

MANAGEMENT UNIT 11A - NINE MILE /ANTHRO

Boundary Description

Duchesne and Uintah counties - Boundary begins at Duchesne and Highway US-191; then southwest on US-191 to the Argyle Canyon Road; southeast on this road to the Nine Mile Canyon Road; east along this road, to its end near Bulls Canyon; south from the end of the road to Nine Mile Creek; east along this creek to the Green River; north along this river to the Duchesne River; northwest along this river to Highway US-40; west on US-40 to Duchesne and beginning point (excludes all Ute Indian Tribal lands within this boundary).

Management Unit Description

The 1997 Utah Big Game Annual Report identifies 639,228 acres of land within management unit 11A. The Bureau of Land Management is responsible for 43% of the land area, U.S. Forest Service lands are 16%, State of Utah lands are 5%, Indian lands are 14%, and private lands are 21% (Evans et al. 1997). There is a long and gradual northerly slope to the Anthro Mountain terrain, which lends itself to an abundance of winter range. The long slopes are covered by pinyon-juniper woodland with natural openings of sagebrush. Grassy openings are often found in the drainages. Some ridge tops are covered with black sagebrush. Summer range is limited with most of the high country being comprised of open sagebrush slopes and scattered patches of aspen. Most of the winter range in the unit is available even in severe winters. The upper limits for winter range are generally considered between 8,000 and 8,500 feet. The desert country below 4,000 feet is seldom used by migrating deer.

Livestock Grazing

Cattle grazing is the major activity occurring on Forest Service managed lands within management unit 11A. Oil and gas exploration and drilling with their associated roads and year-round activity are the prominent activities taking place on the lower ends of the ridges. These lands are administered by the BLM and Ute Indians. Firewood cutting is also an important use on the Ute Indian lands.

Information on the current livestock grazing program was provided by the Ashley National Forest. The Cottonwood allotment, where study 11A-1 is located, is a 2-unit deferred rotation system with 326 head of cattle from June 16 to October 15. Prior to 1981, the allotment was generally grazed season long. Study 11A-2 is in the Anthro Mountain allotment and is grazed by 481 head of cattle under a 7-unit rest-rotation system from June 1 to October 15. The Antelope Winter allotment, where study 11A-3 is located, is a 3-unit deferred rotation system with 200 head of cattle grazing the allotment from December 1 to March 23.

Big Game Management Objectives

A small, but increasing number of elk constitute the Anthro herd. It has been hunted under a bull only permit system since 1978, but was separated from the larger Avintaquin-White River herd unit in 1983. The elk herd is managed as a limited entry hunting area with an emphasis on quality hunting by maintaining low hunter numbers and a high percentage of mature bulls in the population. The high for bull permits came in 1990 with 22 permits allowed. In 1991 through 1994 13-15 permits were allowed, only 9 in 1995, 11 in 1996 and 1997, 13 in 1998 and 1999, 12 in 2000, and 10 in 2005. Hunter success is usually high. Elk herd management objectives, as of 2001, call for a target winter herd size of 1700 animals shared between the units 11A and 11B with a minimum post season bull to cow ratio of 8:100, with at least 4 bulls being 2 ½ years of age or older.

Deer numbers on the Anthro Mountain unit continue to be relatively low. Buck harvest averaged 161/year from 1979 to 1983 and then doubled to an average annual harvest of 387 bucks from 1984 to 1988. From

1989 to 1991, buck harvest numbers steadily declined from a high of 579 in 1988 to 237 in 1991. From 1991 to 1996, the buck harvest numbers remained fairly constant with an average of 183/year. Success has remained fairly constant over all years at around 33% (Evans et al. 1997). In 2001, the deer herd unit 11 plan objectives (which include both 11A and 11B) are for a winter population of 8,500 with a buck to doe ratio of 15:100, with at least 30% of the bucks with 2 points or larger (DeBloois et al. 2001).

Unfortunately, the pellet transects are no longer maintained so deer days use per hectare estimates for key areas are unavailable. Because of these changes in big-game management data gathering activities, pellet-group transect data has been incorporated into each of our transect monitoring activities since 1997.

Pronghorn are also present within the study area. They have been observed on Myton Bench and on the pinyon-juniper and sagebrush ridges of Lower Cottonwood and Antelope Canyons. Buck hunting was first permitted in 1978. In 1997, 20 bucks were harvested, 42 in 1998, 50 in 1999, and 46 in 2000 (DeBloois et al. 2001).

Study Site Description

The Upper Cottonwood Ridge (11A-1) study samples an aspen type at 9,200 feet, while the Wirefence Canyon (11A-2) and Chokecherry Canyon (11A-3) studies are located in the sagebrush/grass type. These studies were established in late September of 1982, then re-read in late July 1988. Two additional studies were established in early August 1988, which sample representative winter range for the area. The Cottonwood Canyon (11A-4) study is on DWR land, while the Nutters Canyon (11A-5) study is apparently on the Uintah and Ouray Indian Reservation (it was originally thought to be on BLM). They are both located in naturally open sagebrush valleys surrounded by pinyon-juniper woodland. All sites were reread in 1995, 2000, and 2005 with the exception of study number 11A-1 which was not read in 2000 or 2005.

SUMMARY

WILDLIFE MANAGEMENT UNIT 11A

Summer/transition range on this unit is sampled by two sites, Wirefence Canyon (11A-2) and Chokecherry Canyon (11A-3). Wirefence Canyon and Chokecherry Canyon both sample high elevation mountain big sagebrush areas. The soil trends on both sites were stable. Browse trend for Wirefence Canyon was down while Chokecherry Canyon was stable. In both cases, the density of mountain big sagebrush had decreased, likely a product of the exceptionally low precipitation from 2001 and 2003 which added to the effects of the extended drought. The herbaceous understory of both sites improved, Wirefence Canyon was up and Chokecherry Canyon was slightly up. This increase in herbaceous understory was from an increase in perennial grasses, a response to higher precipitation levels in 2004 and the spring of 2005.

