



STATE OF NEVADA

DEPARTMENT OF WILDLIFE

Game Division

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#19

MEMORANDUM

September 5, 2018

To: Nevada Board of Wildlife Commissioners, County Advisory Boards to Manage Wildlife, and Interested Publics

From: Brian Wakeling, Administrator, Game Division 

Title: **Yakama Tribe Pronghorn Translocation Update –For Possible Action**

Description: The Department will provide an update regarding the translocation of pronghorn to fulfill the original request from the Yakama Tribe in Washington for 100 pronghorn approved by the Commission for Fiscal Year 2018. In Fiscal Year 2018, only 50 of the original 100 were provided to the Yakama Tribe in Washington.

Presenter: Wildlife Staff Specialist Cody Schroeder

Summary:

During fall 2017, the Commission approved a request for translocation of 200 pronghorn to the Colville Confederated Tribes and the Yakama Tribe (up to 100 each). Subsequent to that approval, the Department worked with each tribe and captured and relocated about 150 total pronghorn. This collaborative effort was extremely successful, with low direct mortality during the capture and translocation, and survival post-release remained high. The success of these translocations was one of the topics highlighted in the plenary session at the recent Twenty-eighth Biennial Western States and Provinces Pronghorn Workshop.

Although the Commission approved up to 100 pronghorn for translocation to the Yakama Tribe, only 50 were provided during the last fiscal year. The Yakama Tribe remains interested in receiving the remaining 50 for which they were originally approved. The tribe has monitored and reported on the post-release movements and survival of the pronghorn from last year (report attached).

Although the translocation of an additional 50 pronghorn is consistent with the motion and intent from the Commission's action last year, the Department wanted to provide the Commission with a briefing and affirm the Commission's support to continue with the translocation efforts during fall 2018.

Recommendation:

The Department recommends that the Commission **VOTE TO AFFIRM THE PRIOR MOTION TO PROVIDE PRONGHORN TO THE YAKAMA TRIBE IN WASHINGTON, AND CONTINUE WITH THE TRANSLOCATION OF UP TO 50 MORE PRONGHORN.**

Progress Report
Yakama Nation Pronghorn Translocation Project
Funded through Shikar and Safari Club International
November 1, 2017 – January 18, 2018

Overview

The Yakama Nation successfully captured 52 pronghorn from Central Nevada on October 26, 2017. These pronghorn were comprised of 30 adult female pronghorn and 22 juvenile pronghorn. All except one adult pronghorn were fitted with Vectronic GPS collars for monitoring. The last female was radio-marked with a VHF collar. Of the 52 originally captured, 50 survived the trip to the Yakama Reservation and left the trailers with ease. One additional adult female showed signs of stress and needed to be manually removed from the trailer before she walked away on her own. Lastly, 1 juvenile did not survive the journey.

Since the release, 2 mortalities have been recorded. The first mortality was observed on November 1, 2017 at 8:48 am and was recovered on 3 Nov at 1:00pm. The remains of this pronghorn were scattered by scavengers and no remains were found other than hair and some bone. This individual was the same female that left the trailer with difficulty at the release and thus capture related causes were suspected. The second mortality was recorded on 11 Nov at 5:26am. This animal was found fully intact at the site and was collected for examination. No sign of injury could be found on the carcass but bloody spore from the mouth indicated some form of stress. Unfortunately, we were unable to get the remains to a state veterinarian in time for the cause of death to be determined. Both of these mortalities were within the 2 week window in which capture myopathy generally can be attributed to most mortalities.

Tracking and Monitoring

The Vectronic GPS collars are set to record locations at 13 hour intervals and record mortalities locations every 30 minutes after an animal is recorded in the same location twice. All recorded data is stored in two locations for safety and reliability which include a secure Vectronic GPS plus server and on the satellite itself. YN wildlife staff monitors these data each work day to ensure quick response to mortalities or large changes in dispersal behavior. Data is then saved for later examination at least once per week. Weekly locations of pronghorn located off the reservation are recorded and submitted once monthly to the area biologist for Washington Department of fish and wildlife.

