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Describing Horse and Ranchette Owners in Utah

Courtney Buchanan Utah State University

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DESCRBING HORSE AND RANCHETTE OWNERS IN UTAH

by

Courtney Buchanan

Thesis submitted in partial fulfillment of the requirements for the degree

of

HONORS IN UNIVERSITY STUDIES WITH DEPARTMENTAL HONORS

in

Equine Science and Management in the Department Animal, Dairy, and Veterinary Science

Approved:

Thesis/Project Advisor Dr. Mark Brunson **Departmental Honors Advisor** Dr. Lyle McNeal

Honors Program Director Dr. Nicholas Morrison

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Abstract:

A 2008 study of the Extension needs and preferences of small-acreage landowners in Morgan, Summit, Utah, and Washington counties revealed that approximately 50% of landowners grazed horses. These landowners present a specific group within small-acreage owners that can be targeted with Extension information. Using the data gathered previously, this study looks to identify the characteristics of these landowners as well as compare owners that graze horses, other livestock, or do not keep animals on their property. In addition, I evaluated whether horse owners fit the stereotype they are often given: Affluent people from city or suburban roots that move into rural areas and do not know how to manage their land. Differences were found between owners with and without horses as well as differences between owners that kept strictly horses as compared to horses and other livestock. This is relevant to Extension, as horse owners are a distinct audience for management information. In order to better target these landowners, Extension should evaluate whether they are targeting horse owners in general or specifically those that only keep horses. In addition, this provides a picture of Utah horse owners, which is information that can be used for further purposes.

Background information:

Exurban development is fast growing in the west as larger ranches are converted into "ranchettes". Ranchettes can be defined as "large lots each with an isolated, large house, built for people who want some of the qualities of ranch life (isolation, open space, natural surroundings, and space to board and ride horses) but who do not wish to purchase an operating ranch" (Theobald 1996). Recent years have seen a significant population influx to these "New West" areas (Shumway and Otterstrom 2001) as people seek out characteristics of housing such as open space, natural environment, privacy, and rural surroundings (Crump 2003). From 1950 to 2000, exurban development, defined as one unit per 1-40 acres, grew from about 5% to 25% of the land in the conterminous United States (Brown 2005). Exurban development causes land fragmentation and can have large influences on issues including biodiversity, erosion, water quality, non-native plant species, wildlife, amount of bare ground, and fire (Best 2005, Hansen et al. 2005, Hansen & Rotella 2002, Jensen 2001, Maestas 2002, Theobald 1996). In order to keep ecosystems working properly and for conservation purposes, it will take groups of landowners working collaboratively (Brunson and Huntsinger 2008). Therefore, it is important for Extension to reach these landowners with important information on land management.

In Utah, small acreage landowners are most likely to use friends or relatives to get management information, followed by Extension printed materials and Extension agents (Brunson and Price 2009). Friends and relatives as well as Extension brochures were also frequent sources of land management information for private forest owners in Utah (Salmon et al. 2006), while County Weed and Pest, Extension, and neighbors, family, and friends were important to Wyoming landowners (Mealor 2011).

It is important for Extension agents to better understand this growing exurban segment of the population, as many owners are not getting land management information. 54% of respondents in Wyoming had never looked for management information, while only 21% reported using Extension (Mealor 2011). As this presents a strong number of people, it is important for Extension to be aware of the needs and preferences of this group.

Exurban properties frequently go hand in hand with keeping various types of animals. In a Colorado study, 72% of owners had at least one grazing animal on their land (Maestas 2003). More specifically, many of these small acreage lots are generally thought of as horse properties as many authors mention horse ownership when discussing ranchettes (Jensen 2001, Maestas et al. 2002, Theobald 1996). Furthermore, these owners are often stereotyped as lacking knowledge in ranching and land management practices, which leads to land degradation (Sengupta & Osgood 2003).

