



COOPERATIVE EXTENSION

Bringing the University to You

Special Publication-04-19

Humboldt County Needs Assessment: Community Development and Urban Horticulture

Brad Schultz, Extension Educator, Humboldt County

Introduction to Humboldt County

Humboldt County is located in north central Nevada, largely north of Interstate 80. It covers 9,658 mi², and the Federal Government administers about 81% of the land area. Winnemucca is the only incorporated city, but small outlying communities include Golconda, Paradise Valley, Orovada, McDermitt, Kings River, and Denio. Small acreage residential developments occur near Winnemucca in Grass Valley and Paradise Hill. Population peaked in 1998 at 17,075 residents. The 2000 Census listed the countywide population as 16,106. By 2002, the population had declined to an estimated 15,004 residents, reflecting an economic downturn in the mining industry. The population inside the city limits of Winnemucca is about 7,000. Another 6,000 residents live in Grass Valley and other small acreage (unincorporated) areas within a 20-mile radius of Winnemucca. The remaining residents reside in or near the widespread ranching and farming communities. These demographics result in a definite split along urban and rural lines.

Local economics are heavily dependent on mining and agriculture. Mining has the largest economic input, but is a substantially more volatile industry than agriculture. Humboldt County is among the highest agricultural producing counties in Nevada. The last two agriculture censuses (2002 and 1997) identify over 230 economically reportable farms and ranches, and over 733,000 acres in production.

The market value of agricultural products in both 1997 and 2002 exceeded \$57 million, with crops accounting for close to \$40 million in sales, and livestock (largely beef cattle) the remainder. On a nationwide basis, Humboldt County is among the top 3% of producers for acres of production for hay crops, field seed crops and potatoes, and is among the top 16% for cattle and calves sold.

An economic analysis of the county found that agriculture has a substantial multiplier effect. For every dollar the livestock section increases its sales, *total economic activity* in the county increases by \$2.31. Of the 21 economic sectors measured, livestock production has the second highest *economic multiplier*. Also, every increase in employment by one livestock production employee results in an increase of 2.9 employees in other segments of the economy. Livestock production generates the 7th highest (of 21 sectors measured) *employment multiplier* in Humboldt County. For every dollar of increased sales from crop production *total economic activity* in Humboldt County increases from between \$1.78 to \$2.08, depending on the specific crop. Of the 21 economic sectors measured (farm and non-farm), only one crop production sector (barley) was not in the top 10. Every increase in employment by one crop production employee results in an increase of 2.29 to 3.47 employees in other segments of the economy. Alfalfa seed has the highest *employment multiplier* and barley reports the lowest.

Needs Assessment

Faculty in the College of Cooperative Extension must conduct a formal needs assessment in their geographic area of responsibility. The Extension Educator in Winnemucca is responsible for conducting the needs assessment for Humboldt County. The assessment may include input from a variety of primary (surveys, focus groups, public meetings, etc.) and secondary sources (newspapers, minutes from meetings, etc.). The purpose of the needs assessment is to identify issues (needs) important to the citizens of Humboldt County. Data collected during the needs assessment are analyzed and the results used to guide the development of education and research programs.

In Humboldt County, the Cooperative Extension Educator position has been either vacant or filled for short periods (<3 years), for many years. During this period, a comprehensive needs assessment across all population segments of Humboldt County had not been completed. During the summer and early fall of 2001 the current Extension Educator attended numerous local meetings (e.g., county commission, Farm Bureau, weed management area, Humboldt River water issues), met with representatives from federal and state agencies (e.g., Bureau of Land Management, United States Forest Service, Department of Agriculture), and discussed issues with local government officials and individuals from throughout the community. Data from these primary data sources were combined with secondary economic data and collectively used to identify six general areas Cooperative Extension could focus education and research programming. These were:

- Community Development
- Crop Production
- Livestock Production
- Rangeland/Natural Resources
- Urban Horticulture
- Youth Development

To develop a better understanding about specific issues in each general area, Cooperative Extension developed an issue specific survey (based on input from producers, agencies, and meeting participants described in the preceding paragraph). The survey was mailed to 485 residents in Humboldt County. Each recipient was asked to rate the issues' importance from low (1) to high (5) or don't know. The survey was structured so respondents could be classified by both type of

employment and all respondents combined. Respondents were prompted to provide written comments for issues/concerns the survey did not address; however, few comments were received. Approximately 180 survey recipients were agricultural producers. The remaining 300 recipients were randomly selected from the county tax roll, ensuring no overlap with agricultural producers. All survey responses were anonymous. Agricultural producers were targeted because: 1) agriculture has been the one steady economic theme in Humboldt County over 100 years and currently has economic inputs second only to mining; and 2) county leadership felt the Extension Educator position should emphasize agriculture and natural resources because agriculture and natural resource management are tightly linked with economic and community development in Humboldt County.

