6-30-2004

Selected Demographics of Western Nebraska Cow-Calf Producers

Richard T. Clark  
*University of Nebraska-Lincoln*, rclark3@unl.edu

Roger K. Wilson  
*University of Nebraska-Lincoln*, rwilson6@unl.edu

Follow this and additional works at: https://digitalcommons.unl.edu/agecon_cornhusker

Part of the Agricultural and Resource Economics Commons


https://digitalcommons.unl.edu/agecon_cornhusker/172

This Article is brought to you for free and open access by the Agricultural Economics Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Cornhusker Economics by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Selected Demographics of Western Nebraska Cow-Calf Producers

A recent survey of cow-calf producers in thirty-seven Western Nebraska counties inquired about cow-calf management practices and demographic characteristics of the respondents. Usable questionnaires were returned by 315 producers. Respondents categorized themselves as living either in the Panhandle (PH), Southwest (SW), Sandhills (SH) or ‘CKB’ areas of Western Nebraska. The ‘CKB’ area included producers who lived in Custer, Keya Paha or Boyd counties. For some questions the responses from some areas were too few to report separately, so areas were aggregated for reporting purposes. The survey sample was stratified by herd size measured as number of beef cows. The Nebraska Agricultural Statistics Service (NASS) drew the random sample and mailed the questionnaires.

Respondents in all areas were primarily owner/operator and manager of the operation. Only in the CKB area (88 percent) did fewer than 90 percent of respondents indicate that they were the owner/operator and manager. It was our hypothesis that owners/operators would be able to provide the most accurate information about the cow-calf operation.

The average age of all respondents was 54.7 years, which compares to 52.5 and 53.9 years for all principal farm operators in Nebraska for the 1997 and 2002 Agricultural Census, respectively.

Land Tenancy and Location of Residence

Figure 1 shows the tenancy relationship for survey participants. There is little difference between the regions. By far the majority of operations utilize owned and leased land (72-82 percent). Less than 25 percent of operations utilize owned land only, and
even fewer operate only on leased land. Figure 2 depicts the relative amounts of land owned and leased by those who both own and lease land. The majority of land is owned; however, respondents in CBK leased nearly as much land as they owned. The land leased is primarily from private individuals. State and federal land made up about 25 percent of the leases in the Panhandle and Sandhills areas.

**Figure 1. Operations that Own Land, Lease Land or Both by Region**

![Figure 1](image1.png)

**Figure 2. Percent of Area Owned or Leased by Owner-Lessee**

![Figure 2](image2.png)

Location of the principal residency by size of herd and location is shown in Figure 3. We aggregated responses for all areas other than Sandhills together. Notice that as herd size grows a higher percent of the respondents live on the ranch (with the exception of the non-Sandhills area small herds), until the cowherd exceeds 600 head, at which point fewer respondents live on the farm/ranch. The reduction in the percent living on the farm/ranch was most noticeable for those in the non-Sandhills area. As ranches increase in size and complexity they often require more labor, which may permit the principal manager to live at another location.

**Figure 3. Respondents Living on the Farm/Ranch by Herd Size**

![Figure 3](image3.png)

**Education Level and Herd Size**

Respondents were asked their education level. If they did not receive a high school diploma, the response was given an 11. A 12 indicated high school graduate while a 13 was assigned for vocational school, a 14 for some college or junior college, a 15 for college degree and a 16 for postgraduate degree. The means for the Sandhills and non-Sandhills area were 13.4 and 13.5 respectively, indicating that on average the respondents had completed vocational school or some college. Education and herd size were strongly related (Table 1). Since the original sample was stratified by herd size, the means were strata adjusted to better represent the population of cow-calf producers. Responses from all areas were combined to examine the relationship between herd size and education. It is apparent from Table 1 that the educational level of the responding cow-calf producers is quite high, with over 62 percent having completed at least some 4-year or community college. And those with the highest levels of education tended to have the largest cowherds.

**Table 1. Number of Respondents and Herd Size by Educational Level**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Number of Respondents</th>
<th>Average Number of Cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12</td>
<td>13</td>
<td>236</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>76</td>
<td>374</td>
</tr>
<tr>
<td>Vocational School</td>
<td>18</td>
<td>315</td>
</tr>
<tr>
<td>Some College/Jr. College</td>
<td>76</td>
<td>524</td>
</tr>
<tr>
<td>4-Year College Graduate</td>
<td>78</td>
<td>632</td>
</tr>
<tr>
<td>Post Graduate Education</td>
<td>24</td>
<td>743</td>
</tr>
</tbody>
</table>
Size of Operation by Land Area

The average size of the ranches including both leased and owned land was 4,365 acres in the Sandhills and 3,646 in the non-Sandhills areas. Since number of acres and herd size were highly correlated (r = 0.89), the means for these two areas were adjusted by the sample strata. The average size of the Sandhills ranches compares very closely to an earlier survey conducted in 1992 when the average size was 4,625 acres (Clark and Coady). Does this mean the average size of ranches in the Sandhills has fallen? The answer is probably not. Statistically the two averages are probably not different and reflect sampling differences between the two studies.

Summary

Cow-calf production in Western Nebraska is primarily in the hands of owner-operators. Hired managers operate few ranches. These cow-calf producers own more cows compared to the state average of 91 head (2002 Agricultural Census). On average they are also a bit older than the average farmer/rancher in the state. The majority live on the ranch; however, a significant number live elsewhere, especially in the very large and very small operations as measured by numbers of cows. Leased land is a common resource in most all operations. Few ranches use only deeded land, and the most common lease is from private individuals.

These cow-calf producers are well educated, with many having attended college. As education goes up so does the number of cows managed.

References:


Richard T. Clark, (402) 472-3401
Dept. of Agricultural Economics

Roger K. Wilson
(308) 532-3611, Ext. 157
West Central Research & Extension Center
**Cornhusker Economics**  
Subscription Rates Prorated by Month  
(Subscriptions run from July 1 – June 30)  
**2004 - 2005**

<table>
<thead>
<tr>
<th>Subscription as of</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1</td>
<td>20.00</td>
</tr>
<tr>
<td>August 1</td>
<td>18.40</td>
</tr>
<tr>
<td>September 1</td>
<td>16.80</td>
</tr>
<tr>
<td>October 1</td>
<td>15.20</td>
</tr>
<tr>
<td>November 1</td>
<td>13.60</td>
</tr>
<tr>
<td>December 1</td>
<td>12.00</td>
</tr>
<tr>
<td>January 1</td>
<td>10.40</td>
</tr>
<tr>
<td>February 1</td>
<td>8.80</td>
</tr>
<tr>
<td>March 1</td>
<td>7.20</td>
</tr>
<tr>
<td>April 1</td>
<td>5.60</td>
</tr>
<tr>
<td>May 1</td>
<td>4.00</td>
</tr>
<tr>
<td>June 1</td>
<td>2.40</td>
</tr>
</tbody>
</table>

Enclosed is my check for $___________ made payable to the **University of Nebraska**. Please begin my subscription to *Cornhusker Economics* for __________ months through June 30, 2005.

Name  
__________________________________________

Address  
__________________________________________

Mail with your payment to:  
Nancy Pritchett, 307 Filley Hall, University of Nebraska, Lincoln, NE  68583-0922.  
Phone: (402) 472-1789