## Grazing on the Santa Rita Experimental Range Livestock Grazing Management & Research Activities

We are in the second year of a new livestock grazing management scheme was implemented on the Santa Rita Experimental Range (Santa Rita) under the supervision of Dr. George Ruyle, School of Natural Resources (<u>gruyle@ag.arizona.edu</u>) and in cooperation with Andrew McGibbon who owns the livestock. This new management began in November 2006 and it replaces the "Santa Rita Grazing System" experiment that was in place since 1972 (Martin and Severson. 1988. J. Range. Man. 41:291-295.)

The new scheme applies adaptive grazing management principles to establish expected dormant season grazing capacity based on summer forage production, and summer grazing periods based on avoiding the re-grazing of plants in the summer growing season. The adaptive management elements include 1) use of summer production values to re-adjust stocking rates each fall, 2) start and duration of the summer growing season to determine when livestock should be moved between pastures, and 3) flexible pasture use to support the variety of research projects being performed on the Santa Rita.

Currently, there are two herds moving through multiple pastures to consolidate livestock handling activities and more precisely manage grazing use. The large herd of ~500 animals will move through a combination of 18 pastures, 14 are located on the Santa Rita, and 1 on the Coronado National Forest, and 3 on Arizona State Lands. The small herd, ~60 animals will move through 11 pastures all but two are on the Santa Rita.

Dr. Ruyle and associates are measuring forage production and utilization, livestock movement patterns, and developing methods to forecast forage availability and likelihood of re-grazing plants in the summer growing season.

Researchers, instructors, and other interested parties are advised to consult the accompanying tables and maps to learn the specific location, timing and number of livestock expected in each pasture; as well as the actual use in those areas. Be aware that 1) some animals may appear in pastures outside these expected periods because of handling problems, 2) livestock use of unintended pastures is not shown in the report below, and 3) adjustment to timing and numbers can be made to accommodate research and instruction needs.

## Grazing on the Santa Rita Experimental Range page 2 of 5 Planned Livestock Grazing on the Santa Rita Experimental Range 01 November 2007 - 31 October 2008

Below are the projected livestock grazing days for the "large herd," "small herd," and "special herds" of livestock on the Santa Rita Experimental Range for the grazing year 01 November 2007 - 31 October 2008, and extended to 31 December 2008 for planning purposes. Projected grazing use is based on our current best estimates of available forage and the commencement of summer rains. The projected grazing dates as well as herd size may change as forage conditions change and monitoring data are analyzed. Assume accuracy of projected dates to increase as those dates become closer. See the Grazing Management Map (below) for spatial details. Questions may be addressed to George Ruyle (gruyle@ag.arizona.edu) or Mitch McClaran (mcclaran@u.arizona.edu).

## Last Plan Update: 31 October 2008

SRER Large Herd (Herd 1 on map)

Last Update: <u>31-October-2008</u>

			Proje	ected		Actual				
	Pasture	Herd Size (AU's)	Start Date	End Date	Grazing Days	Herd Size (AU's)	Start Date	End Date	Grazing Days	
2007	6D	500	01-Nov	09-Nov	9	517	01-Nov	09-Nov	10	
	6A	500	10-Nov	06-Dec	27	521	10-Nov	06-Dec	26	
	Helvetia*	500	07-Dec	21-Dec	15	515	07-Dec	26-Dec	20	
	6E	500	22-Dec	30-Dec	9	520	27-Dec	04-Jan	9	
2008	2N	500	31-Dec	04-Feb	36	490	05-Jan	05-Feb	31	
	2S	500	05-Feb	11-Feb	7	480	05-Feb	12-Feb	8	
	12A	500	12-Feb	15-Feb	4	478	13-Feb	16-Feb	4	
	12C	500	16-Feb	01-Mar	15	479	17-Feb	29-Feb	13	
	State*	500	02-Mar	30-Mar	29	442	01-Mar	31-Mar	31	
	Canoa S*	500	31-Mar	19-Apr	20	473	01-Apr	07-May	37	
	Canoa N*	500	20-Apr	29-Apr	10		Not split from Canoa S			
	12B	500	30-Apr	19-May	20	419	08-May	29-May	22	
	3	500	20-May	12-Jun	24	440	30-May	21-Jun	23	
	5S	500	13-Jun	10-Jul	28	455	22-Jun	21-Jul	30	
	5 Mid	500	11-Jul	20-Jul	10	425	22-Jul	31-Jul	10	
	5N	500	21-Jul	30-Jul	10	397	01-Aug	12-Aug	12	
	6B	500	31-Jul	09-Aug	10	445	11-Aug	21-Aug	11	
	15	500	10-Aug	19-Aug	10	460	22-Aug	31-Aug	10	
	6D	500	20-Aug	29-Aug	10	460	01-Sep	10-Sep	10	
	6A	500	30-Aug	08-Sep	10	463	11-Sep	20-Sep	10	
	Helvetia*	500	Closed to Grazing		0					
	6E	500	21-Sep	25-Sep	5	485	21-Sep	25-Sep	5	
	2N	500	26-Sep	15-Oct	20	510	26-Sep	15-Oct	20	
	2S	500	16-Oct	25-Oct	10	502	16-Oct	25-Oct	10	
	12A	500	26-Oct	29-Oct	4	493	25-Oct	29-Oct	5	
	12C	500	30-Oct	03-Dec	35	487	30-Oct	31-Oct	2	

