

# “Ranching and public land use: American public opinion”

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## Ranching and public land use: American public opinion

### Abstract

New survey data show few Americans would ban grazing on public lands. Instead, large majorities agree that: (1) ranchers should be allowed to graze their cattle on public lands they have traditionally used; (2) ranchers are good stewards; and (3) the ranching heritage is valuable. Regression analysis reveals that positive views of ranching are widespread throughout American society but some groups are notably more favorable towards ranching: (1) people who have positive feelings about environmentalism; (2) those more knowledgeable about science; (3) those who hold strong religious beliefs; (4) Republicans. Data are from a representative national sample ( $N = 2,295$ ).

**Keywords:** ranching, grazing, public opinion, public land use, public lands agriculture, resource management plans (RMPs), social impacts, stewardship, American attitudes, nation as stakeholder.

**JEL Classification:** Q15, Q58, Z13.

### Introduction

Controversy has raged over livestock grazing on public lands in the Western United States – a cherished legacy and a fruitful sustainable form of agriculture in some people's eyes (Starrs, 1998), but the devastating plunder of public resources in other eyes (Wuerthner and Matteson, 2002). The social construction of stereotypes of rural folk may serve diverse interests, but in this case, the interests are both class (Eriksson, 2010) and cultural. The class part of this involves elite college educated people (often of East Coast origin or at least East Coast schooling, often with law degrees), who populate both the courts and certain environmental organizations in the American West. They seek to demonize working class ranchers who are deeply rooted in place, many from families ranching the same Western lands for a century or more (Jarosz and Lawson, 2002). The elite's commitment is to an imagined pristine rural landscape as a kind of Garden of Eden before even Adam and Eve, making the exclusion of the all too human activity of ranching a priority. All this is garbed in the compelling language of ecological necessity (Jarosz and Lawson, 2002), providing a claim to authenticity and legitimating their goal of excluding ranchers from their deeply rooted traditional way of life by expropriating the land for other purposes (Paulgaard, 2008). This is indeed contested ideological terrain, in which the new players – a specific set of environmentalist organizations with a particular orientation – are attempting to rework traditional positive stereotypes of ranchers by painting them as analogous to the the urban "welfare" class (Wuerthner and Matteson, 2002). The recent trend of educated, urban origin people who wish to redefine the countryside by demonizing rural people, particularly those engaged in traditional agricultural activities, is present in many post-industrial countries (Little, 1999; Milbourn, 1997; Eriksson, 2010).

This is more than an abstract debate. Policy changes have opened up the possibility of entirely re-

inventing the landscapes of large areas of the West by eradicating ranching and the cultural landscapes it has wrought. The controversy roars into life time and again when Environmental Impact Statements (EIS) must be filed in connection with public land agency initiatives and plans, such as the Resource Management Plans (RMPs) which must be developed and implemented periodically by individual Bureau of Land Management (BLM) field offices. EISs are mandated to include social impact assessments. Submissions to social impact assessments are often rife with claims about public opinion (in the present and the future), and indeed, anti-cattle groups seem to have persuaded ranchers that the public is against them (Durant, 2005). But closer scrutiny reveals that these claims are, for the most part, without a basis in real evidence. Strangely little research has actually measured public opinion: We have stereotypes and claims, but little real data about what the American public thinks, and no recent data at all.

Since the nation as a whole is considered to be a stakeholder in social impact assessments concerning Federal lands, recent public opinion data is needed to provide valid inferences about Americans' preferences concerning uses of public lands. To fill this research gap, we report data from a 2009 nationwide omnibus survey that was largely about other topics, but included what is, to our knowledge, the most comprehensive set of questions about opinions on ranching and grazing that have been asked to date on a nationwide sample. The purpose of this analysis is to describe public opinion on ranching and grazing, and to explore some potentially important social differences in these opinions.

### 1. Prior research

At the local level, prior research covers only parts of the American West. It typically finds that only a small minority opposes grazing on public lands. For example, in a 2003 survey of southwestern Idaho under 20% agreed with the statement that "We need less livestock grazing on public lands" (Wulforst, Rimbej and Darden 2003).

