Oregon Agricultural College Experiment Station

Cattle Marketing Investigations at Portland, Oregon

H. A. LINDGREN
And
E. L. POTTER



CORVALLIS, OREGON

BOARD OF REGENTS OF THE OREGON AGRICULTURAL COLLEGE AND EXPERIMENT STATION

COLLEGE AND EXPERIMENT STATION	
HON. J. K. WEATHERFORD, President	Albany
Hon. E. E. Wilson, Secretary	orvallis
Hon. B. F. Irvine, TreasurerP	ortland
Hon. I. L. Patterson, Governor	Salem
HON. SAM A. KOZER, Secretary of State.	Salem
How C. A. Howard, Superintendent of Public Instruction	Salem
HON. GEORGE A. FALMITER, Master of State Grange	Leview
How Gro M Copywaii	ortland
HON. GEO. M. CORNWALL	ndleton
Hon, Tepperson Myers	ortland
HON. J. F. YATES	orvallis
HON. J. F. YATES	rrydale
STATION STAFF	
W. J. Kerr, D.Sc., LL.D	esident
J. T. JARDINE, B.S	Director
E. T. REED, B.S., A.B.	Editor
H. P. Barss, A.B., S.M. Plant Patl F. D. Balley, M.S. Asst. Pathologist, Insecticide and Fungicide Bd., U. S. Dept. o R. S. Besse, M.S. Associate in Farm Mana P. M. Brandt, B.S., A.M. Dairy Husbe A. G. Bouguet, B.S. Horticulturist (Vegetable Gare	hologist
F. D. BAILEY, M.S., Asst. Pathologist, Insecticide and Fungicide Bd., U. S. Dept. of	f Agri.
R. S. Besse, M.S	gement
P. M. Brandt, B.S., A.MDairy Husba	ındman
A. G. Bouquet, B.SHorticulturist (Vegetable Gard	lening)
E. N. Bressman, M.S. Associate Agree G. G. Brown, B.S. Horticulturist, Hood River Br. Exp. Station, Hood W. S. Brown, A.B., M.S. Horticulturist in	nomist
G. G. Brown, B.S	Charge
D. E. Bullis, B.S	Charge
A S Burnier M S Accident in Farm Mana	gement
LEROY CHILDS AR Sunt Hood River Branch Even Station Hood	River
D. E. BULLIS, B.S	iologist
H. K. DEAN, B.S. Supt. Umatilla Branch Exp. Station, He	rmiston
C. R. Donham, D.V.M	inarian
THEO. P. DYKSTRA, M.S. Assistant Plant Pathologist, U. S. Dept. of	of Agri.
E. M. EDWARDS, B.SAsst. Animal Husbandman, East Ore. Br. Exp. Sta.,	Union
A. E. Enghretson, B.SSupt. John Jacob Astor Br. Exp. Station,	Astoria
L. N. Goodding, B.A., B.SJr. Plant Pathologist, U. S. Dept. of	f Agrı.
W. V. HALVERSEN, Ph.DAssociate Bacter	lologist
J. R. HAAG, Ph.D.	Chemist
T. HARTMAN, M.SASSOCIATE HOTTICUITUITST (FOR	nology
D. D. HILL, M.S	onomist
REPUBLIC CHITTE R A Scientific Assistant Seed I ab II S Dans of Agri (Seed A	nalvet)
R. E. Hutchinton, R. S. Asst to Sunt of Harney Valley Branch Exp. Station.	Burns
G. R. Hyslop, B. S. Agr	onomiat
W. T. Johnson, D.V.M	hologist
I. R. Jones, Ph.D. Associate Dairy Husba	andman
I. S. Jones, M.S.	Chemist
G. W. Kable, M.SAgricultural E	ngineer
I. S. Jones, M.S	andman
A. G. LUNN, B.S. Poultry Husbandman in	Charge
M. B. McKay, M.S	More
Don C More M S. Francisco Country Branch Exp. Station	nologist
M N NEISON Ph D Chief Department of Agricultural For	nomics
Don C. Mote, M.S. Enton M. N. Nelson, Ph.D. Chief, Department of Agricultural Eco O. M. Nelson, B.S. Animal Husb. R. K. Norris, B.S. Assistant to Supt. of Southern Oregon Branch Exp. Station,	andman
R. K. Norris, B.S. Assistant to Supt. of Southern Oregon Branch Exp. Station.	Talent
A. W. OLIVER, B.S	
E. L. POTTER, M.S. Animal Husha	andman
The state of the s	andman andman
W. L. Powers, Ph.D. Chief, Department of	andman of Soils
W. L. Powers, Ph.D. Chief, Department of F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station,	andman of Soils Talent
W. L. Powers, Ph.D. Chief, Department of F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S.	andman of Soils Talent Chemist
W. L. Powers, Ph.D. Chief, Department of F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. Associate in Soils (Foundation of Control of C	andman of Soils Talent Chemist ertility)
W. L. Powers, Ph.D. Chief, Department of F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (For H. A. Schoth, M.S. Asst. Agronomist, Forage Crops Investigation, U. S. Dept. of F. Schultzer, M.S.	andman of Soils Talent Chemist ertility)
W. L. Powers, Ph.D. Chief, Department of F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. Supt. Southern Oregon Br. Exp. Station, C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. Asst. Agronomist, Forage Crops Investigation, U. S. Dept. of C. E. Schutter, M.S. Associate Horticulturist (Por C. E. Schutter)	andman of Soils Talent Chemist ertility) of Agri. nology)
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. H. A. Schoth, M.S. Associate in Soils (F. C. E. Schutter, M.S. Associate Horticulturist (Pon H. D. Scudder, B.S. Associate in Farm Mana Associate in Farm Mana	andman of Soils Talent Chemist ertility) of Agri. nology) gement