Results

Since the release we have recorded 4,906 locations from the collars for an average of 175 observations per collar. The longest straight line distance from any observed location and the first recorded location (i.e., maximum dispersal distance) ranged between 11.68 km and 30.73 km. The average maximum dispersal distance for all remaining pronghorn up to January 17, 2018 was 18.12 km. Since the release there have been 4 consistent groups of pronghorn. Although these groups do occasionally breakup into 5-6 groups they often return to these larger groupings within a short time. The following are images of all observed locations and movements of each of those 4 main groups (i.e., one individual from each group was selected to represent each group for these images). The green squares indicate the first recorded observation for each pronghorn and the red squares indicate the last recorded observation as of January 17, 2018. The red line indicates the boundary of the Yakama Reservation.

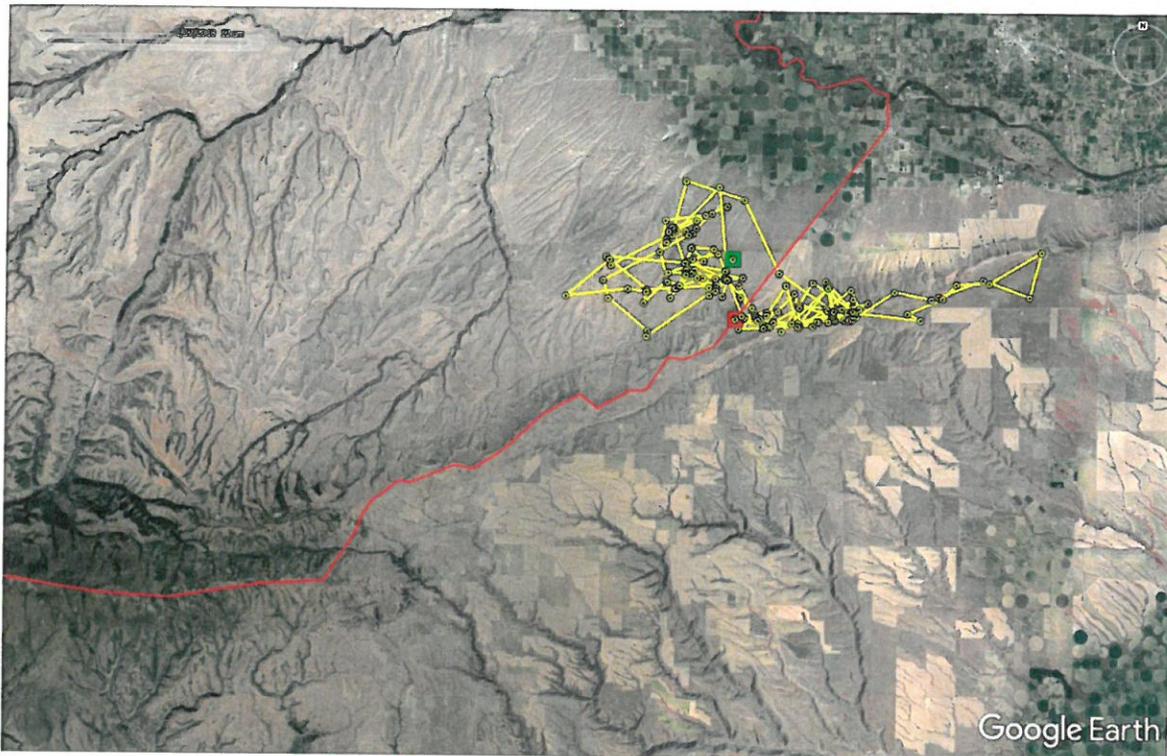


Figure 1. Locations and movements of collar 28111. The maximum dispersal distance for this animal was 16.57 km. This group of pronghorn seems to spend most of the time SE of the Reservation Boundary just above the Mabton-Bickleton Highway.

