

AGRICULTURE

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RANGE SHEEP PRODUCTION IN THE GLENN-COLUSA AREA
AND SAMPLE COSTS - 1969
Monte Bell, Farm Advisor

Sheep numbers*

Sheep numbers have declined in the United States from 28 million in 1959 to 20 million in 1969. California declined from 1.6 million to 1.2 million during this period. California ranks third in sheep numbers, exceeded by Texas and Wyoming.

Glenn County is third in sheep numbers in California, exceeded by Kern and Fresno. Glenn County has 108 thousand and Colusa 52 thousand head of stock sheep.

Sheep production value*

Cash receipts in California in 1968 were \$25 million for sheep and lambs and \$6 million for wool compared to \$1.6 billion for all livestock and poultry commodities. The Glenn-Colusa area sheep industry produces over \$4 million annually.

Meat consumption*

Red meat consumption per capita in the United States has increased from 161 lbs. in 1960 to 182 lbs. in 1968. Individual commodity changes were: beef 85.0 to 109.0 lbs.; veal 6.1 to 3.5 lbs.; lamb and mutton 4.8 to 3.7 lbs.; and pork 64.9 to 65.4 lbs. In California consumption of beef is higher by 50 lbs. and lamb higher by 8.0 lbs. than the national average.

Glenn-Colusa area

Sheep are raised primarily in the foothill areas of Glenn and Colusa counties with some use of irrigated pastures in the valley. Most operators farm and/or raise cattle along with their sheep enterprise.

Flocks vary from 10 to over 10,000 with most ranches running 500 to 5,000 ewes. Most of the ewes are of mixed Rambouillet, Targhee, Columbia, Romeldale breeding and they are mated to Suffolk or Hampshire rams to produce crossbred market lambs. Fine woolled white faced ewes are used because they lamb early and are good wool producers. Black faced sires are used because they produce a faster growing lamb.

Calendar of operations

The breeding season is from late May into October. Ewes lamb about 5 months after conception. Sheepmen try to get most of the ewes to lamb during November before winter storms and to take advantage of the usually higher early spring lamb market and to get the lambs to market weight before the range feed dries. It takes 4 to 6 months on excellent feed to produce a fat lamb at weaning time.

These breeds of sheep are seasonal breeders and many do not start their reproductive cycle until late in the summer. This, plus the high temperatures and in some cases poor feed conditions, results in a prolonged lambing season and a high number (10%) of ewes failing to lamb.

Most rams are purchased at yearling age in the spring prior to the breeding season. About 1/3 of the rams must be replaced each year due to the high death loss. Most sheep are on barley or wheat stubble fields during at least part of the breeding season.

* Sources: USDA, California Dept. of Agriculture; Glenn and Colusa Counties Agricultural Commissioners.

Lambing starts in October and continues into March. Several weeks before lambing the ewes are tagged. This term applies to shearing the wool from the inside of the hind legs so the ewe will remain clean and to enable the lambs to nurse easily.

Before lambing the ewes that have a well developed udder and are expected to lamb within a few days are sorted out of the main band. This is called "bagging out the heavies." This group called the drop band is kept close to the lambing barn and watched closely in order to save as many lambs as possible.

During stormy weather the heavy ewes are held in a barn over night. Larger flocks have a "night man" on duty to take care of the new-born lambs. Many operators number brand the ewes and lambs to aid in keeping the pairs straight. This is especially important with twins.

Under barn lambing conditions, the ewe and her new lamb(s) are put in small (4 x 4') pens called "jails" or "jugs" until the ewe accepts the lamb ("mothered up") and the lamb is strong enough to follow the ewe. Ewes with twins are confined longer than those with single lambs. One of a pair of twins or an orphan lamb is put with a ewe that lost her lamb. This is called "grafting."

The pairs are put in successively larger bunches during the first month to a maximum of about 600 pairs.

The ewes and lambs are run on foothill range and supplemented with alfalfa hay and in some cases grain until there is ample range feed. Lambs may be creep fed (panels placed so ewes cannot get feed) with whole grain or hay pellets.

Lambs are castrated and tails removed (docked) at a few days to a few weeks of age. Some lambs are earmarked also.

In March the ewes and lambs are tagged again to prevent fly strike. In April the ewes are shorn and the wool put in large (300-lb.) bags for shipment. During April the ewes, rams and in some cases lambs are shorn. Shearing crews of five to ten

men shear the sheep on several ranches. A good shearer will shear over 100 sheep per day. Most of the crews have a portable generator for power and a long trailer in which to shear. Each fleece is tied with paper twine and "tromped" into the wool bags. Ewes are paint branded.

Most of the lambs are weaned and sold during April and May and the ewes are checked carefully for sound mouths and udders. Ewes with defects are culled and replacement yearling ewes purchased prior to the breeding season. Lambs kept on feed after weaning are shorn.

Lambs weighing about 100 lbs. go directly to slaughter while the lighter ones are put on feed. Pasture feeding has not been a common practice in this area because of the hot summer weather. When market prices are favorable, lambs may be fed pellets and sold by the middle of July.