Each anonymous response was assigned a unique identification number upon receipt and the data entered into a spreadsheet. The 14 employment categories on the survey form were reclassified into 6 groups to obtain sufficient samples for analyses. These six categories are farmers, ranchers, business owners and managers, government and education workers, industry and/or retail workers, and other (e.g. retired). The results are reported two ways: 1) the percent of all respondents (i.e., county-wide response) that rated an issue very high/high, low/very low, neutral or don't know; and 2) the average important rating for each topic by employment type. Of the 485 surveys mailed, 161 were returned resulting in a response rate of 33%. This is well above average for an unsolicited mail survey.

The length and detail of the mail survey require that results be reported in multiple publications. This special publication reports results for community development and urban horticulture. Other publications report issues related to: 1) crop production; 2) livestock production; 3) rangeland resources (in preparation); and 4) youth development.

Results:

Community Development

The county-wide response for community development issues identified three issues that 70% or more of respondents stated had high or very high importance (Figure 1). These included increasing the manufacturing and industrial base, maintaining Humboldt County's farming and

ranching heritage, and reducing substance abuse. Despite county-wide support for broadening the economic base, there was little support for doing this by marketing the area to telecommuters. Slightly more than 30% of respondents indicated marketing the area to telecommuters is important or very important, but almost 40% of respondents stated this issue has low importance. Domestic violence was rated an important/very important issue by 60% of respondents (Figure 1). This rating, while high, did not approach the importance rating of substance abuse (72%). About 55% of respondents stated community development through expansion of the tourism base is an important/very important issue. Slightly more respondents stated community development should occur by expanding outdoor recreation opportunities (60%) and more in-town events (57%). Only 44% of respondents stated that expanding cultural opportunities or events is an important/very important issue. A small plurality (41%) of respondents stated that the development/redevelopment of vacant and/or abandoned land in the City of Winnemucca is an important/very important issue.

There were differences in importance ratings based on type of employment (Figure 2). For most issues ranchers and farmers had similar responses. Their responses, however, were often very different from the importance ratings identified by business owners and managers, those employed by government and education, those employed by industry and retail outlets, and those employed in other industries or retired. None of the issues were rated as important/very important (see Table 1 for definitions) by all employment types. Likewise, none of the issues were rated moderately unimportant to very unimportant by all employment types.

Table 1. Qualitative definitions for importance ratings and relation to numeric scales in Figures 2 and 4.

Qualitative Definition	Numeric Scale
Important/very important	≥ 4.0
Moderately important	3.50 to 3.99
Neutral	2.51 to 3.49
Moderately unimportant	>2.01 to 2.50
Low/very low important	≤ 2.0

The only issue farmers and/or ranchers rate as important/very important is maintaining the farming/ranching heritage of the county. Farmers and ranchers rated two issues moderately important: increasing the manufacturing and industrial base of the county and decreasing substance abuse. Issues farmers and ranchers rated neutral include expanding the tourism base by increasing outdoor recreational opportunities and having more in-town events, and decreasing domestic violence. Ranchers had a neutral rating for increasing cultural events in the community, while farmers identified a moderately low importance rating. Issues farmers and ranchers rated as moderately low to low included developing or redeveloping vacant/abandoned land in Winnemucca and marketing the area to telecommuters.

Business owners and managers identified one issue as being important/very important: increasing the manufacturing and industrial base. Issues they rated as moderately important were decreasing substance abuse and expanding the tourism base, including more outdoor recreational activities and in-town events. They had neutral opinions about additional cultural events, the need to develop/redevelop abandoned/vacant land in the community, maintaining the farming/ ranching heritage and domestic violence. Business owners and managers rated the idea of marketing the area to telecommuters as a moderately low importance issue.

Those employed by government and education rated four issues as important/very important. These are: increasing the manufacturing/industrial base, maintaining the county's ranching and farming heritage, decreasing domestic violence and decreasing substance abuse. Employees in government and education provided a moderately high rating for developing/redeveloping vacant or abandoned land in the City of Winnemucca, expanding cultural events and opportunities, and expanding the tourism base from both increased outdoor recreation and in-town events. Government and education workers had a neutral response about marketing the area to telecommuters. Employees of government and education did not rate any community development issues as having moderately low to very low importance.