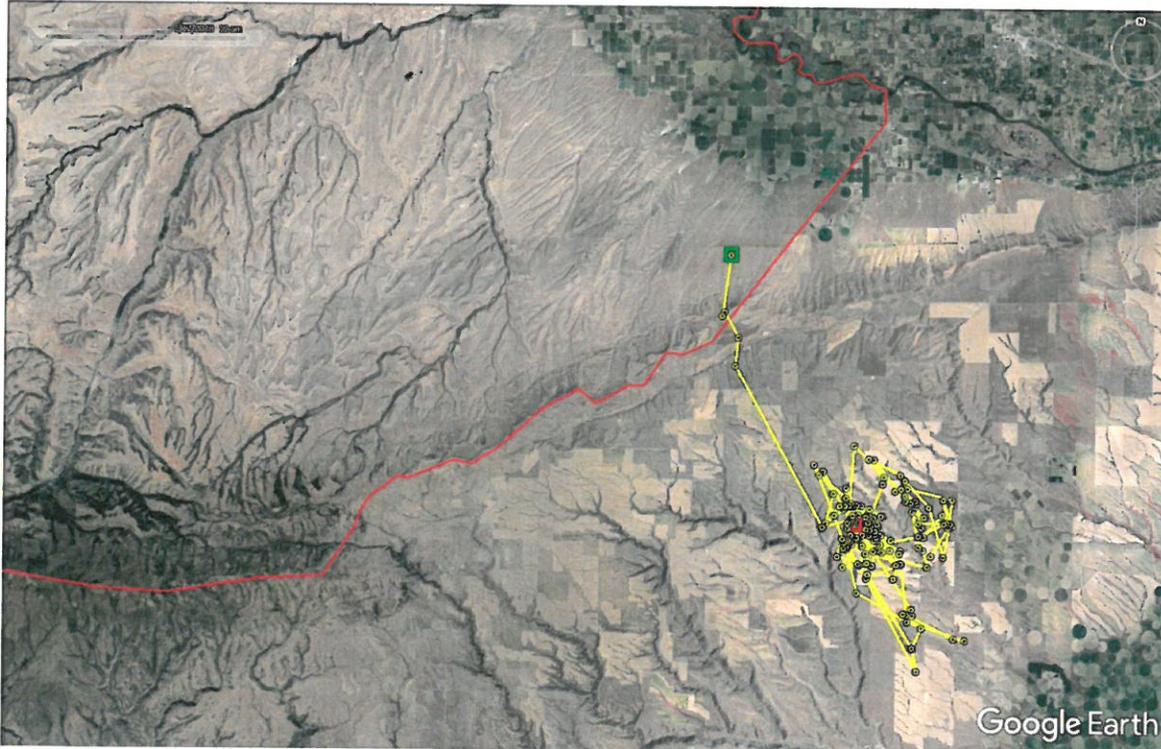


Figure 2. Locations and observations of collar 28112. The maximum dispersal distance for this individual was 24.46 km. Since the release this pronghorn has dispersed SE of the Reservation and NW of Patterson. The majority of this animals locations are located just west of Alderdale rd. This animal has since been observed with 39 unmarked resident pronghorn.