Maintaining a healthy flock is extremely important. Consult your veterinarian about a disease prevention program.

Sheep health calendar

Prior to breeding

- Worm ewes
- Vaccinate for Blue Tongue
- Vaccinate for Vibrio (optional)
- Clean up footrot cases (ewes must go into fall with trimmed, clean feet)
- Vaccinate rams for Epididymitis

At lambing

- Provide grain or molasses for ewes
- Iodine navels of lambs

At marking

- Vaccinate for Enterotoxemia (may have to repeat)
- Vaccinate for White Muscle (in Selenium deficient areas)

At weaning

- Shear, worm and vaccinate for Enterotoxemia all lambs going on feed

New as well as experienced operators will want to have this reference:

"Production Practices for California Sheep" - Manual 16 Revised.

SAMPLE RANGE SHEEP PRODUCTION COSTS GLENN-COLUSA AREA - 1969

Developed by Monte Bell, farm advisor, Doyle Reed, U.C. Extension Economist and a committee representing the Glenn and Colusa Wool Growers.

Income and expense basis is 1,000 ewes assuming that additional livestock and/or farming enterprises are operated by the same manager and that some labor trading is possible between enterprises. Cash method of accounting is used.

Income and Expense Summary

Investment - not including range

Livestock	\$ 34,150	
Buildings	10,250	
Equipment	<u>6,330</u>	\$ 50,730

Gross Income

Sheep sales	22,183	
Wool Sales	<u>6,908</u>	29,091

Expenses

Depreciation on investment	1,448	
Interest on investment	2,579	
Interest on operating capital	796	
Range rent	8,400	
Other feed	6,750	
Replacement stock purchased	7,160	
Herder labor	4,608	
Shearing	1,414	
Trucking hired	1,250	
Taxes, insurance, license	907	
Fuel and repairs	1,820	
Veterinary, supplies, business, misc.	<u>920</u>	<u>38,052</u>

Sheep Enterprise Loss

-\$ 8,961

To Reduce Loss

1. Range owned - cash costs only	+\$ 6,000
2. Interest on investment not considered	+ 2,579
3. Rent includes buildings, equipment & house	+ 1,564
4. Depreciation on road vehicles only	+ 581
5. Only 17%/year replacement ewes needed	+ 805
6. Lamb feeding alternative	+ 938

To Increase Loss

1. 5% management charge	-\$ 1,455
2. Poorer range necessitating 190 ton hay, 60 ton grain, rented alfalfa pasture	- 3,450

Effect of Production or Price Change

1. 5% change in lbs. or price lambs sold	±\$ 1,071
2. 10% change in lbs. or price hay & grain bought	± 435

Income and Expense Details

1000 ewes, 8% mortality (1% after shearing), 12% culled - May
 25 rams, 28% mortality, 4% culled - May
 950 lambs sold, 67% fats, 33% feeders - April - May
 200 replacement yearlings purchased - April - May

Income

637 fat lambs	95 lbs. @ 27¢	= \$25.65	60,515 lbs.	\$16,339
313 feeder lambs	65 lbs. @ 25¢	= 16.25	20,345 lbs.	5,086
950 total lambs	85 lbs. @ 26.50¢	\$22.55	80,860 lbs.	\$21,425
120 cull ewes	125 lbs. @ 5¢	\$ 6.25	15,000 lbs.	750
1 cull ram	150 lbs. @ 5¢	7.50	150 lbs.	8
930 ewe fleeces	8.8 lbs. @ 58¢			
	+ 17¢ payment	= \$ 6.60	8,184 lbs.	6,138
18 ram fleeces	4 lbs. @ 75¢	= 3.00	72 lbs.	54
80,850 lbs. unshorn lamb @ 75¢/cwt.		=		606
Tags @ 11¢		=	1,000 lbs.	110
Total Wool			9,256 lbs.	\$ 6,908

Total income

\$29,091

Lamb Feeding Alternative

Several sheepmen feed their lighter lambs after weaning. These costs are based on pellet feeding in a commercial drylot. Lambs are fed for 50-70 days and gain 1/2 lb. per day to an average sale weight of 98 lbs. with 90% selling as fats; 2% death loss.

<u>Income</u>	<u>\$/head</u>		
276 fat lambs	100 lbs. @ 27¢	= \$27.00	27,600 lbs. \$ 7,452
31 feeders	85 lbs. @ 26¢	= 22.10	2,635 685
307 total lambs	98 lbs. @ 26.91¢	= 26.37	30,235 lbs. \$ 8,137
Wool - 313 head	5 lbs. @ 25¢	= 1.25	391
<u>Total income</u>		\$27.62	<u>\$ 8,528</u>

Expense - 313 head

	<u>\$/head</u>	
Value of feeder - 65 lbs. @ 25¢	\$16.25	5,086
Trucking	.40	125
Veterinary, worm 15¢, vaccinate 9¢, misc. 20¢	.44	138
Interest @ 8½%	.23	72
Pellets - 4 lbs. x 60 days (240 lbs.) x \$52/ton fed	6.24 x 310 hd	1,934
Shear	.75	235
	<u>\$24.31</u>	<u>\$ 7,590</u>
Feeding enterprise profit (Manager's labor not deducted)	\$ 3.00	\$ 938

