

# Iowa Pork Industry Center

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## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Iowa Pork Industry Center

## V(B). Program Knowledge Area(s)

### 1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	10%		10%	
302	Nutrient Utilization in Animals	10%		10%	
306	Environmental Stress in Animals	10%		10%	
307	Animal Management Systems	10%		10%	
308	Improved Animal Products (Before Harvest)	10%		10%	
311	Animal Diseases	10%		10%	
315	Animal Welfare/Well-Being and Protection	10%		10%	
402	Engineering Systems and Equipment	10%		10%	
403	Waste Disposal, Recycling, and Reuse	10%		10%	
601	Economics of Agricultural Production and Farm Management	10%		10%	
	<b>Total</b>	100%		100%	

## V(C). Planned Program (Inputs)

### 1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	14.0	0.0	10.3	0.0
<b>Actual</b>	14.0	0.0	14.3	0.0

### 2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 408226	1890 Extension	Hatch 1512357	Evans-Allen
	0		0
1862 Matching 408226	1890 Matching	1862 Matching	1890 Matching
	0	1512357	0
1862 All Other 1338681	1890 All Other	1862 All Other	1890 All Other
	0	11593384	0

## **V(D). Planned Program (Activity)**

### **1. Brief description of the Activity**

**National Animal ID Program:** Iowa Pork Industry Center (IPIC) Associate Director serves on the national steering team for NAIS. Producers are targeted for sign-up at the Iowa Pork Congress, and in IPIC / Iowa Pork Producers Association (IPPA) regional meetings around the state. As of January, 2009, Iowa has 24,743 of an estimated 47,273 premises registered with the National Animal Identification System (NAIS) (this is across species).

**Manure testing and utilization:** IPIC works closely with Iowa Manure Management Action Group (IMMAG) in development and implementation of standards and protocols for producer education in this area, particularly with the Field Specialist programs of work.

**Cost of production records:** We have completed an NRI research program working with niche market farms to assist them in accurately knowing their cost of production, and have held multiple educational events to disseminate the results of this project. Swine reproductive management software is being developed to assist both niche market producers (Sow Group Tracker) and commodity producers (Sow Tracker) in monitoring herd inventories and reproductive performance.

**Quality (Environmental) Management Systems:** The efforts sponsored by the "Smithfield Agreement" with the state of Iowa and coordinated through the IPIC has focused in part on working with swine producers to better understand what an EMS consists of and how it can be of benefit to them. QMS strategies for responding to current areas of scrutiny have been developed and are being field tested. Unfortunately, the staff coordinator of this project has resigned from this job to work at home, and a replacement is being sought.

**Pork and crop farm synergies:** IPIC personnel have held meetings for county boards of supervisors and boards of health to educate them as to the potential benefits of animal agriculture. These events are coordinated by ISUE Field Specialists and programs are presented by faculty from Animal Science, Economics and Agriculture and Biosystems Engineering departments. IPIC works with producer organizations such as IPPA and Iowa Farm Bureau, as well as the Beginning Farmer Center at ISU in developing programs on the potential for young farmers to enter agriculture via integrated crop and swine production.

**Production systems and practices:** To improve their profit through using state of the art production systems and practices, producers are offered educational opportunities through regional conferences, Iowa Pork Congress, PorkBridge, SowBridge, convention and trade show displays and one on one client discussions.

**Animal health improvement:** Faculty from the College of Veterinary Medicine are very active in developing and communicating information for producers to improve the animal health of their farms. This information comes to the producer directly through regional conferences, state wide educational meetings, educational teleconference series such as PorkBridge and SowBridge, and via educational opportunities for swine veterinary practitioners in the annual Iowa Swine Disease Practitioners Conference.

**2. Brief description of the target audience**

**Independent farms:** these are farms that are owned by the individual operators and not by investor owned companies, although they may be incorporated for business reasons.

**Corporate farms:** these are farms that are owned by investor owned companies.

**Attribute based farms:** these are farms that are marketing a product based on a particular attribute that has appeal to a consumer segment and has a potential higher return.

**Peer support groups:** these are groups of producers with common interests and concerns as it applies to pork production.

**Youth and next generation:** these are our potential clients and include high school, college and young people newly entering the workforce.

**Commodity groups:** these are the organizations that represent the pork producers of Iowa, such as Iowa Pork Producers Association, Iowa Farm Bureau Federation, National Pork Board, National Pork Producers Council, and National Swine Registry.

