

Profiling the Evolving Characteristics and Needs for Risk Management Education of Commercial Agricultural Producers in the Intermountain West

John P. Hewlett and Cole Ehmke

University of Wyoming, Department of Agricultural and Applied Economics

Poster prepared for presentation at the Agricultural & Applied Economics Association 2010
AAEA, CAES, & WAEA Joint Annual Meeting, Denver, Colorado, July 25-27, 2010

Copyright 2010 by John P. Hewlett and Cole Ehmke. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Profiling the Evolving Characteristics and Needs for Risk Management Education of Commercial Agricultural Producers in the Intermountain West

John P. Hewlett & Cole Ehmke, Department of Agriculture and Applied Economics, College of Agriculture and Natural Resources



The Issue

This project aimed to gain an understanding of Extension programming needs of larger producers in the intermountain west, focusing on identifying the risk factors that lead to their vulnerability and to identify effective methods for delivering outreach education. The project would aid in the identification of the risk management needs of Extension clientele and their learning preferences. In 2006 a mirror image of the current study focused on the growing small farm sector (\$50,000 sales and below) with the principal objectives of the study to assist in the discovery of new extension clientele in the West.

Agricultural operator demographics are changing; large operations are becoming larger and the number of small operations is increasing. Managers in the middle are under increasing pressure to become more competitive as a result, simultaneously elevating the risks they face.

Educators and administrators may gain a better understanding from these results of what educational needs exist so that programs may be created that are of value to changing rural populations. Complete results are forthcoming and are available at RuralFamilyVentures.org.

Key Insights

- There are **63,760 farms** in Wyoming, Colorado, and Arizona (USDA-NASS, 2007).
- **Making a profit** was the most frequently stated reason for engaging in rural family enterprises.
- Respondents overwhelmingly expect to manage their property **"until I can no longer do the work."**
- **Production risk** was ranked as the most important source of risk; legal and human risk were ranked as least.
- The preferred source for receiving information is **one-on-one communication**, while the preferred form is **print**.
- The majority of large operations are organized as **sole proprietorships**, almost always family-owned or closely held.
- The highest level of education most often reported was **high school** for all operators, with a significant number indicating they earned a 4-year degree or more (37 percent for the primary operator and 39 percent for operator #2).
- Primary operator age was most often reported as **65 and over**, with 45-54 years of age for operator #2.
- A total of 92 percent indicated at least one member of the primary operators' household currently **holds an off-farm job**.



The Survey

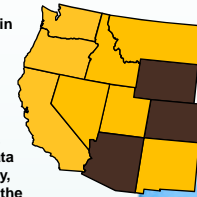
To better understand the characteristics and needs of larger agriculturalists, the Rural Family Ventures Team conducted a survey of farm operations in Wyoming, Colorado, and Arizona in the spring of 2008. The target population was operations with annual sales greater than \$50,000.

The eight-page survey instrument was developed by the Rural Family Ventures Team. The National Agricultural Statistics Service (NASS) conducted the survey with the Wyoming and Colorado Field Offices completing the project. The survey was mailed to farm operators selected by NASS from its various data bases. A follow-up postcard was mailed two weeks later. Finally, telephone interviews were conducted with operators to obtain the desired 50 percent return rate.

The survey instrument had seven sections:

1. Reasons for Involvement
2. Information Preferences
3. Resource Management – general
4. Resource Management – crops
5. Resource Management – livestock & poultry
6. Income Issues
7. Demographics

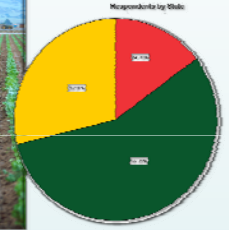
The Respondents



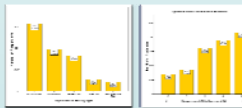
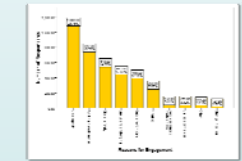
Overall Response Rate = 50 percent

Survey Responses by State

State	Frequency	Percent	Cumulative Percent
AZ	215	14.7	14.7
CO	825	56.4	71.1
WY	423	28.9	100.0
Total	1,463	100.0	

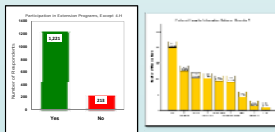
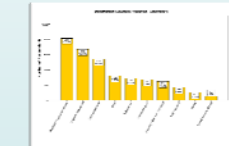


Management Concerns



- Making a profit was the most frequently stated reason for engaging in rural family enterprises.
- Working close to nature was also a major reason for operating an agricultural enterprise.
- Respondents overwhelmingly expect to manage their property, "until I can no longer do the work".
- Production risk is the most important risk faced by these agriculturalists.
- Marketing, along with financial risk, showed the greatest variability in responses.
- Respondents ranked legal and human risk management as least important.
- Respondents appear very comfortable in handling the uncertainty in the family business environment.
- Respondents in this study strongly believed in their ability to create success for their business.