Many landowners in Utah keep horses on their property. Surveys have been conducted in various states both to characterize horse owners as well as find their needs for information. However, none of these studies have been conducted in the western United States. A 2004 survey of Minnesota horse owners found that there was a demand and need for horse information within the state from Extension while also characterizing demographic information of this population. In addition, it was shown that very few horse owners obtained Extension information while many used equine magazines, other horse owners, and veterinarians. When asked what methods were preferred, owners indicated preferences for short publications, the Internet, evening seminars, and hands-on sessions from professional trainers (Martinson et al. 2006). A Vermont study was also completed to determine the issues of greatest concern to horse owners in the state. A high portion of owners reported they were motivated to participate with efforts to change, and land use policy was among one of the higher concerns (Monti & Greene 2008). A survey conducted in Pennsylvania, although more focused on the effect of the horse industry on the state, revealed that the equine industry provided more than a million acres of land in farmland and open space in the state. Over half of the state's horses were kept on property under twenty acres (Swinker et al. 2003). Clearly, Extension agents concerned with land management issues should view horse owners as an important audience.

Methods:

Data was used from previously gathered information in a survey that was administered in April-June of 2008. The survey was mailed to small acreage (2-50 acre) landowners in select areas of Morgan, Summit, Utah, and Washington counties. These individuals were identified with a geographic information system that was developed from county tax assessor files and sampling was done within "census tracts". Locations were chosen because they were known to have undergone conversion to small acreage properties. The goal of this study was to better understand how small-acreage owners received land stewardship information and their preferences for receiving it. The survey asked about land management decisions, perceived benefits of land ownership, tenure, sources and preferences of management information, and socio-demographic information. The original sample was 1,151 properties; 470 responses were received with 22 undeliverable for a 41.6% response rate. (Brunson and Price 2009)

The data was analyzed using the SPSS (version 20) statistical software package. From there, cross-tabulation was performed to analyze the difference between owners with horses and those without by finding the percentages of responses in each category. Chi square tests were performed to find the significance (alpha=.05). This analysis gave a basic picture of "horse owners" as compared to other landowners.

Secondly, responses were recoded for further analysis comparing property owners who graze horses but not other livestock; graze other livestock but not horses; graze both horses and other livestock; and did not indicate grazing any animals on their properties. Crosstabs analysis was performed again to find the percentage of responses in each of the four categories. Although the number of responses varied from question to question, a total of 467 responses were used: 72 were horse-only, 76 were livestock only, 159 had both, and 160 did not graze any animals.

Results:

- There are differences in responses from owners that keep horses on property as opposed to those that do not.
- There are differences in responses from owners that keep only horses as compared to those that graze horses and other livestock.
- The stereotypical view that horse owners make a lot of money, come from non-rural backgrounds, and are uneducated about land management is not supported in these Utah counties.

Who are Utah's horse owners?

Analysis revealed that Morgan and Summit counties had a higher concentration of owners that grazed horses (53.5% and 62.6% respectively) as compared to Utah (28.9%) and Washington (37.4%) counties. In addition, a higher percentage of these landowners had larger properties, with 39.4% having over 30 acres as compared to 25.9% of non-horse owners. Furthermore, they were more likely to indicate having a home on that acreage and on average had longer land tenure than those land owners without horses.

This analysis also revealed that in Utah, people with horses do not necessarily fit the typical stereotype of affluent city dwellers that move to rural areas later in life. There were not significant differences in education, occupation, or income between landowners with and without horses. In addition, contrary to the stereotype, these owners were more likely to have spent their youth on a ranch or farm (37.2%) than non-horse owners (25.2%). In addition, with regards to where they spent their prior adult life, those owners with horses were more likely to have only lived in county (36.1% compared to 21.7%) and were less likely to have previously lived in a large town or city (16.4% and 17.8% compared to 25.0% and 29.2%).

Differences in Land Management Between Owners With and Without Horses

A major distinction between landowners that kept horses and those that did not was the differences in perceived benefits of land ownership (Table 1). Owners that kept horses were much more likely to report "grazing income" and "hunting and/or fishing" as moderately or very important. In addition, they were more likely to say that hunting lease income, mineral income, produce income, and family traditions were important.

