

Teaching Livestock Production for Niche Markets

A.S. Leaflet R2476

Peter J. Lammers, research associate;
Mark S. Honeyman, professor,
Department of Animal Science

Summary and Implications

Niche markets for livestock products are growing both nationally and within Iowa. Broadly, niche markets address consumer demand for product differentiation while enabling producers to take a more active role in price determination. This creates opportunities for individuals who are interested in raising livestock following a production model different from typical commodity production. Student interest in pursuing livestock production for niche markets is strong at Iowa State University. In response to exit-interview requests for coursework addressing production of livestock for niche markets, a course was developed by the authors. In the first semester (Fall 2008), 42 students enrolled in the course. Animal Science 312X: Livestock Production for Niche Markets is a course offered by the Department of Animal Science at Iowa State University that helps prepare students to participate in this growing market for livestock products.

Introduction

Commodity livestock production usually requires large-scale production to be economically viable. Such an operation is out of reach for beginning farmers without extensive financial support. Many young people would like to engage in livestock production as owner-operators, but lack the assets and capital necessary to make commodity livestock production a feasible career choice. Other individuals may not want to engage in livestock production for commodity markets due to personal lifestyle choices.

Graduating seniors in Animal Science are interviewed by the Animal Science Department at Iowa State University. These interviews are used to evaluate existing curriculum, gauge student's career goals, and identify ways to improve the quality of undergraduate education. Student comments during these interviews indicated an existing demand for a course addressing livestock production for niche markets.

Niche markets address consumer demand for product differentiation while enabling producers to take a more active role in price determination. Markets for livestock products that are produced according to certain guidelines—process-driven niches—are growing both nationally and within Iowa. Naturally-raised pork and USDA certified organic milk are two examples of process-driven niches. In general, naturally-raised pork requires that pigs be fed no animal by-products, have access to bedding, and are not given sub-therapeutic antibiotics. Gestation stalls and farrowing crates are generally not allowed by naturally-

raised pork processors and animal space allowances are usually larger than conventional practice. USDA-certified organic products are produced in accordance with national organic standards. Extensive production records are kept by producers and operations are regularly reviewed by organic certification agencies. The primary difference between naturally-raised and organic niches is that organic requires organically raised and processed feedstuffs. Because unique animal management requirements for the natural and organic markets are not met by current production systems, producers that raise livestock according to specifications are able to achieve a premium price for their products. This allows producers interested in raising livestock on a smaller scale to achieve total farm income comparable to larger commodity producers.

A growing segment of the population not directly engaged in production agriculture is seeking a greater connection with the food they consume. This is evident by the steady growth in so called connection niches such as farmer's markets, on-farm retail, and other marketing strategies that directly link producers and consumers of food. Minimizing the number of entities involved in production, processing, and marketing of livestock products enables producers to retain more of the value of the product. Producers marketing to local retailers or directly to consumers are generally able to achieve higher returns for their products as compared to producers marketing commodity livestock. Common examples of connection niches include eggs sold at farmers markets and fluid milk raised within 100 miles of a particular location that is bottled on farm and sold at retail outlets.

Emerging markets are a third broadly defined niche market opportunity. This type of niche is exemplified by the growth of meat goat consumption and production within Iowa. Although national supply chains exist for meat goats, the meat goat industry is not as well established in Iowa as other types of animal protein—pork, beef, dairy, and poultry. Meat goats are not a species of livestock historically grown by Iowa farms. However goat meat is an important part of the typical diet of many immigrants to the state of Iowa. This demand coupled with the general absence of goat meat from the meat case of most food retailers has encouraged entrepreneurial producers to begin raising meat goats in Iowa. Because goat meat is a relatively novel product in Iowa grocery stores, producers raising meat goats have an opportunity to be price “setters” rather than price “takers.”

Premium prices are attractive to livestock producers, but to achieve those prices producers generally must follow specific production guidelines and/or engage in marketing more extensively than in commodity systems. Successfully producing livestock for niche markets requires a similar but different skill set than commodity livestock production.

Iowa State University Animal Industry Report 2009

Existing courses in livestock management offered by most universities do not extensively address the unique aspects of livestock production for niche markets.