**Veterinarians:** these are the animal health practitioners who serve the pork industry through on-farm service, through commodity groups or other organizations.

**Community colleges:** these educational organizations are our partners in training potential swine farm personnel, as well as, consumers of pork.

**General population:** as consumers of pork, this is a very important group.

**Policy makers:** since the pork industry does not operate without impact from the policy makers of Iowa and the nation, we must communicate and cooperate with this client group.

**Allied Industry:** the production segment of the pork industry relies on allied industry to provide goods, services and information that allow the producers to meet their goals. Allied industry includes providers such as feed manufacturers, equipment suppliers, animal health product suppliers, software providers, consultants, and genetic suppliers.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	8000	16000	3000	3000
2008	12000	24000	2000	2000

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2008:	2

**Patents listed**

7,303,878: Genetic Markers for Improved Meat Characteristics in Animals (MC4R): Genetic Markers for Improved Meat Characteristics in Animals (MC4R).

2,337,495: Use of MC4R Gene as a Genetic Marker for Fatness in Pigs: Melanocortin-4 Receptor Gene and Use as a Genetic Marker for Fat Content, Weight Gain, and/or Feed Consumption in Animals.

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>	2	0	
2008	27	38	65

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Number of research studies completed.

*Not reporting on this Output in this Annual Report*

**Output #2**

**Output Measure**

Number of porcine respiratory and reproductive syndrome (PRRS) epidemiologic studies.

*Not reporting on this Output in this Annual Report*

**Output #3**

**Output Measure**

Number of producer surveys related to porcine respiratory and reproductive syndrome (PRRS) management and impact.

*Not reporting on this Output in this Annual Report*

**V(G). State Defined Outcomes**

<b>O No.</b>	<b>Outcome Name</b>
1	Number of niche market farms with accurate cost of production records.
2	Number of swine farms to participate in EMS training sessions (cumulative).
3	Number of youth participating in the Iowa State Fair swine programs (annually).
4	Number of crop producers who broaden their agricultural enterprise to include swine production facilities in order to bring another family member into the business (annually).
5	Number of premises registered in the national animal ID program (cumulative).
6	Number of pork producers exposed to large pen gestation systems and their management (cumulative).
7	Percent of pork producers using manure testing information to manage swine manure application (cumulative).
8	Number of Producers who adopt improved animal health protocols or procedures

**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
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**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Public Policy changes
- Government Regulations
- Competing Public priorities

**Brief Explanation**

External factors that influence the outcomes of our programs have centered on the public policy and governmental regulation areas, with other competing public priorities also having an impact. As the State and Federal legislatures implement policy and regulations that impact our pork industry, this then has a great impact on our programmatic activities and their impact. Examples for the current time include Mandatory Country of Origin Labeling (MCOOL), National Animal ID System, and the requirement of PQA+ site status by the pork processors or their vendors. These external factors will drive many of our programs for the upcoming year, however, they will also offer us the opportunity to engage new clients and have a positive impact of a larger number of clients than in previous years.

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- During (during program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

### **Evaluation Results**

Presentations on herd health events and related management problems were given to more than 400 niche pork producers using face-to-face and online methods. At least three months after these educational events, follow-up surveys were distributed to approximately half of these attendees (200), and 40 of these were returned for a 20 percent response rate. Specific behavioral changes were addressed in these surveys and measured by respondent completion. Of the 40 producers who returned surveys, 75% (30) said they were now adjusting feeders more often in attempts to reduce feed wastage. Fifty percent (20) said they cleaned waterers more often to provide more, clean fresh water to their pigs. Forty-three percent (17) reported making adjustments to their nutrition programs to help lower the cost of gain on their animals, and nearly one-third (12) had implemented a change in pig flow to batch-farrow sows when possible, leading to a narrower weaning age range within groups. Perhaps most importantly, nearly 40% decided to start keeping financial and other production records in their operations. As project team members continue to follow these initial participants, more positive changes in behavior are expected. As a result of past work with niche pork producers, a need for software to help provide costs and other information was realized.

### **Key Items of Evaluation**

Twenty percent of solicited survey respondents in an NRI grant project of niche pork producers returned completed surveys. These surveys were sent at least three months after an educational event to allow time for participants to decide whether to adopt behaviors learned during the event. More than 400 participants attended educational events in two different ways: producer meetings (in person) and via an Internet-provided venue, and roughly half were surveyed.