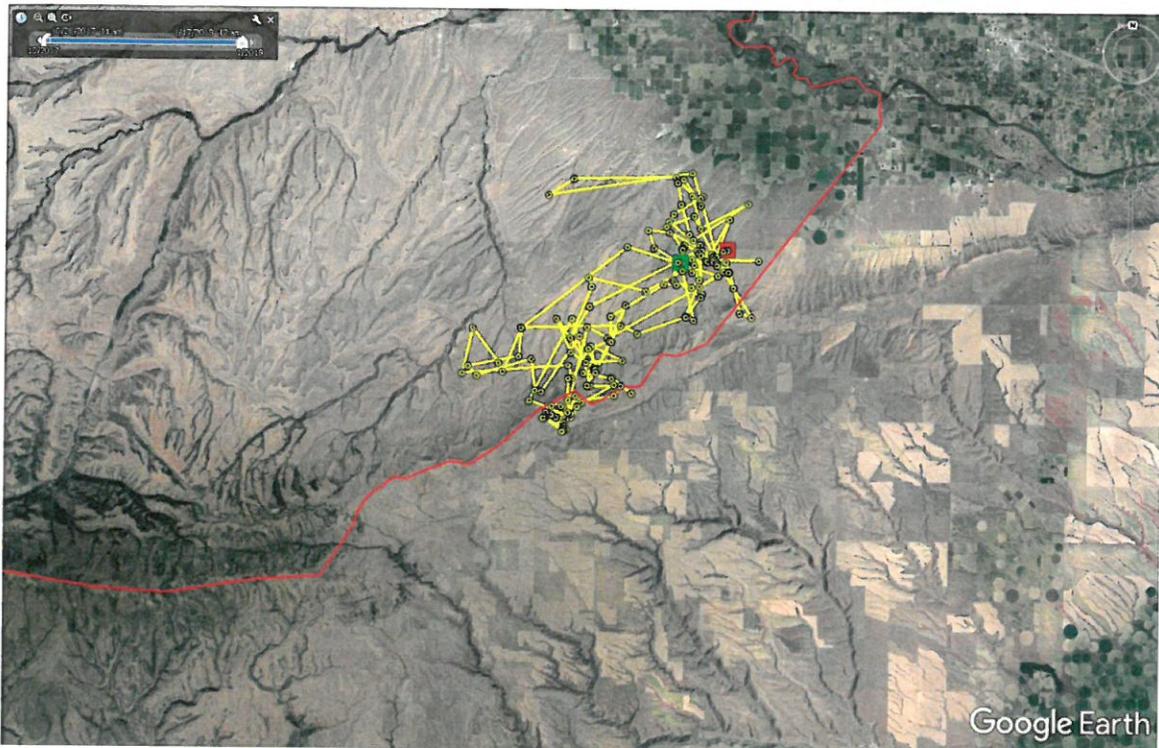


Figure 3. Locations and observations of collar 28116. The maximum dispersal distance for this animal was 13.29 km. This group of pronghorn is the largest group translocated pronghorn of approximately 25 individuals.

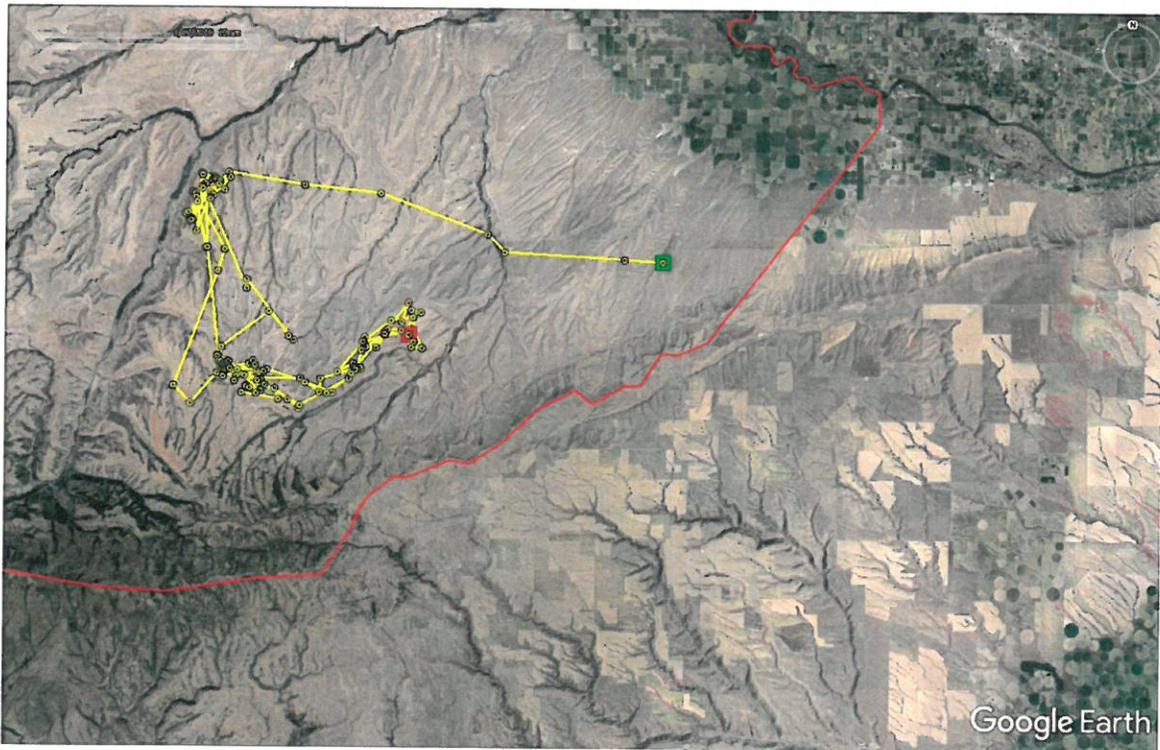


Figure 4. Locations and observations of collar 28138. The maximum dispersal distance for this animal was 27.36 km. This group includes 3 translocated pronghorn that are grouped with approximately 30 resident pronghorn.

