



United States
Department of
Agriculture

Forest
Service

Coronado National Forest
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File Code: 2210

Date: February 04, 2007

Route To:

Subject: Helvetia Allotment Proposed Action


To: District Ranger, NEPA Team Leader, Permittee

The Helvetia Allotment is scheduled to undergo NEPA analysis this year. The following is a management proposal for your consideration.

Current Management: The Helvetia Allotment is currently permitted to Santa Rita Ranch Inc. for 60 cattle year-long (CYL), and is located east of Green Valley, AZ on the west slope of the northern end of the Santa Rita mountain range. The east boundary of the allotment is the crest of the Santa Rita Mountains. The west boundary is the Santa Rita Experimental Range (SRER). The allotment contains 2,229 acres of which 1,231 are considered capable for grazing. Elevation ranges from 4200 feet to 6000 feet. Topography varies from rolling to very steep slopes with most range capable for grazing found in the more moderate terrain. The primary vegetation type varies from oak woodland to semi-desert grassland with scattered stands of mesquite. Santa Rita Ranch Inc. has been the Helvetia permittee since December 1974.

The allotment consists of one pasture divided roughly in half by a large ridge and is currently run as a cow-calf, 3-pasture rotation (two Forest and one SRER pastures) with grazing occurring from September to April on forest lands. This management strategy has been in place since 1992. Prior to this the allotment was grazed year-round with approximately half the herd on the north end of the pasture and half in the south end. The permittee has done a good job managing this allotment as can be seen by the improving resource conditions and utilization not exceeding allowable levels.

Resource Conditions:

Resource conditions on the allotment are improving. The data we gathered Fall 2005 when compared to past data shows that the majority of the allotment is in fair to good range condition with upward or stable trends. One very evident and obvious change from the 1970 Range Analysis to current conditions is the presence of mann Lovegrass, an introduced exotic grass from South Africa that was widely seeded over the past few decades. This has changed the composition of perennial grasses, and accounts for the change in C2 from Good Condition to Fair, although cover, watershed health, and soil stability is either static or improving. Capacity estimates indicate a carrying capacity of 60 CYL or 720 Head Months (HM). These data coupled with utilization monitoring, actual use data, and precipitation totals for the past few years indicate that the stocking level is balanced with carrying capacity on this allotment.



CAPACITY

YEAR	DOCUMENT	ESTIMATED CARRYING CAPACITY
1970	Forest Service Allotment Analysis	720 HM
1989	Forest Service Prod./Utiliz.	554 -759 HM

CONDITION & TREND

Transect	1970 Veg	2005 Veg	1970 Soil Stability	2005 Soil Stability
C1	Fair ↓	Fair →	Fair →	Good ↑
C2	Good →	Fair →	Good →	Good →
P1	Good ↑		Good ↑	
P2	Good →		Good →	

UTILIZATION MONITORING

2002	2005
20 % use in C1 Key area	25% North Pasture
	35 % South Pasture

Annual Precipitation(inches)

Location	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Mean	Min. Max.
Anvil Ranch, AZ	9.54	8.47	14.37	7.56	11.13	10.41	6.42	12.81	8.76	6.16	12.10*	4.26* 24.93*
Santa Rita Exp Range, AZ	15.31	20.05	20.42	20.77	21.99	24.65	18.46	23.46	19.01	16.08	22.13^	10.51^ 34.50^
Tumacacori Natl. Mon., AZ	10.83	19.12	16.07	9.92	19.23	16.62	9.33	12.17	10.75	12.55	16.02*	7.49* 29.04*
Nogales 6N, AZ	10.79	14.84	17.98	13.02	25.85	14.53	8.06	16.61	10.66	11.90	17.22+	8.06+ 31.84+

* for data covering 1948-2005.

^ for data covering 1950-2005.

+ for data covering 1952-2005.

Actual Use Numbers

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Auth. Use	440 HM	400 HM	400 HM	440 HM	440 HM	412.5 HM	464 HM	420.5 HM	412.5 HM	412.5 HM	412.5 HM
Actual Use	606 HM	600 HM	400 HM	440 HM	440 HM	319 HM	464 HM	420.5 HM	412.5 HM	302 HM	55 HM

Proposed Management:

The proposed action is a variation of current management. Authorized HMs would stay the same. Livestock grazing would occur for a two to four week period each year, to occur at different times each year. This will provide for growing season rest practically every year. Cattle (~600 head) would move from North Pasture to South Pasture and then move off the allotment, where the herd spends the balance of the grazing year rotating through pastures on the SRER. Salt and supplement will be placed away from water and low areas where cattle tend to congregate. Salt and supplement areas will be moved often to improve livestock distribution. Key areas for future monitoring activities will be selected and guidelines for use in the allotment will be established annually during development of Annual Operating Instructions (AOI) with the permittee. Livestock rotation will be accomplished through permittee and agency designed rotation schedules.

This new high intensity, short duration rotation pattern will allow for a high amount of rest and recovery. Target utilization levels will be 30 to 40% with a maximum allowable utilization of 45%. Pasture moves will be primarily controlled through monitoring of utilization levels, available water and ecological conditions. The permitted livestock level will be 720 HM.

Some new range improvements will be proposed. These will include two additional water troughs in the NW corner of the allotment near the Forest Boundary fence, which will be supplied by water lines and storage existing on the SRER. Maintenance and reconstruction of existing improvements will continue.



Kendall Brown
Range Staff

