

2015

2009 Farm and Rural Life Poll: Targeted conservation and nutrient removal wetlands

J. Gordon Arbuckle

Paul Lasley

Peter Korsching

Follow this and additional works at: <http://lib.dr.iastate.edu/agdm>



Part of the [Agribusiness Commons](#)

Recommended Citation

Arbuckle, J. Gordon; Lasley, Paul; and Korsching, Peter (2015) "2009 Farm and Rural Life Poll: Targeted conservation and nutrient removal wetlands," *Ag Decision Maker Newsletter*: Vol. 14 : Iss. 10 , Article 2.

Available at: <http://lib.dr.iastate.edu/agdm/vol14/iss10/2>

This Article is brought to you for free and open access by the Ag Decision Maker at Iowa State University Digital Repository. It has been accepted for inclusion in Ag Decision Maker Newsletter by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.



2009 Farm and Rural Life Poll: Targeted conservation and nutrient removal wetlands*

by J. Gordon Arbuckle, Jr., extension sociologist; Paul Lasley, extension sociologist; Peter Korsching, professor; and Chris Kast, research assistant

The Iowa Farm and Rural Life Poll is an annual survey that collects and disseminates information on issues of importance to rural communities across Iowa and the Midwest. Conducted every year since its establishment in 1982, the Farm Poll is the longest-running survey of its kind in the nation. This article highlights information from the 2009 survey on farm policy and commodity production.

Targeted conservation

Targeted conservation refers to soil and water conservation activities that use techniques such as satellite imagery and geographic information systems (GIS) to identify the areas of the landscape that are most vulnerable to soil erosion or water quality impairment. Because targeted conservation approaches focus resources on the areas of the landscape that are most in need of conservation practices and would provide the most environmental benefits, they are seen by many as a way to improve the effectiveness of soil and water conservation activities. Despite their potential to address the most pressing agricultural conservation needs, targeted approaches have not been widely implemented.

The Farm Poll examined how farmers feel about targeted conservation strategies.

Overall, farmers appear to be supportive of targeted approaches. About three-fourths of Farm Poll participants agreed that conservation funding should be higher for land that is most vulnerable to soil and water quality problems (Table 1). Seventy-four percent agreed that targeted conservation is a good idea because limited resources should be spent where they have the most impact, and 71 percent agreed that satellite imagery, GIS, and similar technologies can be valuable tools to help farmers improve the environmental performance of their farm operations.

Three questions focused on the balance between concerns about privacy and property rights and the need to address natural resource problems. Responses to the statement “Government use of satellite imagery and GIS to map characteristics of private land is an invasion of privacy” were fairly evenly split, with 30 percent in agreement, 33 percent uncertain, and 38 percent in disagreement. Farmers were also asked whether they would feel unfairly singled out if a conservation

Table 1. Targeted conservation

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
	—Percentage—				
Conservation funding should be higher for land that is most vulnerable to soil and water quality problems.....	1	5	19	65	11
Targeted conservation is a good idea because limited resources should be spent where they have the most impact..	1	4	22	64	10
Satellite imagery, GIS and other technologies can be valuable tools to help farmers improve their farm’s environmental performance.....	1	3	25	64	7
If a conservation professional contacted me about a potential natural resource concern on my land, I would allow them to come to assess it.....	1	4	25	60	10
Targeted conservation programs are needed because current programs are not effective enough.....	2	13	51	31	3
Government use of satellite imagery and GIS to map characteristics of private land is an invasion of privacy.....	4	34	33	24	6
If a conservation professional contacted me about a potential natural resource concern on my land, I would feel unfairly singled out.....	6	45	36	11	2

2009 Farm and Rural Life Poll: Targeted conservation and nutrient removal wetlands*, continued from page 3

professional contacted them about a potential natural resource concern on their land: only 13 percent agreed, compared to 51 percent who either disagreed or strongly disagreed, indicating that in general they would not feel singled out. Finally, farmers were presented with the statement: “If a conservation professional contacted me about a potential natural resource concern on my land, I would allow them to come to assess it.” A solid majority—70 percent—agreed that they would allow it, and only five percent disagreed. Together, these results indicate that most farmers would support a shift toward a more targeted approach to promoting conservation activities on agricultural land.