At the state level, a 2005 survey of a statewide sample of Nevadans examined opinions about a variety of ecology-related issues, and then asked specifically about opinions on different vegetation management methods on public lands (Rollins et al., 2007, p. 13). Out of a list of 10 priorities, pro-rancher “prescribed grazing” policies came third (68% felt it was “appropriate” or “very appropriate”) and the anti-rancher policy of “excluding grazing animals” came last (only 22% felt it was “appropriate” or “very appropriate”).

At the national level, the only prior nationwide survey of which we are aware found only a small minority opposed to ranching on public lands in the early 1990s (Brunson and Steel, 1994). Specifically, only 36%, agreed that “Livestock grazing should be banned on federal rangelands” and an even smaller minority, 22%, thought that “Livestock growers should not be allowed to graze their animals on federal lands no matter how high the fee is.” Taken together, it seems reasonable to interpret these findings as indicating that a ban on grazing was supported only by somewhere around a quarter or a third of the national population.

Thus, the evidence to date suggests that excluding ranchers from grazing their cattle on public lands is an objective endorsed only by a minority, probably a rather small one, whether at the community, state, or national level. But the last national data on the topic were collected more than 15 years ago and it is quite possible that opinion on these, as on many other political and environmental issues, has shifted since then.

Two facts motivated our collection of new data: (1) the age of existing national data and (2) the lack of a good multi-item scale of attitudes towards ranching which, besides its intrinsic interest, can be used as a baseline for future national studies, or as a benchmark in local studies.

## 2. Data and methods

Our report is based on a large omnibus survey which included the module on public opinion about rangelands conducted by the International Survey Center in May 2009 (Kelley, 2009). There are 2,295 cases. The sample is national and representative of US adults, aged 18 and older. It is based on an Internet panel provided by the well regarded private firm Survey Sampling International. Recent US experience suggests that high quality Internet-based samples of this sort are a very effective method of assessing public opinion (Couper and Miller, 2008; Kreuter, Presser and Tourangeau, 2008; Toepoel, 2009). Where comparison is possible, results from this survey are very similar to those from other representative national samples in the US collected in other survey modes, for example on religion, education and politics (Evans and Kelley, 2011).

The methods we use in this article include descriptive statistics (specifically frequency distributions and means for each of the focal variables); factor analysis to determine if the intended multiple-item scale of attitudes towards ranching is, in fact, justified by the data; and regression analysis to estimate the separate effects of several social and cultural factors on attitudes towards ranching. This allows us to investigate the extent and origins of social divisions in public opinion on ranching.

## 3. Results

**3.1. Distribution of opinions.** Before the questions about ranching, the survey asked about a variety of issues in science, genetic engineering, cloning, stem cells, transplants, abortion, and religion; after asking about ranching it continued with politics, attitudes toward income inequality, and concluded with demographic and family background questions. There were over 120 separate questions, taking an average of 22 minutes to complete, with the ranching questions making up 3 or 4 percent of the whole. This omnibus format makes the survey more engaging for respondents and reduces bias introduced by single-topic questionnaires (Evans and Kelley, 2004).

The survey introduced ranching by setting a context about grazing and sketching some of the basic arguments for and against continued grazing. This was followed further statements about different facets of family ranching on public lands. Respondents were invited to express the extent to which they agreed or disagreed with each. The context statement is presented in the Appendix.

There is overwhelming public support for allowing ranching families to continue grazing their cattle on the public lands they have traditionally used. Fully 37% say “definitely yes” and another 37% say “probably yes”, for an overwhelming 74% in favor. 20% have mixed or neutral feelings. A tiny 3% probably would not allow this and an even tinier 2% would definitely not, for a total of just 5% opposed. Thus “Cattle free land...” is a slogan that has little resonance with the American public.

The mean – the average level of approval – is 76 points out of 100, about three quarters of the way towards universal, unconditional approval<sup>1</sup>.