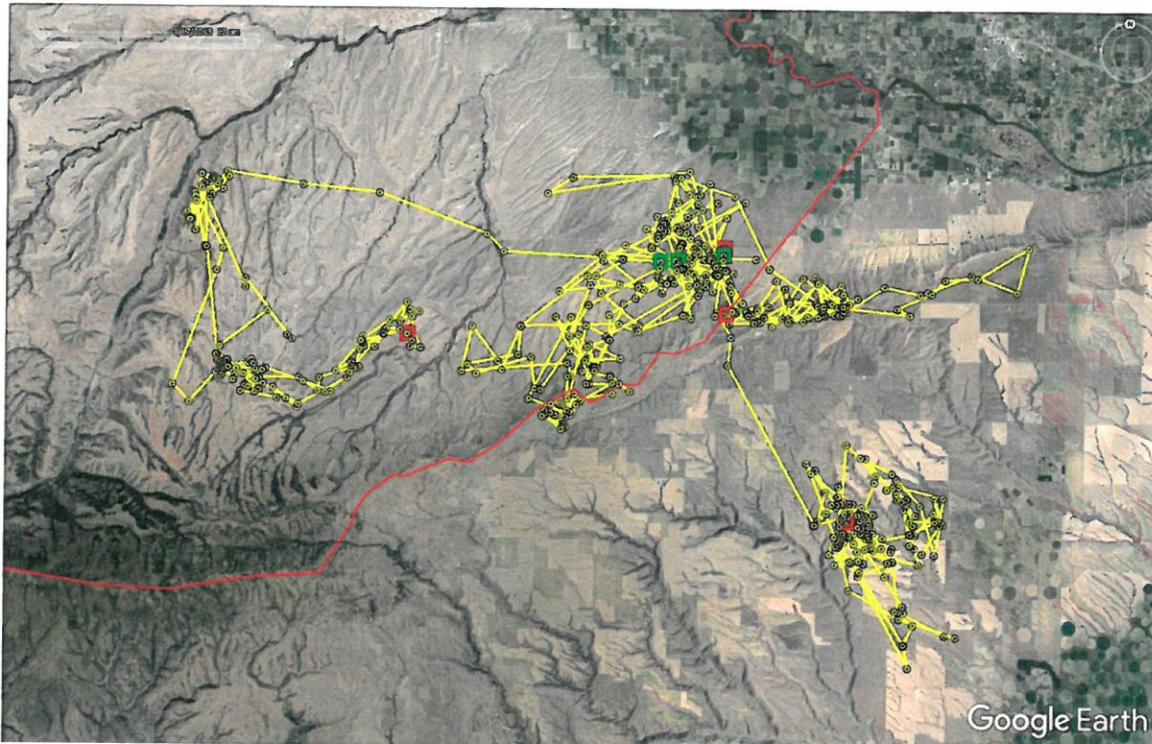


Figure 5. Shows recorded locations and dispersal for all 4 of the above collars and groups. The red squares indicate the approximate location of the 4 main groups of pronghorn as of 1/17/18.

Discussion

Although mortality rates of these 52 captured pronghorn (5.7%) was higher than the goal of <3%, we have been relatively fortunate for such low levels of mortality given the conditions and distance of travel for these pronghorn. Capture related mortalities from injury or stress usually occur within the first 2 weeks post release. All of the known mortalities for these pronghorn occurred within that time frame which means that we have 100% survival of pronghorn since that point. This survival rate is a metric of great success for our project.

