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To the Editor:

In her article "Sustainable agriculture: The wildlife connection" (AJAA 6(4):161-167) Ann Y. Robinson discusses integrating wildlife with farm practices. This is an interesting approach to the complicated question of where to foster wildlife. However, I question Ms. Robinson's seeming lack of attention to the crucial matter of competition between domesticated and wild animals. There is a limited amount of food in any farming situation, and it would seem that as much as possible, the farmer would want to put resources into the harvested crops, not into the mouths of wildlife.

Also, has Ms. Robinson considered integrating competing native species of an area into the agricultural system? Wildlife need not simply exist on a farm alongside the crops and livestock herds, but instead could be regarded as a herd to be utilized. For example, the farmer could allow deer to forage, but also could sell permits to have them hunted and sell their hides and meat.

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Author's Response:

Competition between domesticated and wild animals involves dynamics that depend very much on local circumstances and pests. Some species get out of control because of the ecological simplification of the countryside, one characteristic of which is reduction of predators. This lays the groundwork for species that once were insignificant as pests to flourish. An advantage to reviving biodiversity on farms at least theoretically, is that such systems will restore a greater environmental balance, eventually reducing threats from any one organism. Also, diversity spreads economic risk so that the consequences of pest outbreaks are lessened.

Another cause of pest problems is loss of habitat, which forces wildlife such as waterfowl to become more concentrated. Formerly the birds would have been dispersed, causing little harm. Now, in some cases, even though overall numbers are down, more birds must congregate in smaller areas, where they can become a serious problem.

Many states where wildlife-related crop losses are significant have programs to compensate farmers for lost profits. This is a positive way for the public to share with landowners the costs of maintaining wild populations of animals.

The idea of integrating "competing native species of an area into the agricultural system," as Ms. Siedlecki suggests, is controversial in wildlife management circles. Wildlife and fish currently represent significant economic value. For example, in 1985, hunters spent nearly \$264 million pursuing their prey, supporting nearly \$400 million in business activity. In the U.S., wild animals, which often range across ownership boundaries, are considered "public" property. The state holds the authority to sell hunting permits. Even so, many landowners find creative ways to obtain benefit from allowing outdoor enthusiasts to enjoy wildlife on their property. The degree to which this happens depends on state law and local custom, but more could probably be done to allow landowners to gain economically from wildlife.

However, outright marketing of wildlife has serious potential drawbacks. A good discussion of the problems can be found in an article by Dr. Valerius Geist in *Conservation Biology* (March 1988). Dr. Geist argues that markets for hunting privileges and for wildlife meat and parts eventually reduces the public stake in wildlife conservation, hands wildlife to the wealthy, and allows disastrous raids on select species for profit. Most damaging, he says, is the placing of a market value on dead specimens of vulnerable wildlife, inviting exploitation not seen since the Wild West days of unfettered market hunting.

It is important to remember that many landowners view wildlife more as complementary than competitive, and appreciate the aesthetic, recreational and even spiritual benefits wild creatures offer. But appreciated or not, perhaps the wild species that inhabit the land have an intrinsic claim to exist. If so, we have an obligation to make reasonable accommodation for them.

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