<sup>1</sup> Each focal variable had five answer categories “Definitely yes”, “Probably yes” “Mixed feelings, yes and no,” “Probably not” and “Definitely not”, as shown above. We need to convert those to numerical scoring to compute means and correlations. The simplest scoring assumes the answers occur at equal intervals, and extensive research experience comparing this with more complex alternatives typically finds it quite satisfactory (e.g. Evans and Kelley, 2004a, 2004b). Accordingly we scored the answers in equal intervals from 0 for definitely not, 25 for probably not, 50 for mixed feelings, 75 for probably yes and 100 for definitely yes. The choice of the zero to 100 range is mainly for convenience – it is easy to think about things on a points-out-of-100 basis (and any range works equally well from a mathematical standpoint, so long as the intervals between the answers are equal).

This finding of widespread approval of ranching on public lands is not unique to this particular question. The survey went on to elicit opinion about stewardship.

A very large majority of Americans perceive ranchers to be good stewards. Fully 35% say “definitely yes” and another 39% say “probably yes”, for an impressive 74% in agreement. 22% have mixed or neutral feelings. Just 2% think the ranchers are probably not good stewards and another 2% think definitely not, for a total of 4%. The mean is again well towards the affirmative end of the spectrum, averaging 76 points out of 100.

Next the survey next asked a more personal question about the value of ranching to the respondent himself or herself.

Again, a very large majority of Americans hold positive views of ranching: They value the ranching heritage. Fully 35% say “definitely yes” and another 37% say “probably yes”, for an impressive 72% valuing ranching as part of the frontier heritage. 23% have mixed or neutral feelings. Just a handful, 5%, reject the ranching heritage. The mean also shows strong endorsement, with an average of 75 points out of 100.

Some organizations have campaigned to ban cattle from grazing on public lands, for example the “National Public Lands Grazing Campaign” (<http://www.publiclandsranching.org/>) and a ban has been seriously entertained as a policy alternative in BLM (Bureau of Land Management) and USFS (US Forest Service) local land use decisions in recent years. However, the survey shows that this is a fringe demand rejected by the vast majority of Americans.

Just 4% definitely endorse a ban and another 5% think it is probably a good idea. That makes for a total of just 9% in favor of this policy. In contrast to the tiny minority in favor of a ban, 27% have mixed or neutral feelings about it, 29% think there should probably not be such a ban, and no less than 36% definitely reject it. The mean is strongly tilted towards the “rejection” end of the attitude spectrum, being just 28 points out of 100, far below the neutral point of 50. It is astonishing to think that a view endorsed by less than 10% of the American public has been seriously entertained as a policy alternative on the basis of alleged public support.

These results suggests that when social impacts of RMPs and the like are being assessed for EISs, the fact that the vast majority of the American public favors allowing ranchers to graze their cattle on their traditional lands must be taken into account. Policies that infringe on traditional grazing patterns are contrary to most Americans’ values, and so

would have a (small) negative social impact on a large majority of the American public.

Strikingly, these recent findings suggest there has been a major shift in opinion in favor of ranching over the last 10 or 20 years. In the early 1990s, a grazing ban attracted minority support from a quarter to a third of the American public, depending on the exact question asked (Brunson and Steel 1994). But by the time of this 2009 survey, the minority has shrunk drastically to just 9%. The questions asked are not exactly the same, so we cannot be certain of the size of the trend, but they are close and suggest a sharp decline of 20 to 25 percentage points.

**3.2. Structure of belief.** An important question in assessing public opinion is whether there are many separate and diverse attitudes on a particular topic, or whether opinions form a coherent whole, with people who hold one attitude also being likely to hold the other attitudes in the cluster (e.g. Evans and Kelley, 2004b). To find out, we turn to correlations and factor analysis (Table 1). When two variables are exactly alternative measures of one, more general, underlying attitude, their correlation is 1; when they are exactly opposed, the correlation is -1. If there is no relationship between them, the correlation is 0.

