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WETLANDS AND ENDANGERED SPECIES: EDUCATIONAL ASSISTANCE NEEDS OF EXTENSION EDUCATORS

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Our nationwide survey of U.S. extension educators revealed their expectations and needs for the public policy issues of wetlands and endangered species. Wetlands and endangered species issues will continue to be "hot" topics during the next two to three years evolving around financial and legal aspects and basic values such as property rights. Extension educators expect to be involved in wetlands and endangered species issues, and the survey revealed a high level of demand for assistance.

The Survey

In July, 1992, survey forms were mailed to 1,192 extension educators to ascertain their expectations about wetlands and endangered species issues and their needs to conduct effective programs in their areas. The survey was sent with a letter from Extension Service administrators John Vance and Vivan Jennings to Agricultural and Natural Resource (ANR) specialists and to ANR program leaders who in turn solicited responses from four agents in each state. The survey asked whether or not wetlands and endangered species issues were going to be "hot" in the next two to three years, whether or not they expected to be involved, and what kind of materials and programs they would need.

With 47 percent of the 558 surveyed responding, the response rate was high, especially given no mail or phone follow-up, and the letters and comments indicated a high level of interest.

The Respondents

The response appeared representative of U.S. extension educators likely to work with wetlands and/or endangered species issues. All regions of the U.S. were well-represented in the survey although 30 percent of the respondents work in the South and 29 percent in the West. Of every ten respondents, six were specialists, three were agents, and one was an administrator. Most work with both natural resources and agriculture.

Anticipating the Issues

The question was asked: How hot (controversial) will wetlands or endangered species issues be in your county/state in the next two to three years? Mean responses are in bold.

		Cold ←	Warm →		Hot
Wetlands definition/regulations	1	2	3	4	5
Swampbuster program	1	2	3	4	5
Property rights in wetlands	1	2	3	4	5
Public purchases of wetlands	1	2	3	4	5
Private purchases of wetlands	1	2	3	4	5
Chemicals and endangered species	1	2	3	4	5
Development and endangered species	1	2	3	4	5
Property rights and endangered species	1	2	3	4	5

All categories received a mean response of 3 or 4 out of a possible 5, with standard deviations ranging from .87 to 1.23. The arguments over defining wetlands for regulatory purposes will continue. Financial and legal consequences are expected to propel these issues as are basic values such as property rights, and the conflicting values of affected interest groups.

Controversy Focus

What commercial or public activities are likely to spawn these issues? For example, where are they most likely to pop up? Here are the responses and the frequency with which each was listed: Agriculture—81%, Water—67%, Forests—49%, Residential Development—39%, Commercial Development—33%, Recreational Development—30%, Highways and Roads - 16%, Mining—14%, and Other—10%.

The Other category included: private use of public range and forest lands, development, oil and gas exploration, fisheries and aquaculture, regulation and takings, bio-diversity, floods, skiing, gravel extraction, pesticide use and control, and relationships with Native Americans.

Regional comparisons of these data provide more clues as to which activities are likely to be associated with wetlands and/or endangered species issues. Each column shows the percent of responses. In the North Central region, issues are expected to be associated with agriculture and water. In the South, add forestry, residential and commercial development to that list.

In the Northeast, development, agriculture and water are the likely sources. In the West, extension educators will be sensitive to agriculture, water, and forest management; also to mining, public lands,

rivers and hydro power, and range management. However, the regional data reveal more national homogeneity than regional differences.

<u>Focus</u>	<u>Regional Responses %</u>			
	<u>NC</u>	<u>NE</u>	<u>S</u>	<u>W</u>
Agriculture	34%	19%	22%	23%
Water	23	17	19	20
Forests	7	10	19	17
Residential Development	9	19	12	9
Commercial Development	9	12	11	7
Recreational Development	9	10	8	9
Highways and Roads	5	7	5	3
Mining	3	3	2	7
Other	1	3	2	5
	100%	100%	100%	100%

Probable Involvement

The survey asked: To what extent (on a scale of 1 - 5) do you think you will be involved in these issues? The mean answer is 3.65 and the standard deviation is 1.05.

Low -----High
 1 2 3 4 5

Materials and Programs

To learn what kind of materials and/or programs would be most helpful, the survey asked: **What would help you?** Mean responses are highlighted.

	Low -----High				
Materials describing the issue(s)	1	2	3	4	5
Materials to teach how resource policy is made	1	2	3	4	5
Information on effects of policy alternatives	1	2	3	4	5
How to educate about resource policy issues	1	2	3	4	5
Mediation/Negotiation program materials	1	2	3	4	5
Successful extension programs: case examples	1	2	3	4	5

The responses are 3 or 4 out of a possible 5, with standard deviations ranging from .99 to 1.23. The data give little guidance on priorities—all types are in demand.

Media

What forms should these materials/programs take? Fact sheets were checked on 79% of the responses; 44% and 42% wanted newsletters and videos; 35% wanted a regional training seminar; 19% preferred a short course or school; 34% wanted booklets; and 26% wanted handbooks.

The preferences are so similar among the regions that they suggest that the same media and programs can be used nationwide with regional and/or topical adaptations.

<u>Media</u>	<u>Regional Responses</u>			
	<u>NC</u>	<u>NE</u>	<u>S</u>	<u>W</u>
Booklets	12%	11%	12%	11%
Fact Sheets	29	30	26	25
Handbook	10	10	8	9
Ag*Sat program	4	2	3	4
Video	12	13	18	13
Short Course/School	6	6	4	9
Regional Training Seminar	11	11	12	13
Newsletter	15	16	16	13
Other	1	1	1	3
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Conclusions

Two conclusions are obvious. First, U. S. extension agents, specialists and administrators expect to be involved in wetlands and endangered species issues. Second, they want assistance from the extension system. They want to be well informed, and they want to know how to work with these issues.

The data reveal more national homogeneity than regional differences. Respondents in all regions identified basically the same issues, focuses of controversy, probability of their future involvement, and materials and programs needed to deal with wetlands and endangered species. While this provides guidance for Extension Service program development, it is also apparent that regional differences, such as the endangered salmon and spotted owl issues in the West, will require specific attention.

The results of this study indicate a need for materials and programs which will help agents, specialists and administrators to effectively handle wetlands and endangered species issues. Fact sheets, newsletters and videos, the preferred media identified by the respondents, should be produced as the most easily disseminated forms of information. And regional training seminars should be conducted to allow not only national issues to be discussed and analyzed, but regional issues as well. The "teachable moment" has arrived for many wetlands and endangered species issues.