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzek, B.S. H. A. Schoth, M.S. Associate in Soils (Foundation of the State of the S	andman andman of Soils Talent Chemist ertility) of Agri. nology) gement gement
W. L. Powers, Ph.D. Chief, Department of F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzek, B.S. Associate in Soils (Fo. H. A. Schoth, M.S. Asst. Agronomist, Forage Crops Investigation, U. S. Dept. of C. E. Schuster, M.S. Associate Horticulturist (Por H. D. Scudder, B.S. Chief in Farm Mana H. E. Selby, B.S. Associate in Farm Mana O. Shattuck, M.S. Supt. Harney Valley Branch Exp. Station, J. N. Shaw, D.V.M. Assistant Veter	andman of Soils Talent Chemist ertility) of Agri. nology) ogement Burns inarian
W. L. Powers, Ph.D. F. C. Retmer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. H. A. Schoth, M.S. Supt. Southern Oregon Br. Exp. Station, C. E. Schutter, M.S. Associate in Soils (F. M.S. Associate in Soils (F. M.S. Associate in Soils (F. M.S. Associate in Forge Crops Investigation, U. S. Dept. of C. E. Schutter, M.S. Associate Horticulturist (Pomental Control of Chief in Farm Mana O. Schattuck, M.S. Supt. Harney Valley Branch Exp. Station, J. N. Shaw, D.V.M. J. E. Simmons, M.S. Assistant Veter J. E. Simmons, M.S. Assistant Dacter	andman of Soils Talent Chemist ertility) of Agri. nology) ogement gement Burns inarian iologist
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzek, B.S. Associate in Soils (Foundation of the Composition of the	andman of Soils Talent Chemist ertility) of Agri. nology) agement gement Burns inarian iologist inarian
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzek, B.S. Associate in Soils (Foundation of the Computation of the Computation) G. E. Schuster, M.S. Associate Horticulturist (Pomental of the Computation of t	andman of Soils Talent Chemist Chemist Chemist Chemist Chemist Chemist Farian ology) agement Burns inarian inlogist inarian
W. L. Powers, Ph.D. F. C. Retmer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. Associate in Soils (F. H. A. Schoth, M.S. Associate Horticulturist (Pon H. D. Scudder, B.S. Chief in Farm Mana O. Shattuck, M.S. Supt. B.S. Associate in Farm Mana O. Shattuck, M.S. J. N. Shaw, D.V.M. J. E. Simmons, M.S. Assistant Veter B. T. Simmons, M.S. Supt. Sherman County Br. Exp. Station, R. E. Stephenson, Ph.D. Associate Soils Signeration of the Station of the Station of the Station, Supt. Sherman County Br. Exp. Station, R. E. Stephenson, Ph.D. Associate Soils Signeration of the Station o	andman of Soils Talent Chemist
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzek, B.S. Associate in Soils (Foundation of the Composition of the	andman andman of Soils Talent Chemist ertility) of Agri. nology) gement gement Burns inarian iologist inarian iologist
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. Asst. Agronomist, Forage Crops Investigation, U. S. Dept. of C. E. Schuster, M.S. Associate Horticulturist (Pom. H. D. Scudder, M.S. Supt. Harney Valley Branch Exp. Station, J. N. Shaw, D.V.M. J. N. Shaw, D.V.M. J. E. Simmons, M.S. Assistant Veter, J. E. Simmons, M.S. B. T. Simms, D.V.M. D. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station, R. E. Stephens, B.S. Associate Soils Sp. G. Supt. Sherman County Br. Exp. Station, R. E. Stephenson, M.S. Assistant Enton R. E. Trokeerson, B.S. Assistant in Soils (Soil Sp. M.S.) Assistant in Soils (Soil Sp. M.S.)	andman andman of Soils Talent Chemist ertility) of Agri. nology) igement gement gement Burns inarian iologist inarian oecialist nologist
W. L. Powers, Ph.D. F. C. Retmer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. Associate in Soils (F. H. A. Schoth, M.S. Associate Horticulturist (Pon H. D. Scudder, B.S. Chief in Farm Mana O. Shattuck, M.S. Supt. Marney Valley Branch Exp. Station, I. N. Shaw, D.V.M. J. E. Simmons, M.S. Assistant Veter B. T. Simms, D.V.M. D. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station, R. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station, R. E. Stephenson, Ph.D. Associate Soils Sp. Assistant Incom R. E. Stephenson, Ph.D. Associate No. Supt. Sherman County Br. Exp. Station R. E. Stephenson, Ph.D. Associate No. Supt. Sherman County Br. Exp. Station R. E. Stephenson, Ph.D. Assistant Incom R. E. Stephenson, Ph.D. Assistant in Soils (Soil S. R. E. Trokerson, B.S. Assistant in Soils (Soil S. A. Walker, B.S. Assistant in Soils (Soil S. R. Walker, B.S. Assistant Paccentary Reserved Station, R. E. Stephenson, B.S. Assistant in Soils (Soil S. R. Walker, B.S. Assistant Paccentary Reserved Reserv	andman andman of Soils Talent Chemist Chemist Chemist Parin ology gement gement Burns inarian iologist inarian inalist Survey) Union