Table 1. Correlations among attitudes toward ranching (USA 2009)

Item	Graze	Stewards	Value	Ban	Factor loading
1. Continue grazing public lands	1.0				.83
2. Ranchers good stewards	.77	1.0			.89
3. Value ranching	.67	.79	1.0		.81
4. Ban grazing on public lands	-.47	-.38	-.31	1.0	-.46

Notes: Exact item wording and number of cases is given above in the text. Unrotated factor loadings are shown, as there is only one eigenvalue over 1.0.

These correlations show that people who think ranchers should be allowed to continue grazing their cattle on the public lands they traditionally use also have a strong tendency to think that ranchers are good stewards; conversely people who think ranchers are not good stewards have a strong tendency to want to exclude ranchers from grazing their herds on public lands (correlation of 0.77, Table 1). Moreover, people who value the ranching heritage are also very likely to favor traditional ranching use of public lands. In contrast, those who hold the ranching heritage of little worth tend to oppose ranchers’ traditional use of public lands (correlation of 0.67). Furthermore, those who perceive ranchers as good stewards also value the ranching heritage, whereas those who disparage the ranching heritage tend to perceive ranchers as poor stewards (correlation of 0.79).

Factor analysis shows that these three questions all measure one underlying attitude towards ranching. The factor loadings in the column on the far right are impressively high for these three items, being over 0.80. Attitudes specifically about whether there should be a ban on grazing on public lands are the mirror image, although somewhat more weakly related to the other attitudes.

The fact that the three questions about ranching have such high correlations and impressive factor loadings substantiates the view that they are alternative measures of one deeper value, so it is appropriate to combine them into a single index, making efficient use of all the information they provide. The index is the simple average of answers to the three questions, and so ranges from 0 for those strongly and consistently opposed to ranching to 100 for those strongly and consistently in favor. The average is clearly in favor of ranching, 76 points out of 100.

**4. Social differences in views about ranching: regression results**

Regression analysis reveals that positive views of ranching are widespread throughout American society, with some real, but small, demographic differences (Table 2). Both urban residents and rural dwellers hold positive views of ranchers, with the urban residents views being only one point out of 100 less positive. Men and women alike hold positive views of ranchers with no significant difference between them. Older people hold more positive views of ranchers, with an otherwise typical 70 year old being about 8 points out of 100 more positive than a comparable 20 year old, perhaps because of changing values about the frontier heritage and the ranching cultural landscape that represents it (Greider and Garkovich, 1994). More highly educated people have slightly less positive views of ranchers than do otherwise comparable people with less education. These differences are all small, but there are some important surprises when it comes to people with different attitudes and values.

Table 2. Regression analysis (USA 2009)

	<i>b</i>	Std. err.	<i>t</i>	Standardized
Urban (1 = farm through 6 = metro)	-1.03	0.3148	-3.28	-.07
Age (years)	0.16	0.0270	6.02	.12
Male (1 = male, 0 = female)	ns	ns	0.48	ns
Education (years)	-0.79	0.1904	-4.14	-.09
Religious belief (scale, 0 to 1)	10.59	1.4850	7.13	.15
Science knowledge (scale, 0 to 100)	0.20	0.0202	10.02	.21
Protect environment (0 to 100)	0.06	0.0183	3.45	.08

Party (0 = Republican, 0.5 Indep., 1 = Democrat)	-9.40	1.3803	-6.81	-.15
Intercept or (R-squared)	60.63	3.9184		(13%)

Source: International Survey Center, 2009 survey: Attitudes toward Stem Cell Research 5.  
Note: *N* = 2,141.