Nutrient removal wetlands

Restoration or creation of wetlands at strategic points on the landscape can reduce the amount of nutrients, chemicals, and sediment that enter streams from farmland. The survey provided participants with the following text: “The establishment or restoration of wetlands at key places on the landscape has been shown to be an effective tool for reducing the amount of agriculture-related nitrogen and sediment that reaches streams through run-off or tile discharge. In general, such wetlands are constructed at the end of drainage districts and other drainage areas (watersheds) to capture nutrients and sediments before they enter streams and lakes.” They were then asked to respond to questions and statements about nutrient removal wetlands.

Several questions examined farmers’ familiarity with nutrient removal wetlands and willingness to consider establishing wetlands on their farmland. Fifty-eight percent of participants were familiar with constructed wetlands, 21 percent had visited one, and 13 percent reported that they had constructed wetlands on their own farmland (Table 2). Thirty-nine percent indicated that they were aware of the Conservation Reserve Enhancement Program (CREP), a federal program that helps

landowners to establish nutrient removal wetlands where appropriate.

For the second set of questions, which was developed in consultation with Iowa Department of Agriculture and Land Stewardship staff, participants were provided with the following information about nutrient removal wetlands and the CREP program: “Nutrient removal wetlands cover 43 acres on average. Under the Iowa Conservation Reserve Enhancement Program (CREP), landowners: 1) receive 100 percent cost-share of wetland and buffer establishment cost, 2) receive up to 15 annual rental payments of 150 percent of the weighted average soil rental rates, plus \$2 per acre maintenance payments, and 3) can choose to receive a one-time up-front incentive payment to enter into a 30-year or permanent easement on the land. During the easement period, the land cannot be farmed, but landowners still receive 15 years of payments and still own and maintain control over the land. Enrollment in CREP does not make the land under easement public property.”

Participants were then asked to answer questions about their willingness to learn more or consider establishing a wetland themselves. The questions were preceded by the statement: “If a portion of your farmland were identified as a critical site for a nutrient removal wetland, would you...?” Seventy-one percent responded that they would be willing to learn more about nutrient removal wetlands, and 58 percent expressed that they would be more likely to consider establishing a wetland on marginal cropland (Table 3).

Forty-six percent indicated that they would consider establishing a nutrient removal wetland through the CREP program. A smaller, but still substantial percentage of farmers (29 percent) were willing to consider establishing a wetland with a permanent easement for \$2,500 an acre, and 23 percent would consider the 30-year easement option for \$1,000 an acre. When asked

Table 2. Nutrient removal wetlands

	No	Uncertain	Yes
	—Percentage—		
Are you familiar with constructed wetlands for nutrient run-off reduction?	30	12	58
Are you familiar with the Conservation Reserve Enhancement Program (CREP)?	47	14	39
Is any of your farmland located at or near the bottom of a drainage district or other drainage area/watershed?	61	10	29
Have you ever visited a nutrient removal wetland or other constructed wetland? .	76	3	21
Have you constructed wetlands on your farmland?.....	85	2	13

continued on page 5

2009 Farm and Rural Life Poll: Targeted conservation and nutrient removal wetlands*, continued from page 4

whether they would feel unfairly targeted if some of their land were identified as a critical site for a wetland, only 15 percent indicated that they would, and only seven percent stated that they would refuse to consider the possibility of constructing a wetland under those circumstances.

Finally, six questions examined beliefs about water quality and the potential impacts of nutrient removal wetlands. Seventy-eight percent of farmers agreed that Iowa farmers should do more to reduce flows of nutrients and sediment into waterways and lakes, and 58 percent believed that nutrients from Iowa farms contribute to hypoxia (oxygen depletion) and sedimentation in Iowa lakes and rivers (Table 4). Forty-five percent of participants endorsed nutrient removal wetlands as a good idea that should be promoted more heavily. In terms of impacts, while 64 percent of farmers believed that constructed wetlands would attract desirable wildlife for hunting and viewing, 32 percent agreed that

such wetlands could cause upstream and downstream drainage problems for other landowners, and 27 percent felt that they could attract undesirable wildlife.

