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## Should Delaware ag diversify more?

(Editor's Note: Much of the following information comes from the recent report, "Delaware Agriculture in the 1980s: Future Direction" (Bulletin 13') written by Gerald Vaughn and retired assistant Delaware extension director W.T. McAllister. Copies of the Vaughn-McAllister report are available from county extension offices in Newark (451-2506), Dover (738-1448) and Georgetown (856-5250). Ask for "Delaware Agriculture in the 1980s.")

The current threat of an avian influenza outbreak among Delmarva broilers has underlined Delaware agriculture's narrow commodity base and points up the need for greater diversification, says University of Delaware extension resource management specialist Gerald Vaughn.

He says farmers need to explore ways to diversify their output and thus protect themselves from the potentially crippling effects of periods of prolonged low prices, unfavorable weather or a serious disease outbreak in broilers, soybeans and/or corn.

"Beyond the risk of production losses which would occur in the broiler industry following outbreak of a major disease like avian flu, or from strong price competition from other production areas, there are also the risks associated with present monocultural cropping practices in Delaware," Vaughn says.

The overwhelming majority of Delaware farmland alternatives between corn and soybeans, two crops of narrow genetic base and thus increased vulnerability to pests and diseases. Leaf blight reduced by South's corn crop in 1970 by 15 percent. What would happen if something like this were to occur locally? Disease, nematode and fertility problems -especially soybean cyst nematode and Fusarium wilt -- already are a serious concern with soybeans.

"A more diversified crop rotation plan involving cover crops and conservation tillage systems could lessen this vulnerability to pests and diseases, promote better soil and water conservation, increase soil productivity and improve the Delaware farmer's ability to compete," the economist says.

Irrigation is another way to reduce risk. Watering Delaware's droughty soils makes it possible to grow a wider range of crops - not just corn and soybeans, but also vegetables, potatoes, melons, fruits, ornamental plants and sod. However, because irrigation requires substantial capital investment, added production costs, and new technology and management ability, it's not for everyone, Vaughn cautions. Not all farmers have the resources or skills necessary to adopt irrigation successfully, despite its potential for increasing farmland productivity.

Another option which could be explored is the potential for growing crops such as grain sorghum, amaranth, sunflowers or cover crop seed. Unfortunately, little or no information is presently available on how profitable these crops would be in Delaware, Vaughn says. "Growers who shift to these crops could run into more problems than they now have with corn and soybeans. An investment in research must come first. Production costs, 'yields, prices and markets must also be investigated."

When corn and soybean prices are low, alfalfa might be another alternative cash crop — especially In the northern part of the state where soils and climate are more suitable. Another way to diversify is by raising livestock. There may be room for modest expansion in both hog and beef production (including dairy beef) in Delaware, Vaughn says. Some farmers might consider operating producer-owned meat packing facilities, either as cooperatives or privately held corporations.

There are now nearly a thousand dairy goats in Delaware. Is there a potential among the local Hispanic population for raising dualpurpose goats for both meat and milk? And how about commercial rabbit production — another emerging enterprise on Delmarva?

Harvesting timber from wellmanaged woodlots may also be a way to cope with the finanical pressures of the 1980s, Vaughn says. "People with land that's of marginal value for crop production, or individuals holding land as a long term investment or in estate trusts might look into the income and tax advantages of establishing and maintaining a productive forest," the economist says. "The long term outlook for lumber and forest products is favorable."

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Some Delaware farmers also may be able to increase their income by providing recreational opportunities for others, or by becoming involved in some aspects of energy production.

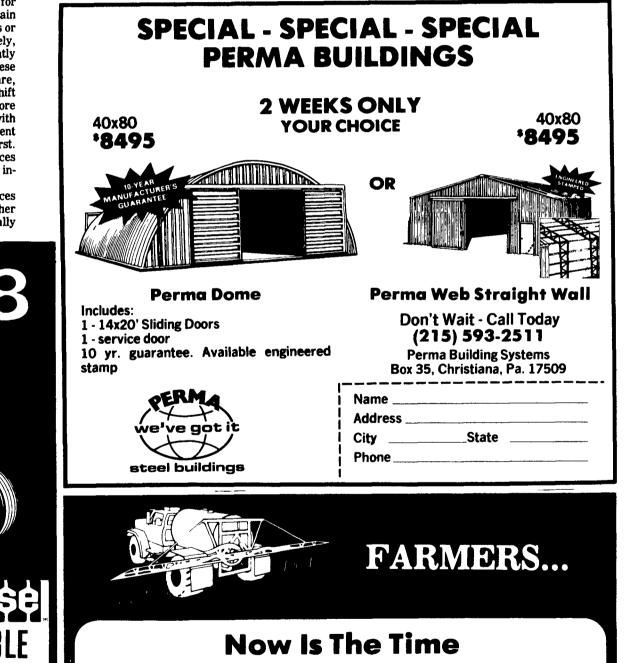
Though greater diversification of Delaware agriculture is economically desirable, it isn't likely to happen overnight, Vaughn says. The low labor requirement of corn and soybeans gives these crops an outstanding advantage. The corn/soybean grower has time of the futury not available to most livestock producers, or those who grow vegetables and fruit.

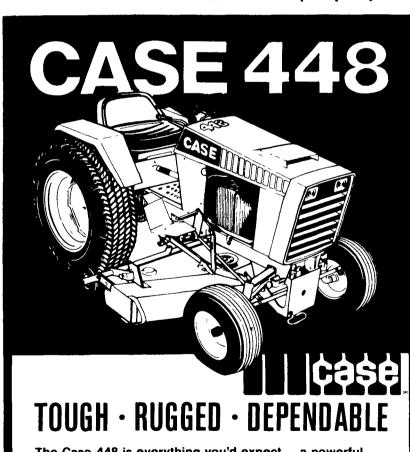
"Enterprises which demand more of a farm operator's time also are likely to require a larger hired labor force, something which flies in the face of certain realities," Vaughn says. "In a state like Delaware with so many nonagricultural employers, farm wage rates must be high to attract workers. Even then, not many people want to do this kind of work today. Farmers who must rely on inexperienced, migrant or undependable workers often wind up with problems. For these reasons, many producers choose their enterprises and scale thier production in ways which minimize labor requirements and headaches. Problems like these must be solved in order to make diversification more attractive."

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Delaware could also use some new off-farm enterprises to complement, without unduly competing with existing agribusiness. For example, Vaughn suggests that plants which convert agricultural wastes and crop residues into useful, marketable by-products might have a place. Promising research is under way at the University of Delaware on the recovery of protein and other nutrients from the processing wastes of broilers, potatoes and tomatoes.

Another possibility would be a plant which manufactures parts of irrigation systems. If irrigation continues to accelerate as it has in recent years, eventually enough farmland may be irrigated on the Delmarva peninsula and in nearby areas to warrant locating such a plant in Delaware, Vaughn says.





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