Owner benefit	Horse	Non-Horse
Source of investment income	46.8	41.3
Source of timber income	3.3	1.5
*Source of grazing income	41.8	14.3
*Source of hunting lease income	10.3	4.3
*Mineral value	13.0	4.3
*Source of produce income	22.4	10.1
Privacy	88.8	86.0
*Maintaining family traditions	83.9	64.6
"Green" space around residence	83.2	77.7
*Hunting and/or fishing	47.5	23.9
Recreation and/or scenic enjoyment	76.3	77.4

Table 1: Comparing Land Ownership Benefits for Horse and Non-Horse Owners

Note: Responses show the percentage of respondents indicating a benefit was moderately or very important. Those categories representing statistical significance (.05) are starred.

Landowners' perceived benefits of ownership coincided with factors that affected decisions for land management. Owners with horses were more likely to state "improved recreation or hunting", "control of non-native plants", "money from products from the land", and "improved production of products for personal use" were very or moderately important in their decision making when compared to those owners without horses (Table 2).

Factor	Horse	Non-horse
Improved scenic quality	66.8	74.9
*Improved health of the land	88.4	81.4
Improved wildlife habitat	52.8	51.4
*Improved recreation or hunting	28.6	17.4
*Control of non-native plants	77.7	67.1
*Money from products from the land	36.5	18.5
*Improved production of products for personal use	51.2	32.9

Note: Responses show the percentage of respondents indicating a benefit was moderately or very important. Those categories representing statistical significance (.05) are starred.

Small-acreage owners with horses on their property were overall more likely than non-horse owners to use Extension. Only 23.4% reported not getting management information whereas 35.2% of non-horse owners reported this. Horse owners were more likely to get information from an Extension brochure, Extension agent, or friends and relatives. These landowners indicated that the top three preferred methods for receiving management information were the Internet (43.7%), brochure/fact sheet (43.3%), and periodic newsletter (40.3%). These preferences were similar to owners without horses.

Based on this overall analysis, it appears that owners that keep horses are not as ignorant of land management as many believe. Not only are these owners concerned with their animals, but they are concerned with broader issues including recreation, hunting and fishing, controlling non-native plants, and improving products from the land for both personal use and monetary value. Other studies have indicated that these new landowners of ranch properties are indeed concerned about managing the land for grazing as well as for other goals such as wildlife conservation (Lage 2005). In general, these owners are invested in the land's multipurpose value, truly getting everything they can from it. Consequently, these owners are likely to seek out information regarding land management. These owners are likely to live on their land and take an active role in managing it for a variety of purposes. Incidentally, they are less likely want to sell in the next 5-10 years than other owners (13.2% compared to 23.5%). For Extension agents targeting this audience, it is important to take into consideration these qualities so the needs of these landowners can be met.

Horse-only owners compared to those with livestock

Further analysis was conducted to determine differences between owners that only kept horses, those that had both horses and other livestock, owners that kept livestock but not horses, and owners without any animals on the land. About 1/3 of respondents reported not keeping animals on the land, 1/3 reported having both horses and other livestock, 1/6 had horses only, and 1/6 kept other livestock.

While the majority of owners with horses in this study lived in Morgan and Summit counties, owners with strictly horses were more evenly spread between counties. Owners with both livestock and horses remained more concentrated in Morgan and Summit. The majority of horses-only owners had landholdings of 2-10 acres (54.2%) or 11-30 acres (27.8%) whereas the owners with both or strictly livestock had much larger acreage, with a higher percentage owning over 50 acres (38.4% and 34.2% respectively). Horses-only owners almost all (87.3%) lived on the land while those that did not typically lived nearby – nonresident owners in this group reported the lowest mean distance from residence to small acreage at 9.14 miles.

Strictly horse owners are, in general, newer landowners. They have lived on the land a shorter mean time (17.8 years) than owners with both livestock and horses (29.1 years) and strictly other livestock (26.6 years), which is a mean time that was comparable to owners without any animals (15.8 years). In addition, horses- only owners were most likely to purchase the land through a realtor (46.5%) just as those without animals were (55.1%) whereas inheritance was the most common means of land acquisition for owners with horses and livestock (36.9%) or strictly other livestock (42.5%).

