

2021 Dall's Sheep Survey Summary-Bureau of Land Management Central Yukon Field Office

The Bureau of Land Management, in cooperation with the National Park Service Arctic Network Inventory and Monitoring Program, conducted an aerial survey for Dall's sheep across all probable habitat for Dall's sheep on BLM managed lands in the Central Brooks Range including portions of GMU 24A and GMU25A. To estimate population abundance, surveys are conducted using distance sampling derived from elevation contours. The survey was conducted between July 7 and 14 of 2021 by multiple fixed-wing aircraft based out of Galbraith Lake and Coldfoot (Map 1). In total, 104 transects were completed in approximately 42 hours of flight time.

Estimates: The estimates for total sheep across the study area are 1229 (95% Bayesian Credible Interval: 1088-1433), for Units 1A and 1B they are 293 (95% BCI: 224-411). These results suggest a decline in the sheep population for this region when compared to prior years including 2014–2018, and 2021 (Figure 1). The ratio of lambs to ewe-like sheep is below average and legally harvestable ram numbers are low (Table 1).

Upcoming surveys and analyses: The BLM will continue collaboration with the NPS and conduct surveys annually. Efforts are being made to identify the reasons for the decline.

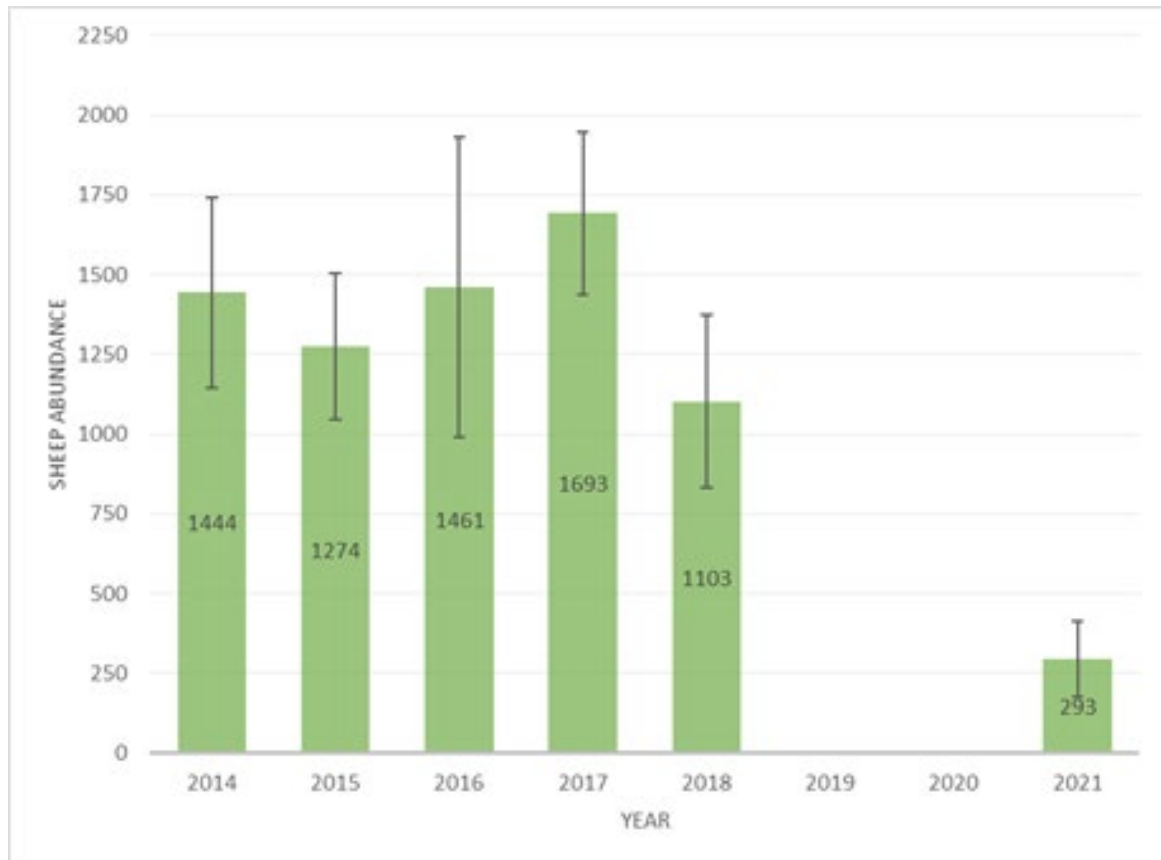
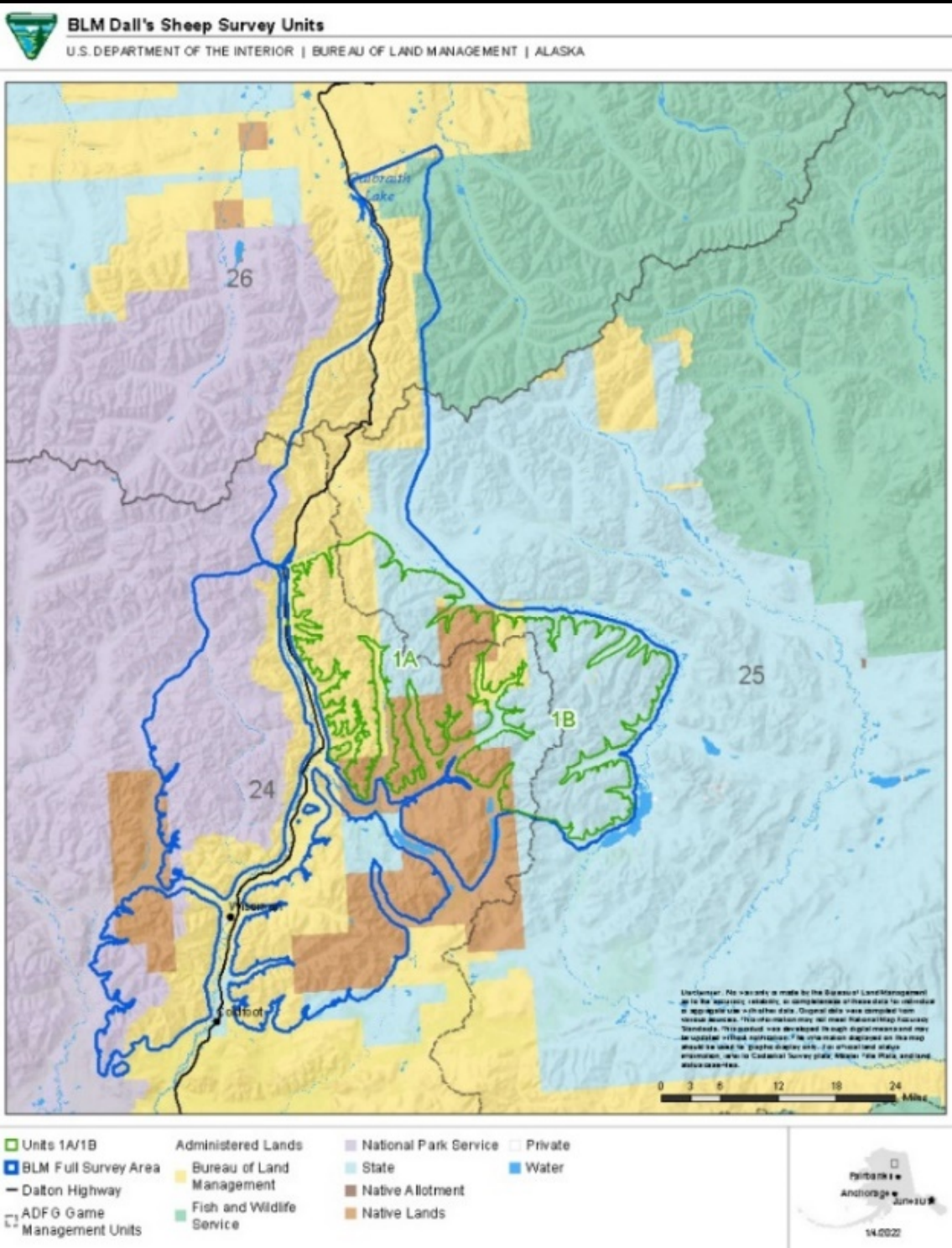


Figure 1 Total Dall's Sheep Distance Sampling Estimates 2014-2021 for Survey Units 1A & 1B 2014-2021



Map 3 Dall's Sheep Survey Area 2014-2021, including Survey Units 1A & 1B

	BLM Full Survey Area		Units 1A/1B	
	2015	2021	2015	2021
Total Sheep	3241 (2904-3701)	1229 (1088-1433)	1274 (1108-1503)	293 (224-411)
Adults	2782 (2478-3185)	988 (879-1155)	1078 (941-1272)	250 (198-345)
Legal Rams	59 (45-101)	12 (0-44)	12 (6-25)	5 (0-25)
Lambs	459 (381-594)	242 (194-319)	196 (155-256)	43 (20-86)
Lambs:Ewe-like	0.38 (0.30-0.48)	0.26 (0.20-0.34)	0.36 (0.28-0.48)	0.19 (0.09-0.38)

Table 2 Dall's sheep population estimates for full survey area and Units 1A & 1B by class in 2015 and 2021