20s (16°F in Wilson at 7:30 am). There had not been any significant snowfall on the valley floor for two days prior to Moose Day. The Snake River Basin was at 111% of the 30-year average snow water equivalent as of March 16, 2011 (NRCS Snowtel data found at <http://www.wrds.uwyo.edu/wrds/nrcs/snowprec/snowprec.html>). High snow pack levels probably restricted moose movement and encourage them to use lower elevation sites for a greater portion of the winter including the day of the count.

The 2010 Snake River Basin snow water equivalent was at 55% allowing moose to easily access the entire valley floor as well as adjacent foothills (Moose Day 2010 Report). This difference in snow conditions between 2010 and 2011 could account for the increase of 38 individual moose observed in 2011 over 2010. A continuation of this project into future years will provide for better comparisons between years with similar environmental conditions and an overall trend.

Summary:

- 60 individual search areas were covered by 46 volunteers
- 124 individual moose were observed
- Sex and age identification are difficult in February due to antler drop in December and January. Thus, many observations are recorded as “unknown”.

Sex/ Age	Adult	Yearling	Juvenile	Unknown	TOTAL
Female	32	0	1	2	35
Male	12	0	1	0	13
Unknown	18	0	15	43	76
TOTAL	62	0	17	45	124

- 2011 Search effort was recorded. 46 people combined to spend 88.75 hours searching which equates to a total effort of 137.5 hours. Search effort was not recorded in 2009 or 2010.
- Volunteers continue to be enthusiastic with regard to the Moose Day project and express their appreciation and willingness to participate in systematic, focused projects.
- New this year, 12 volunteers gathered for lunch after the counting was complete to exchange stories and report in their observation numbers.
- Yearlings are not easily distinguished from calves and younger adults. As a result all “potential” yearlings were classified as unknowns.

Recommendations:

- All searching teams should have a minimum of 2 observers as it is often difficult to search and drive at the same time. Additionally, this year the snow banks were at times higher than the vehicles used for searching thereby making a second set of observer eyes advantageous.
- Have observers document their search route and vantage points (2009 recommendation).
- Clarify how to document no moose seen (2009 recommendation). This was done by calling/ emailing Megan Smith, Project Coordinator, in 2011.
- Provide an ungulate identification handout and supplemental training shortly before Moose Day for those in need of additional training on non-antler, sex identification (adaptation of 2009 recommendation).
- Moose Day 2012 is *tentatively* set for Saturday, February 25, 2012.

Report:

Compiled by Megan A. Smith, Project Coordinator, Nature Mapping/ Jackson Hole Wildlife Foundation March 17, 2011.

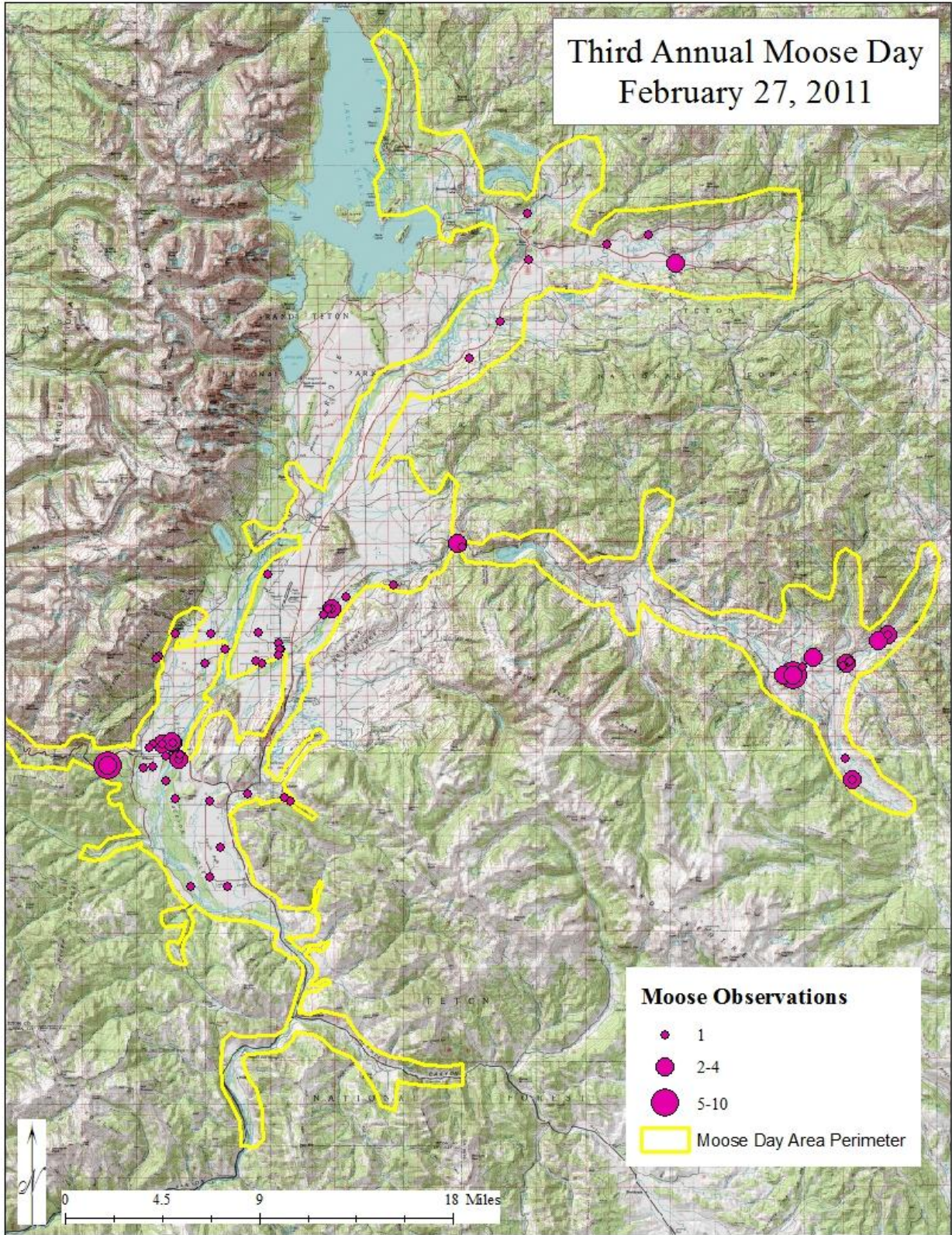


Figure 1. A total of 124 individual moose were observed during the third annual Moose Day