

# RANGE ECONOMICS REFERENCE DATA

Cost/Return Data	Dollars per Ranch	Dollars per Cow
Cash Receipts	95,502	431
Cash Expenses		
Purchased cattle	1,152	5
FS/BLM fee	2,768	13
Other public pasture rental	2,625	3
Other feed costs	27,050	122
Other variable cash expense	21,920	102
Total variable cash expense	53,515	245
Fixed cash expenses	22,227	100
Total cash expenses	75,742	345
Cash receipts less cash expenses-"ranch income"	19,760	86

No. of ranches sampled	6,678
Average herd size	221
Percent with 20-99 cows	33.9
Percent with 100-499 cows	56.9
Percent with 500+ cows	9.2

**Source:** Economic Research Service, USDA, 1990 Farm Costs and Returns Survey reported in W.F. Hahn, K.H. Mathews, K.E. Nelson, Economic Aspects of Supply and Demand for Livestock Forage on Public Lands - Appendix G of the Rangeland Reform '94 Draft Environmental Impact Statement.

### Example of How to Use for Impact Estimation

1. Most FS decisions will result in either a change in management costs or a change in grazing use on NFS land. The above data can be used to provide context for assessing the importance of cost increases and to translate any AUM reductions into rancher income reductions.
2. Rancher income reductions resulting from reduced availability of NFS AUMs can occur two ways:
  - a) By having to pay more for alternative forage/feed sources (commonly 2-3 times the cost per AUM of NFS fees).
  - b) By reducing herd size
    - Estimate herd size reduction at 1/12 (.0833) of the AUM reduction
    - Multiply herd size reduction by \$86 to estimate reduced income
    - As the result is an estimate, be sure to round off

**COMPARATIVE SIZE OF NON-IRRIGATED GRAZING  
BY LAND OWNERSHIP AND COUNTY**

County	NFS	Other Public	Private	Total
(Thousands of Animal Unit Months)				
Alameda	--	1.1	250.0	251.1
Alpine	3.1	--	4.0	7.1
Amador	1.1	0.3	192.0	193.4
Butte	3.5	--	221.0	224.5
Calaveras	1.9	1.0	432.0	434.9
Colusa	1.3	0.2	100.0	101.5
Contra Costa	--	8.3	175.0	183.3
Del Norte	5.0	--	80.0	85.0
El Dorado	7.0	.3	125.0	132.3
Fresno	21.9	19.2	600.0	641.2
Glenn	3.3	.4	120.0	123.7
Humboldt	4.4	3.4	682.0	689.8
Inyo	--	18.8	105.0	123.8
Kern	8.4	48.7	1,291.0	1,348.1
Kings	--	1.6	60.0	61.6
Lake	4.7	1.0	168.0	173.7
Lassen	29.0	84.4	33.0	146.4
Los Angeles	7.5	.1	106.0	113.6
Madera	13.0	.6	352.0	365.6
Marin	--	--	193.0	193.0
Mariposa	4.8	4.1	190.0	198.9
Mendocino	3.2	.7	401.0	404.9
Merced	--	.7	390.0	390.7
Modoc	98.7	17.4	157.0	273.1
Mono	--	34.7	20.0	54.7
Monterey	19.1	38.1	863.0	920.2
Napa	--	.4	299.0	299.4
Nevada	3.6	.1	130.0	133.7
Orange	1.1	--	112.0	113.1
Placer	6.3	--	200.0	206.3
Plumas	28.9	.6	287.0	316.5
Riverside	1.5	4.3	6.0	11.8
Sacramento	--	--	175.0	175.0
San Benito	--	8.2	355.0	363.2
San Bernardino	6.1	72.5	12.0	90.6
San Diego	11.1	17.1	85.0	113.2
San Joaquin	--	--	127.0	127.0
San Luis Obispo	--	18.1	600.0	618.1
San Mateo	--	--	60.0	60.0
Santa Barbara	2.2	23.8	651.0	677.0

County	NFS	Other Public	Private	Total
(Thousands of Animal Unit Months)				
Santa Clara	--	.3	209.0	209.3
Santa Cruz	--	.5	100.0	100.5
Shasta	13.8	2.5	300.0	316.3
Sierra	7.5	.2	51.0	58.7
Siskiyou	13.6	5.1	79.0	97.7
Solano	--	.6	175.0	175.6
Sonoma	--	.1	400.0	400.1
Stanislaus	--	.6	314.0	314.6
Sutter	--	--	50.0	50.0
Tehama	10.5	1.9	370.0	382.4
Trinity	5.5	2.1	27.0	34.6
Tulare	53.9	2.0	275.0	330.9
Tuolumne	12.3	1.7	90.0	104.0
Ventura	16.0	--	100.0	116.0
Yolo	--	.6	69.0	69.6
Yuba	1.0	7.2	100.0	108.2
State Total	435.8	452.9	13,118.0	14,006.7

Source: G. Goldman and E. Gates, University of California Cooperative Extension, November 1986

Note: "Other public" includes Department of Defense, BLM and State lands

#### Suggestion for use

The above data can be useful for setting the context of NFS grazing in the overall industry. Although this data is older, longer term changes through time occur gradually. The major trend is a gradual reduction of private land grazing as a result of conversion to urban and cropland use. More recent data indicates that private lands continue to dominate grazing activity statewide and in most counties.