# 2016 Public Moose Survey Results

Thank you to all who took time to participate in the 2016 moose survey.

Public observers logged a total of 329 reports during the Sept. 1 – Nov. 30 2016 survey period, 320 of moose observations and 9 of no moose observed that day.

Participants submitted reports across all the northeastern and northcentral counties of Washington (map excludes urban/suburban reports). Most reports were received in Spokane County (96) and Stevens County (77). Some reports could not be used for analysis because data fields were left blank or were invalid. Our objectives with the collected data are to determine calf:cow ratios and population abundance indices (number of moose seen per hour spent afield).

To obtain accurate data, we need more dedicated participants who will not only submit a report when they see a moose, but also report hours afield when they do not see any moose. For example, if you plan to deer hunt for four consecutive days, submit a report for each day you are hunting, whether you see a moose or not.
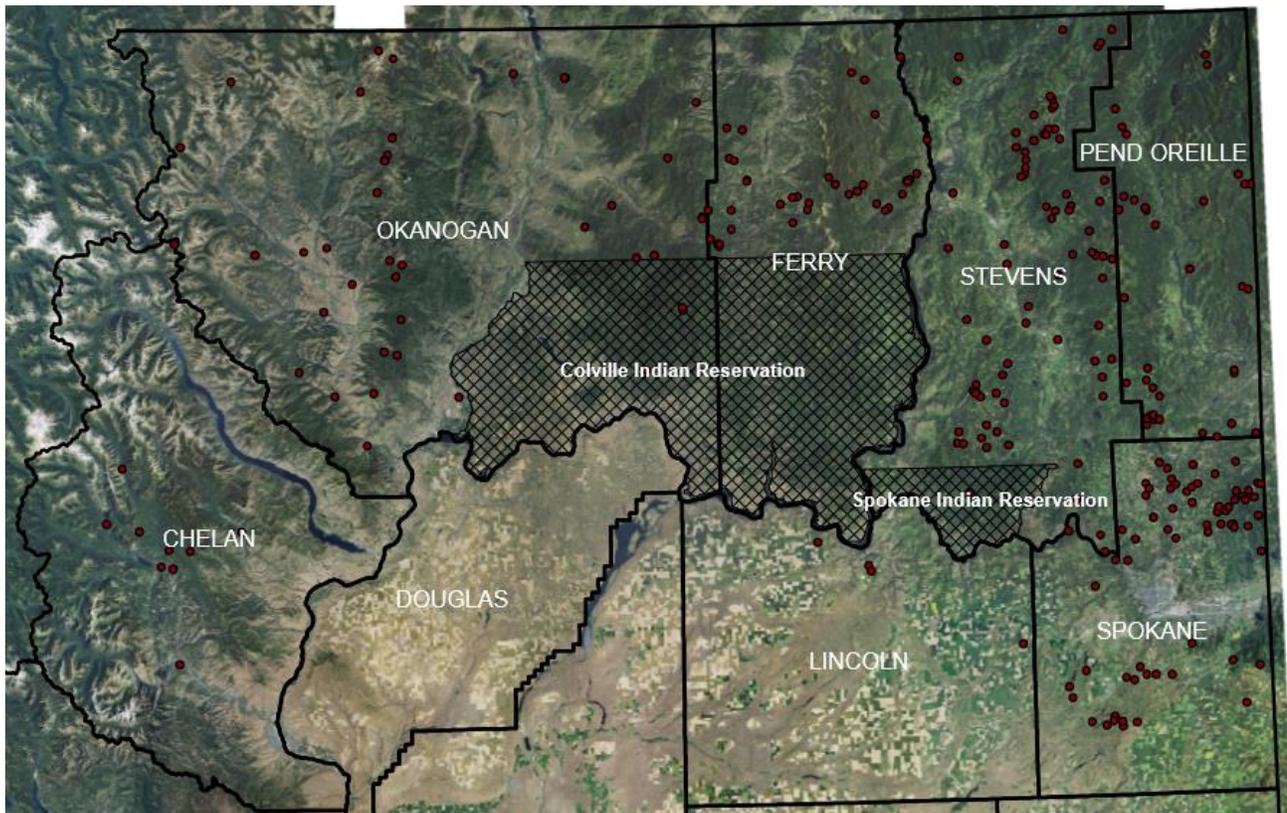
We analyzed 2016 data by county. If we receive more reports in 2017, we would ideally analyze the data by Game Management Units (GMU). Although our analysis is hampered by small sample sizes, it appears that calf:cow ratios were lowest in Pend Oreille County and highest in Okanogan County (see table).

Reports from the public as well as from local wildlife biologists over the last several years indicate a growing population of moose in Okanogan County. This might be due, in part, to the frequent fires in the county over the last 40 years that have improved moose habitat.

Calf:cow ratios in five counties of northeast and northcentral Washington.
(Sample sizes differ from totals stated above because this excludes observations with invalid or missing data, urban locations, bulls, or where moose gender was not indicated. "90% confidence limits" means there is a 90% chance that the true number of calves per 100 cows was between the lower and upper numbers.)

County	Calves per 100 cows	90% confidence limits	# of observations
Pend Oreille	23	15 - 30	19
Spokane	40	30 – 50	26
Stevens	45	34 - 56	43
Ferry	53	42 - 63	18
Okanogan	83	71 - 96	20

Unfortunately, we were not able to derive a statistically reliable abundance index from the data collected in 2016 because most reports were only of moose seen (and few reports when moose were not seen.) We have made changes to the reporting system that we hope will improve our ability to analyze data in 2017.

These data can be an indicator of the status and trend of the moose population, especially when compared across years. Moose have recently struggled in almost all of their southern-most range in North America. Obtaining all the data we can will help us understand the population, its future, and how we can manage moose moving forward.

Thank you again to all who participated in 2016.

For more information, please contact:

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