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2012 Iowa Farm and Rural Life Poll: Pest resistance and certified conservation

by J. Gordon Arbuckle, Jr., extension sociologist, 515-294-1497, arbuckle@iastate.edu; Paul Lasley, extension sociologist; and John Ferrell, research assistant

Two emerging topics of interest, pest resistance and certified conservation, were included in the 2012 Iowa farm poll to capture the thoughts of participants. The 2012 farm poll asked farmers to rate their concern about the potential development of widespread insect resistance to Bt and the spread of herbicide-resistant weeds. Another area gaining attention is certified conservation. This discussion

has focused on the possible development of a training and certification program focused on helping Iowa farmers to improve their soil and water conservation abilities. The 2012 farm poll included a series of questions to measure farmers' interest in and perspectives on such a program.

More than 80 percent of farmers expressed concern that herbicide resistance will become a problem where they farm (Table 1). More than 60 percent of farmers agreed that they are concerned about Bt-resistant insects becoming a problem.

Concern about resistance in pests

Many Iowa farmers plant crops that are genetically modified to facilitate the management of insect and weed pests. A majority of corn planted in Iowa is "Bt" corn that is engineered to control corn rootworms. Nearly all soybeans and most corn planted in Iowa contain genes that confer resistance to the herbicide glyphosate. In recent years, populations of corn rootworms and several types of weeds that are resistant to these pest management tools have been identified in the state.

Certified conservation farmers

The question set on a training and certification program focused on helping Iowa farmers to improve their soil and water conservation abilities was preceded by a short description of what such a program might consist of, as follows: "Several groups in Iowa are thinking about developing

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Handbook updates

For those of you subscribing to the handbook, the following new updates are included.

Change in Corn Prices by Two-Week Period – A2-17 (1 page)

Change in Soybean Prices by Two-Week Period – A2-18 (1 page)

Historic County Cropland Rental Rates – C2-11 (10 pages)

Please add these files to your handbook and remove the out-of-date material.

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Table 1. Management-resistant insects and weeds

	Strongly Disagree	Somewhat Disagree	Uncertain	Somewhat Agree	Strongly Agree
	— Percentage —				
I am concerned that herbicide-resistant weeds will become a problem in my area.	1	5	12	49	33
I am concerned that Bt-resistant insects will become a problem in my area.	2	8	28	45	17

a voluntary program to certify farm operators as ‘Certified Conservation Farmers.’ Training would include identifying farmland conservation needs; understanding agencies, programs, and resources available to support conservation; planning and implementation of conservation practices; communicating conservation needs to landowners; and, marketing conservation skills to landowners. Farmers who rent land could promote their conservation farmer certification as an asset that would assure landowners that they would care for their land.”

In general, Iowa farm poll participants appeared to be open to the idea of a training and certification program centered on helping farmers to improve their conservation skills. Sixty-five percent indicated that they would be or might be interested in learning more about such a program (Table 2).

Fifty-four percent of farmers reported that they would be or might be interested in becoming a Certified Conservation Farmer. Nearly 80 percent selected either “yes” or “maybe” in response to the question, “Do you think a Certified Conservation Farmer program would help Iowa farmers to do more conservation?”

About one-third of farmers agreed that landlords would be more likely to rent to a “Certified Conservation Farmer,” and that landowners would be more likely to rent to a farmer who was certified over one who was not, while 34 and 48 percent of farmers, respectively, responded “maybe” (Table 2). In response to a question about whether ISU Extension and Outreach should start a certified conservation farmer program, 29 percent selected yes and 43 percent selected maybe. Overall, the results from these questions suggest that there would be substantial demand for such a program if

Table 2. Perspectives on a hypothetical “Certified Conservation Farmer” program

	Yes	Maybe	No
	— Percentage —		
Would you be interested in learning more about a Certified Conservation Farmer program?	30	35	35
Would you be interested in becoming a Certified Conservation Farmer?	21	33	46
Do you think a Certified Conservation Farmer program would help Iowa farmers to do more conservation?	38	38	24
Do you think landowners would be more likely to rent to a Certified Conservation Farmer over someone who was not certified?	31	34	34
Do you think landlords would want their tenants to become Certified Conservation Farmers?	32	48	20
Do you think Iowa State University Extension should start a Certified Conservation Farmer program?	29	43	28

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it were developed.

About the Iowa Farm and Rural Life Poll

Conducted every year since its establishment in 1982, the Iowa Farm and Rural Life Poll is the longest-running survey of its kind in the nation. ISU Extension and Outreach, the Iowa Agriculture and Home Economics Experiment Station, the Iowa Department of Agriculture and Land

Stewardship, and the Iowa Agricultural Statistics Service are partners in the Iowa farm poll effort.