Employees in industry and retail rated five issues as important/very important. These included expanding the tourism base through increased outdoor recreation opportunities and more in-town

events, increasing the manufacturing/industrial base, maintaining the county's farming/ranching heritage, and decreasing both domestic violence and substance abuse. Issues rated as moderately important included developing/redeveloping vacant/abandoned land in the City of Winnemucca, increasing the number of cultural events, and marketing the area to telecommuters. As a group, employees in industry and retail did not rate any issue as having neutral or lower importance.

Retired individuals, and those who classified themselves as being employed by other types of employment, identified three issues as important/very important. These are: expanding outdoor recreational opportunities, increasing the manufacturing and industrial base, and reducing substance abuse. Issues rated as moderately important are increasing cultural opportunities/events, expanding the tourism base, and doing so by increasing in-town events, maintaining the county's farming and ranching heritage, and decreasing domestic violence. Issues that received a neutral rating are developing/redeveloping vacant and/or abandoned land in Winnemucca and marketing the area to telecommuters. This employment group did not identify any community development issues as having a moderately low to very low rating.

Urban Horticulture

At the county-wide scale, no urban horticulture issue is rated as important or very important by more than 60% of respondents (Figure 3). Tree care is the only issue rated important/very important by at least 50% of respondents. Issues rated as important/very important by 40% to 50% of respondents are plant disease, growing vegetable gardens, identifying plant pests, plant selection for landscaping, and lawn care. The percentage of respondents that rated these issues as low or very low ranged from about 17% to 26%. Slightly less than 40% of respondents rated strengthening the Master Gardener program as an important/very important issue. Over 30% of respondents rated this issue as low or very low importance. All issues were rated neutral by at least 20% of respondents.

There were differences in importance rating based on type of employment (Figure 4). Several patterns are evident. First, farmers ranchers and business owners/managers generally ranked each issue much less important than did individuals employed by government and education, industry and retail, or other types of employment. Second,

farmers and business owners had very similar responses for each issue. Third, among employment types, ranchers typically rated each issue less important than the other groups, and often substantially less important. Fourth, with the exception of business owners and managers, there is a general urban/rural divide about the importance of urban horticulture issues. Business owners and managers are largely expected to reside in or near Winnemucca, where most industry and commerce is located. Their importance ratings were more similar to farmers and ranchers, who typically reside far from town.

Discussion

Figure 1 indicates that residents of Humboldt County want economic expansion and diversification, but appear selective about the type of business they want in Humboldt County. Residents strongly want to increase manufacturing and industry in the community but do not want business that can occur by telecommunication. This suggests they want business with roots in the community. Also, Humboldt County residents want to maintain agriculture. Maintenance of agriculture should be a primary focus of community development because of its large multiplier effect for total economic activity, including employment (see Introduction Section for specific details).

Over 50% of respondents want more activities in the community to expand the tourism base (Figure 1). The types of events/activities wanted, however, may be fairly restricted. Over 55% of respondents want more in-town events and/or more outdoor recreation, but only 44% want to expand cultural events. No respondents took the opportunity to provide written comments about the specific type of in-town events they wish to see in the community.

Community development/growth can be viewed from two perspectives: quantitative and qualitative. Quantitative development and growth implies that more jobs, industry, people, etc. is better. Qualitative development revolves around an enhanced quality of life that may or may not be accompanied by an increase in economic parameters (jobs, spending, etc.). For qualitative community development, Humboldt County residents appear to want some issues addressed but not others. Substance abuse and to a lesser extent domestic violence are important community issues respondents identified. There are a number of existing organizations and programs in the

community to address each issue. These can be found in the Tri-County Community Resource Directory compiled by the Family Resource Center. Less important issues include the development and/or redevelopment of the numerous vacant land parcels in and around the City of Winnemucca and expanding cultural events in town. Urban horticulture, a component of qualitative community development, does not have a single issue rated as important/very important by more than 56% of the community (Figure 3). Residents in Humboldt County appear to want qualitative community development that focuses on programs designed to treat social problems and enhance individual responsibility. They place less importance on issues that revolve around community beautification or the management of small private parcels of land.