Methods

The Department of Animal Science at Iowa State University had interest for a course in livestock production for niche markets. The authors were asked to develop a course in livestock production for niche markets because they have extensive experience working with niche pork producers and are familiar with other livestock niches operating in Iowa. It was decided that the focus of the course would be livestock enterprises most common to niche markets in Iowa—swine, chickens, beef cattle, meat goats, and dairy. Species such as sheep, turkeys, and rabbits are also being raised for niche markets in Iowa. However it was decided to minimally include these species in discussion of the major livestock groups. Exotic species raised for meat—bison, elk, ratites—are not generally considered livestock and thus were outside of the scope of this course. Animals not primarily raised for animal protein to be consumed by humans—show stock, race horses, fiber producing alpacas, llamas, and goats, and species sold primarily through pet stores for example—were similarly excluded.

Four essential themes were identified for the course. The themes were: animal biology and husbandry, financial cost-benefit analysis, marketing strategies, and regulation/oversight. Themes were interwoven in lectures covering the identified livestock groups. Guest speakers—primarily producers engaged in livestock production for niche markets—were identified and contacted.

Results

Three course objectives were presented to the curriculum committees of the Department and College. The course objectives are included as table 1. Animal Science 312X: Livestock Production for Niche Markets was approved for fall 2008 as a 3-credit class to be offered every fall semester. Prerequisites for the course are 6 credits of Animal Science coursework. Forty-two students enrolled in the initial offering of the course. Seventy-five percent of the students are male with Agricultural Studies (22) and Animal Science (9) being the most common majors. Five students majoring in Agricultural Education are enrolled in the course. Agricultural Systems and Technology, Agricultural Engineering, and Horticulture are majors represented by 1 or 2 students in this class. Producers engaged in livestock production for niche markets were very receptive and supportive of the course. Eight individuals not employed by Iowa State University agreed to present to the class. In post-class conversations with the instructors, most speakers found the experience very rewarding and expressed interest in returning for future class sections. Not all producers contacted were able to participate in the course due to

scheduling conflicts. However the nearly universal response of producers was enthusiastic support for the course.

By understanding the factors that define and shape niche markets for livestock, students will be better prepared to develop their business strategies to meet real world situations. Regulations and interpretations of guidelines change over time and so the class was not designed to be a detailed discussion of all pieces of regulation and oversight pertaining to niche markets for livestock. Students were informed of major areas to be considered as well as key agencies to be consulted when producing and marketing livestock through niche markets. General marketing strategies presented during course lectures were also covered by guest speakers relating their experiences to the class and were further explored by students in several activities.

Raising livestock for niche markets generally requires strong animal husbandry skills. Because many tools commonly used by commodity production—farrowing crates, sub-therapeutic antibiotics, growth implants, and battery cages—are not allowed by various niches, understanding biology and behavior of a particular animal species is essential. Students who are familiar with conventional animal production typically understand growth in the context of corn-grain based diets often supported by growth enhancers. Livestock production for niche markets usually operates under a different set of performance expectations that are not fully understood by students. For example grass-based dairy and beef production is a major niche market that dictates a production context that is novel to most undergraduate students. Producer experience guided the establishment of realistic production benchmarks for the major areas of livestock under niche market conditions. Producers were also instrumental in discussion of processing and marketing logistics and costs for niche markets. Class lectures on livestock production focused on managing livestock to improve performance coupled with financial evaluation of management choices. Students were familiarized with simple enterprise budgets and balance sheets. Financial cost-benefit analysis was discussed and used to evaluate different production approaches and price scenarios for each type of livestock.

Niche markets for livestock products are growing both nationally and within Iowa. Students interested in raising livestock as owners-operators may find that niche markets can help them achieve their career goals. Understanding livestock production under niche market conditions as well as how niches change over time will better prepare students to engage in entrepreneurial livestock production for niche markets. Animal Science 312X: Livestock Production for Niche Markets is a new course offered by the Department of Animal Science at Iowa State University that helps prepare students to participate in this growing market for livestock products.

Iowa State University Animal Industry Report 2009

Table 1. Course outcomes for Livestock Production for Niche Markets.

1. Students will be able to describe and discuss the factors that define and shape niche markets for livestock products.
 2. Students will be able to describe general regulatory guidelines and marketing strategies, and understand how to access available resources for more specific information and assistance.
 3. Students will demonstrate knowledge of production strategies of niche producers and be able to discuss how they are different from commodity production approaches.
-