W. L. Powers, Ph.D. F. C. Retmer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. Schutter, M.S. Associate Horticulturist (Por H. D. Schudder, B.S. Associate Horticulturist (Por H. D. Schudder, B.S. Associate in Farm Mana O. Shattuck, M.S. Supt. Harney Valley Branch Exp. Station, J. N. Shaw, D.V.M. J. E. Simmons, M.S. T. Simmons, M.S. Supt. Sherman County Br. Exp. Station, D. E. Stephenson, Ph.D. Associate Soils Sy B. G. Thompson, M.S. Assistant Enton E. F. Torgerson, B.S. Assistant Enton E. F. Torgerson, B.S. Assistant Cere Assistant In Soils (Soil S A. Walker, B.S. Assistant Satern Assistant Assistant Assistant Assistant C.F. Whitaker, B.S. Assistant As	andman andman of Soils Talent Chemist of Agri. nology) gement gement Burns inarian iologist inarian ologist Survey) Union Chemist oducts
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. C. V. Ruzer, B.S. C. E. Schuster, M.S. Associate in Soils (F. H. A. Schoth, M.S. Asst. Agronomist, Forage Crops Investigation, U. S. Dept. of C. E. Schuster, M.S. C. E. Schuster, M.S. C. E. Schuster, M.S. Associate Horticulturist (Pomental Control of the Control	andman andman of Soils Talent Chemist crility) if Agri. nology) sgement gement Burns inarian iologist inarian , Moro occialist nologist Survey) Union Chemist oducts)
W. L. Powers, Ph.D. F. C. Retmer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. Associate in Soils (F. H. A. Schoth, M.S. Associate Horticulturist (Por H. D. Scudder, B.S. C. E. Schutter, M.S. Associate Horticulturist (Por H. D. Scudder, B.S. Associate in Farm Mana O. Shattuck, M.S. J. N. Shaw, D.V.M. J. E. Simmons, M.S. Assistant Veter B. T. Sinms, D.V.M. D. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station, R. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station, R. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station, R. E. Stephenson, Ph.D. Associate Soils Sp. Assistant in Soils (Soil S. A. Walker, B.S. Assistant in Soils (Soil S. A. Walker, B.S. Assistant E. H. Wiegand, B.S. Assistant E. H. Wiegand, B.S. Assistant Horticulturist (Horticulturial Pr. Joseph Willoox, B.S. Assistant in Ento Maud Wilson, B.S. Horticulturist (Horticultural Pr. Joseph Willoox, B.S. Horticulturist (Horticultural Pr. Joseph Wilson, B.S. Hor	andman andman andman of Soils Talent Talent Chemist crility) if Agri. nology) gement Burns inarian iologist inarian nologist yunion Chemist oducts) mology onomist onomist
W. L. Powers, Ph.D. F. C. Reimer, M.S. Supt. Southern Oregon Br. Exp. Station, R. H. Robinson, A.B., M.S. C. V. Ruzer, B.S. Associate in Soils (F. H. A. Schoth, M.S. C. E. Schutter, M.S. Associate Horticulturist (Por H. D. Scudder, B.S. Chief in Farm Mana O. Shattuck, M.S. Supt. Harney Valley Branch Exp. Station, J. N. Shaw, D.V.M. J. E. Simmons, M.S. Supt. Harney Valley Branch Exp. Station, J. N. Shaw, D.V.M. D. E. Stephens, B.S. Supt. Sherman County Br. Exp. Station B. T. Simms, D.V.M. D. E. Stephenson, Ph.D. Associate osils Sp. B. G. Thompson, M.S. Assistant Tenton Associate in Farm Associate in Farm Associate in Farm Assistant Veter B. T. Simms, D.V.M. Veter D. E. Stephenson, Ph.D. Associate Soils Sp. B. G. Thompson, M.S. Assistant in Soils (Soil Sp. A. Walker, B.S. Assistant in Soils (Soil Sp. A. Walker, B.S. Assistant in Soils (Soil Sp. A. Walker, B.S. E. H. Wiegand, B.S. Assistant in Enton Assistant in Enton Maud Wilson, B.S. Supt. Eastern Ore. Branch Exp. Station, Assistant in Enton Maud Wilson, B.S. Horticulturial Pr. Assistant in Enton Maud Wilson, B.S. Supt. Eastern Ore. Branch Exp. Station, Manue Wilson, B.S. Supt. Eastern Ore. Branch Exp. Station, Manue Wilson, B.S. Supt. Eastern Ore. Branch Exp. Station, Manue Wilson, B.S. Home Ecc.	andman andman of Soils Talent Chemist of Agri. nology) gement gement Burns inarian indologist survey) Union Chemist oducts) modogy poducts)
A. W. OLIVER, B.S. E. L. POTTER, M.S. M.S. Animal Husb: W. L. POWERS, Ph.D. Chief, Department of the Common of	andman andman andman of Soils Talent Talent Chemist Parish (Agricular Sement Burns inarian iologist (inarian and of Survey) Union Chemist Survey) Union Chemist Oducts) moologist oducts) moologist inarian cologist (inarian and of Survey) Union Chemist Oducts) moologist oducts) moologist oducts) moologist oducts) moologist oducts) moologist oducino odologist oducino oducino odologist oducino od oducino oducino od oducino od oducino od oducino od oducino od oducino od