The employment groups identified in this study can largely be classified as rural (farmers and ranchers) or urban (all others). Figures 2 and 4 indicate a strong urban/rural divide for most community development issues. Many of these divisions are expected based on typical wants and needs of urban and rural residents, respectively. One unexpected result is the neutral opinion that business owners and managers expressed about maintaining the county's ranching and farming heritage. The agricultural industry in Humboldt County has about \$57 million in direct annual sales that turns over in the community almost three times before it leaves the area. This represents significant income to most, if not all, businesses in Humboldt County. There appears to be a lack of understanding about direct and indirect linkages between agricultural producers and other business activity in Humboldt County.

Program Development and Delivery

Farmers and ranchers appear primarily interested in community development programs focused on the maintenance of agriculture and, to a lesser degree, increasing the manufacturing and industrial base. Data in Figure 2 indicate little interest in participating in education programs related to other aspects of Community Development. Urban and suburban (small acreage) residents appear likely to participate in programs related to economic expansion, substance abuse, and to a lesser degree, domestic violence (Figure 2).

Each population segment has preferred methods for receiving education programs.

Farmers prefer to communicate their problems, concerns, and needs via on-site visits (Table 2). Their preferred approaches for receiving education programs are newsletters and fact sheets, followed by field tours and workshops (Table 3). They have an aversion to communicating via electronic media (Tables 2 and 3). Farmers have a very strong preference for receiving education programs from November through May, and many are unlikely to attend programs at other times of the year (Table 4). Like all population segments, they prefer programs be delivered on a Tuesday, Wednesday or Thursday. Also, they want to avoid weekends more than any other population segment. They prefer that programs be delivered during the workday, not evening hours. This preference is stronger than for all other population segments. Farmers appear more likely to attend programs if they are held in either Winnemucca or Orovada (Table 5). This undoubtedly reflects the larger concentration of farm operations in these areas.

References

- Census of Agriculture. 1997. Humboldt County Profile. Web Address: <http://www.nass.usda.gov/census/census97/profiles/nv/nvpb008.pdf>
- Census of Agriculture. 2002 Humboldt County Profile. Web Address: <http://www.nass.usda.gov/census/census02/profiles/nv/cp32013.PDF>
- Harris, T.R., T.R. MacDiarmid, S.W. Stoddard, W.O. Champney, and D.J. Torell. 1993. Economic Linkages in the Economy of Humboldt County. University Center for Economic Development. University of Nevada Reno. Department of Applied Statistics. Technical Report UCED 92-01. 67 pp.
- Nevada Agricultural Statistics Service. 2002. Nevada Agricultural Statistics 2002. United States Department of Agriculture, Reno, Nevada. 57 pp.
- Schultz, B.W. 2003. Humboldt County Needs Assessment: Crop Production. University of Nevada Cooperative Extension Fact Sheet FS-03-55.
- Schultz, B.W. 2003. Humboldt County Needs Assessment: Livestock Production. University of Nevada Cooperative Extension Fact Sheet FS-03-56.
- Schultz, B.W. 2003. Humboldt County Needs Assessment: Youth. University of Nevada Cooperative Extension Fact Sheet FS-03-57.
- Unauthored. 2003. Tri-County Community Resource Directory, Humboldt County. Compiled by the Family Resource Center. Humboldt County.
- United States Census. 2000. Web Address: <http://factfinder.census.gov/>

Figure 1. County-wide (i.e., all respondents) importance ratings for community development issues in Humboldt County.

