

WILDLIFE MANAGEMENT UNIT 13B - DOLORES TRIANGLE

Boundary Description

Grand County - Boundary begins at the Colorado River and Utah-Colorado state line; then southwest along the Colorado River to the Dolores River; east along the Dolores River to the state line; north along the state line to the Colorado River and beginning point.

Herd Unit Description

The Dolores Triangle unit is formed by the Colorado River, the Dolores River, and the Colorado-Utah state line. Topography is varied with relatively flat mesas above 7,000 feet, large rocky rough canyons and broken country at the middle elevations, with low desert along the Colorado River. Four drainages dominate the area. Granite Creek flows into the Dolores River; Ryan Creek, Coates Creek, and Little Dolores River empty into the Colorado River. There are ranches scattered throughout the area. Fruita and Grand Junction, Colorado are the closest municipalities. Access to the unit is through Colorado by way of Glade Park or by fording the Dolores River near its confluence with the Colorado River at Dewey. However, fluctuating water levels and undulating bottom contours make crossing the river hazardous. The unit is comprised of 94,100 acres of winter range and 17,520 acres are classified as non-range. There is not any habitat within this unit that would be classified as summer range. The Bureau of Land Management manages 88% (82,900 acres) of the unit. The State of Utah owns 9% (8,600 acres) of the unit and 3% (2,600 acres) is privately owned (Evans et al.1997).

The Dolores Triangle unit serves as winter range for deer which spend the remainder of the year in Colorado's Pinon Mesa area. Few deer reside in the unit year-round, those that do are found along the Colorado River. Concentrated areas for deer during normal winters are Steamboat Mesa, Lower Steamboat Mesa, Fish Park, Big Triangle, Ryan Park, and Granite Park. Only during severe winters with abnormally heavy snowfall are deer forced to disperse into the lower desert range where forage quality is poor. Severe winter range and normal winter range are not separated into different categories because much of the land to the east is too high for normal winter range. Therefore, the whole unit could be considered critical. The ranches with agricultural land scattered throughout the herd unit offer valuable forage to the deer in the spring and fall.

Coles and Pederson (1967) identified and described five vegetation types which make up the winter range on the unit. The desert shrub type is dominated by blackbrush which occupies the lower portions of this winter range. This type is most important during severe winters although few desirable forage species are found within it. The grass type is found in the Granite Park and Steamboat Mesa areas. These were once large sagebrush parks, but have undergone a conversion to grasses (much of it cheatgrass) after overgrazing during the wrong time of the year (fall and/or spring), wildfires (reoccurring more often after the increase in weedy species), and sagebrush treatments. These areas were formerly important deer wintering areas which now receive increased use by elk. The sagebrush type is found above the desert shrub type, up to and within the pinyon-juniper woodlands. It provides important browse to both deer and livestock. The pinyon-juniper type, like the grass type, has undergone some changes due to competition with the mature trees, extended drought, and heavy use in some years. An understory of cliffrose and black sagebrush has diminished somewhat through the years and is the least productive vegetation type on the unit. This type is common on the slopes and higher mesas. The pinyon-juniper-sagebrush type occupies the upper portions of the winter range and provides important cover and forage for wildlife. In recent years, many wildfires have burned a large number of acres of this vegetation type.

Livestock Grazing

Livestock grazing is the single-most important land use in the area. Winter sheep use began in the early 1900's. Now, most of the AUM's (about 7,500) the BLM allocates for livestock use is for cattle, although some winter sheep use still occurs. The evolving dominance of pinyon-juniper along with excessive use by livestock and big game have led to deteriorating range conditions. Both livestock and deer numbers were reduced in the past to help improve the range. Although some problems still exist, range conditions appear to be slowly improving according to Jense et al (1986). Range conditions were in a state of improvement in the mid 1980s, but continued drought has caused deterioration in sagebrush communities. An increase in precipitation in the autumn of 2004 and the spring of 2005 have and will likely continue to improve declining range conditions.