While there are many differences when comparing all four groups, owners with strictly horses and those with both livestock and horses were somewhat similar in which benefits were important to them in land ownership. (Table 3) The main difference was that those with both horses and other livestock understandably saw grazing income as more important with 50.3% indicating this to be very or moderately important compared to only 21.5% of horse-only owners. Income from produce was also much more important to those with both (28.0%) than to horse-only owners (9.4%).

Owner benefits	Horse	Livestock	Both	Nama
	потзе	LIVESLOCK	Both	None
Source of investment income	46.2	43.5	47.1	40.3
Source of timber income	1.6	2.9	4.0	0.7
*Source of grazing income	21.5	33.3	50.3	4.3
*Source of hunting lease income	6.2	8.6	12.1	2.2
*Mineral value	9.2	8.6	14.6	2.2
*Source of produce income	9.4	15.9	28.0	7.2
Privacy	92.5	81.2	87.2	88.3
*Maintaining family traditions	77.3	76.4	86.7	58.4
*"Green" space around residence	81.8	67.6	83.8	82.6
*Hunting and/or fishing	40.6	28.2	50.3	21.6
Recreation and/or scenic enjoyment	75.0	72.9	76.8	79.6

Table 3: Comparing Land Ownership Benefits between Landowner Types

Note: Responses show the percentage of respondents indicating a benefit was moderately or very important. Those categories representing statistical significance (.05) are starred.

A greater proportion of owners with both horses and livestock indicated more land management factors were moderately or very important when compared to owners with strictly horses (Table 4). These landowners were more likely to see controlling non native plants (81.2% vs. 69.7%), money from products (42.9% vs. 21.9%), and improved personal product production (57.9% vs. 35.9%) as important while owners with just horses were more concerned with scenic value (78.1% vs. 62.0%). For most factors, the importance to owners with strictly livestock was similar to owners with both, while horse-only owners were an intermediate between these groups and owners without any animals.

Table 4: Factors Affecting Land Management Decisions for Landowners Types

Factor	Horse	Livestock	Both	None
*Improved scenic quality	78.1	62.7	62.0	80.6
Improved health of the land	84.6	87.1	90.1	78.6
Improved wildlife habitat	55.4	42.0	51.7	55.9
*Improved recreation or hunting	27.7	21.7	29.1	15.3
*Control of non-native plants	69.7	75.7	81.2	62.9
*Money from products from the land	21.9	29.4	42.9	13.3
*Improved production of products for personal use	35.9	43.5	57.9	27.7

Note: Responses show the percentage of respondents indicating a benefit was moderately or very important. Those categories representing statistical significance (.05) are starred.

Owners that kept both livestock and horses were the most likely to get land management information with only 18.9% answering they did not receive information. Livestock owners trailed this with 25.0%, followed by 33.3% of horseonly owners that did not received management information. Owners without animals were the least likely to get management information with 40.0% indicating they did not receive information. The frequency for use of each individual method generally followed this overall trend. In all cases however, friends and relatives, Extension brochures, and county Extension agents are the top three methods used. Interestingly, all four types of owners had similar responses when asked which method they preferred for learning about land management.

As far as Extension needs are concerned, livestock-only owners were most content with current sources of land management information with 65.2% being satisfied or highly satisfied. A lower proportion of owners with both livestock and horses (45.2%) and strictly horses (39.0%) were satisfied or highly satisfied.

There were noteworthy differences in lifestyle between owners with strictly horses and owners with both horses and other livestock. While the initial analysis between horse and non-horse owners indicated no significant difference in income, education, and occupation, there are differences when the groups are broken down further. Owners with just horses were the most likely to have an advanced degree (28.6%) when compared to owners with livestock only (21.6%), both (13.4%) and no animals (19.6%). In addition, horse-only owners had a higher percentage of respondents that indicated earning a 2 year, 4 year, or advanced college degree (54.3%) when compared to owners with livestock only (37.8%) or both (47.2%). although it was lower than those with no animals (60.1%). Horse-only owners were less likely to be a farmer than owners with both (2.9% vs. 11.5%) and were most likely of all groups to be self-employed (31.4%). Income of horse-only owners was higher than other landowners with 50.0% earning more than \$100,000 compared to 21.5% of livestock-only owners, 27.8% of owners with both, and 44.6% of owners with no animals. However, those without animals were most likely to have an income of over \$150,000 at 28.1%.