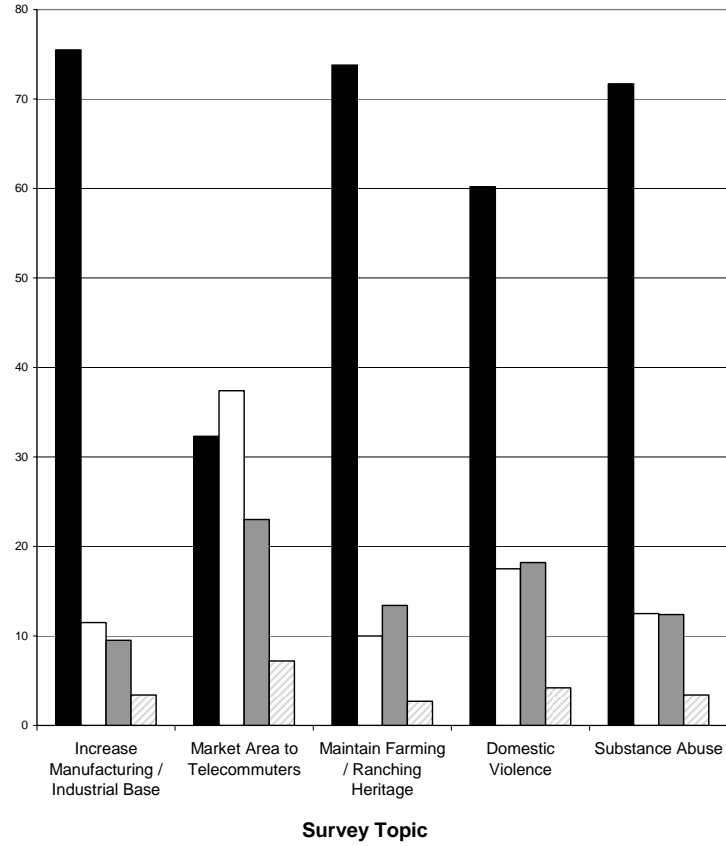
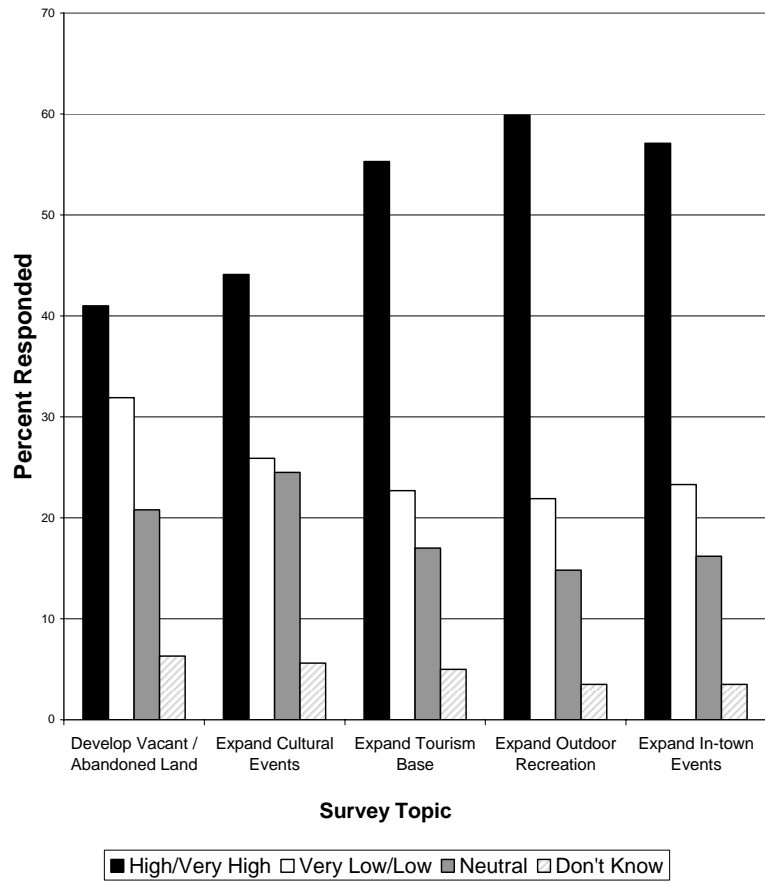


Figure 2. Importance ratings for community development issues in Humboldt County as classified by type of employment.

