

State and Province Abstracts

October 11, 2022

(Alphabetical by Organization)

California deer and elk status update

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California is home to two subspecies of deer (black-tailed and mule deer) and three subspecies of elk (Roosevelt, Rocky Mountain, and endemic tule elk) that are distributed among diverse habitats including coastal rainforests, chaparral, oak woodlands, mountains, deserts, and across extensive human population gradients. Monitoring abundance, rates of change, and distributions are the primary objectives using aerial surveys (distance sampling, sightability correction, mark-resight), fecal DNA capture-recapture, and camera trapping, and numerous collaring efforts to estimate vital rates, habitat use, and movement. Mapping, conserving, and restoring habitats and connectivity among populations and between seasonal ranges remains a top priority in accordance with Secretarial Order 3362. Unprecedented droughts and wildfires are conspicuously altering landscapes across California, including many that support populations of deer and elk. Concerns over more frequent and extreme droughts relate to effects of forage quality and availability, with implications to population productivity, as well as water availability in arid landscapes. Wildfires may have devastating short-term effects on landscapes, but are expected to benefit deer and elk in the long-term by providing abundant, high-quality vegetation by resetting successional stages of plant communities. We are also actively surveilling for chronic wasting disease (which has not been detected in California) and treponeme-associated hoof disease, along with passive, serological surveillance for several other diseases. All elk populations are considered stable or increasing, with many implicated in human-wildlife conflicts. Deer populations are also considered generally stable. We estimate statewide abundance of deer at about 460,000 and elk at approximately 14,000.

Status update for mule deer in Saskatchewan, Canada

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Mule deer populations in Saskatchewan, Canada remain relatively stable or growing despite increasing prevalence of chronic wasting disease throughout the province. Recent aerial survey estimates in core mule deer range have found similar population estimates to those found during the mid-2000s. Mule deer are expanding their northward distribution in the Parkland and Boreal Forest Fringe regions of the province. Mule deer licence sales and total mule deer harvest have increased in Saskatchewan over the past 5-years, with expanded hunting opportunity along the northern boundary of mule deer range in the province. Chronic wasting disease (CWD) continues to be a concern in Saskatchewan since the disease was first detected in wild mule deer in the year 2000, with prevalence estimates ranging from non-detected to highly endemic (e.g., > 50%) in some regions of the province. Saskatchewan is currently in the development of a long term mule deer management plan with the purpose of outlining a clear and

consistent framework to ensure the conservation of mule deer in the province.

Status of deer and elk populations in Washington, 2021

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Rocky Mountain (*Cervus elaphus canadensis*) and Roosevelt (*C. canadensis roosevelti*) elk both occur in Washington State and the Washington Department of Fish and Wildlife (hereafter, the Department) formally recognizes and manages 10 elk herds. Six of the 10 herds are either stable or increasing, three are recovering from severe winter conditions in 2017, and one experienced significant population declines in the last decade associated with environmental conditions and disease. The statewide post-hunt estimate following the 2020 season was 45,000–55,000 elk. The Department manages for a post-hunt population that has 12–20 bulls:100 cows and achieved this management objective in all but one herd during 2020, with observed ratios ranging from 11–22 bulls:100 cows. Post-hunt surveys also indicate calf recruitment rates in each herd were at levels that would support population growth or stability, with post-hunt calf:cow ratios ranging 22–44 calves:100 cows.

The Department maintains general season, over-the-counter hunting for elk throughout the state to maximize hunter opportunities, with an additional number of limited-entry, quality hunts offered through a permit system. The statewide harvest estimate in 2020 was 5,228 elk, which is below the 2001–2019 mean of 7,336 elk. The Department's current management efforts for elk focus on: 1) increasing our understanding of treponeme-associated hoof disease (TAHD); 2) increasing our understanding of poor calf recruitment in portions of southeast Washington; and 3) identifying effective methods for monitoring elk populations across densely vegetated landscapes in western Washington.

The Department is responsible for managing mule deer (*Odocoileus hemionus*), black-tailed deer (*O. h. columbianus*), and white-tailed deer (*O. virginianus*), which collectively represent 300,000 to 320,000 deer in Washington State. Endangered Columbian white-tailed deer (*O. v. leucurus*) also occur in Washington and are under federal purview. The Department establishes management objectives and monitors deer populations at the management zone level and has identified 7 management zones for mule deer, 5 zones for white-tailed deer, and 5 zones for black-tailed deer. Available population metrics (abundance indices, age/sex ratios, survival estimates, and harvest trends) indicate mule deer and black-tailed deer are stable at the management zone level, while white-tailed deer populations exhibit stable, increasing, and potentially decreasing trends across management zones. The Department manages deer hunting to maximize hunter opportunity and maintains general season, over-the-counter opportunities for the three hunted subspecies that occur in the state. In addition, quality hunts are offered through a limited-entry, permit system. The statewide harvest estimate for 2020 was 29,435 deer an ~8% increase from the 2019 estimate of 27,187 deer. Habitat quality, land-use changes, disease, and weather are likely the primary drivers of local deer and elk population fluctuations at this time. Other factors, such as the influence of local carnivore communities on deer and elk dynamics, are currently being explored in several regions of the state. Most recently, the Department has initiated research in association with Secretarial Order 3362 to inform habitat management activities for mule deer and research to investigate factors responsible for poor elk calf recruitment in southeast Washington.

Additional State and Province Reports Presented

Abstracts Not Provided

Colorado state of the herds report

Andy Holland, Colorado Parks and Wildlife, Fort Collins, CO, USA

Idaho state update

Rick Ward, Idaho Department of Fish and Game, Boise, ID, USA

Nebraska state update

Luke Meduna, Nebraska Game and Parks Commission, Lincoln, NE

Biennial status update of deer and elk populations in Nevada

Cody McKee, Nevada Department of Wildlife, Reno, NV, USA

Cody Schroeder, Nevada Department of Wildlife, Reno, NV, USA

Oregon state update

Don Whittaker, Oregon Department of Fish and Wildlife, Salem, OR, USA

Rocky Mountain Elk Foundation update

Karie Decker, Rocky Mountain Elk Foundation, Missoula, MT, USA

Texas state update

Shawn Gray, Texas Parks and Wildlife, Alpine, TX, USA