An Experimental Course: Livestock Production for Niche Markets

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An Experimental Course: Livestock Production for Niche Markets

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Summary and Implications
Niche markets for livestock products are growing. Niche markets address consumer demand for product differentiation while enabling producers to take an 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. Animal Science 312X: Livestock Production for Niche Markets is a new course that helps prepare students to participate in this growing market for livestock products. It was offered the second time in fall 2011. Of the 54 students enrolled in Animal Science 312X for fall 2011, 41 students (76%) were non-Animal Science/Dairy Science majors.

Introduction
Niche markets address consumer demand for product differentiation while enabling producers to take an active role in price determination. Markets for livestock products that are produced according to certain guidelines are growing.

Premium prices are attractive to livestock producers, but to achieve those prices producers generally must follow specific production guidelines. Successfully producing livestock for niche markets may require a unique skill set.

Materials and Methods
There was interest in a course about livestock production for niche markets. The authors developed and instruct a course in livestock production for niche markets because of their experience working with niche pork producers and familiarity with other livestock niches in Iowa.

Animal Science 312X: Livestock Production for Niche Markets was approved as an experimental 3-credit class. Prerequisites for the course are 6 credits of Animal Science coursework. The course was first offered in 2008 and was offered the second time in 2011.

Results and Discussion
For the fall 2011 offering of An S 312X, six major livestock enterprises were discussed in-depth. They were swine, dairy cattle, beef cattle, broiler, layer, and meat goat. Dairy, beef and swine were primarily pasture-based. The poultry was primarily range-based. Enterprise budgets, animal husbandry and production biology (growth, feed intake, environmental requirements, efficiencies and product makeup) were discussed for each.

Fifty-four students enrolled in fall 2011. Sixty-five percent of the students were male with Agricultural Studies (30), Animal Science/Dairy Science (13) and Ag Education (9) the most common majors. Agricultural Business and Agronomy also had majors represented in the class.

By understanding the factors that shape niche markets for livestock, students will be better prepared to develop their business strategies. Students were informed of major regulatory areas to be consulted when producing and marketing niche livestock.

Raising livestock for niche markets generally requires strong animal husbandry skills. Tools commonly used by commodity production (farrowing crates, sub-therapeutic antibiotics, growth implants, battery cages, high-energy diets) may not be allowed by various niches, thus understanding biology and behavior of the animal is essential. Livestock production for niche markets often operates under a distinct set of performance expectations. For example grass-based dairy and beef production is a major niche market that dictates a certain production context. Class lectures on livestock production focused on managing livestock to improve performance coupled with financial evaluation of management choices. Students were familiarized with enterprise budgets and balance sheets. Financial cost-benefit analysis was discussed and used to evaluate different production approaches and pricing scenarios for each type of livestock.

Each week of class had two lectures and a participatory hands-on session (some with live animals). Each livestock enterprise had at least one week of focus and more if needed. Time was also allocated to forages, pasture and grazing management.

Student Evaluation. Students were evaluated on numerous occasions throughout the semester. There were three exams and two major reports (one oral and one written) that accounted for about 70% of the possible points. The two major reports were by teams of students who visited local farms that produced livestock or animal products for niche markets. The teams wrote a report and presented slides to the class. The students made all contacts and arrangements with farmers of their choice. Sixteen farms were visited covering a variety of livestock species including five swine, four dairy, two beef farms and one each of lamb, meat goat, egg, ostrich and alpaca. Reports
included production, budget, marketing and overall farm goals.  Also, students were asked to complete six budget worksheets (one for each of the major specie enterprises covered) and four longer assignments (carcass pricing, forages, diet formulation and carcass cut-out topics) plus an animal niche product inventory. For the animal niche product inventory, teams of students were assigned to various food outlets (grocery stores, institutional dining services or restaurants) to inventory all available animal products that met the niche definition.  

Student interest in coursework examining niche livestock production is strong, especially for students pursuing agricultural degrees outside of Animal Science/Dairy Science. Of the 54 students enrolled in Animal Science 312X this fall, 41 students (76%) were non-Animal Science/Dairy Science majors.