Cattle Marketing Investigations at Portland, Oregon

By

H. A. LINDGREN

and

E. L. POTTER

The object of this study was to determine over a period of months in what way, if any, the type of cattle being produced by the stockmen of Oregon could be modified to suit better the needs of the consumer and at the same time bring more profit to the producer.

The Portland market was studied sixteen times, covering seasons when cattle were being received from different sections where they had been handled under various conditions.

The investigator at each visit made a count of the number of cattle that (1) were in desirable market condition, (2) were too thin to sell to advantage, (3) were too young, (4) were of dairy breeding, and (5) were of scrub breeding. A study was made of the outlet for these various grades. Attention was likewise given to the market and outlet for grain-fed cattle. The price received for these various grades was also obtained. The numbers and prices received are actual figures, while the segregation into grades was an estimate based on the investigator's judgment, together with that of men connected with the trade. The total receipts during the time of the sixteen visits were 40.193.

STEERS

1. It is desirable to make all beef-bred steers as fat as they can be made on grass or hay regardless of the time of year, but especially for the early summer market. It will be noted from the table that of a total of 16,322 steers received during the sixteen visits, 48 percent or 7281 steers were in desirable condition for market, and 40 percent or 6535 were too thin for killing purposes. This percentage varied with the seasons, as will be noted later. Between the desirable kind and the "too thin" kind there was an average difference in price of 95 cents per hundred. Of the total number of steers that were classed as too thin, 40 percent were rough and off quality. These steers, although they showed beef breeding, were such as do not fatten to advantage. The remainder of these "too thin" steers showed good quality and breeding and would have been desirable market cattle had they carried from 100 to 200 pounds more meat. The bulk of these cattle came off of early grass in June, July, and August, but there was a very considerable number throughout the year. Under certain local conditions, the marketing of thin cattle was found necessary due to drouth or lack of feed for later on. In order to have them desirable market cattle at least 60 days more grass would have been necessary. If this grass was available and it was such as would actually put on the gains, it would have paid the producer to have held them.

TABLE SHOWING NUMBER, PERCENTAGE, AND PRICE OF DIFFERENT GRADES OF CATTLE RECEIVED ON THE + SIXTEEN VISITS TO THE NORTH PORTLAND YARDS

	Desirable condition		Too thin			Too young			Dair	Scrub					
	No.	%	Price	No.	%	Price	No.	%	Price	No.	%	Price	No.	%	Price
Steers Heifers	7821 3052	48 46	\$8.28 6.91	6535 2031	40 30.6	\$7.33 6.35	998 663	6.5 10.0	\$6.66 6.39	666 716	4 10.8	\$6.31 5.95	312 168	1.5 2.6	\$5.68 5.33
Cows During this time, the average	5217 top p	42 rice fo	6.30	4184 was \$8.76	35.5 , for h	5.53 eifers \$7.57,	and for	cows	\$6.79.	2209	20	4.67	311	2.5	3.44

TABLE SHOWING NUMBER, PERCENTAGE, AND PRICE OF DIFFERENT GRADES OF CALVES RECEIVED ON THE SIX-TEEN VISITS TO THE NORTH PORTLAND YARDS

	Desira	ble c	ondition	Т	`00 tl	nin	Too heavy		
Beet Dairy During this time the average top price for veal calves was \$12.36.	No.	%	Price	No.	%	Price	No.	%	Price
	1631	53	\$11.36	768	25	\$7.72	648	22	\$6.65
	1101	48	10.72	669	29	7.34	510	23	6.06

The accompanying tables (page 4) give the numbers and percentage of cattle according to kind and condition.

During October, November, and December, 25 percent of the steers received were too thin to sell to advantage. These steers offered an excellent opportunity for winter feeding, especially those that had quality. They brought 95 cents per hundred less money than good steers at that time. On the other hand, they could have been put in good shape on hay alone on a margin of 35 cents per hundred per month for the period they were



Fig. 1. A good steer in desirable market condition. Came to market off grass in fall.

feed. (See Oregon Experiment Station Bulletin 193.) A 60 to 90 days' feed would have made them worth 95 cents a hundred more on the basis of quality alone. In addition to that, however, the market normally rises about 20 cents a month during the winter season, so that these cattle would have sold for \$1.35 to \$1.55 more if fattened to a reasonably good killing condition. This condition is reflected in the fact that these thin steers usually sell to better advantage to feeders in the country than to killers in Portland. It should be noted that these steers that were rated as "too thin" for killing purposes were, on the average, distinctly fatter than the usual run of feeder steers and could therefore be put in good condition on a comparatively short feed.

2. Cattle prices are normally highest in the late spring and lowest in the fall, but since the cost of production follows a similar curve there is no advantage in crowding unfinished cattle into the higher-price season. During the past sixteen years, the average decline from July to September has been 20 cents; during the past four years, 32 cents; and during the year just past the decline was 50 cents. As will be apparent, this decline in price

from July to September is less than the average difference of 95 cents between thin steers and fat steers. In other words, fat steers late in the summer sold for more than they were worth earlier in the season when they were not fat. In addition to the difference in price, there is a profit on the gains made on grass. In tests at the Eastern Oregon Experiment Station, it was found that where steers were on good grass the price could be marked down 25 cents per hundred each month. In other words, if a steer is worth \$8.00 a hundred in June, he can be kept to July and sold for \$7.75 at an equal profit. Or he can be held into August and sold at \$7.50, or till September and sold at \$7.25, all with equal profit. This is due to the fact that grass gains are cheap and rarely cost as much as 4 cents a pound, even including interest, insurance, labor, and all other items. The fact, therefore, that the price of steers normally declines through the summer months does not justify crowding thin cattle on to the market during the early part of the season. On the contrary, the improvement in the cattle and the low cost of grass gains make it profitable to hold cattle until they are fat even though top quotations decline. Of course, shortage of feed sometimes forces an operator to sell before the cattle are ready, but such necessity does not render the sale profitable.

