United States Department of Agriculture

Forest Service Coconino NF

Blue Ridge Ranger District HC 31, Box 300 Happy Jack, AZ 86024 (602) 477-2255

Reply to: 2210

Date: September 21, 1991

Subject: Bar T Bar Allotment Inspection

To: District Ranger, Blue Ridge RD

The Bar T Bar Allotment was inspected during the past growing season. Many of the inspection visits were in association with the ongoing forage study, while others were to assess production in various pastures or to examine livestock grazing practices.

Cool season plant production was good this spring on the pinyon and juniper lands, with growth starting in late February and continuing until early May. In the late spring, cool season plants associated with the ponderosa pine and mixed conifer zone started to put on forage growth. This continued until mid-June when the cool season plants shut down growth. Late spring and early summer rains provided moisture for better than average plant growth. Warm season plants, taking advantage of good moisture conditions, started growing in July. Although precipitation was slightly below average as recorded at the Flagstaff weather station, the Bar T Bar Allotment received wide spread rain from large continuous cloud blankets.

The forage cages, placed on the pinyon and juniper grasslands in April, revealed approximately 40% average use by elk on cool season regrowth when read in early May. Data for these areas, at the time of new cage placement, suggested that use levels were considerably higher than, 40%. However, this data could not be substantiated without comparison site information.

Cages set last fall were evaluated in early May. Data from these sites showed use by elk that approached 70% to 80% on cool season plants in the pinyon and juniper lands.

The Arizona Game and Fish Department studied the location and distribution of elk in the vicinity of the Quail Unit by doing aerial fixed-wing counts of elk. The data, from flights which started in October of 1990 and ended in June of 1991, revealed maximum animal concentrations during the record cold wave associated with the snows of December. In the late winter and early spring, with the onset of cool season forage growth, elk numbers rose until they peaked at approximately 600 animals on April 5. One month later, there were still 300 head using the area. Over the time period of May 6 through June 14 the majority of these animals left for their summer ranges. It is assumed, based upon the information provided by the forage utilization cages, that the Melatone, Green Howard, and Broomy pastures showed similar number patterns.

District Ranger, Blue Ridge RD

Visits in July and August to the Allotment were to check on compliance with the Allotment Management Plan and the 1991 letter of annual instructions. Livestock were in the assigned pastures and moved to other pastures as per the instructions. Forage growth, which did not meet expectations or utilization which occurred at rates more rapid than anticipated, caused changes in the planned schedule. All schedule adjustments were discussed in advance with the permittee and verbally approved.

Forage growth during the summer exceeded the average production levels of the past three years. The improved growth of this season, along with the permittee's voluntary stocking reduction to 40% of permitted levels, has allowed forage plants on the summer ranges to replenish their root stocks. This year's rest and deferment after summer precipitation has benefited the forage resource base.

Future inspections of the Allotment will occur in October with the final reading of the forage utilization cages. At that time, the cages will be reset on new sites for the collection of winter and spring forage data.

DARYL HERMAN Range Staff Officer

DHerman:se 9/24/91