

Beginning in November 2007, 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 ([gruyle@ag.arizona.edu](mailto:gruyle@ag.arizona.edu)) and in cooperation with Andrew McGibbon who owns the livestock. This new management replaces the "Santa Rita Grazing System" experiment that was in place since 1972 (Martin and Severson. 1988. J. Range. Man. 41:291-295., and Mashiri et al. 2008. Rangeland Ecol. Manage. 61:368-379.)

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 ~540 animals will move through a combination of 18 pastures, 14 are located on the Santa Rita, and 3 on the Coronado National Forest, and 3 on Arizona State Lands. The small herd, ~70 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.

Starting in November 2008, there will be a new practice of opening pasture gates 1-2 days before the official start-date for grazing in the new pasture. Typically, the gates will open 1 day earlier, but the 2-day window will be common when there are frequent moves (every 10 days) during the summer growing season. This practice is being adopted to prevent the separation of calves from cows during the move between pastures.

## Planned Livestock Grazing on the Santa Rita Experimental Range

01 November 2012 - 31 October 2013

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 2012 - 31 October 2013, and extended to December 2013 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](mailto:gruyle@ag.arizona.edu)) or Mitch McClaran ([mcclaran@u.arizona.edu](mailto:mcclaran@u.arizona.edu)).

Last Plan Update: 31 October 2013

SRER Large Herd (Herd 1 on map)

Last Update: 31-Oct-2013

	Pasture (acres)	Projected				Actual			
		Herd Size (AU's)	Start Date	End Date	Grazing Days	Herd Size (AU's)	Start Date	End Date	Grazing Days
2012	<b>2N</b> (4585)	540	30-Oct	18-Dec	50	467	30-Oct	18-Dec	50
	<b>2S</b> (1389)	540	19-Dec	02-Jan	15	463	15-Dec	09-Jan	25
2013	<b>12A</b> (995)	540	03-Jan	12-Jan	10	399	07-Jan	21-Jan	15
	<b>12C</b> (1886)	540	13-Jan	01-Feb	20	448	19-Jan	13-Feb	26
	<b>State*</b>	540	02-Feb	04-Mar	30	404	11-Feb	05-Apr	52
	<b>Canoa S*</b>	540	05-Mar	03-Apr	30	481	23-Mar	14-May	53
	<b>Canoa N*</b>	540	04-Apr	03-May	30	Canoa pastures not yet split			
	<b>12B</b> (4112)	540	04-May	07-Jun	35	443	13-May	10-Jun	27
	<b>12D</b> (1072)	540	08-Jun	17-Jun	10	0			0
	<b>3</b> (4104)	540	18-Jun	17-Jul	10	477	07-Jun	09-Jul	33
	<b>5S</b> (4699)	540	18-Jul	27-Jul	10	445	09-Jul	21-Jul	13
	<b>5 Mid</b> (3448)	540	28-Jul	07-Aug	10	175	19-Jul	16-Aug	29
	<b>5N</b> (2025)	540	08-Aug	17-Aug	10	407	28-Jul	14-Aug	16
	<b>6B</b> (1677)	540	18-Aug	27-Aug	10	507	26-Aug	03-Sep	09
	<b>15</b> (4217)	540	05-Sep	14-Sep	10	261	12-Aug	06-Sep	26
	<b>6D</b> (1978)	540	15-Sep	29-Sep	15	453	04-Sep	17-Sep	14
	<b>6A</b> (2686)	540	30-Oct	13-Oct	15	508	18-Sep	13-Oct	26
	<b>Helvetia North*</b>	540	14-Oct	17-Nov	35	0			0
<b>Helvetia South*</b>	540				0			0	
<b>6E</b> (910)	540	18-Nov	02-Dec	15	505	14-Oct	23-Oct	10	
<b>2N</b> (4585)					508	28-Oct	31-Oct	04	

