

Current Tule Elk Status on Ranchlands

At the end of 2017, the Drakes Beach herd was estimated at 112 total animals and the Limantour herd was estimated at 145 total animals. Final 2018 tule elk census numbers will be available in the winter of 2018/2019.

NPS has no current evidence of tule elk moving between the Drakes Beach and Limantour herds.

From 2012 to 2017, GPS collared female elk (n = 4) spent on average 27.4% of their time per year on C Ranch, 15.2% time on D and E Ranches east of Drakes Beach Road, and 57.4% time outside of leased grazing areas. ^{1,2}

Males in the bachelor groups tend to spend more time on ranches. Two males, collared in 2012 and 2017, averaged 26.4% of their time per year on C Ranch, 60.8% of time on D and E Ranches east of Drakes Beach Road, and 12.8% of time outside of ranch areas. 1,2

In March 2015, two male elk and one female were relocated to Limantour as part of an experiment to understand relocation response. All three animals returned to Drakes Beach over the next year.

In February 2017, two female elk were relocated to the Tomales Point Elk Reserve. One left the fenced reserve and returned to Drakes Beach in July 2017. The other was found deceased in the Tomales Point Elk Reserve in March 2018.

Weights were collected on 25 tule elk in the Drakes and Limantour elk herds in 2015 and 2016. The tule elk bulls weighed an average of 488 lbs. (n=14), with a range of 365-592 lbs. The tule elk cows weighed an average of 341 lbs. (n=11), with a range of 296-404 lbs. 2

An initial literature review has found that elk may consume forage equal to between 1.5 and 2.5% of their body weight per day in dry matter (i.e. 7 to 12 lbs. per day for an average weight male). ^{3,4}

In 2018, residual dry matter (RDM) was evaluated on all ranches that are visited by the Drakes Beach herd. All long-term monitoring transects and 96% of visual estimatates of RDM across each ranch were above the park RDM standard of 1,200 lbs. per acre. Of the 4% of areas that were below the 1,200 lbs/acre standard for the visual estimates, many were known cattle concentration areas (e.g. feeding areas). Similarly, all RDM transects on ranches visited by Limantour elk were above 1,200 lbs/acre.

The NPS proposed action presents a minimum of 100 animals and a preliminary maximum of 160 animals in the Drakes Beach herd. A more defined population goal will be refined during the GMPA process. These numbers are based on:

(1) the minimum viable population size for elk herds to preserve genetic diversity presented in the California Department of Fish and Wildlife Draft Elk Conservation and Management Plan (2017), and

(2) preliminary analyses of estimated available forage, the operational needs of the ranches, and the elk attendance patterns in the Drakes Beach area.

¹ Bernot, T., and D. Press. 2016. Tule elk monitoring at Point Reyes National Seashore: 2013-2014 report.

² Bernot, T., and D. Press. 2018. Tule elk monitoring and management at Point Reyes National Seashore: 2015–2016 report.

 $^{\rm 3}$ Holechek, J. 1988. An approach for setting the stocking rate. Rangelands 10(1):10-14.

⁴ Thomas, J. W. and D. E. Toweill. 1982. Elk of North America. Stackpole Books, Harrisburg, PA.

Point Reyes National Seashore General Management Plan Amendment and Environmental Impact Statement

National Park Service U.S. Department of the Interior