The organizations working against public lands grazing have justified their activities in the name of environmentalism, but the survey evidence suggests this goal is *not* representative of environmentalism in general. On the contrary, people who have positive feelings about environmentalism tend also to *approve* of ranchers (Table 2). Importantly, this suggests that the general public does not see a conflict between ranching and caring for the environment, although many offices of federal agencies have seen a conflict (Raisch, 2000). Researchers doing in-depth analyses of particular localities (e.g. Sayre, 2007) have noted enduring positive relationships between local environmentalists and ranching communities in some areas, and the survey finding suggests that this may be a more general pattern. The successful launching of a rangelands conservation organization including ranchers, scientists, environmentalists, hunters, and government and local agencies, the California Rangeland Conservation Coalition, also suggests that environmentalist and ranching stakeholders have been able to find common ground in their love for and commitment to the Western landscape (Barry, Schohr and Sweet, 2007).

The single most important influence on attitudes towards ranching is scientific interest and knowledge. People who are more knowledgeable about science are substantially more favorable to ranchers than are people who know little science. Those who know the most about science are fully 20 points out of 100 more favorable to ranching than are those who know the least.

Religion and science sometimes conflict, but not on this issue. The regression analysis reveals that people who hold strong religious beliefs take more positive views of ranching than do their atheist peers.

Finally, views on ranching are also shaped by party politics. Republicans are about 9 points out of 100 more favorable to ranching than are otherwise similar Democrats. But even so most Democrats are favorable (71 points out of 100, on average), just not quite as favorable as Republicans (80, all else equal).

**5. Implications: typical ranching attitudes of different social groups**

How do these different influences on people’s opinions work out in combination? We can obtain es-

timates from the regression analysis to see what the typical opinion is for particular kinds of people. Let us first take average Americans, a group who are about half men and half women, who have average levels of education, who have average levels of scientific knowledge, average levels of religious belief, average attitudes towards environmentalism, and who have the same mix of political party preference as the nation as a whole. For them, the most typical attitude towards ranching is about 76 points out of 100. This is on a scale where 0 would indicate an entirely negative view of ranching, 50 would indicate a neutral view, and 100 would indicate an unalloyed, strong positive view. This 76 is substantially above the neutral point – very close to the 75 which would indicate that the respondent “agrees” (but not strongly) on all the ranching items, or has a mix of views that, on average, add up to the same overall positive judgment. This estimate (and those for people with other combinations of characteristics discusses below) is shown in Table 3.

Table 3. Attitude towards ranching for some illustrative types of people (predicted values from the regression in Table 2)

Attitude (0 to 100)	Group
84	Over 60, devout, scientifically knowledgeable, warmly endorses environmentalism, Republican
76	Average American
73	Over 60, devout, ignorant of science, antipathy towards environmentalism, Independent
67	Under 30, atheist, scientifically knowledgeable, warmly endorses environmentalism, Democrat
51	Under 30, atheist, ignorant of science, antipathy towards environmentalism, Democrat

First, consider someone with the characteristics that the regression analysis finds will incline them the most strongly against ranching: someone who is ignorant of science, as hostile as possible towards environmentalism, an atheist, under age 30, and strongly supports the Democratic party. On average, such a person would have a ranching attitude around 51, right around the neutral point of 50. This is a good deal below the 76 point average for the typical American. But it is noteworthy that this group least favorable towards ranching is neutral on average, rather than negative. This suggests that groups taking a very negative view of ranching and claiming to represent a substantial segment of American public opinion are mistaken: Every substantial social subgroup of Americans that we have been able to identify takes a neutral or warmer view of ranchers and ranching.

Consider next another young atheist Democrat – perhaps sitting in a coffee shop next to the someone of our previous example – who differs only in being scientifically knowledgeable and strongly favoring

environmentalism. On average, they would have a ranching attitude of about 67. That is about 16 points higher than the least favorable group. They are still 10 points below the average American, but nonetheless far into the positive zone.

What about an older, more traditional person? Let’s begin with someone who is over 60, devout, ignorant of science, hates environmentalism, and has independent political views. On average, they would rate ranching about 73, almost as high as the average American. This puts them about three quarters of the way towards unconditional approval of ranching (which would be a score of 100).

Finally, how about another senior person, also devout but scientifically knowledgeable, Republican, and strongly in favor of environmentalism – a kind of modern day Teddy Roosevelt. On average, they would rate ranching about 84 points out of 100, the most favorable of any of our examples. This is deep into the positive zone, about 8 points more supportive than the average American.