- 3. The average premium on grain-fed steers over hay-fed steers was only 35 cents, which does not justify the expense of grain feeding. During the late winter and early spring months, a few loads of grain-fed steers from Eastern Oregon and Idaho were received. These were smooth steers carrying a very good finish. The average spread in price on these steers compared with average hay-fed steers was about 35 cents per hundred, which, according to tests at the Eastern Oregon Experiment Station, was not enough to justify the expense of grain feeding. The meat dealers stated that the limited demand for that class of beef did not justify them in paying a higher price. This may be due to one of two things: either our consuming public is not educated to the quality of grain-fed beef, or they are entirely satisfied that our hay-fed beef is just as good. It has been shown by the work of the Eastern Oregon Experiment Station that the difference in cost of production between hay-fed and grain-fed cattle in the Northwest is greater than it is in the Central States, where grain is cheaper but hay more expensive and of lower quality.
- 4. Young steers sell at a satisfactory price provided they are fat. A few steers were marketed that were too young to carry a desirable finish. Others were fat and well covered; these often sold up with the better steers. Where they were in growing condition, they sold at a sacrifice, usually about \$1.50 per hundred under steers in desirable condition and 50c under steers of heavier weight but thin in flesh. While our plan called for segregating the young steers that did not sell well, our study showed that the low price was due to lack of finish rather than lack of age. On the contrary, a lack of age is no handicap and is even an advantage provided the steers are fat. The fact remains, however, that very few cattle appearing on the Portland market at less than two years of age are fat unless they have had grain in rather liberal amounts. This is confirmed by the work of the Union Station, which has shown that it is very difficult to get a range steer fat without grain at less than two years of age.

There were occasional shipments of baby beef, and they sold well. There is apparently a growing demand in Portland for baby beef, but this demand has not been tested with sufficient thoroughness to justify a positive statement at this time.

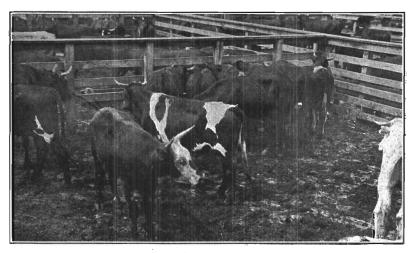


Fig. 2. Steers too thin to sell to advantage.

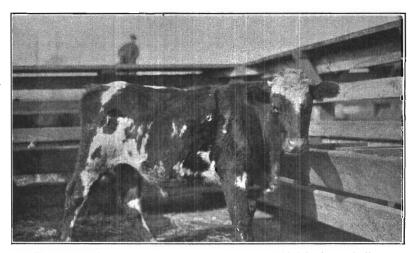


Fig. 3. An inferior steer. It does not pay to hold this kind for longer feeding.

5. Kill dairy-bred bulls at birth rather than make steers of them. During the period of the study, 4 percent of the steers received showed dairy breeding. Most of these were out of dairy cows and came from the dairy sections where some outside range is available. Some also came from sections where beef bulls had been used on dairy cows, such as might happen

on any beef ranch where dairy-bred cows are used for milk. These steers were oftentimes fat, but naturally were rough, shallow-bodied, and low yielding. These sold on the average at \$1.97 per hundred pounds less than the better grade of steers. It was not possible to obtain the difference in weight for age between the beef steers and the dairy steers, but the dairy steers were distinctly smaller. This smaller weight coupled with a differ-

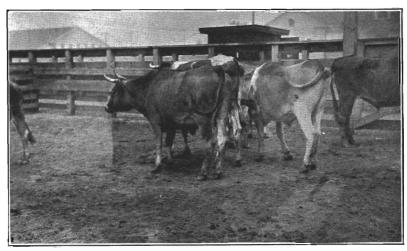


Fig. 4. Typical dairy-bred steers. It would pay better to knock these in the head as calves and put the feed into beef-bred animals.

ence of \$1.95 in price would indicate a difference per head of \$25.00 to \$35.00. This, in turn, would indicate that it would have been better to have knocked these dairy steers in the head the day they were born and to have bought good beef calves at current figures. In addition to being unprofitable in themselves, these dairy steers are a distinct damage to the beef market.

The percentage of so-called scrub steers, excluding the dairy steers, was small, amounting to but 1½ percent. These were off quality and grade, and such as carried very little covering and produced very low quality beef. While there is an outlet for the cheaper grade of beef, it does not bring a profit to the producer, and is a very inefficient machine for producing beef.

6. Light steers weighing 950 to 1150 pounds are most sought after. It was quite noticeable throughout this study that lighter steers are in greatest demand. Heavier cattle often sold up well, but it was usually a special circumstance such as a light run or an unusual demand that influenced the price paid. It seems safe to say that as a general rule the smaller the cattle the better they sell providing they are fat.

HEIFERS

7. Heifers sell to better advantage than thin and low-grade steers. During the period of this study, 46 percent of the heifers received were in desirable condition. Good heifers were in demand, and they sold as a

rule within a dollar and a quarter of the prices received for steers of the same quality. They almost always sold more readily than thin steers. The heifers in desirable condition brought on the average 42 cents less than thin steers, although they were considered more desirable beef.

Of the heifers 30.6 percent were too thin for market. These sold at a sacrifice of 56 cents a hundred under the heifers of better condition. This margin would have justified fattening on grass but not hay or grain.