\* These pastures are not part of the Santa Rita Experimental Range

SRER Small Herd (Herd 2 on map)

Last Update: <u>31-October-2008</u>

		Projected				Actual				
		Herd Size	Start	End	Grazing	Herd Size	Start	End	Grazing	
	Pasture	(AU's)	Date	Date	Days	(AU's)	Date	Date	Days	
2007	4	63	01-Nov	25-Nov	25	54	01-Nov	30-Nov	30	
	Ranger Station*	63	26-Nov	23-Feb	90	63	26-Nov	20-Feb	86	
2008	11C	63	24-Feb	02-Mar	8	63	21-Feb	28-Feb	8	
	8	63	03-Mar	06-May	64	63	29-Feb	05-May	67	
	1	63	07-May	26-Jun	50	55	06-May	30-Jun	51	
	UA-F	63	27-Jun	11-Jul	15	34	27-Jun	07-Ju1	11	
	UA-G	63	12-Jul	21-Jul	10	44	08-Jul	19-Jul	12	
	UA-H	63	22-Jul	31-Jul	10	65	20-Jul	31-Jul	11	
	UA-A	63	01-Aug	10-Aug	10	65	01-Aug	12-Aug	12	
	11B	63	11-Aug	20-Aug	10	65	13-Aug	24-Aug	12	
	4	63	21-Aug	30-Aug	10	65	25-Aug	03-Sep	11	
	11C	63	31-Aug	09-Sep	10	65	04-Sep	13-Sep	10	
	8	63	10-Sep	19-Sep	10	65	14-Sep	23-Sep	10	
	1	38	20-Sep	08-Dec	80	40	24-Sep	31-Oct	41	
	UA-F	0			0					
	UA-G	28	20-Sep	29-Oct	40	28	24-Sep	31-Oct	38	
	UA-H	28	30-Oct	08-Dec	40					
	UA-A	63	09-Dec	23-Dec	15					
	11B	63	24-Dec	05-Jan	13					
2009	4	63	06-Jan	11-Feb	42					
	Florida*	63	12-Feb	17-Apr	60					

\* These pastures are not part of the Santa Rita Experimental Range.

## SRER Special Herds and Other Pastures

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Last Update: <u>30-October-2008</u>
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		Projected				Actual				
Pasture	Use	Herd Size (AU's)	Start Date	End Date	Grazing Days	Herd Size (AU's)	Start Date	End Date	Grazing Days	
UA - B	rest	0			0					
UA - C	rest	0			0					
UA - D	rest	0			0					
UA - E	rest	0			0					
6C	temporary									
Huerfano Trap	temporary					5	Jun	Jun	8	
20	temporary									
140	temporary									
11A	temporary					4	Mar	Apr	10	
12D	bulls	20	01-Jan- 08	31-Aug- 08	240	10	01-Oct	31-Oct	31	
Madera Trap	bull calves	10	01-Mar- 08	30-Sep- 08	70	10	02-May	30-Sep	132	
16	Deferred	0			0					
286	Deferred	0			0					
302	Deferred	0			0					

