

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/315114475>

National Elk Refuge Biological Update 16 March 2017

Technical Report · March 2017

DOI: 10.13140/RG.2.2.11426.43203

CITATIONS

0

READS

22

1 author:



[Eric K Cole](#)

U.S. Fish and Wildlife Service

40 PUBLICATIONS 230 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Brucellosis in the Greater Yellowstone Ecosystem [View project](#)



Reduction of Supplemental Winter Feeding: Effects on Elk (*Cervus canadensis nelsoni*) at the National Elk Refuge in Jackson Hole, Wyoming [View project](#)

6 March 2017 National Elk Refuge Biological Update

Prepared by Eric Cole, National Elk Refuge Biologist

Elk and Bison Classification Count Results and Current NER Numbers

Refuge and Wyoming Game and Fish Department staff counted and classified elk on NER feedgrounds in late February. Total elk on feed was 8,879, which was the highest number of elk since 1997 and 78% above the 5,000 elk objective for the number of elk wintering on the refuge.

NER, Grand Teton National Park, and WGFD staff also counted the number of bison using NER feedgrounds in mid-February. 504 bison were counted on NER feedgrounds. The Jackson Bison Herd is now at objective.

Recent feedground estimates suggest that most of the elk counted on feedgrounds in late February still continue to use feed (8,500 elk estimated on feed in recent days), but bison use of feedgrounds has been sporadic since 11 March. Many bison are now free-ranging on Poverty Flats and areas northeast of the McBride feedground.

Current Snow Conditions/Feed Season Status

Although snow-pack remains well above average at the higher elevations of the Snake River basin (155% Snow Water Equivalent, 165% total precipitation), snow pack depth at NER headquarters dropped below average for the first time this winter on 10 March 2017 and has continued to decline rapidly. As of 15 March 2017, snow-pack depth at the NER headquarters monitoring site was only 2 inches (compared to the long term average for this date of 6 inches), and much of the southern half of the Refuge is now snow free.

After a long feed season that started 2.5 weeks earlier than average and with the highest number of elk since 1997, the southern half of NER is heavily contaminated with elk feces. Contaminated feedground conditions along with dense aggregations of elk have been associated with disease events such as foot rot and septicemic pasteurellosis in previous years. There is also considerable evidence that later feed season end dates are associated with higher brucellosis transmission risk and prevalence in elk. To reduce the potential for disease transmission, our goal is to end supplemental feeding as early in the spring as practical and encourage elk to spread out and use clean areas adjacent to the feedgrounds.

Based on our current protocol, feeding is terminated in the spring when sufficient standing forage becomes available due to snow melt and/or sufficient green-up occurs to support the elk that have spent the winter on NER. Although there is not yet sufficient forage to meet these criteria, NER and WGFD staff will continue to evaluate available forage and elk and bison movements to determine when supplemental feeding is no longer needed. For perspective the 10-year average feeding end date is 2 April (range 21 March to 21 April). If current melting trends continue, an earlier than average feeding end date this season is very possible.

Feeding and Elk Winter Mortality Questions

I and other NER staff receive a large number of questions, comments, and information requests about the supplemental feeding program, winter elk mortality, and disease issues on the refuge. These requests come from organizations and individuals representing all sides of the

supplemental feeding debate. To ensure transparency and equal access to available information, we will assemble a document that includes our responses to these questions, comments, and data requests in the coming weeks. The document will be included in a future National Elk Refuge Biological Update.

Other Wildlife Observations

Four to seven wolves from the Pinnacle Peak Pack have been regularly observed hunting elk in the Poverty Flats and McBride areas of the Refuge in recent weeks.

A maximum of 22 pronghorn have been counted on NER in March. This is down from 69 counted in late December, and 28 counted in late January. 5 pronghorn winter mortalities have been confirmed this winter, but we will likely find others when we search peripheral areas of the refuge later this spring.

Thirty to 40 bighorn sheep have been using the Miller Butte area in recent weeks.

Signs of the Spring Season:

First Horned lark on 5 March

First Mountain bluebird on 12 March

First Western meadowlark on 13 March

First Uinta ground squirrel out of hibernation on 14 March

First Sandhill cranes on 15 March