In sum, even when we consider a group with extreme characteristics and values the least favorable towards ranching, their views are very close to the neutral point, certainly not negative. All other groups have positive views, most very positive. Thus views of the American people on ranching range from neutral to highly positive, with a warmly positive view (about 76 points out of 100) characterizing the average American.

## 6. Discussion

The survey data analyzed here show that only a small minority of Americans would prefer to ban grazing on public lands. A large majority agree that ranch families should be allowed to continue grazing their cattle on the public lands they have traditionally used. The other attitudes towards ranching measured in this survey are positive as well. The strong internal coherence of these attitudes on ranching justifies combining them into a single reliable measure of ranching attitudes, a measure that can be used as a benchmark to trace future trends over time and as a comparison point for local studies replicating these questions.

The regression analysis reveals some important connections. Perhaps most strikingly, the opposition to ranching that some groups have put forward as the environmentalist position is *not* found among environmentalists in the general public. On the contrary, Americans who most strongly support environmentalism are also, on average, strong supporters of ranching – more so than the general public. It is not the first time in American politics that unelected interest groups have drifted far from the views of

those they claim to represent. It is one of the reasons why social impact assessments need to include information from survey research, not just from volunteered submissions (Evans and Rollins, 2012).

Another important finding is that the Americans most knowledgeable about science have strongly pro-ranching views.

It is intriguing also that people of strong religious beliefs tend to value ranching. This could provide common ground between religion and science in an period in history when their conflicts are more often highlighted.

## Conclusion

Thus, we have learned much, but much remains to be done. This small set of questions is, of course, not the last word in survey research of public opinions on ranching. Prior research on this topic has often failed to make a substantial impact on policy for several reasons: (1) because it has not been cumulative (different questions have been asked, so precise estimates of changes over time or of differences among places cannot be made); (2) because statistical tools for assessing the coherence of answers to diverse questions and, when appropriate, combining them into efficient, reliable measures, and have not been utilized; and (3) because convenient translation algorithms converting such measures into quantifiable impacts on quality of life have been lacking. Developing a mechanism for translating attitude data of the kind analyzed here into quality of life impacts must be a high priority for future research (Evans and Rollins, 2012).

Future research will also need to investigate closely how differences in wording and questionnaire context affect responses. All the questions examined here find only small minorities in favor of banning grazing, but exactly how small a minority remains to be determined in future research comparing different wordings in the same survey and comparing results when the questions are imbedded in different kinds of surveys. And only with precisely comparable measures can we be sure that the shift toward more favorable attitudes toward ranching we suspect from existing evidence is continuing, and reliably estimate how rapidly attitudes toward ranching are becoming more favorable.

Moreover, these results have implications for resource managers who can be frustrated by public apathy towards what the managers see as pressing ecological concerns. Understanding that the public may be seeing the traditional landscape in terms of heritage values and in terms of national or local identities – as a cultural landscape (Antrop, 2005; Greider and Garkovich, 1994; Jacques, 1995) – may help man-

agers to frame discussions and communications in terms that make their issues more accessible and interesting to the public. In addition, demonstrating to the public that their values are recognized may further facilitate communication and negotiation.