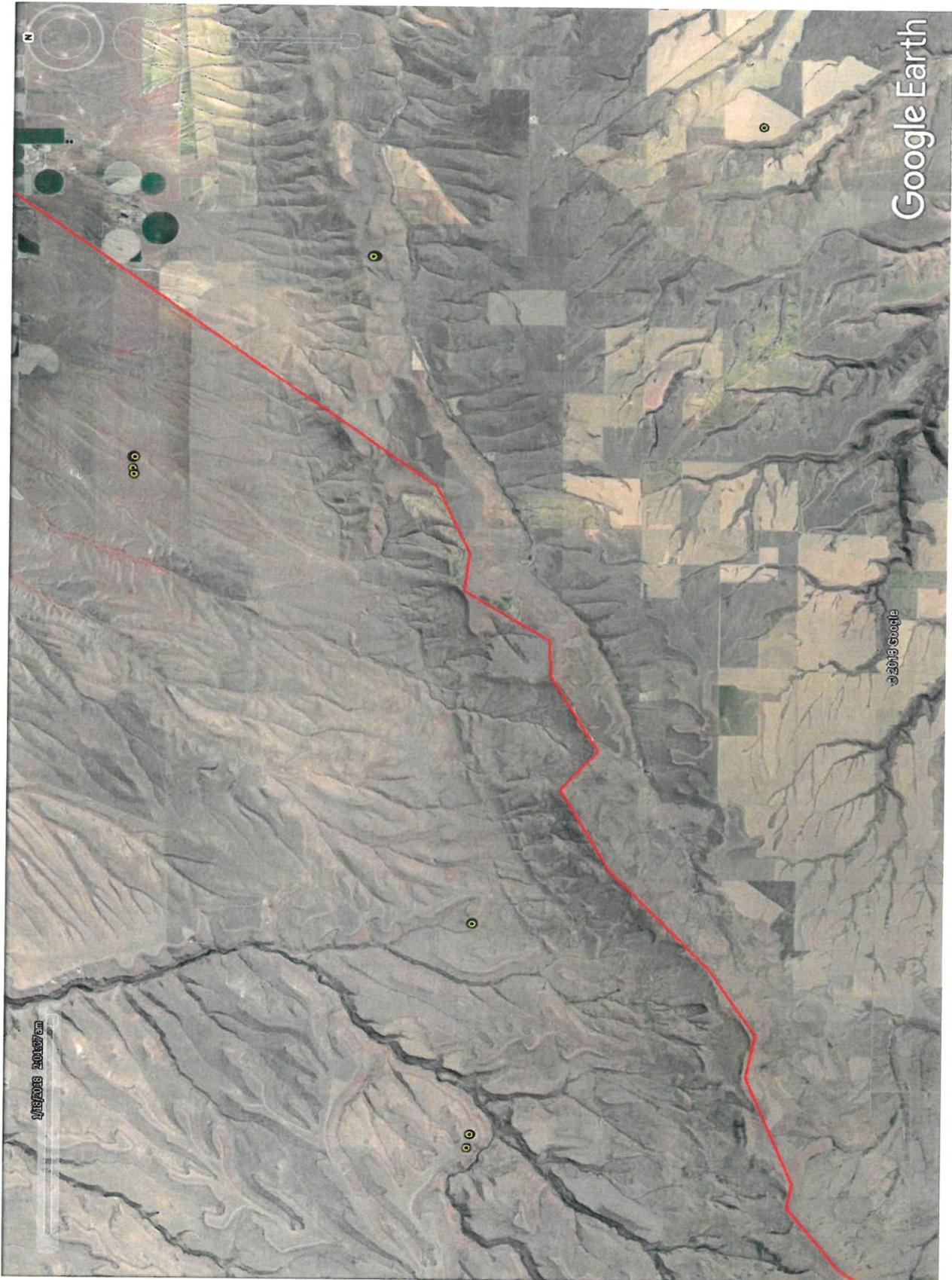
Dispersal following the release is within the levels observed during our previous pronghorn translocation. It was our objective to choose a release site that was within the largest area of quality wintering habitat in order to minimize dispersal distances. Based on observed locations of large groups of wintering resident pronghorn it was decided that the release site remain the same as per our previous translocation. Currently 23 of the 27 remaining collars are within 12 km of this site which could indicate that this objective was successful. On January 18, 2018 YN staff was able to observe each group with collars and get accurate counts of animals in each group. Pronghorn were observed in 5 groups rather than 4. Group sizes were as follows: 33 (3 collars, 30 unmarked), 19 (14 collars, 5 ear-tagged), 12 (4 collared, 8 ear-tagged), 13 (5 collared, 8 ear-tagged), and 40 (1 collar, 39 unmarked). In total we observed 117 total pronghorn in 5 groups and were able to account for 48 of the 50 pronghorn that were released in 2017. This is extremely good news for the pronghorn as they have survived much of the winter and most will likely survive to the reproductive season.

Future Needs

Future needs include the continued cooperation of private and state officials to coordinate the monitoring and success of our pronghorn both on and off the Reservation. In particular, we will need close monitoring of the pronghorn that move away from the Reservation as they disperse from winter groups and seek out fawning grounds. It will take much more effort to identify recruitment form these translocated pronghorn as they move into this solitary rearing season. In addition, the help of WDFW staff to identify and coordinate with private land owners will be pivotal for the success of the pronghorn. Although the tribe will likely remain a primary contact for future complaints and issues, a close coordination with WDFW will aid in a prompt and appropriate response. Attached are the most recent locations of all the pronghorn in an excel spreadsheet and a map.

