

A SURVEY OF COW-CALF PRODUCERS IN OREGON AND NEVADA – PRODUCTION PRACTICES

D. W. Bohnert¹, R. F. Angell², and R. C. Torell³Eastern Oregon Agricultural Research Center, Oregon State University¹ and ARS-USDA², Burns, OR 97720, Cooperative Extension, University of Nevada, Reno, Elko, NV 89801³

ABSTRACT: In 2004, we sent a cow-calf production survey to 1,400 individuals in NV (NV Cattleman's Association members and associate members; University of NV – Reno, Cooperative Extension Service livestock mailing list) and 2,090 individuals in OR (OR Cattleman's Association mailing list). Objectives were to better understand current cow-calf management practices and enhance Extension beef programs in the Intermountain West. A total of 462 surveys were returned (NV=91; OR=371). Herd sizes varied widely, with 25, 36, 24, and 13% of respondents listing 0-50, 51-200, 201-600, and greater than 600 hd, respectively (2% didn't provide a herd size). Fifty-two percent of the survey respondents always cull open cows. In addition, of the 48% (222 respondents) that claimed to not cull all open cows, the top 3 reasons for keeping an open cow were young cows (51%), if the cow had been a good producer in the past (25%), and if the cow lost her calf through no fault of her own (23%). The most frequent culling rate for cows was 10% or less (43%), while 54% of respondents claimed annual cow death loss to be less than 0.5%. An overwhelming majority of producers (74%) raised their own replacement heifers, with 49% rating their heifer replacement program as excellent and 42% claiming to need improvement. The most common annual cow cost was \$251-300 (22%), with both \$201-250 and \$301-350 being listed by 18% of producers. The annual return on investment was listed as positive, breakeven, and negative by 64, 16, and 5% of respondents, respectively. Only 25% of producers conduct complete breeding soundness exams on their bulls each year and 40% don't test their bulls at all. Nevertheless, the average pregnancy rate was listed as greater than 91% by 70% of the respondents. This survey provides information on current cow-calf production practices in NV and OR and will assist in developing cow-calf Extension programs.

Key words: Intermountain, Cow, Management, Survey, West

Introduction

The diversity of the climate and topography in Nevada and Oregon can be a challenge to cow-calf producers. Consequently, an understanding of current production practices by cow-calf producers is necessary to develop effective Extension programs that help improve the economic efficiency of beef production in the Intermountain West.

This survey was developed to obtain information on current cow-calf management practices. This will allow Extension personnel to better understand beef production in

the Intermountain West and develop Extension beef programs that address current needs and/or deficiencies in production practices.

Materials and Methods

We developed a survey and sent it to cow-calf producers throughout Nevada and Oregon. The survey posed 22 questions related to cow management, female replacement programs, bull management, and annual cow-herd economics. In Nevada, the survey was mailed to 1,400 individuals who were members of the Nevada Cattleman's Association and/or the University of Nevada-Reno Cooperative Extension Service Livestock mailing list. In Oregon, 2,090 surveys were mailed to the members of the Oregon Cattleman's Association mailing list. The Nevada and Oregon mailings included a postage-paid return form that allowed the survey respondents to mail the completed surveys back at no cost and in complete anonymity.

As of March 1, 2005, the cutoff date for this report, 462 surveys had been returned (Nevada = 91; Oregon = 371). Information from each response was entered into a Microsoft® Access 2002 (Microsoft Corporation, Redmond, Washington) database to facilitate data summary and analysis.

Survey Results

General Respondent Information

Surveys for both states listed western, central and eastern as location choices. If no response was given we placed the survey in a "general" category. In Nevada, 45, 15, 39, and 1% of respondents listed western, central, eastern and general as the location of their operation (data not shown), while in Oregon, 24, 16, 57, and 3% of respondents listed western, central, eastern and general as the location of their operation (data not shown).

The average herd size varied widely, with the most common herd being 50 head or less, which was reported by 25% of respondents (Table 1). The least common herd size, greater than 1000 head, was noted by 6% of respondents. Approximately 2% of the returned surveys did not list a herd size.