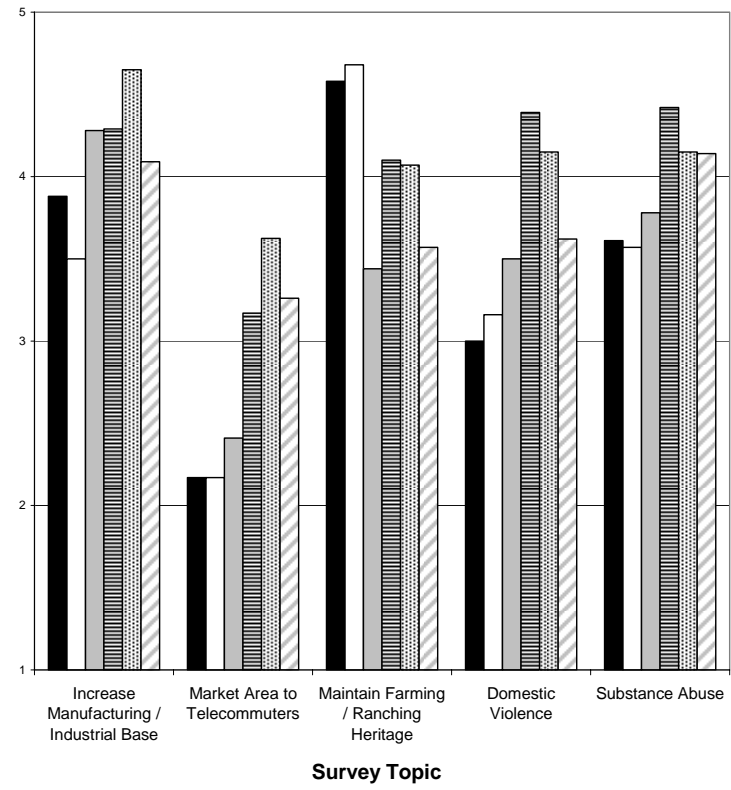
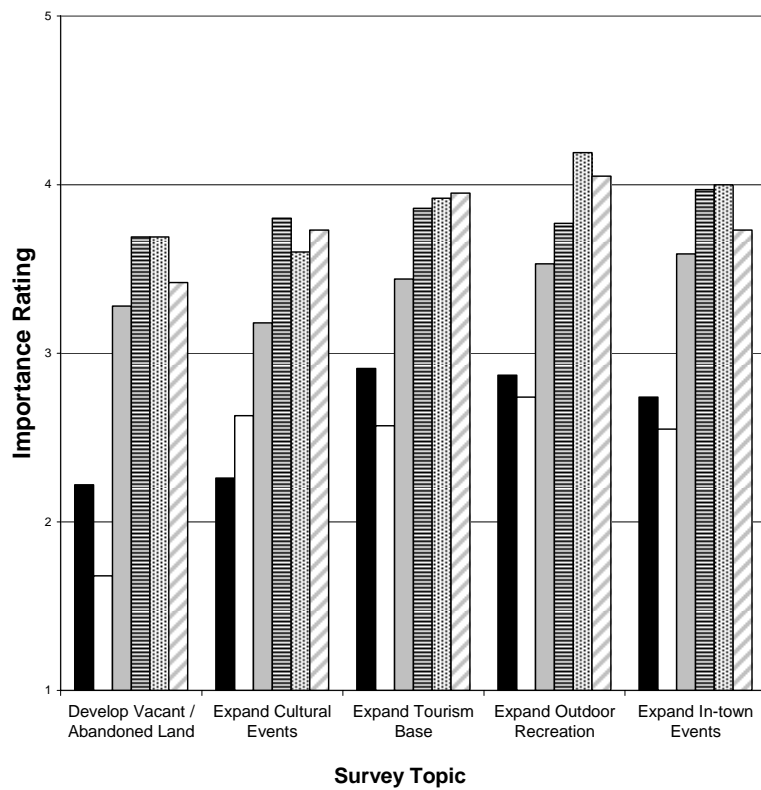


Figure 3. County-wide (i.e., all respondents) importance ratings for urban horticulture issues in Humboldt County.