Income and Expense Details

Investment - not including range

		<u>Years Life</u>	<u>Depreci- ation</u>	<u>6% Interest</u>
<u>Livestock Investment</u>				
1000 ewes @ \$31	\$ 31,000	-	-	\$ 1,860
25 rams @ \$120	3,000	-	-	180
2 dogs @ \$75	<u>150</u>	-	-	<u>9</u>
Total Livestock	\$ 34,150			\$ 2,049
<u>Building Investment</u>				
Hay barn, 200 ton space, 2500 sq. ft. @ \$1.10	\$ 2,750	30	92	\$ 82
Grain bin, 500 bu. space (1/2 x \$500 bin)	250	30	8	8
Lambing barn, 400 head space, 2000 sq. ft. @ \$2.50	5,000	30	167	150
Corrals, chutes, scales (1/2 x \$2500)	1,250	20	60	38
Land for buildings, pens, etc.	<u>1,000</u>	-	<u>-</u>	<u>60</u>
Total building investment	\$ 10,250		\$ 327	\$ 338
<u>Equipment Investment</u>				
Pickup (1/2 x \$3,200)	\$ 1,600	5	\$ 320	\$ 48
4-wheel drive used (1/2 x \$2,500)	1,250	5	250	38
2-ton flatbed used (1/2 x \$2,500)	1,250	5	250	38
Tractor, used (1/2 x \$ 500)	250	5	50	8
Sheep trailer (1/2 x \$ 500)	250	10	25	8
Water wagon	500	10	50	15
4 1-ton creep feeders @ \$75	300	7	43	9
4 water troughs @ \$65	260	7	37	8
6 hay racks @ \$15	90	7	13	3
8 grain troughs @ \$10	80	7	11	2
Misc. - panels, shearing, marking, trimming, foot troughs, etc.	<u>500</u>	7	<u>72</u>	<u>15</u>
Total equipment investment	\$ 6,330		\$ 1,121	\$ 192
<u>Total Investment and Overhead</u>	\$ 50,730		\$ 1,448	\$ 2,579

Expenses

Feed

Bur clover range	November-June	1200 acres	@ \$7.00	\$ 8,400
Stubble	July-October	1000 acres	@ 2¢/head/day	2,400
Hay	November-January	190 tons	@ \$30/ton	3,600
Grain	November-April	15 tons	@ \$50/ton	<u>750</u>
Total Feed				\$15,150
200 shorn yearling replacements @ \$31				6,200
8 rams @ \$120				960
Herder - \$300/month + \$50/month house			\$ 350	
4.8% Social Security			14	
6.8% Workmen's Comp. (applies to wages only)			<u>20</u>	
			\$384 x 12 mo.	4,608
Shear - 930 ewes @ 78¢			725	
18 rams @ \$1.50			27	
2 wrangler days @ \$20			40	
Tag ewes 2x, lambs 1x @ 18¢ (2900 head)			522	
5 wrangler days @ \$20			<u>100</u>	
			\$1,414	1,414
Trucking hired				1,250
Taxes on livestock				375
Taxes on buildings and improvements				80
Insurance - building \$70, feed \$40, equipment \$185, liability \$45				340
Vehicle license				112
Fuel and power				1,070
Repairs				750
Veterinary medicine				560
Supplies - wool bags \$50, string \$20, brand fluid \$40, office, legal business, misc. \$250				<u>360</u>
<u>Total Cash Expenses</u>				\$33,229
Depreciation				1,448
Interest on investment				2,579
Interest on operation capital				<u>796</u>
<u>Total Expenses</u>				\$38,052

SAMPLE CASH FLOW SHEET*

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total
Wool										6,908			6,908
Lambs										7,000	10,000	4,425	21,425
Culls											758		758
Total										13,908	10,758	4,425	29,091

CASH EXPENSES*

Range					1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	8,400
Hay	1,200	1,200										1,200	3,600
Stubble	600	600	600	600									2,400
Grain	750												750
Replacements											7,160		7,160
Herder	300	300	300	300	300	300	300	300	300	300	300	300	3,600
Housing	50	50	50	50	50	50	50	50	50	50	50	50	600
Comp. & Soc Sec	102			102			102			102			408
Tag				211					411				622
Shear										792			792
Truck	325			625								300	1,250
Taxes										455			455
Insurance												340	340
License								112					112
Fuel & Repair	152	152	152	152	152	152	152	152	152	152	152	148	1,820
Vet Supply						80	80	80	80	160	80		560
Office & Supplies	62	12	12	12	12	52	62	12	12	82	12	18	360
Total	3,541	2,314	1,114	2,052	1,564	1,684	1,796	1,756	2,055	3,143	8,804	3,406	33,229

CUMULATIVE MONTHLY BALANCE

8½% Interest	3,541	5,855	6,969	9,021	10,585	12,269	14,065	15,821	17,876	7,111	5,157	4,138	4,138
	25	41	49	64	75	87	100	112	127	50	37	29	796

*No indebtedness on livestock

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