Ten percent of the heifers received were quite young, but as in the case of the steers, indications are that this did not handicap them provided they were fat. In thin condition they sold for 52 cents per hundred less than good heifers but 4 cents more than thin older heifers. It seemed a sacrifice to sell these good young heifers where they are needed more in the breeding herd for replacing old cows, and their value should be placed on that basis rather than on a meat value.

In the heifer class, 10.6 percent showed dairy breeding. These were mostly out of straight dairy-bred herds. They sold for 96 cents less than the good heifers. There were a small number that were classed as scrubs because they showed entire lack of breeding and were of very poor conformation. This kind brought 62 cents per hundred less than dairy-bred heifers.

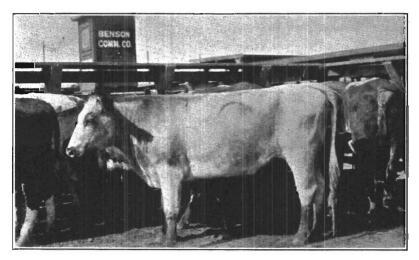


Fig. 5. Good beef cows in desirable condition, off of grass in the fall.

COWS

A total of 11,914 cows were received, of which 42 percent were in desirable condition. Cows always sell very well on the Portland market. There is a good outlet for cow beef of all classes in the retail trade and the logging camp trade. The latter prefer large cuts of cow beef for roasts. A great deal of the cow beef is used by restaurants. This class of beef seems to have a better outlet than the lower grades of steer beef.

8. Make all beef-bred cows as fat as they can be made on grass. It is a question if it will pay to fatten them on winter feed. Of the beef-bred

cows, 35½ percent were too thin to sell at the best prices. These were cows that in many cases were brought in with a calf at side and sold in suckled down condition. This happened mostly during the periods between June and August and in October and November. During that time, the receipts of cows were greater in proportion to steers than at other seasons of the year. These thin cows found a very ready market at all times at 77 cents less per hundred than the cows in desirable condition. Where a cattleman is fully stocked or has cull cows to dispose of, the practice of selling them with the calves off of grass seems to be a logical one. Where feeder steers are scarce and high in price, some stockmen are feeding these thin cows to advantage. The spread in price between thin cows and cows in desirable condition, however, is not as great as between steers of similar

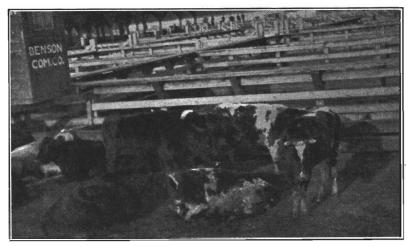


Fig. 6. Cows too thin to sell to best advantage.

grades, and from the standpoint of a market for hay, the steers offer the better opportunity. There were two periods when the percentage of thin cows was unduly large. The first period was in the early summer. Apparently producers were rushing cows to market before the summer decline in price. As with steers, there is every indication that it would have been more profitable to hold these cows on grass until fat, even though sold on a lower price level. The second period when thin cows were especially abundant was late in the fall. These were apparently cows that the owners did not care to winter. With an average difference in price between fat and thin cows of 77 cents, it would not appear that much would have been gained by holding and fattening them on winter feed.

9. Discarded dairy cows should be sold as soon as possible and no expense put on them. Dairy-bred cows made up 20 percent of the total cow receipts during the time of the visits. This seems to check closely with the total figures over a period of years. In comparison with their value, this grade of cattle sold to better advantage than any other offered on the market. Practically all of these cows were culled from the dairy herds and were received in greatest numbers during the late fall and winter

months. They came from the Coast Region, from the Willamette Valley points, and from the irrigated sections. These cows weighing in the neighborhood of 900 to 1000 pounds sold within \$1.60 of good cows. The demand was always keen for this class, and they were usually the first ones sold during the day's sales.

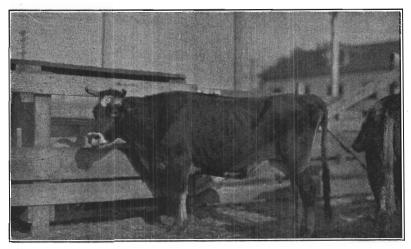


Fig. 7. A typical dairy cow such as make up a considerable percentage of the receipts during the winter and early spring months.

There were 2.5 percent of the cows that were classed as scrubs. These brought an average of \$3.44 per hundred, or a little more than a dollar less than dairy-bred stuff. These were such cows as showed very little yield, were shallow, and lacked breeding. Since dairy cows and scrub cows seem to bring all they are worth at any time, no changes in marketing are recommended. While the fatter dairy cows bring more money than the thinner ones, the margin is not sufficient to justify fattening except where grass is abundant and unusually cheap. Feeding tests at Corvallis have shown that it takes the same feed to fatten a cow as to fatten a steer, while our market studies show that the margin between a fat steer and a thin steer is much greater than that between a fat dairy cow and a thin dairy cow.

CALVES

The receipt of calves at North Portland was heaviest during the fall months, and through the early winter months. Idaho furnished a very heavy calf run during January, February, and March.

10. Market all calves before they pass 200 pounds in weight. Our studies show that the average price for the good calves weighing not more than 200 pounds was \$11.36 per hundred pounds. The calves that were too thin sold for \$7.72 per hundred, or \$3.64 less. Heavy calves weighing 250 to 400 pounds brought on the average \$6.65 per hundred or \$4.71 per hundred less than vealers or calves in the desirable weight class. This heavy class comprised 22 percent of the beef calves offered.