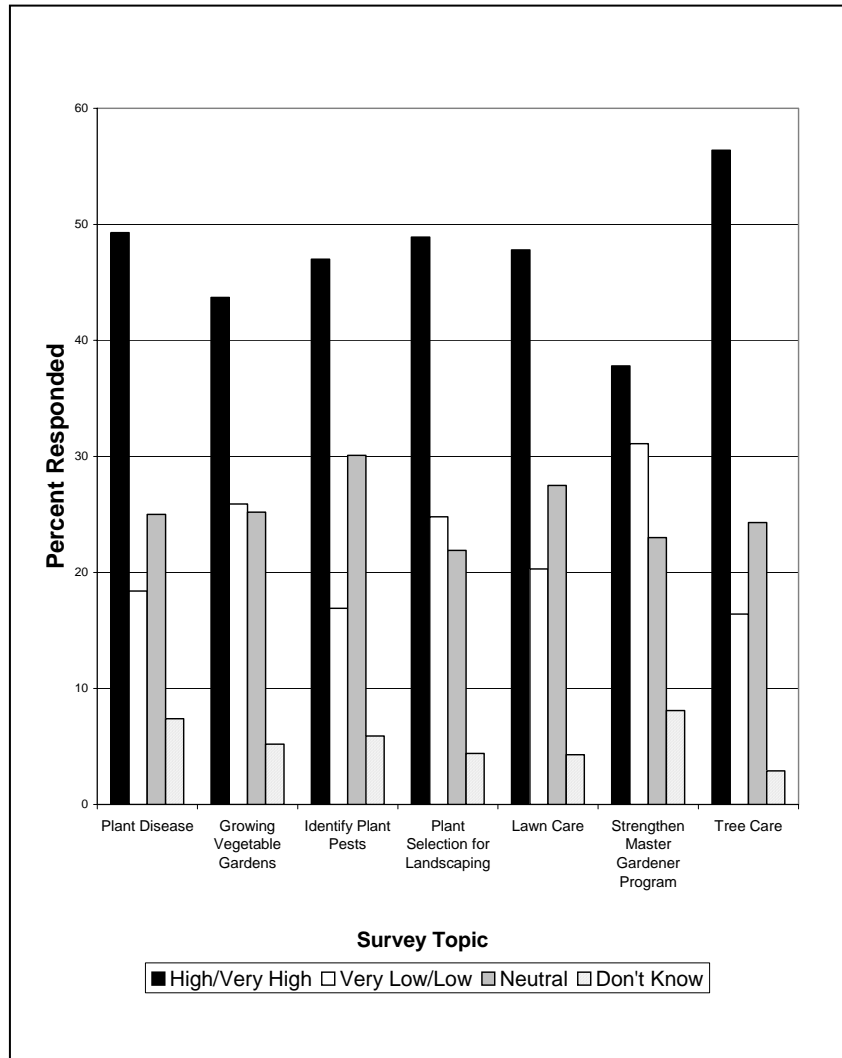


Figure 4. Importance ratings for urban horticulture issues in Humboldt County with respondents classified by type of employment.

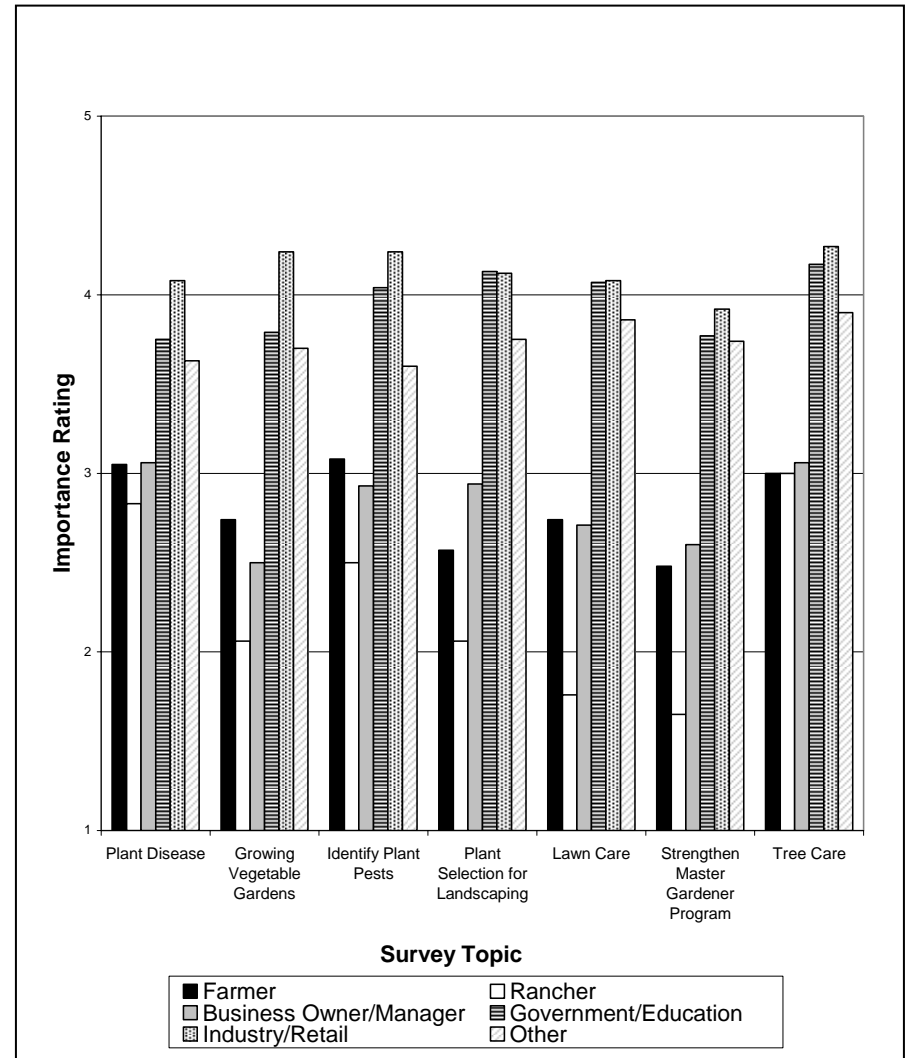


Table 2. Preferred methods for communicating problems, concerns, and needs with the Cooperative Extension office in Humboldt County.

