Strategies for Profitable Hog Production: Raising Pigs on Pasture

Researchers and farmers find that with small portable huts and good pasture, they can drastically reduce the cost of production.

Hog farmers thought sows needed to farrow in confinement to ensure piglet survival, but his confinement system promotes ulcers, sores and detrimental behaviors. Therefore, producers are raising sows outdoors to allow them more space and access to fresh air and sunshine.

The traditional cattle country of the Texas panhandle is beginning to diversify into hogs. Outdoor pig production on a large scale is gaining a hoof-hold in the southern High Plains because of moderate climates, relatively flat land and sparse population.

Texas Tech University’s Sustainable Pork Program began studying intensive outdoor pig production in 1993 and, in 1998, built a research farm dedicated to exploring profitable, environmentally sound systems that are animal-, environment-, worker-, and community-friendly.

The prototype operates within a paddock system that requires about 100 acres for every 300 sows (three sows per acre). The 12-acre paddocks radiate out from a central circular area, used for handling and observation, and are demarcated by electric fence. The separate paddocks isolate breeding, gestation, farrowing and pasture growth.

Texas Tech researchers are evaluating production costs, behavior and environmental impacts, dust and microbe levels, and pork quality. They found improved pig health, a better work environment, less odor, less microbial activity, fewer regulatory problems and lower start-up and operating costs. It costs less to raise a pig in “intensive outdoor” production than the typical confinement system ($23.20 versus $31.00, respectively).

The institute’s director, John McGlone, said, “Pigs are going to be bigger than cattle on the southern Plains, and it could happen within the next 10 to 20 years.” He is sure sustainable pastured pork systems will take off once more producers learn of their environmental benefits, lower start-up costs and marketing opportunities.

Iowa studies also reveal the benefits of raising pigs on pasture. Iowa State University (ISU) compared economic and production data of indoor and outdoor herds. Results reveal outdoor herds save $3 less per pig in fixed costs than indoor herds. Lowered production costs lead to higher profitability.

The main cost in a pasture hog system is supplemental feed, with grain accounting for 60 to 70 percent of the cost from farrow to finish. ISU researchers studying the feasibility of grazing sows on alfalfa found similar costs for raising sows in confinement versus grazing alfalfa in a managed four paddock rotational system. The grazing animals were supplemented with 1.5 to 2 pounds of corn per day. In the meantime, the alfalfa stand improved the soil.

Environmental considerations make outdoor systems more attractive. Hogs evenly distribute manure across the field. Pastures can be seeded or natural, and including leguminous plants like alfalfa in a rotation can improve nitrogen cycling and supply a nutritious feed for pigs. Raising pigs outside gives them access to mud, water and shade to cool themselves.

Hog producers use a variety of wood, metal, or plastic huts to house their farrowing sows. Lined with bedding – hay, corn cobs, cornstalks, straw or shredded newspaper – the huts stay warm despite outdoor conditions.

Thanks to the low start-up costs, pasture systems create an ideal way for new hog producers to get started in the industry.

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