During the grass season, the percentage of beef-bred calves that were in desirable condition for market was higher than when the cows were on dry feed. This, of course, is natural. When the cows are on grass they are milking more heavily, and consequently the calf puts on more fat. Whenever the feed dries up or the cows drop off in milk, the percentage of thin calves is greater. The best prices were paid for the light veal, or calves weighing not more than 200 pounds live weight, and in good condition. For the beef-bred calves throughout the period, 25 percent were too thin, mostly coming during the winter months. Let us consider just what that meant. A 200-pound vealer brought \$22.72. A 200-pound thin calf brought \$15.44, and a 300-pound calf brought \$19.95. The good 200-pound vealer brought \$7.28 per head more than the thin kind and \$2.77 more than a 300-pound calf.

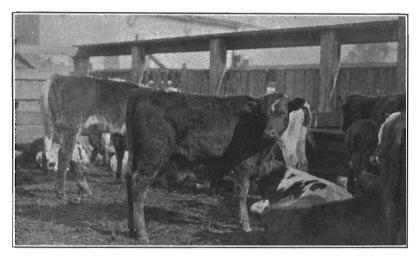


Fig. 8. Good calves weighing less than 200 pounds. The kind that bring the best price on the market when in desirable condition.

Good dairy calves sold within 64 cents per hundred of good beef calves. The percentage of thin and heavy calves was practically the same for dairy as for beef throughout the period. Twenty-nine percent of the dairy calves were too thin and 23 percent too heavy. The same relation to milk production applied here as with beef calves. It was noticeable that during the grass period, when the milk flow was the highest, the percentage of thin dairy calves was less than when cows dropped off in nilk.

CONDITION OF SEASONAL RECEIPTS

The tables that follow give the estimated percentage of the grades of cattle and calves at the time of each visit. These tables show the variation in condition of cattle received at different seasons. It will be noted that there was a higher percentage of thin cattle during June, July, and August, which would indicate that there is a tendency toward crowding them to market before they are ready.

The heaviest percentage of dairy cows and heifers is shown during the winter and early spring months. When the grass is good on the farms, the cows are milking their best and fewer are found on the market. The highest percentage of calves in desirable condition is shown to be during the spring months when milk flow is at its best.

PERCENTAGE OF VARIOUS GRADES OF CATTLE RECEIVED DURING THE SIXTEEN VISITS TO THE STOCKYARDS

	Steers						С	ows		Heifers					
Date	Desirable condition	Too thin	Too young	Dairy	Scrub	Condition	Too thin	Dairy	Scrub	Desirable condition	Too thin	Too young	Dairy	Scrub	
Jan. 4, 1926 Feb. 1, 1926 May 17, 1926 May 17, 1926 June 14, 1926 June 28, 1926 July 26, 1926 Aug. 2, 1926 Aug. 16, 1926 Sept. 13, 1926 Nov. 15, 1926 Nov. 29, 1926 Jan. 10, 1927 Feb. 14, 1927 Mar. 28, 1927 Apr. 18, 1927	. 50 - 75 - 40 - 25 - 13 - 20 - 40 - 55 - 60 - 75 - 75	22.2 35 40 15 50 70 80 77 65 45 30 25 10 10 12 24	5.6 9 5 7 3 9 3 10 10 5 5 5 5 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5	5.6 5.3 3.2 2.2 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5	2.2 1 2 2 1 1 1 5 5 5 3 1	566 555 500 500 500 500 500 500 500 500	18 35 20 10 50 65 59 52 40 25 50 20 20 25	22 28 28 25 8 9 10 15 15 20 25 15 25 25 10	3 2 2 5 2 1 1 1 1 1 5 5 5 5 5 5 5 5 5 5 5	55 50 48 60 40 25 35 25 40 75 45 35 70 75 80	15 35 10 10 35 60 30 60 48 10 25 25 15 10 7	15 4 25 5 15 10 25 5 15 10 25 5	13 10 15 20 8 4 8 8 10 10 25 7 5 10 40	1 2 5 2 1 1 1 2 1 5 3 5 3 10	

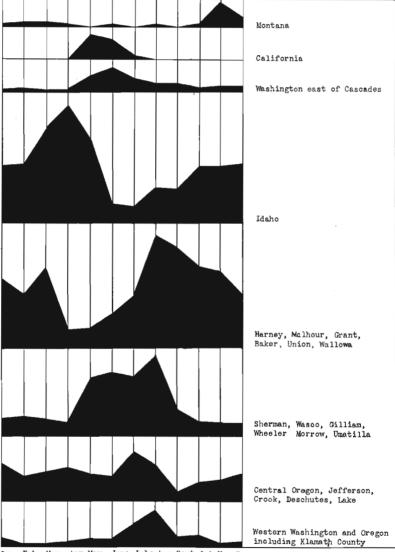
PERCENTAGE OF VARIOUS GRADES OF CALVES RECEIVED DURING THE SIXTEEN VISITS TO THE STOCKYARDS