The 2012 Iowa Farm and Rural Life Poll summary report (PM 3036) and previous Iowa Farm and Rural Life Poll summary and topical reports are available to download from the ISU Extension and Outreach Online Store, https://store.extension.iastate.edu/ or from Extension Sociology, http://www.soc.iastate.edu/extension/farmpoll2012.html.

Research briefs from Iowa State University Department of Economics

Duffy honored by American Agricultural Editors' Association



Mike Duffy, an Iowa State University professor of economics, will be presented the Distinguished Service Award this summer by the American Agricultural Editors' Association (AAEA).

"Mike's leadership in helping beginning farmers for nearly 20 years has helped to facilitate the transfer and transition of farm operations between multiple generations," said Dan Zinkand, an agricultural journalist and AAEA member who led Duffy's nomination effort.

Duffy served as director of Iowa State's Beginning Farmer Center from its creation by the Iowa Legislature in 1994 through the end of 2012.

"The center may be unique in the nation, and Mike's expertise and management has been influential not only in Iowa, but also to farm families nationwide in thinking differently and smartly about inheritance, succession and retirement," said Zinkand.

Duffy joined Iowa State University in 1984 as an extension farm management field specialist and began as an economics department faculty member in 1985. He earned a doctorate in agricultural economics from Pennsylvania State University in 1981, a master's degree in agricultural economics and a bachelor's degree in natural resources, parks and recreation management from the University of Nebraska in 1977 and 1975, respectively.

He is an expert in Iowa land valuation, having coordinated the annual Iowa State land value survey for 27 years, and conducts the Iowa Land Ownership survey. Duffy also serves as administrator for the ISU Extension Farm Financial Management Program and is director of graduate education for the Graduate Program in Sustainable Agriculture.

The AAEA, a professional organization of communicators in agriculture media, will present the award to Duffy at the Agricultural Media Summit this August in Buffalo, N.Y.

Read the news release at http://www.ag.iastate.edu/news/releases/1085/.

Factors constraining Iowa labor force growth through 2020

Swenson, David A., March 2013

Iowa endured high outmigration rates among young adults during the 2000 to 2010 period. In light of accelerating exits from the labor force as the "baby boom" generation reaches retirement age and Iowa's somewhat smaller labor force ages 25 through 44 than the national average, the state's labor force is projected to contract.

This report uses age and gender specific mortality and migration rates from the 2000 to 2010 period to project Iowa's working age population by 2020. Overall, the projections indicate an expected contraction in the Iowa population ages 16 to 64 of 74,142 persons. If that is the case, Iowa's economy may have trouble expanding.

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Full Text - <http://www.econ.iastate.edu/sites/default/files/publications/papers/p16040-2013-03-13.pdf>

Agriculture and agriculture-related manufacturing economic impacts in Iowa

Swenson, David A., March 2013

Agriculture is an important component of the Iowa economy. When considered in combination with Iowa's food manufacturing and Iowa's industries that specifically produce agricultural inputs, the broader agriculture and agriculture-related manufacturing sectors explain a substantial fraction of the state's jobs and labor incomes. If those industries are analyzed in terms of their contributions toward final demand sales (the preponderance of which are exports from Iowa), all of the jobs linked to those final demand sales can be quantified. By doing so, it is possible to estimate the total number of jobs in Iowa that are directly or indirectly linked to agriculture and agriculture-related manufacturing.

Full Text - <http://www.econ.iastate.edu/sites/default/files/publications/papers/p15967-2013-03-04.pdf>

Economic importance of the Iowa egg industry

Otto, Daniel; Ibarburu, Maro; Schulz, Lee L., ISU Extension: Economic Importance of the Iowa Egg Industry, January 2013

Iowa leads the nation in egg production, producing more than the second and third largest states combined. The United States Department of Agriculture estimates that approximately 52.9 million layers in Iowa produced 14.5 billion eggs in 2011. This level of production consumes 49.2 million bushels of corn and 452,200 tons of soybean meal to feed the layers and 4.2 million bushels of corn and 38,500 tons of soybean meal to feed the growing pullets. In addition, the egg industry is an important value-added activity in Iowa, directly employing an estimated 3,700 hatchery, production and processing workers in 2011 and generating

over \$156 million in direct payroll. The multiplier impacts on the Iowa economy are even more impressive, with total labor income of \$424 million, nearly 7,960 total jobs and an economic boost of \$657 million.