This unit presents some unique deer and elk management problems. Since this unit functions primarily as winter range for big game which spend the remainder of the year in Colorado, effective management requires coordinated efforts with the Colorado Division of Wildlife. Also, since deer and elk are present mostly in the winter when snow depth may complicate access to the area, obtaining population data is often difficult. Because the presence of deer and elk depends on weather conditions prior to and during the hunt, hunting as a management tool is not always effective. If heavy snows have driven the deer onto the unit, hunter access is usually a problem. Thus, the number of deer harvested and percentage of hunter success are often more related to weather conditions than to deer abundance.

Big Game Trends

Beginning in 1969, the deer herd unit showed a significant drop in bucks harvested. Between 1969 and 1975, either-sex general season and control hunts accounted for an average yearly harvest of 403 bucks and 207 does. Previously, from 1955 through 1968, the buck harvest averaged near 1,500 bucks/year. Under buck-only hunting regulations between 1976 and 1985, the average harvest was 89 bucks/year. In 1983, control hunts for does were implemented and have accounted for an average of 122 does/year harvested through 1990. Antlerless permits have not been utilized since 1990. The buck harvest numbers decreased again in 1987, and from 1990 to 1995 the herd unit was made a draw unit with 26-27 hunters afield and an average of 22 bucks/year harvested. As of 2001, the current management objectives are a winter population objective of 6,400 deer and postseason objectives of 25 bucks/100 does and 40% of the bucks with 2 points or greater (DeBloois et al. 2001).

Elk that winter in this area come from Colorado's unit 40, which is managed for quality hunting. There have been minimal numbers of elk harvested by Utah hunters in this unit. Colorado would like to gradually increase these elk numbers from an estimated 1,700 animals in the late 1990s to 3,000 animals sometime in the future. About 50% of the elk population use Utah as winter range and are expected to continue to do so. The current management objectives are to maintain an optimum elk herd population without degrading the health of the range, and thereby complement Colorado's management goals.

Trend Study Description

Nine interagency range trend studies were established during June 1986. The study sites were selected the previous month by local interagency personnel. The studies were read again in May of 1995, 2000, and 2005.

SUMMARY

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All 9 sites in the herd unit 13B, Dolores Triangle, were read in 1986, 1995, 2000, and 2005. Four of the 9 studies in the unit sample pinyon-juniper chainings completed in 1968. The chaining sites include Fish Park (13B-3), Ryan Park (13B-6), Steamboat Mesa North (13B-7), and Steamboat East Bench (13B-9). Four sites are considered sagebrush/grass sites. These sites include Lower Westwater (13B-1), Upper Westwater (13B-2), Buckhorn Draw (13B-5), and Steamboat Mesa South (13B-8). The final site, Red Cliffs (13B-4), is classified as a blackbrush site. The Trend Summary table summarizes trends for all sites for all years.

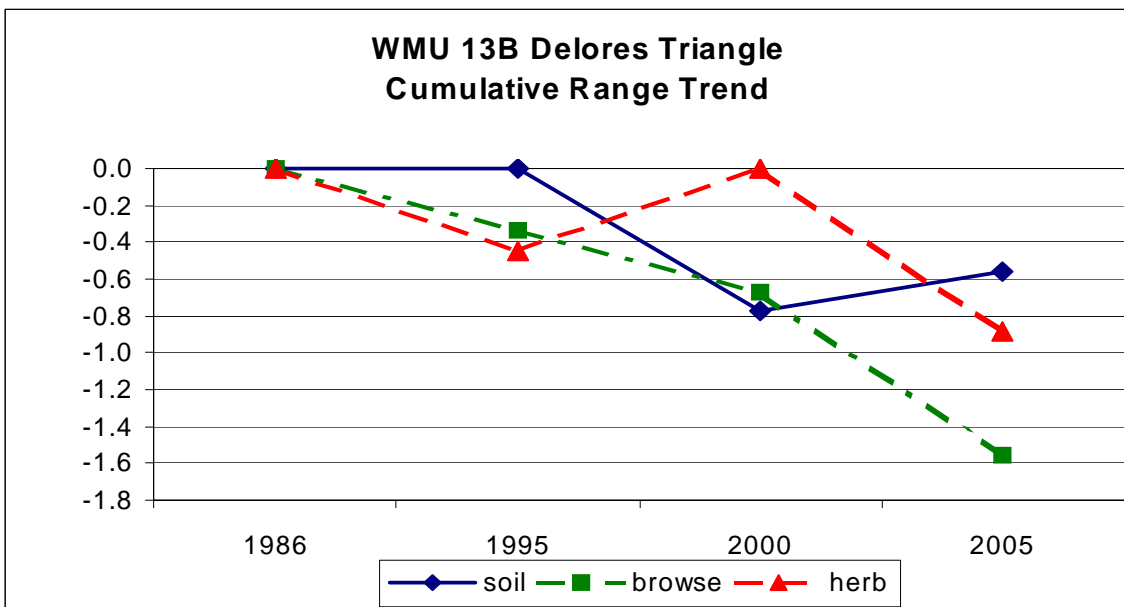
In 2005, the soil for most sites were stable or improving. This is due to improved precipitation in 2005 and higher ground cover. Browse trends have steadily declined over the past 10 years. Wildfire at Upper Westwater and Ryan Park has completely removed palatable browse species. Big sagebrush has nearly completely died out at Lower Westwater due to lack of recruitment. Wyoming Big sagebrush is the key browse species on five sites (Basin and Wyoming big sagebrush mixture at Fish Park). The following values with averaged data from 1995, 2000, and 2005 illustrate the declining trends of big sagebrush.

