

Update on the Temple Peak Bighorn Sheep Herd in the Southern Winds

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With significant and greatly appreciated funding from the Wyoming Wild Sheep Foundation, collaborative efforts continued in the Temple Peak Sheep herd. These involved winter and summer helicopter observation flights, capture and radio-collaring, and monitoring of bighorn movements - important work that further enhances our knowledge and ability to conserve this historic population in the southern Wind River Mountains.

Flights: A cold, January helicopter survey on the Wind River Reservation's three main wintering grounds showed the highest count of bighorns in at least the last 20 years - a good sign that this population, though small, continues to move in the right direction. During the flight, we counted 75 bighorns around the Washakie Reservoir area (44 ewes: 12 lambs: 19 rams). Add the 15-20 that occupy the North Fork Popo Agie Canyon, and that's a minimum count of 90-95 bighorns. In addition, we observed 8 rams in the Bull Lake area. Though technically not part of the Temple Peak herd, we were uncertain as to what summer areas these isolated rams occupy and whether they mingle with the Temple Peak herd.

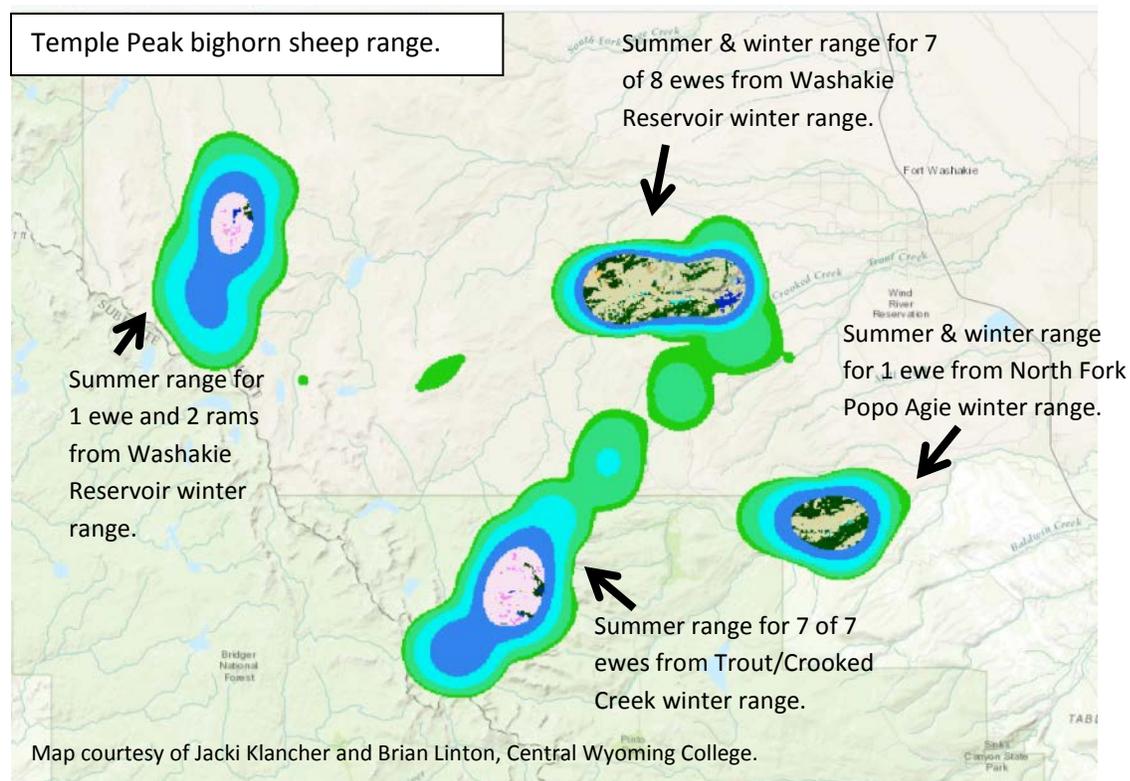


Capture & Disease Testing: Following a successful effort in 2016 during which 14 bighorns were radio-collared (11 ewes, 3 rams), we continued in March 2017 with helicopter-capturing and collaring another 6 ewes and 2 rams near Washakie Reservoir as well as 2 rams near Bull Lake. To our collective disappointment, the very "clean" disease status observed in 2016 was not to continue. All 10 sheep tested positive for combinations of leucotoxin+ *Mannheimia*, *P. multocida*, and/or *M. ovipneumoniae*. Unfortunately, 2 ewes perished



either while in-hand (necropsy showed severe fluid build-up in lungs that may or may not have been related to infection), or the day after capture (ewe was lethargic at capture and reluctant to leave capture site). Though the stress of capture was likely the immediate cause of death, both ewes being in poor health prior to capture was the ultimate cause. In addition, 1 of the Bull Lake rams died in May 2017, likely from lion predation but possibly pre-disposed from disease. Fortunately, survival remains high as all 14 captured in 2016 are currently alive as well as 8 of 10 from 2017.

Movements: Understanding when, where and how these sheep move is of primary importance, and some interesting patterns have emerged. Sheep from adjacent winter ranges were completely different as to whether they moved to high-elevation summer ranges or not. Ewes from the Trout/Crooked Creek winter range consistently moved to high-elevation summer range of at least 12,000 feet (7 of 7 marked ewes), and 5 made round-trip forays in August back to stay on winter range (7,000 feet) for several days to, we assumed, visit natural mineral licks. These ewes then returned to high elevation summer range. Bighorns in the Whiskey Mountain Herd have displayed similar patterns. In contrast, nearly all marked ewes (7 of 8) from the adjacent Washakie Reservoir winter range stayed at low elevation (less than 9,000 feet) and did not move to high elevation summer range. Likewise for the one collared ewe in the North Fork Popo Agie area. The variance in movements is perplexing. Hopefully further study will help us understand this difference.



9/15/2017

Another interesting find: one Bull Lake ram moved to high-elevational summer range and occupied the same areas as rams from Washakie Reservoir. And so, it conclusively appears the Bull Lake segment should be included in the Temple Peak herd.

On behalf of the USFWS, WGFD, and Tribes, we thank you, for this work would not have been possible without the generous support from Wyoming Wild Sheep Foundation and its members.