	В	eef Calve	es	Dairy Calves					
Date	Desirable condition	Too thin	Too heavy	Desirable condition	Too thin	Too heavy			
Jan. 4, 1926	43.1	6.5	40						
Feb. 1, 1926	75	10	15	90	5	5			
Mar. 20, 1926	35	40	25	25	25	50			
May 17, 1926	50	10	40	50	20	30			
June 14, 1926	90	5	5	25	50	25			
June 28, 1926	50	35	15	50	35	15			
July 26, 1926	60	20	20	30	30	20			
Aug. 2, 1926	50	30	20	50	30	20			
Aug. 16, 1926	50	35	15	50	35	15			
	50	30	20	- 50	30	20			
Sept. 13, 1926	45	30	25	45	30	25			
Nov. 15, 1926						20			
Nov. 29, 1926	50	30	20	40	40				
Jan. 10, 1927	50	25	25 .	50	25	25			
Feb. 14, 1927	25	25	50	40	40	20			
Mar. 28, 1927	60	30	10	50	30	20			
Apr. 18, 1927	60	25	20	50	25	25			

RECEIPTS BY ZONES

11. The variety of territory tributary to Portland makes it possible for the producers of each zone to market their cattle at the season when they can make them the fattest with the least expense. Under these conditions, no large changes in the time of marketing are desirable. It is, however, highly desirable to have a better adjustment of the week-to-week shipments, as was attempted by the Oregon Cattle and Horse Raisers' Association.

12. The Portland market needs 2500 cattle a week to satisfy the demand. It is quite noticeable that when the number of cattle received is less than that number there is an active trade. The cattle sell out early and at better prices than when there are more. On the other hand, when the Monday supply exceeds 2500 head of mature cattle, the trade is slow and buyers do not seem to be able to handle them, and usually the price



Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec

Fig. 9. Graph showing cattle shipments received at North Portland, 1926, by zones.

RECEIPTS OF CATTLE IN PORTLAND, 1926, BY ZONES

Zone	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Western Washington and Western Oregon including Klamath county	417	123	140	203	332	367	1029	1680	454	520	149	282
Central Oregon, Jefferson, Crook, Deschuts, and Lake	1797	1148	1343	1502	1339	1106	2354	1796	483	990	1030	130
Sherman, Wasco, Gilliam, Wheeler, Morrow, and Umatilla	888	946	890	601	2698	2902	2748	3742	1107	690	671	599
Harney, Malheur, Grant, Baker, Union, and Wallowa	3144	2409	3778	927	926	1563	2327	5236	4787	3728	3529	241
Idaho	2608	2741	4438	5455	4014	887	740	1686	1654	2608	2678	271
Washington, east of Cascades	166	231	170	174	788	1143	628	463	411	166	206	28
California					1169	983	127					
Montana	169	213	248	135		162		95		169	1129	547
Canada			******					69				
All other states	******		84			• · · · · · · · ·						

RECEIPTS OF CALVES IN PORTLAND, 1926, BY ZONES

Zone	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Western Washington and Western Oregon including Klamath county	17	12	13	24	40	31	134	426	84	71	24	20
Central Oregon, Jefferson, Crook, Deschuts, and Lake	139	93	50	64	155	83	164	232	91	174	82	59
Sherman, Wasco, Gilliam, Wheeler, Morrow, and Umatilla	76	60	45	34	194	301	260	344	298	116	144	89
Harney, Malheur, Grant, Baker, Union, and Wallowa	263	91	319	80	292	335	339	652	557	317	388	164
Idaho	768	843	784	530	537	365	292	245	681	768	638	590
Washington east of Cascades	49	13	10	12	102	56	80	70	32	49	70	18
California												
Montana	10	34	4							10	106	6
Canada	• • • • • • • • • • • • • • • • • • • •						*****					
All other states				*******								

received is not so good. Hence, it is a logical idea to practice orderly marketing.

Through the cooperation of Mr. C. L. Jamison, market director of the Oregon Cattle and Horse Raisers' Asociation, data were obtained as to the source of all cattle received during 1926. These data are shown in the tables on page 15. In these figures will be noted a marked tendency for the peak shipments from the various zones to come at different times of the year. For example, the beginning of the year finds the larger part of our cattle coming from the feed lots of Eastern Oregon and Idaho. By April, the Oregon feed lots are pretty well cleaned up, but Idaho is coming strong. May sees the last of the feed-lot cattle and the early-grass cattle from California and the Columbia basin. Midsummer brings heavy runs from both Western Oregon and Central Oregon. August and September bring the big runs of grass cattle from the Blue Mountain counties. This run continues on into the fall, supplemented by heavy runs from Idaho and by some late grass cattle from Montana. Fall season, however, sees but few cattle from Western Oregon or the Columbia basin. In this way there is a quite satisfactory distribution of cattle throughout the year.

SUMMARY

- 1. It is desirable to make all beef-bred steers as fat as they can be made on grass or hay regardless of the time of year, but especially for the early summer market.
- 2. Cattle prices are normally highest in the late spring and lowest in the fall, but the cost of production follows a similar curve so that there is no advantage in crowding unfinished cattle into the higher-price season.
- 3. The average premium on grain-fed steers over hay-fed steers was only 35 cents, which does not justify the expense of grain feeding.
 - 4. Young steers sell at a satisfactory price providing they are fat.
 - 5. Kill dairy-bred bulls at birth rather than make steers of them.
 - 6. Light steers weighing 950 to 1150 pounds are most desired.
 - 7. Heifers sell at better advantage than thin or low grade steers.
- 8. Make all beef-bred cows as fat as they can be made on grass. It is a question whether it will pay to fatten them on winter feed.
- 9. Discarded dairy cows should be sold as soon as possible and no expense put on them.
 - 10. Market all calves before they pass 200 pounds in weight.
- 11. The variety of territory tributary to Portland makes it possible for the producer to market his cattle when they can be made the fattest and the cheapest.
- 12. An average of 2500 cattle per week satisfies the demand at Portland.