Furthermore, the results suggest that the anti-rancher bias of many public land agencies in the US needs to be reconsidered. America's Intermountain West – where most ranching on public lands occurs – is a bit of an anomaly in a market-oriented country. These lands were retained unexpectedly in the hands of the national government, after unwise legislation intended to convey these lands to individual private ownership mandated property sizes conceived in the lush lands of the Midwest which, in fact, were too small to sustain a family in many arid areas of the Intermountain West. The Homestead Act of 1862 and the completion of the railroad spanning the continent in 1869 stimulated a flood of hopeful settlers, but homesteading failed over large tracts, and the lands remained in the hands of the Federal Government. As ranching grew, in many areas customary rights developed with local ranchers, operating from a winter base of private land, grazed their cattle or sheep in the summer in the same lands year after year, decade after decade, with careful stewardship for future generations. In other areas, transient operators, intent on short-term profits, severely over-grazed the land, and conflicts over the use of the land even erupted into armed conflicts (Drago, 1970). To keep the peace and exclude the short-term plunder, the Taylor Grazing Act of 1834 retained the Federal Government's ownership of the lands, but formally divided up the grazing rights, largely among the ranch families customarily using them, into Grazing Districts which were managed by a bureaucracy initially named the Division of Grazing and later renamed the the U.S. Grazing Service. In 1946, the Grazing Service was merged with the General Land Office to form the Bureau of Land Management which has held responsibility for managing these public lands ever since (BLM, 2011). That long history of control and centralization of decision-making has led to an agency that is more responsive to the policy climate in the capital and less responsive to the general public and to the local communities in which it operates. In the absence of data, individuals and organizations have a natural tendency, "projection", (e.g. Thomsen, 1941; Evans, Kelley and Kolosi, 1992) to overestimate the degree to which their views are representative of broader publics. This is a normal process, not a problem special to the BLM, but it leads to a distorted ontology, an incorrectly imagined state of reality (Hunter, 1989), which needs to be counteracted by regular exposure to high-quality surveys of public opinion data revealing the views of both the local communities where the BLM works and the general public which owns the lands it manages for them.

This project is intended to represent a first step in that direction: It provides a current portrait of national public opinion about grazing on the public lands of the American West. It will provide a base-

line for future national surveys and trend analyses of changing opinions. It will also provide a benchmark for future local surveys, allowing them to compare views in a specific locality to the national norm.