Horse-only owners were very similar to owners without animals in where they spent their adult lives prior to their current residence. A high proportion of both of these groups indicated previously living in a large town or city while those owners with livestock only or both livestock and horses were much less likely to have lived in these locations. However, 54.4% of horse-only owners indicated spending their youth in a rural, ranch, or farm setting. This is a bit lower than indicated by those owners with livestock only (56.1%) and both (60.8%), but much higher than that of those without animals (37.9%). See Table 5.

Youth	Horse	Livestock	Both	None
Farm or Ranch	29.4	39.7	40.5	18.3
Rural area, but not on a farm or ranch	25.0	16.4	20.3	19.6
City/town (fewer than 10,000 people)	8.8	19.2	22.8	18.3
City/town (10,000 to 100,000 people)	17.6	13.7	8.9	20.3
City (more than 100,000 people)	19.1	11.0	7.6	23.5
Adult life				
Only lived in county	22.7	32.9	41.8	16.2
Farm or Ranch	3.0	4.3	11.1	4.9
Rural area, but not on a farm or ranch	15.2	12.9	11.8	10.6
City/town (fewer than 10,000 people)	3.0	8.6	9.8	7.7
City/town (10,000 to 100,000 people)	25.2	24.3	12.4	25.4
City/town (more than 100,000 people)	30.3	17.1	12.4	35.2

Table 5: Previous Residences of Landowners

Note: Values given in percentages

Importance and Relevance:

As exurbia continues to grow, the need to involve communities of landowners in the management of Utah's lands is becoming increasingly important. To do this, Extension agents must understand who these small acreage landowners are to better meet their needs and desires for land management information. A study in Wyoming showed knowing the audience was important when delivering information, as there was significant variability in exurban landowners and many common generalizations were not held true (Mealor et al. 2011).

Information in this study is important for Extension as it identifies two groups of horse owners in Utah who are similar but also different On the one hand, there are the owners with both horses and livestock. These owners appear to be more invested in the land and capitalize on its multipurpose benefits. In general, they have lived on the land longer, often inheriting it from family, and therefore see family traditions as an important benefit to owning land. These owners do a little bit of everything to make the land work for them and seem to take pride in using the lands' resources to their fullest. The characteristics of this group in many ways resembles the strictly livestock owners, but with some differences.

Another group is the owners that have strictly horses. This group, which in the counties we surveyed was only about half as large as the group having both horses and other livestock, appears to be an intermediate between owners with livestock and those owners that have no animals on the land. Although generally not as invested in the multipurpose use of the land, these owners have many of the same land management desires and perceive similar benefits to land ownership as the owners with both horses and livestock. However, in many ways their characteristics such as land tenure, how they acquired the land, income, education, and where they lived before moving to their current location resemble owners

without animals. It seems many of these horse-only owners came from a rural background, left this behind to get an education and higher paying job in a more populated area, and have now returned to a rural setting. This is supported by the fact that these owners have shorter land tenure and were more likely to purchase land through a realtor.

Another important aspect to be explored is the need to increase the satisfaction of horse owners in receiving management information. With strictly horse owners only 39.0% satisfied or highly satisfied and owners with both horses and livestock 45.2% satisfied there is room to improve. In addition, 33.3% of horse-only owners indicated that they did not receive management information. By looking at what these land owners see as benefits to owning the land, what factors affect their land management decisions, what methods they use and prefer for obtaining information, and their backgrounds Extension agents can better meet the needs of these land owners. This will allow small acreage landowners and Extension professionals to work cooperatively in the overall management of Utah's private land.