- Big sagebrush density (plants/acre).....1,840, 2,230, and 1,150.
- Percent decadence12%, 18%, and 46%.
- Percent dying.....9%, 8%, and 33%.

Herbaceous trends declined sharply in 2005. Higher precipitation resulted in higher amounts of cheatgrass. Average sum of nested frequency for perennial grasses decreased 26% from 2000 and was 67% higher for cheatgrass. Positively, sum of nested frequency of perennial forbs increased 68% from 2000-2005, but forbs make up a relatively small part of the vegetative composition in this area.

Cumulative Range Trends -- WMU 13B Delores Triangle

	1986	1995	2000	2005
soil	est	0.0	-0.8	-0.6
browse	est	-0.3	-0.7	-1.6
herb	est	-0.4	0.0	-0.9
	9 sites	9 sites	9 sites	9 sites



TREND SUMMARY

Site No. and Name	Category	1986	1995	2000	2005
13B-1 Lower Westwater	soil	est	0	-1	-1
	browse	est	-2	-2	-2
	herbaceous understory	est	-2	-1	-2
13B-2 Upper Westwater	soil	est	0	-1	0
	browse	est	-2	0	0
	herbaceous understory	est	0	0	0
13B-3 Fish Park	soil	est	0	0	0
	browse	est	+2	+2	-2
	herbaceous understory	est	-1	0	-1
13B-4 Red Cliffs	soil	est	0	0	0
	browse	est	0	0	0
	herbaceous understory	est	-2	+2	-2
13B-5 Buckhorn Draw	soil	est	0	-1	+2
	browse	est	+1	0	-2
	herbaceous understory	est	0	+1	-2
13B-6 Ryan Creek	soil	est	0	-2	0
	browse	est	-2	0	0
	herbaceous understory	est	0	+1	0
13B-7 Steamboat Mesa North	soil	est	0	0	-1
	browse	est	0	0	0
	herbaceous understory	est	+1	+1	0
13B-8 Steamboat Mesa South	soil	est	0	-2	+2
	browse	est	0	+2	-2
	herbaceous understory	est	0	+1	-2
13B-9 Steamboat Mesa East Bench	soil	est	0	0	-1
	browse	est	0	-1	0
	herbaceous understory	est	0	-1	+1

est = established, (-2) = down, (-1) = slightly down, (0) = stable, (+1) = slightly up, (+2) = up, (NA) = not applicable, no browse on site

	Category	1986	1995	2000	2005
Average Range Trend	soil	est	0.0	-0.8	0.2
	browse	est	-0.3	-0.3	-0.9
	herbaceous understory	est	-0.4	0.4	-0.9
Number of Sites Read		9	9	9	9

est = established, (-2) = down, (-1) = slightly down, (0) = stable, (+1) = slightly up, (+2) = up, (NA) = not applicable, no browse on site

Precipitation graphs for the Delores Triangle unit. Data is percent of normal precipitation averaged for weather stations in Moab and Castle Valley (Utah Climate Summaries 2005).