## References

1. Barry, S., T.K. Schohr, and K. Sweet (2007). "The California Rangeland Conservation Coalition", *Rangelands*, 27 (June), pp. 31-34.
2. Brunson, Mark W. and B.S. Steel (1994). "National Public Attitudes toward Federal Rangeland Management", *Rangelands*, 16(2), pp. 77-81.
3. Callegaro, M. and C. Disogra (2008). "Computing Response Metrics For Online Panels", *Public Opinion Quarterly*, 72(5), pp. 1008-1032.
4. Couper, Mick P. and P.V. Miller (2008). "Web Survey Methods", *Public Opinion Quarterly*, 72(5), pp. 831-835.
5. Durant, J.O. (2005). "In Public Land Ranching is The Preservation of Western Landscapes", *Rangelands*, 27(6), pp. 3-7.
6. Eriksson, Madeleine (2010). "People in Stockholm Are Smarter Than Countryside Folks – Reproducing Urban And Rural Imaginaries In Film And Life", *Journal of Rural Studies*, 26, pp. 95-104.
7. Evans, M.D.R. and Jonathan Kelley (2004a). "Effect of Family Structure on Life Satisfaction", *Social Indicators Research*, 69 (3), pp. 303-353.
8. Evans, M.D.R. and Jonathan Kelley (2004b). "Data, Methods, and Measurement", in *Australian Economy and Society*, 2002. Sydney: Federation Press, pp. 317-336.
9. Evans, M.D.R. and Jonathan Kelley (2011). "US Attitudes Towards Human Embryonic Stem Cell Research", *Nature Biotechnology*, 29 (6), pp. 484-488.
10. Evans, M.D.R. and Kimberly Rollins (2012). "The Frying Pan or The Fire: Public Attitudes About Using Herbicides To Manage Invasive Weeds", *Environmental Economics*, 3(3), pp. 110-123.
11. Greider, Thomas and Lorraine Garkovich (1994). "Landscapes: The Social Construction of Nature and the Environment", *Rural Sociology*, 59 (1), pp. 1-24.
12. Jarosz, L. and V. Lawson (2002). "Sophisticated People versus Rednecks, Economic Restructuring and Class Difference in America's West", *Antipode*, 34, pp. 8-27.
13. Kelley, Jonathan (2009). "Public Opinion on the Ethics of Emerging Biotechnologies: Final Report to the Great Basin Foundation for Biomedical Research on Grant No. 00109. 2009", International Survey Center: Reno, NV, pp. 1-21.
14. Kreuter, F., S. Presser, and R. Tourangeau (2008). "Social Desirability Bias in Cati, IVR, And Web Surveys", *Public Opinion Quarterly*, 72 (5), pp. 847-865.
15. Little, J. (1999). "Otherness, Representation And The Cultural Construction Of Rurality", *Progress in Human Geography*, 23, pp. 437-442.
16. Milbourne, P. (1997). *Revealing the Rural 'Others': Representation, Power and Identity in the British Countryside*, London: Pinter.
17. Paulgaard, G. (2008). "Re-Centering Periphery. Negotiating Identities in Time and Space", In: Granås, B., Bærenholdt, J.O. (Eds.), *Mobility and Place*, Ashgate.
18. Raish, Carol (2000). "Environmentalism, the Forest Service, and the Hispano Communities of Northern New Mexico", *Society & Natural Resources*, 13(5), pp. 489-508.
19. Rollins, Kimberly et al. (2007). *The 2005 Nevada Rangeland Vegetation Survey: General Public Questionnaire and Summary of Responses*. 2007, Reno, NV: University of Nevada Cooperative Extension, Special Publication 07-11. Online: <http://www.unce.unr.edu/publications/files/nr/2007/sp0711.pdf>.
20. Sayre, N.F. (2007). "A History of Working Landscapes: The Altar Valley, Arizona, USA: How ranchers have shaped the West-and continue to do so", *Rangelands*, 29 (June), pp. 41-45.
21. Starrs, P.F. (1998). *Let The Cowboy Ride: Cattle Ranching in the American West*, Baltimore: Johns Hopkins University Press.
22. Toepoel, V. (2009). "Design of Web Questionnaires", *Sociological Methods and Research*, 37, pp. 371-392.
23. Wuerthner, G. and M. Matteson (2002). *Welfare Ranching: The Subsidized Destruction of the American West*, Washington, D.C.: Foundation for Deep Ecology/Island Press.
24. Wulfhorst, J.D., N.R. Rimbey, and T.D. Darden (2003). *Social and Community Impacts of Public Land Grazing Policy Alternatives in the Bruneau Resource Area of Owyhee County, Idaho*. Agricultural Economic Extension Series: Moscow, ID: University of Idaho, 2003. 0307, pp. 1-71.

## Appendix

Many ranching families have grazed their cattle on a combination of private and nearby public lands for several generations. But some people think that cattle harm the environment, so they should be excluded from public lands. Other people think ranchers take good care of the land and should be allowed to continue to lease it. Do you agree...



Table 1a. Questionnaire

1. Ranch families should be allowed to continue grazing their cattle on the public lands they have traditionally used		
Definitely yes	37%	[100 points]
Probably yes	37%	[75 points]
Mixed feelings, yes and no	20%	[50 points]
Probably not	3%	[25 points]
Definitely not	2%	[0 points]
	100%	(2,156 cases)
	(Mean = 76 points)	
2. Most ranchers are good stewards of their lands		
Definitely yes	35%	[100 points]
Probably yes	39%	[75 points]
Mixed feelings, yes and no	22%	[50 points]
Probably not	2%	[25 points]
Definitely not	2%	[0 points]
	100%	(2,153 cases)
	(Mean = 76 points)	
3. I value ranching as part of the frontier heritage		
Definitely yes	35%	[100 points]
Probably yes	37%	[75 points]
Mixed feelings, yes and no	23%	[50 points]
Probably not	3%	[25 points]
Definitely not	2%	[0 points]
	100%	(2,140 cases)
	(Mean = 75 points)	
4. Livestock grazing should be banned on public lands		
Definitely yes	4%	[100 points]
Probably yes	5%	[75 points]
Mixed feelings, yes and no	27%	[50 points]
Probably not	29%	[25 points]
Definitely not	36%	[0 points]
	100%	(2,144 cases)
	(Mean = 28 points)	