We listed seven categories for type of beef operation, and respondents were asked to check all that applied. Many respondents listed multiple operation types, indicating the diverse nature of beef operations in the Intermountain West. Categories that we provided on the survey, with the proportion of respondents listing each in

parenthesis, were: registered seed stock producer (16%), commercial producer (66%), outside year round operator (13%), irrigated/improved pasture operator (57%), common allotment range operation (16%), desert range (low input-tough) operator (11%), and desert range (moderate input-more balanced) operator (27%).

The two most frequently listed calf weaning weights were over 272 kg and 250-272 kg, which were each selected by 27% of cow-calf producers. The next two most common weaning weights were 227-250 kg and 204-227 kg by 19 and 16% of producers, respectively. Six percent of respondents listed an average weaning weight of 182-204 kg while 1% listed less than 182 kg as their average weaning weight. We took the mid-weight from each weaning weight range provided on the survey, multiplied that number by the number of respondents in that respective category, and then averaged the estimated weights per category to get an overall average weaning weight for survey respondents. That weight was 241 kg.

Culling Practices

The most common cow culling rate was 0-10% which was noted 43% of the time followed by 10-15% which was listed by 28% of respondents. The remaining three culling rates, 16-20%, 21-25%, and > 25%, were selected by 8, 1, and 0.2% of producers, respectively. In addition, approximately 1% of respondents stated that their annual cow culling rate depended on ranch finances and drought conditions while 10% stated that multiple strategies were used in determining culling rate. Two percent of returned surveys did not list a selection for cow culling rate.

The proportion of respondents that always cull open cows was 52% (240 of 462). The reasons given by the remaining 48% of respondents for not culling open cows are listed in Table 2. It should be pointed out that many of the survey respondents listed multiple reasons for not culling open cows; therefore, the percentages listed in Table 2 were calculated as the number of responses listed for each category divided by the 222 respondents that claimed to not always cull open cows. The majority of responses (51%) listed a young cow as the primary reason to not cull. The next two most frequently stated reasons for not culling an open cow were past performance (25%) and if it was "not the cows fault" that she was open (23%). The remaining reasons for not culling an open cow were listed less than 10% of the time.

Cow Replacement Programs

The response for cow death loss was 54, 27, 13, and 4% of survey respondents stating that annual death loss was 0-0.5, 0.5-1.0, 1.0-1.5, and > 1.5%, respectively. Three percent of respondents didn't respond with an estimate.

Approximately 42% of cow-calf producers stated that they replace a constant percentage of their cow herd each year. This was followed by 24% stating that they replace all culls and 12% retaining more cows when cow prices are low. Other considerations listed for determining the annual cow replacement rate included selling more cows when cash was short (5%), keeping more cows when

cow prices are high (4%), and replacing a constant dollar value of cows each year (0.4%). Also, 9% of the respondents chose more than one of the reasons listed above and 4% didn't provide any response.

The most common replacement strategy listed by cow-calf producers was raising their own replacement heifers (74% of respondents). The next most frequently listed replacement strategy was purchasing pregnant heifers at 5%. Purchasing pregnant cows was listed by 2% of respondents and purchasing both pregnant cows and heifers was listed by 1% of producers. The remaining responses involved some combination of the variables above (data not shown).

Heifer replacement programs were rated as excellent by 49% of respondents while 42% felt that they could use improvement. Only 1% of the survey responses listed their heifer development program as poor. Seven percent of cow-calf producers didn't provide a response in relation to their heifer development program.

Annual Cow Cost/Economics

The reported annual cow cost for survey respondents is listed in Table 3. The most common response (22%) was \$251-\$300 per year. However, there was a wide range in reported cow cost with 70% of all cow-calf producers listing costs between \$200 and \$400. Almost 14% of producers either didn't know or didn't provide an estimate of their annual cow cost.

The proportion of respondents that provided an estimated annual return on investment (ROI) was 25, 24, 15, 16, and 5% for a ROI of 0-5%, 5-10%, > 10%, breakeven, and negative, respectively. Similar to annual cow cost, approximately 15% of cow-calf producers didn't know or didn't provide an estimate of their annual ROI.