Survey information

Iowa State University Extension, the Iowa Agriculture and Home Economics Experiment Station, and the Iowa Department of Agriculture and Land Stewardship are all partners in the Farm Poll effort. The information gathered through the Farm Poll is used to inform the development and improvement of research and extension programs and is used by local, state, and national leaders in their decision-making processes. We thank the many farmers who responded to this year's survey and appreciate their continued participation in the Farm Poll.

Who participates?

The 2009 Farm Poll questionnaires were mailed in January and February to a statewide panel of 2,201 farm operators. Usable surveys were received from 1,268

Table 3. Nutrient removal wetlands, part 1

	No	Uncertain	Yes
—Percentage—			
If a portion of your farmland were identified as a critical site for a nutrient removal wetland, would you...			
be willing to learn more about nutrient removal wetlands?.....	11	18	71
be more likely to consider establishing a wetland on marginal cropland?.....	14	27	58
consider establishing a nutrient removal wetland through the CREP program?	20	35	46
consider establishing a wetland with a permanent easement for \$2,500/acre?	30	40	29
consider establishing a wetland with a 30-year easement for \$1,000/acre?	39	38	23
feel unfairly targeted just because your land is located where it is?.....	56	28	15
refuse to consider the possibility of constructing a nutrient removal wetland?.....	61	32	7

Table 4. Nutrient removal wetlands, part 2

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
—Percentage—					
Iowa farmers should do more to reduce nutrient and sediment run-off into streams and lakes	0	3	19	65	13
Nutrient removal wetlands would attract desirable wildlife for hunting and viewing.....	1	5	30	57	7
Nutrients from Iowa farms contribute to hypoxia and sedimentation of Iowa lakes and rivers	1	6	36	49	9
Nutrient removal wetlands are a good idea that should be promoted more heavily among Iowa farmers	1	6	47	40	5
Nutrient removal wetlands could disrupt drainage systems for upstream/downstream landowners.....	2	14	52	29	3
Nutrient removal wetlands would attract undesirable wildlife	3	22	47	24	3

continued on page 6

2009 Farm and Rural Life Poll: Targeted conservation and nutrient removal wetlands*, continued from page 5

farmers, resulting in a 58 percent response rate. On average, Farm Poll participants were 64 years old, and had been farming for 39 years. Fifty percent of farmers reported that farm income made up more than half of their overall 2008 household income, and an additional 20 percent earned between 26 and 50 percent of their

household income from farming. Copies of this or any other year's reports are available from your county ISU Extension office, the Extension Online Store (www.extension.iastate.edu/store), Extension Sociology (www.soc.iastate.edu/extension/farmpoll.html), or from the authors.

*Reprinted with permission from the Iowa Farm and Rural Life Poll, 2009 Summary Report, PM 2093. Renea Miller provided valuable layout assistance to the questionnaire and this report. The Iowa Department of Land Stewardship, Division of Statistics, assisted in the data collection.

Updates, continued from page 1

Internet Updates

The following updates have been added on www.extension.iastate.edu/agdm.

Brand Loyalty -- C5-54 (2 pages)

Using Trade Shows for Product Promotion -- C5-140 (2 pages)

Decision Tools and Current Profitability

The following tools have been added or updated on www.extension.iastate.edu/agdm.

Season Average Price Calculator -- A2-15

Corn Profitability -- A1-85

Soybean Profitability -- A1-86

Ethanol Profitability -- D1-10

Biodiesel Profitability -- D1-15

Returns for Farrow-to-Finish -- B1-30

Returns for Weaned Pigs -- B1-33

Returns for Steer Calves -- B1-35

Returns for Yearling Steers -- B1-35

... and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write

USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964. Issued in furtherance of Cooperative Extension work, Acts of May 8 and July 30, 1914, in cooperation with the U.S. Department of Agriculture. Jerry Miller, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

Permission to copy

Permission is given to reprint ISU Extension materials contained in this publication via copy machine or other copy technology, so long as the source (Ag Decision Maker Iowa State University Extension) is clearly identifiable and the appropriate author is properly credited.