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

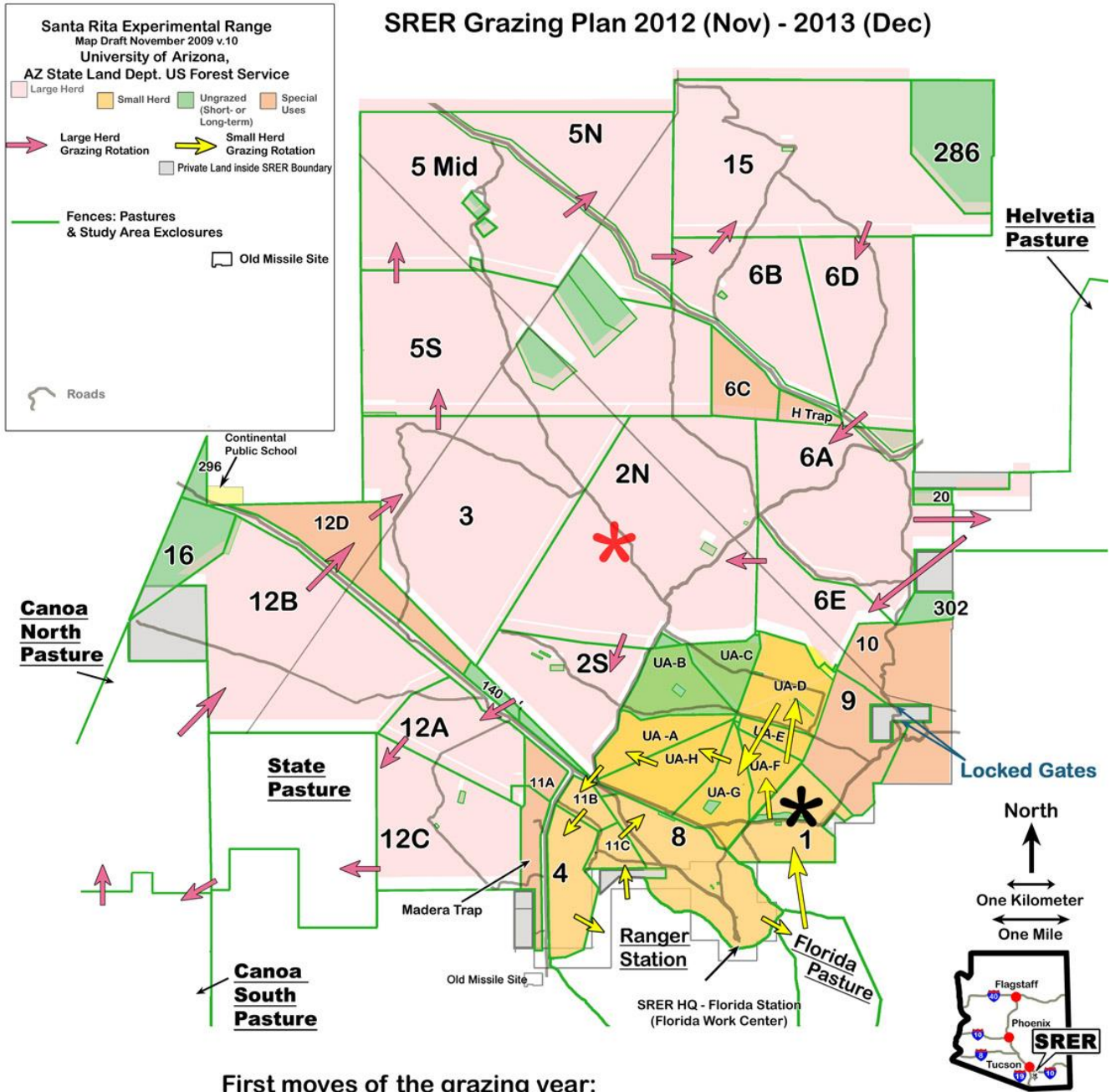
SRER Small Herd (Herd 2 on map)

Last Update: 31-Oct-2013

	Pasture (acres)	Projected				Actual			
		Herd Size (AU's)	Start Date	End Date	Grazing Days	Herd Size (AU's)	Start Date	End Date	Grazing Days
2012	<b>1</b> (782)	70	17-Sep	15-Nov	60	70	17-Sep	16-Nov	61
	<b>UA-F</b> (336)	70	16-Nov	30-Nov	15	70	17-Nov	08-Dec	22
	<b>UA-D</b> (357)	70	01-Dec	20-Dec	20	70	09-Dec	03-Jan	26
2013	<b>UA-G</b> (441)	70	21-Dec	14-Jan	25	70	04-Jan	30-Jan	27
	<b>UA-H</b> (453)	70	15-Jan	09-Feb	25	70	31-Jan	26-Feb	27
	<b>UA-A</b> (549)	70	10-Feb	06-Mar	25	70	27-Feb	25-Mar	27
	<b>11-B</b> (212)	70	07-Mar	16-Mar	10	70	26-Mar	04-Apr	10
	<b>4</b> (670)	70	17-Mar	05-May	50	70	05-Apr	26-May	52
	<b>Forest Service Pasture*</b>	70	06-May	14-Jul	70	70	27-May	16-Jul	51
	<b>11C</b> (214)	70	15-Jul	24-Jul	10	70	17-Jul	26-Jul	10
	<b>8</b> (815)	70	25-Jul	03-Aug	10	70	27-Jul	10-Aug	14
	<b>Forest Service Pasture*</b>	70	04-Aug	12-Oct	70				
	<b>1</b> (782)	70	13-Oct	01-Dec	50	70	01-Oct	31-Oct	31
	<b>UA-G</b> (441)	Not planned, Forest Service pasture received too little rain				70	11-Aug	23-Aug	13
	<b>UA-D</b> (357)	Not planned, Forest Service pasture received too little rain				70	24-Aug	31-Aug	08
	<b>UA-F</b> (336)	Not planned, Forest Service pasture received too little rain				70	06-Sep	30-Sep	25

\* These pastures are not part of the Santa Rita Experimental Range. [Forest Service Pastures include Ranger and Florida pastures.](#)





First moves of the grazing year:

- \* Large herd from 2N to 2S
- \* Small herd from 1 to UA-F