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## Nevada Range Education: The People's Choice

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It may not be surprising, but the ranchers in Nevada ranked "livestock and wildlife water developments" as the number one programming priority for range extension. Government range managers gave top ranking to "proper management of important range types for all users" while other people interested in range management thought that "proper management of streams and streamside vegetation (riparian areas) for all users" should be the top priority. These responses came from a survey that the "Range Resources Management and Planning Extension Team" conducted to help determine needs and set priorities for a range extension four-year plan in Nevada.

The team reduced an array of extension program topics into a list of 16 that fit the needs of the State. After the survey was tabulated, the team outlined specific topics for a four-year plan. The topics in the survey are listed with their average importance ratings from all respondents in Table 1. Respondents rated each topic as very important (5), important (4), undecided (3), of minor importance (2), or not important (1). Thirty questionnaires were sent to each of the three groups of clientele in each of the four Extension Areas of the State (for a total of 360). The three clientele groups were: 1. agriculturalists interested in range management; 2. government employees in range management, and 3. other concerned citizens interested in rangelands. Of the 360 questionnaires sent out, 180 were returned, a 50% response rate. Of these 159 were complete and usable. Response rate was twice as high from agency personnel.

There was general consistency among types of respondents, although some topics were perceived as significantly more important by different groups. Government range managers perceived the seasonal effects of grazing as important. They rated "best time to graze important range types" higher than did agriculturalists or other concerned citizens. They were also more interested in

**Table 1. Topics identified for extension programming in Nevada and their advantage importance ratings as perceived by all respondents.**

Proper management of important range types for all users.	4.6
Best time to graze important range types.	4.5
Proper management of streams and streamside vegetation (riparian areas) for all users.	4.3
Livestock and wildlife water developments.	4.2
Respect for range resources and property rights (soil, vegetation, fences, water developments, etc.).	4.2
The benefits of including many uses in proper range management	4.1
Forage use mapping, photography, and other records to determine the effect of grazing management.	4.1
Plants for conservation and revegetation.	4.1
Financial considerations in range management.	4.0
Revegetation of drastically disturbed rangeland.	4.0
Identification of important range plants.	4.0
Planning public and private rangeland management jointly by all users and managers (CRMP).	4.0
When and how to use fire on rangelands.	4.0
Revegetation of burned areas and planting fire resistant vegetation	3.9
Identification and control of range weeds and poisonous plants	3.6
Manipulating range vegetation with machinery, seeding, and herbicides.	3.5

\*Only the first two and last two were significantly different from most of the others.

"proper management of important range types for all users" than were other concerned citizens or agriculturalists. Other concerned citizens were more interested in "proper use of streams and streamside vegetation (riparian areas) for all users" and in "the benefits of including many uses in proper range management"; both of these were rated lowest by agriculturalists. Agriculturalists, who most directly suffer the cost of range vandalism, were more interested in "respect for range resources and property rights (soil, vegetation, fences, water develop-

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ments, etc.)" than were other concerned citizens or government range managers; likewise they were more interested in "manipulating range vegetation with machinery, seeding and herbicides" than were government range managers or other concerned citizens.

There was also a difference among Areas of the State concerning the importance of programs on livestock and wildlife water developments (Central = 4.43, Northeast = 4.37, Southern = 4.19, and Western = 3.89). Within the agriculture sector, there appears to be a much stronger interest in "identification and control of weeds and poisonous plants in the Northeast area (4.50) than in other Areas, especially the Southern Area (2.33). The Northeast Area is primarily sagebrush-dominated cold desert and produces over half the cattle in the State whereas the Southern Area is predominantly Mojave Desert. Agriculturalists also seemed to be more interested in "forage use mapping, photography, and other records to determine the effect of grazing management", in areas other than

the South. Perhaps these monitoring techniques leave something to be desired in a region of erratic precipitation and multiple growing seasons.

**In addition to asking respondents** to rate the importance of the sixteen identified topics, each was asked to indicate which audience Extension should attempt to reach. Respondents believed that ranchers were the most important group to be reached, followed by youth, government agencies, sportsmen, environmentalists, recreationists, and the public, respectively. Although every type of respondent except youth leaders rated ranchers as the most important audience, each audience group except ranchers rated themselves higher than others did. Predictably, youth leaders rated youth as the most important audience.

One final question asked the number of days per year each respondent spent time on rangeland. The overall average was 141. The most frequent response by ranchers was 365 and their average was 196. Agency range managers were on rangeland an average of 132 days per year and other concerned citizens 106. There did not seem to be any correlation between the days spent on rangeland and the perceived importance of the educational message or audience.

The team used the survey to develop a plan consisting of eight priorities that will be the focus of educational programs to:

1. Apply appropriate management concepts in selected range types of Nevada;
2. Promote coordinated resource management among government, private citizens, and public interest groups as appropriate;
3. Incorporate monitoring into proper range management;
4. Apply an appropriate mix of management strategies in diverse riparian settings;
5. Seasonally balance range livestock operations to best use the mix of Nevada's range types;
6. Efficiently install and utilize livestock and wildlife water developments to optimize rangeland management;
7. Identify and properly control range and pasture weeds and poisonous plants; and
8. Respect range resources and property rights.

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