Full Text - <http://www.econ.iastate.edu/sites/default/files/publications/papers/p15917-2013-01-11.pdf>

Scaling up from smallholder agriculture in China, North Branch River Vegetable Cooperative

Kimle, Kevin; Hongdong Guo, WP #12028, December 2012

Zhang Guan Liang is a Chinese agricultural entrepreneur who lives in Fuyang, China. In 2009, he founded North Branch River Vegetable Cooperative with a vision of creating a vegetable production and distribution entity of significant scale. He has successfully launched the venture, with more than 200 farmers producing vegetables for it. Today, he faces significant challenges to further growth: some common to entrepreneurs, others unique to agriculture and others unique to growing an agricultural venture in China. The case charts Zhang's efforts to increase production capacity, access growth capital and manage food safety issues. In a larger sense, the case charts the agrifood supply chain struggles that are particularly acute in China today.

Full Text - <http://www.econ.iastate.edu/sites/default/files/publications/papers/p15735-2012-12-29.pdf>

Identifying the effects of SNAP (food stamps) on child health outcomes when participation is endogenous and misreported

Kreider, Brent; Pepper, John V.; Gundersen, Craig; Jolliffe, Dean, Forthcoming in Journal of the American Statistical Association

The literature assessing the efficacy of the Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program, has long puzzled over positive associations between SNAP receipt and various undesirable health out-

Research briefs from Iowa State University Department of Economics, continued from page 4

comes such as food insecurity. Assessing the causal impacts of SNAP, however, is hampered by two key identification problems: endogenous selection into participation and extensive systematic underreporting of participation status. Using data from the National Health and Nutrition Examination Survey (NHANES), we extend partial identification bounding methods to account for these two identification problems in a single unifying framework. Specifically, we derive informative bounds on the average treatment effect of SNAP on child food insecurity, general poor health, obesity and anemia across a range of different assumptions used to address the selection and classification error problems. In particular, to address the selection problem we apply relatively weak nonparametric assumptions on the latent outcomes, selected treatments and observed covariates. To address the classification error problem, we formalize a new approach that uses auxiliary administrative data on the size of the SNAP

caseload to restrict the magnitudes and patterns of SNAP reporting errors. Layering successively stronger assumptions, an objective of our analysis is to make transparent how the strength of the conclusions varies with the strength of the identifying assumptions. Under the weakest restrictions, there is substantial ambiguity: we cannot rule out the possibility that SNAP increases or decreases poor health. Under stronger but plausible assumptions used to address the selection and classification error problems, we find that commonly cited relationships between SNAP and poor health outcomes provide a misleading picture about the true impacts of the program. Our tightest bounds identify favorable impacts of SNAP on child health.

Published Version - http://www2.econ.iastate.edu/faculty/kreider/webpage/papers/downloads/JASA_KPGJ_online.pdf



Flexible cash farm leases

by Steven D. Johnson, farm & ag business management field specialist, Iowa State University Extension and Outreach, 515-957-5790, sdjohns@iastate.edu

A decline in crop prices compared to recent years is expected this fall. Despite lower prices, many tenant operators could pay higher fixed cash rental rates in 2014 and beyond. Most landowners recognize the need to create a reasonable cash rental rate as tenant operators assume most production and crop risks.

Since 2010, Iowa cash rental rates have increased by nearly 47 percent. The statewide average cash rent in 2013 is estimated at \$270 per acre, with even higher amounts for more productive farmland. However, much of the increase in cash rental rates was fueled by cash crop prices that averaged \$5 to \$7 per bushel for corn and \$11 to \$14 per bushel for soybeans over the past three years. The USDA midpoint cash price for the 2013 crop is currently forecast at \$4.80 per bushel for corn and \$10.75 per bushel for soybeans.

A 2010 survey of Iowa farmland owners indicated that 16 percent of cash rented farms use a flexible arrangement. Landowners who adopt a flexible cash farm lease typically receive a guaranteed base cash rent amount, in addition to a potential flex payment triggered by higher gross revenue (yield times price). The use of a flexible cash farm lease is likely fairer to both the landowner and tenant. However, the challenge is coming up with a base rent amount, maximum cash rent, and a way to determine a flexible payment that both parties understand and deem fair.

Determining yield and prices

Establishing a farm's actual yield (dry weight for corn adjusted to 15 percent) might require that lease arrangements reflect grain bin measurements, scale tickets, settlement sheets, yield monitor data, grain car scales, or other verifiable methods. To simplify, the yield information required should be

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