Bull Management

Most survey respondents (32%) purchase their bulls via private treaty and only slightly fewer (27%) purchase bulls from a bull sale. Similarly, 16% listed both private treaty and bull sales as sources of seed stock. Therefore, 75% of the survey respondents purchase their bull battery from either a bull sale or by private treaty. Only 5% of producers raise their own bulls and 1% purchase bulls from a sale barn. The percentage of surveys that did not provide a type of bull purchase was 5%. The remaining responses involved some combination of the variables above (data not shown).

Yearling bulls were preferred for purchase by 34% of cow-calf producers followed by 2-yr olds at 18%. Also, approximately 14% of respondents purchase both yearlings and 2-yr olds. Surprisingly, 34% of producers chose not to respond. Table 4 provides a breakdown of the price that survey respondents pay for bulls.

The responses to our questions regarding annual testing of bulls are provided in Table 5. Briefly, 40% of respondents don't do any form of testing while 25% have complete breeding soundness exams performed. Only 8% of cow-calf producers test for trichomoniasis and 12% have semen tests conducted.

The average age that most cow-calf producers dispose of their bulls was 5 yr (43% of respondents). The next most frequent disposal age was 6 yr or older, which was selected by 26% of producers. This was followed by 4 (16%) and 3 (4%) yr old bulls. Four percent of respondents didn't list a bull disposal age. The remaining respondents selected multiple ages (data not shown).

The most frequently listed cow-to-bull ratio was 20-25:1, which was noted by 46% of cow-calf producers. The next most common ratios were 15-20:1 (28%) and greater than 25:1 (14%). Approximately 12% of respondents didn't provide a cow:bull ratio.

Cow Reproduction

Spring calving was listed by 68% of producers and fall calving was selected by 6% of respondents. Interestingly, 21% stated that they had both spring and fall calving cows. About 5% of producers did not respond.

Length of breeding season information is provided in Table 6. Approximately 75% of the cow-calf producers use a breeding period of 90 d or less. Consequently, 23% of respondents listed a breeding season greater than 90 d. Only 2% of the surveys didn't offer a length of breeding season.

Pregnancy rate is one of the most important performance variables for a cow herd. Seventy percent of survey respondents said their herd's pregnancy rate was greater than 91%, with 19% saying their rate was 86-90%. The remaining responses were 0.2% for < 70% pregnancy rate, 0.4% for 71-80%, 4% for 81-85% and 6% declined to provide a pregnancy rate.

Table 1. Average herd size of survey respondents^a

Herd Size, hd	Percentage
0-50	25.1
51-100	19.5
101-200	16.2
201-300	10.0
301-400	6.3
401-600	8.0
601-1000	6.5
>1000	6.1
No selection on survey	2.4

^a 462 total respondents

Table 2. Reasons for keeping open cows^a

Reason	Percentage
Young cow	51.4
Past performance	25.2
Climate/drought	5.9
Sentimental	4.1
Not cows fault	23.4
Rebreed and sell	3.2
Economics	6.8
Cow will eventually rebreed	5.4
Foothill abortion	2.7
Genetic base	8.6
Use in Embryo transfer program	2.3

^a 222 respondents; multiple selections by most respondents

Table 3. Annual cow cost of survey respondents^a

Cow cost, \$	Percentage
100-200	10.8
201-250	17.7
251-300	22.3
301-350	18.0
351-400	12.3
> 400	5.2
No selection on survey	13.6

^a 462 respondents

Table 4. Price paid for bulls by survey respondents^a

Purchase price, \$	Percentage
≤ 1,000	4.5
1,001-1,300	9.7
1,301-1,600	14.7
1,601-1,900	8.2
1,901-2,200	13.6
2,201-2,500	14.7
2,501-3,000	13.6
> 3,000	14.5
Multiple prices chosen	0.6
No selection on survey	5.6

^a 462 total respondents

Table 5. Bull testing practices of survey respondents^a

Type of test	Percentage
Trichomoniasis	8.0
Semen	12.1
Trichomoniasis + semen	9.3
Breeding soundness exam	25.1
No testing	39.8
No selection on survey	5.6

^a 462 total respondents

Table 6. Length of breeding season listed by survey respondents^a

Breeding season, d	Percentage
≤ 45	5.2
45-60	29.2
60-90	40.9
90-120	14.3
>120	8.2
No selection on survey	2.2

^a 462 total respondents