Information Preferences

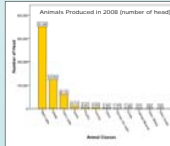
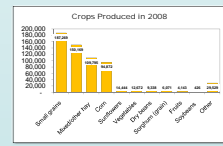


- The preferred source for receiving information is through some form of one-on-one communication and the preferred form in which to receive information is overwhelmingly print.
- Extension has been used and is a key source for information and personnel contact for producers facing questions on their operation.
- Respondents felt that the content and understandability of the information they receive could be improved.
- Other university services such as direct department contacts, diagnostic labs and experiment station research were also important sources of information.

Resource Management

Owned and Leased Land

	Acres of Owned Land	Acres of Leased Land	Total Acres
N	1,299	918	1,373
Mean	3,123.8	6,381.3	7,156.1
Median	882.0	1,130.0	1,800.0
Mode	2,000.0	2,000.0	1,000.0
Std. Deviation	8,188.4	18,750.3	20,856.7
Variance	6,705E7	3,510E8	4,355E8
Minimum	1.00	1.00	1.00
Maximum	160,000.0	300,000.0	460,000.0
Sum	4,057,863.0	5,858,005.0	9,838,988.0

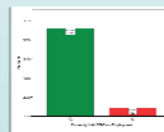
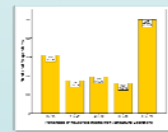


- Larger rural property owners across Wyoming, Colorado, and Arizona most commonly own 2,000 acres.
- Most lease additional land, commonly about 2,000 acres per respondent.
- Operators were not often enrolled in the Conservation Reserve Program (CRP) and do not produce products for specialty markets.
- Wells are the most common source of water reported on rural properties.
- Less than half of the property managers use some type of irrigation on their pastures, but a large percentage use agricultural chemicals.
- They are about as likely to have crops as animals – mixed operations are typical.
- The animal kept most frequently is beef cattle.
- Most crop land is planted to small grains, but together, hay and alfalfa represent a larger total acreage.
- They typically graze pasture 7.5 months each year and leave none or almost no grass left.
- They primarily raise their own animal feed. If purchased, it is typically from a local grower.

Income Issues

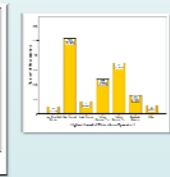
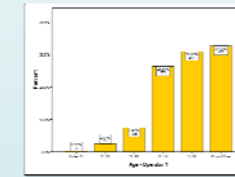
Primary Sources of Income in 2008

Source	Respondents
Beef cattle	651
Corn & related farming	290
Hay Farming	184
Other crop farming	35
Greenhouse; nursery, floriculture	34
Vegetable & melon farming	27
Dairy cattle & milk production	23
Sheep & goat production	20
Aquaculture & other animal production	20
Specialty products	20
Cattle feedlots	10
Tourism & recreation	10
Hunting & fishing	8
Hog & pig production	2
Other	205



- A majority of the large agricultural operations in Wyoming, Colorado, and Arizona are operated as sole proprietorships.
- They are almost always family owned or closely held operations.
- The income earned by these operations is typically realized by one family and provides more than 80 percent of the household income for more than one-third of the operations.
- While respondents in the study reported a variety of enterprises, about 71 percent of their income is generated by beef cattle, grain and oilseeds, and hay production.
- Auctions – live and video – serve as the primary marketing methods for many large farms and ranchers.
- Income from Conservation Reserve Program (CRP) also generates significant income for many operations.
- Cash flows from the regular sales of products and commodities and/or operating loans from a bank provided needed financing for more than one-half of the operations.

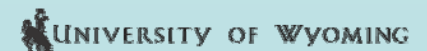
Demographics



- The majority of larger operators indicated their operations were completely rural or mostly rural.
- Most large operators live in a residence located on property (79 percent). Those with off-farm residences are most often located 5 miles from the property.
- Respondents most often reported the distance to the nearest metro area as 20 miles.
- A total of 92 percent indicated that at least one member of the primary operators' household currently holds an off-farm job.
- The most commonly reported number of operators involved in day-to-day decision making was one, with that person typically a white male. Operator #2 was most often reported as a white female (61 percent).
- The primary operator age was most often reported as 65 and over. Operator #2 most frequently indicated they were 45-54 years of age.
- The highest level of education most often reported was high school for all operators, with 37 percent of primary operators indicating a 4-year college degree or more. Fully 39 percent of those listed as operator #2 indicated a 4-year college degree or more.
- The primary operator most often reported tenure on the property as 10 years, while operator #2 most often listed 30 years' tenure. Primary operators reported their tenure in the community most often as 50 years, while the most frequent response for operator #2 was 30 years.
- The relationship of operator #2 to the primary operator was most often reported as "spouse" (59 percent).

Acknowledgements

We thank the Western Center for Risk Management Education for providing us with financial support to carry out this project. The survey data for this research was originally collected as a part of a multi-state Extension project in collaboration with Randy Weigel (University of Wyoming), Jeff Tranel (Colorado State University), Teer Tegenstrom and Tauhidur Rahman (University of Arizona). We have benefited from working with them.



More information?
Visit RuralFamilyVentures.org or
Contact John Hewlett at hewlett@uwyo.edu, (307) 766-2166

This project received financial support from