It is important however, to be aware of which group is being targeted: all horse owners, or those that own specifically horses and not other livestock. Although there are many similarities, the needs of each group are different. Therefore, Extension agents must keep these differences in mind when disseminating management information to Utah's small acreage landowners with horses. As this study only addresses a section of horse owners in Utah, further study needs to be done to evaluate the needs of horse owners in the state.

Literature Cited

Best, A. (2005) How dense can we be? *High Country News*, http://www.hcn.org/issues/300/15571

Brown, D.G., Johnson, K.M., Loveland, T.R., & Theobald, D.M. (2005) Rural Land-use Trends in the Conterminous United States, 1950-2000. *Ecological Applications*, 15(6), 1851-1863.

Brunson, M.W, & Huntsinger, L. (2008) Ranching as a Conservation Strategy: Can Old Ranchers Save the New West? *Rangeland Ecology and Management*, 61(2), 173-147.

Brunson, M., & Price E.A. (2009). Information Use and Delivery Preferences Among Small-Acreage Owners in Areas of Rapid Exurban Population Growth. *Journal of Extension*, 47(5), 5FEA4

Crump, J.R. (2003) Finding a place in the country: Exurban and suburban development in Sonoma County, California. Environment and Behavior, 35(2), 187-202.

Hansen, A.J., Knight, R.L., Marzluff, J.M., Powell, S., Brown, K., Gude, P.H., & Jones, K. (2005) Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs. *Ecological Applications*, 15(6), 1893-1905.

Hansen, A.J., & Rotella, J.J. (2002) Biophysical Factors, Land Use, and Species Viability in and around Nature Reserves. *Conservation Biology*, 16(4), 1112-1122.

Jensen, M.N. (2001) Can Cows and Conservation Mix? *BioScience*, 51(2), 85-90.

Lage, J. (2005) Coming into the Country: New Oenrts of Ranches in the Sierra Valley, California. http://www.centerwest.org/ranchlands/lage_aag.pdf.

Maestas, J.D., Knight, R.L., Gilgert, W.C. (2003) Biodiversity across a Rural Land-Use Gradient. Conservation Biology, 17(5), 1425-1434.

Maestas, J.D., Knight, R.L., Gilgert, W.C. (2002) Cows, Condos, or Neither: What's Best for Rangeland Ecosystems? Rangelands, 24(6), 36-42.

Martinson, K., Hathaway, M., Wislon, J.H., Gilkerson, B., Peterson, P.R., & Del Vecchio, R. (2006). University of Minnesota Horse Owner Survey: Building an Equine Extension Program. *Journal of Extension*, 44(6) 6RIB4.

Mealor, R.D., Meiman, P.J., Hild, A.L., Taylor, D.T., & Thompson, J.S. (2011) New Rangeland Residents in Wyoming? A Survey of Exurban Landowners. *Rangeland Ecology and Management*, 64(5), 479-487.

Monti, A., & Greene, E.A. (2008) Rating Current Vermont Equine Industry Issues and Determining if Motivation for Participation in Change Efforts Exists. *Journal of Extension*, 46(2), 2TOT6

Salmon, O., Brunson, M., & Kuhns, M. (2006) Benefit-Based Audience Segmentation: A Tool for Identifying Nonindustrial Private Forest (NIPF) Owner Education Needs. *Journal of Forestry*, 104(8), 419-425.

Sengupta, S., & Osgood, D.E. (2003) The value of remoteness: a hedonic estimation of ranchette prices. Ecological Economics, 44, 91-103.

Shumway, J.M., & Otterstrom, S.M. Spatial Patterns of Migration and Income Change in the Mountain West: The Dominance of Service-Based, Amenity-Rich Counties. *Professional Geographer*, 53(4), 492-502

Swinker, A.M., Tozer, P.R., Shields, M.L.,& Landis, E.R. (2003) Pennsylvania's Equine Industry Inventory, Basic Economic and Demographic Characteristics. http://www.das.psu.edu

Theobald, D.M., Gosnell, H., & Riebsame, W.E. (1996) Land Use and Landscape Change in the Colorado Mountains II: A Case Study of the East River Valley. *Mountain Research and Development*, 16(4), 407-418.