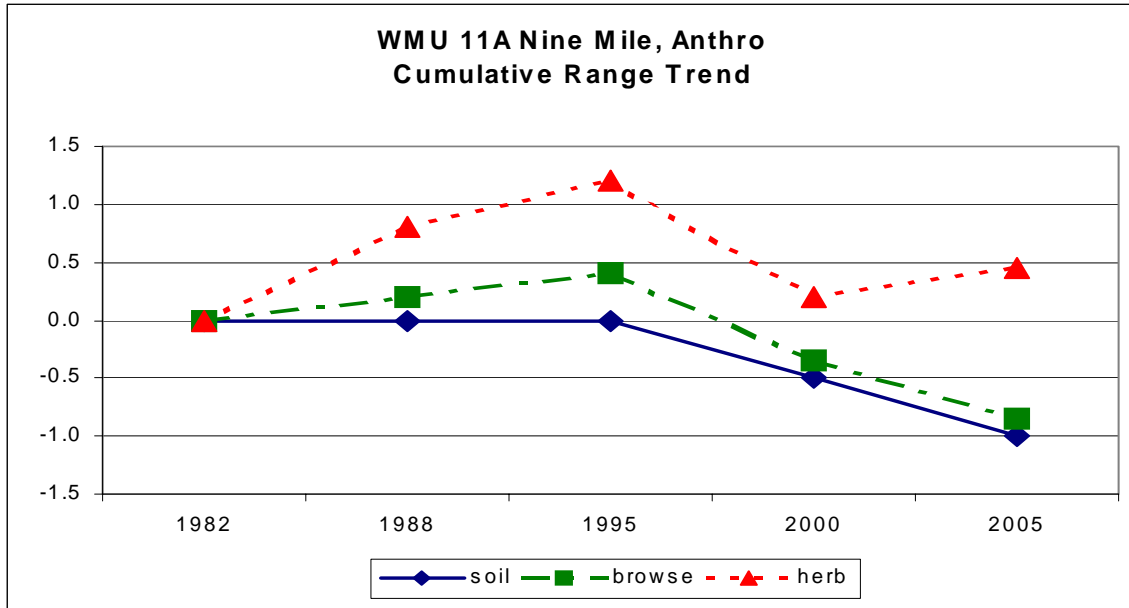
Cottonwood Canyon (11A-4) and Nutters Canyon (11A-5) sample winter ranges within the unit. In both cases, the soil trend was slightly down. Both sites showed an increase in bare ground and decrease in cryptogamic cover. The browse trend for the Cottonwood Canyon site was up and that of the Nutters Canyon site was down. The Nutters Canyon site showed a massive black sagebrush dieoff, likely a delayed product of the low precipitation from 2001 to 2003. The perennial herbaceous understory trend for both Cottonwood Canyon and Nutters Canyon was slightly down. The major herbaceous component for both sites was the perennial grasses which makeup 90% or more of the total herbaceous perennial cover. Forbs have always been a minor component of the herbaceous understory on these two sites.

Pellet group data showed changes in the use of elk and deer. Elk use was down on all sites. Deer use increased on all sites except Cottonwood Canyon (11A-4). Sagegrouse pellet groups were identified on the Wirefence Canyon site (11A-2) for the first time in 2005.

In summary, although pinyon and juniper stands dominate much of the winter range, there are sufficient natural openings to provide good quality winter range. There are pinyon-juniper sites with the potential after treatment, to provide more forage during the fall-spring period. The summer range remains the limiting factor, especially for deer.

Cumulative Range Trends -- 11A Nine Mile, Anthro

	1982	1988	1995	2000	2005
soil	0	0	0	-0.5	-1.0
browse	0	0.2	0.4	-0.4	-0.9
herb	0	0.8	1.2	0.2	0.5



Trend Summary

	Category	1982	1988	1995	2000	2005
11A-1 Upper Cottonwood Ridge	soil	est	0	0	NR	NR
	browse	est	0	0	NR	NR
	herbaceous understory	est	+2	+2	NR	NR
11A-2 Wirefence Canyon	soil	est	0	0	0	0
	browse	est	0	0	-2	-2
	herbaceous understory	est	0	+1	-2	+2
11A-3 Chokecherry Canyon	soil	est	0	0	0	0
	browse	est	+1	+1	+1	0
	herbaceous understory	est	+2	0	-1	+1
11A-4 Cottonwood Canyon	soil		est	0	-1	-1
	browse		est	0	-2	+2
	herbaceous understory		est	0	0	-1
11A-5 Nutters Canyon	soil		est	0	-1	-1
	browse		est	0	0	-2
	herbaceous understory		est	-1	-1	-1

	Category	1982	1988	1995	2000	
Average Range Trend	soil	0	0	-0.5	-0.5	
	browse	0.2	0.2	-0.8	-0.5	
	herbaceous understory	0.8	0.4	-1	0.3	
Total Number of Sites Read		3	5	5	4	4

(-2) = down, (-1), slightly down, (0) = stable, (+1) = slightly up, (+2) = up
 (est) = site established, (NR) = site not read

Precipitation graphs for the Anthro and Range Creek units. Data is percent of normal precipitation averaged for weather stations in Sunnyside, Wellington, and Duchesne (Utah Climate Summaries 2005).