Method	<u>Countywide</u> %	<u>Farmer</u> %	<u>Rancher</u> %	<u>Business Owner/Manager</u> %	<u>Government/ Education</u> %	<u>Industry/ Retail</u> %	<u>Other</u> %
Regular Scheduled Meetings	52	54	57	35	52	68	37
Phone Conversations	41	35	50	38	39	54	33
Email	40	33	21	27	44	63	42
On-site Visits	56	75	59	44	45	60	58
Open Houses	55	44	38	29	54	80	77

Table 3. Preference for delivery of education programs in Humboldt County by specific formats. Values in each row are the percent of respondents by employment type who wanted education programs delivered by specific format.

	<u>Countywide</u>	<u>Farmer</u>	<u>Ranche</u>	<u>Business</u> <u>Owner/Manager</u>	<u>Government/</u> <u>Education</u>	<u>Industry/</u> <u>Retail</u>	<u>Other</u>
	<u>%</u>	<u>%</u>	<u>r</u> <u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Program Format							
Seminar	75	86	83	80	71	70	59
Workshop	90	91	90	100	82	91	90
Field Day	76	81	69	60	73	75	95
Field Tour	79	91	90	71	70	65	95
Newsletter	84	96	95	81	83	74	76
Fact Sheet	85	95	100	80	89	70	75
Newspaper	70	57	73	71	82	63	56
Web Site	69	57	53	60	81	83	63
Demonstration Site	83	80	90	63	93	78	84

Table 4. Respondent preference for receiving education programs in Humboldt County. The first value is the percent of respondents that answered yes, and the second value (in parentheses) is the percent that responded no. The combined values do not equal 100% because neutral responses are not included. Neutral responses equal the remaining balance.

	<u>Countywide</u>	<u>Farmer</u>	<u>Rancher</u>	<u>Business Owner/Manager</u>	<u>Government/ Education</u>	<u>Industry/ Retail</u>	<u>Other</u>
Best time of year							
Sept.-Oct.	26 (28)	19 (57)	35 (24)	21 (14)	25 (29)	46 (9)	6 (29)
Nov.-Feb.	50 (13)	91 (0)	74 (0)	43 (7)	42 (21)	19 (33)	28 (6)
March-May	39 (23)	19 (48)	12 (47)	28 (27)	58 (8)	62 (10)	47 (5)
June-August	19 (45)	10 (85)	7 (60)	14 (36)	14 (46)	32 (32)	24 (12)
Best Time of Week							
Monday or Friday	28 (25)	29 (29)	24 (24)	27 (20)	32 (36)	37 (16)	12 (18)
Tuesday-Thursday	48 (11)	76 (0)	47 (16)	33 (20)	54 (12)	29 (14)	45 (0)
Weekend	27 (36)	11 (56)	17 (39)	27 (27)	42 (25)	40 (35)	12 (41)
Best time of day							
Workday (8-5)	40 (40)	67 (10)	56 (19)	23 (39)	35 (39)	32 (32)	29 (18)
Early Evening (5-7)	51 (15)	36 (32)	59 (18)	50 (19)	68 (8)	52 (14)	33 (0)
Late Evening (7-10)	25 (50)	30 (65)	27 (67)	33 (42)	26 (2)	25 (35)	6 (38)

Table 5. Preference for having education programs in respective communities in Humboldt County. Values are percent of respondents who rated the location high/very high.

	<u>Countywide</u>	<u>Farmer</u>	<u>Rancher</u>	<u>Business Owner/Manager</u>	<u>Government/ Education</u>	<u>Industry/ Retail</u>	<u>Other</u>
	%	%	%	%	%	%	%
Location							
Winnemucca	82	74	65	77	93	96	81
Paradise Valley	48	24	59	53	54	52	43
Orovada	51	73	57	29	40	38	45
McDermitt	41	24	40	29	61	48	38
Kings River	36	32	35	29	46	33	37
Denio	33	14	33	29	50	32	35