The capture and translocation of an additional 48 pronghorn was approved by the Nevada Wildlife Commission. These animals will most likely be captured during the winter of 2018-19. Additional support is needed to fund GPS collars for this capture. We hope to again collar every adult pronghorn that is captured. As with previous efforts, volunteers will be requested in order to make sure enough hands on the ground to quickly process and handle these new animals.

Appendix 1. Most recent locations of all remaining collared individuals as of 1-18-18.



Appendix 2. Most recent locations of remaining collars as of 1-18-18.

NO	CollarID	UTC_DATE	UTC_TIMELMT_DATE	LMT_TIMI	Origin	MAIRBU_VECEF_X	ECEF_Y	ECEF_Z	LATITUDE	LONGITUDE	MOR_STATUS
1	28109	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.44 3.60	-2220237	-3828077	4578161	46.1647046 -120.1131994	normal
3	28111	1/18/2018	10:01:37	1/18/2018 02:01:37	Globalstar	3.60 3.76	-2218020	-3833758	4574979	46.1201928 -120.0515201	normal
4	28112	1/18/2018	10:01:08	1/18/2018 02:01:08	Globalstar	3.52 3.68	-2218148	-3840281	4569373	46.0482036 -120.0107492	normal
6	28114	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.68 3.76	-2232448	-3827193	4573425	46.1003178 -120.2555296	normal
7	28115	1/18/2018	10:01:08	1/18/2018 02:01:08	Globalstar	3.52 3.68	-2218014	-3833784	4574951	46.1198918 -120.0512845	normal
8	28116	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.52 3.68	-2220592	-3827899	4578150	46.1644793 -120.1183315	normal
9	28117	1/18/2018	10:01:00	1/18/2018 02:01:00	Globalstar	3.60 3.68	-2220230	-3828070	4578169	46.1648165 -120.1131664	normal
10	28118	1/18/2018	10:00:39	1/18/2018 02:00:39	Globalstar	3.60 3.68	-2232439	-3827198	4573425	46.1003192 -120.2553965	normal
11	28118	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2220200	-3828103	4578146	46.1645856 -120.1126161	normal
12	28118	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.52 3.68	-2220455	-3827944	4578164	46.1647600 -120.1165049	normal
14	28122	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2236787	-3824759	4573507	46.1002681 -120.3198543	normal
15	28123	1/18/2018	10:01:06	1/18/2018 02:01:06	Globalstar	3.60 3.76	-2220230	-3828084	4578158	46.1646694 -120.1130755	normal
16	28124	1/18/2018	10:01:01	1/18/2018 02:01:01	Globalstar	3.52 3.68	-2220218	-3828079	4578172	46.1648237 -120.1129736	normal
17	28125	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.68 3.76	-2232455	-3827180	4573418	46.1003240 -120.2556925	normal
18	28125	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2218046	-3833798	4574919	46.1195098 -120.0515521	normal
19	28127	1/18/2018	10:01:09	1/18/2018 02:01:09	Globalstar	3.52 3.68	-2218011	-3833769	4574965	46.1200730 -120.0513481	normal
20	28128	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2220215	-3828093	4578163	46.1646988 -120.1128490	normal
23	28131	1/18/2018	10:01:01	1/18/2018 02:01:01	Globalstar	3.60 3.76	-2232447	-3827188	4573426	46.1003553 -120.2555510	normal
24	28132	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2220235	-3828098	4578134	46.1644250 -120.1130406	normal
25	28133	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.52 3.68	-2218038	-3833796	4574924	46.1195781 -120.0514755	normal
26	28134	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2220593	-3827895	4578158	46.1645484 -120.1183687	normal
27	28135	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2218025	-3833756	4574970	46.1201317 -120.0515891	normal
28	28136	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.52 3.60	-2220228	-3828094	4578146	46.1645450 -120.1129881	normal
29	28137	1/18/2018	10:01:06	1/18/2018 02:01:06	Globalstar	3.60 3.76	-2236794	-3824770	4573501	46.1001462 -120.3198606	normal
30	28138	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2237038	-3824580	4573556	46.1007539 -120.3238246	normal
31	28139	1/18/2018	10:00:56	1/18/2018 02:00:56	Globalstar	3.52 3.68	-2220219	-3828082	4578169	46.1647849 -120.1129653	normal
32	28140	1/18/2018	10:00:37	1/18/2018 02:00:37	Globalstar	3.60 3.68	-2218017	-3833788	4574945	46.1198222 -120.0512922	normal