Trend Study 10-25-00

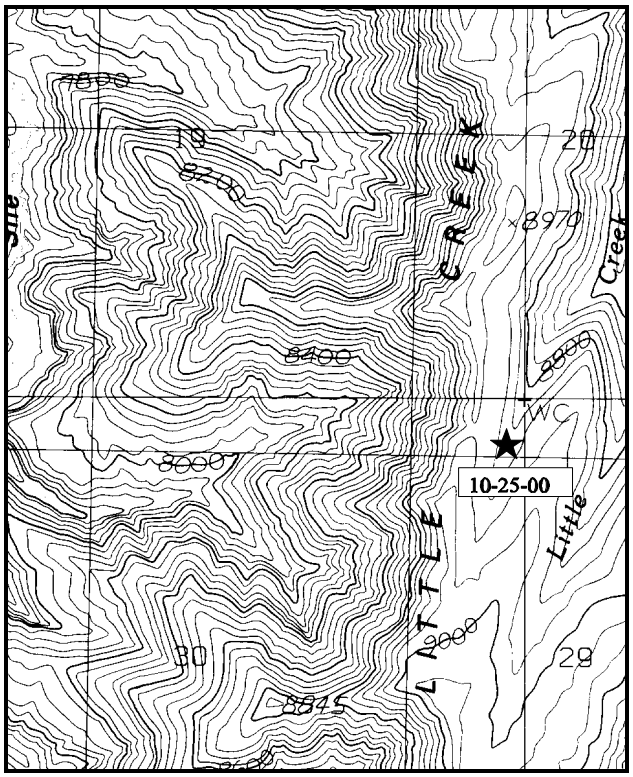
Study site name: Little Ridge . Range type: Meadow .

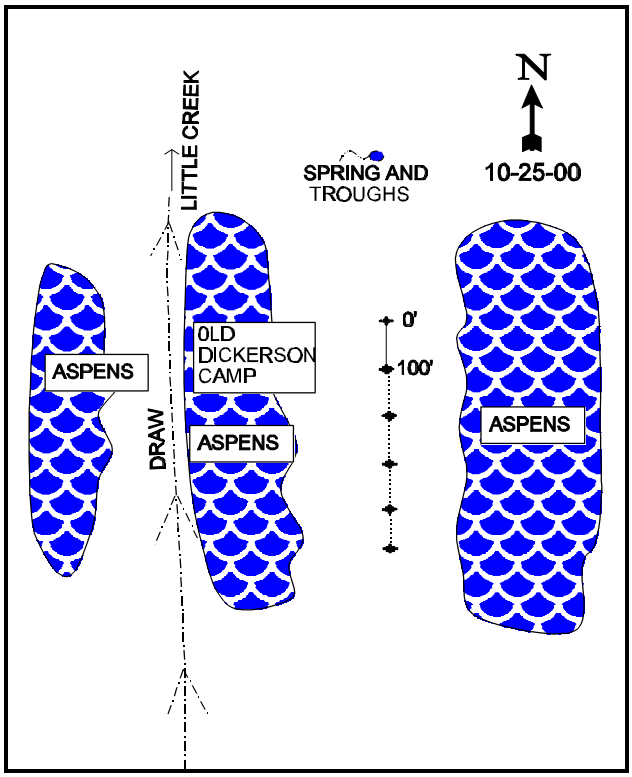
Compass bearing: frequency baseline 174°M .

First frame placement on frequency belts 5 feet. Frequency belt placement; line 1 (11ft), line 2 (34ft), line 3 (59ft), line 4 (71ft), line 5 (95ft).

LOCATION DESCRIPTION

Go up Little Creek Trail (from east Willow Creek) to forks at head. Take the right fork (with water). Go up to the spring with trough, go up trail in draw to right where it opens up in park with aspens on both sides. You can see remains of camp on ridge to the left. Go up to the ridge. The study is marked with a witness post. The 0 foot baseline stake is 4 ½ paces at 240/.





Map Name: Bogart Canyon . Diagrammatic Sketch

Township 18S , Range 21E , Section 20

DISCUSSION

Trend Study No. 10-25 (16B-12)

*** This site was not read in 2000. Text from the 1995 Utah Big Game Range Trend Studies report is included. Consult the 1995 report for maps and data tables.

This new transect established in 1995 samples a dry grass park on Little Creek Ridge in the roadless area of the Book Cliffs. Elevation at the site is approximately 8,800 feet with a slightly northern aspect and a slope of only 4%. The slopes surrounding the site are covered with conifers and patches of aspen. The Little Creek Ridge area has been historically severely grazed with the exception of the last 5 years, when livestock have been excluded.

Soil on the site appears very deep, light brown in color, and finely textured. The soil surface has rock and pavement cover of about 2%. Vegetation cover is estimated at 50% and provides excellent protection for the soil. Litter cover is also high and estimated at 64%. There is some bare ground (11%) which is likely the result of past grazing pressure. Due to the abundant vegetative and litter cover and lack of steep slope, there are no signs of active erosion at this time.

Although mountain big sagebrush is the most numerous browse on the site, snowberry offers the most browse cover. The mountain big sagebrush population is estimated at 700 plants/acre with a majority (80%) being classified as young plants. Biotic potential for this population is tremendous this year with an estimated 2,460 seedlings/acre. This is 3½ times as many plants as the entire population of mature and young combined. None of the plants sampled exhibited any hedging and vigor was reported as good. Snowberry density is estimated at 280 plants/acre, of which, 71% were classified as mature. There appears to some moderate hedging on these plants, but vigor remains good.

The dominant grass on the site is needle-and-thread which accounts for 39% of the total vegetative cover. Although this area has been rested from livestock grazing for five years, there is more needle-and-thread grass than likely desired. The increaser Kentucky bluegrass is not as abundant as in other open grass parks in the surrounding areas. Letterman needlegrass, big mountain brome, Columbian needlegrass, and carex are all present but in low abundance.

Most forbs species are low growing increasers and/or invaders with low forage values. The exception to this is thickleaf peavine which is moderately sought after by wildlife and livestock. Annual forbs are scattered throughout and contribute only 4% to the total vegetative cover. This composition of many increaser forbs is due to the high grazing pressure exerted on this site historically.

1995 APPARENT TREND ASSESSMENT

The mountain big sagebrush population density is quite low at this time, but could increase if the seedlings reported in 1995 become established. Browse trend at this time is stable with the possibility of the mountain big sagebrush population increasing. The herbaceous understory is dominated by grasses, with the most dominate being needle-and-thread grass. This is likely not the preferred grass for this area and may decrease in time with increased competition from other more desirable species. The forbs are mostly low growing species with low palatability, but due help protect soils from eroding downslope. Therefore, the herbaceous understory trend is stable although it is made up mostly of increaser species, which should change through time with no more livestock use. There are no signs of soil movement and there is abundant vegetative and litter cover. These factors lead to a stable soil trend.