



United States  
Department of  
Agriculture

Forest  
Service

Coronado National Forest  
Nogales Ranger District

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File Code: 2210

Date: March 29, 2007

Route To:

Subject: Thurber Allotment Proposed Action

To: District Ranger, NEPA Team Leader, Permittee

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

Current Management:

The Thurber Allotment is currently permitted to Singing Valley Ranch for 221 cattle year-long (CYL), and is located north of Sonoita, AZ along the east side of the Santa Rita mountain range. The west boundary of the allotment is the ridge above Barrel Canyon. The east boundary is Highway 83 and sections of private property. The northern boundary runs along the ridges just north of Oak Tree canyon, and the Southern boundary is Ophir Gulch. The allotment contains 4490 acres of which 4480 are considered capable for grazing. Elevation ranges from 4500 feet to 6000 feet. Topography varies from rolling hills to very steep slopes with most range capable for grazing found in the more moderate terrain. Oak woodland dominates over the entire allotment. There are three main watersheds on the allotment – Los Posos Gulch, Empire Gulch, and Oak Tree canyon.

Singing Valley Ranch has been the Thurber permittee since February 1989, at which time 221 head (CYL) was permitted. In 2003 the permittee reduced numbers to 20 due to resource conditions (drought). The permittee has not stocked back due to resource protection (continued drought) and personal reasons.

The allotment consists of twenty-one pastures, in which all are completely made up of forest lands. The allotment is currently run as a cow-calf; deferred rotation with grazing occurring throughout the year on forest lands. This management strategy has been in place since 1989. 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.

The Thurber allotment and the English allotment were combined in 1965. It was scheduled to be combined in 1959, but at the permittees request it was held off for several more years.

Resource Conditions:

Resource conditions on the allotment are improving. The data we gathered in fall 2006 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 1953 Range Analysis to current conditions is the presence of Lehmann 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 that is in balance with the permitted numbers of 221 CYL. 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***

<b>Allotment</b>	<b>YEAR</b>	<b>DOCUMENT</b>	<b>ESTIMATED CARRYING CAPACITY</b>
Thurber	1953	Forest Service Allotment Analysis	152
English	1958	Forest Service Allotment Analysis	69

### ***CONDITION & TREND***

<b>Transect</b>	<b>1953 Veg</b>	<b>1958 Veg (English Allot)</b>	<b>1995 Veg</b>	<b>2006 Veg</b>	<b>1953 Soil Stability</b>	<b>1958 Soil Stability (English Allot)</b>	<b>2006 Soil Stability</b>
C1	Good →		Good		Fair ↑		
C2	Fair →		Excellent	Good ↑	Fair →		Good ↑
C3	Good ↑		Excellent	Good →	Fair ↑		Excellent →
C3A		Fair ↑	Good			Good ↑	
C4	Fair ↓		Excellent	Good ↑	Fair ↑		Good ↑
P1				Good ↑			Good ↑
P2				Fair ↑			Excellent →
P3				Good ↑			Excellent →

### ***UTILIZATION MONITORING***

<b>1997</b>	<b>1998</b>	<b>2000</b>	<b>2003</b>	<b>2006</b>
15-25% in grazed pastures	<45% in grazed pastures	Buck	35% Mesa	<5% Bear
		N. Well	55% S. Forest	<5% Buck
		N. Well#2	50% Beargrass	<5% Mesa
		N. Basin	60% E. Flat	<5% N. Basin
		Horse	60% Home	<5% N. Well
		Flats	40% S. Basin	<5% N. Well#2
		N. Forest	55% N. Basin	<5% S. Basin
		<i>20-35% in these pastures</i>	45% N. Well#2	<5% S. Forest
			55% S.V Flat	<5% Veisir



*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*

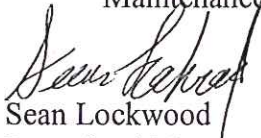
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Auth. Use	2689 HM	1947 HM	842 HM	858 HM	1702 HM	1620 HM	1980 HM	1920 HM	240 HM	240 HM	240 HM
Actual Use	2689 HM	156 HM	842 HM	858 HM	1702 HM	1620 HM	1980 HM	619 HM	240 HM	240 HM	240 HM

Proposed Management:

The proposed action is a continuation of current management. Authorized HMs would stay the same. Livestock grazing would occur on a deferred rotation. This will provide for growing season rest for each pasture periodically. 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.

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 221 CYL.

Maintenance and reconstruction of existing improvements will continue.



Sean Lockwood  
 Rangeland Management Specialist

