



FSMA Produce Safety Rule: Dealing with Wildlife

The Food Safety Modernization Act does not endorse the use of practices that may adversely affect wildlife such as removal of habitat or wild animals from land adjacent to produce fields (§112.84). FSMA takes into account the environmental practice standards and policies of the following agencies: National Organic Program, Natural Resources Conservation Service, Environmental Protection, And Fish and Wildlife Service.

What FSMA Produce Rule Says:
§112.84. Nothing in this regulation authorizes the “taking” of threatened or endangered species as that term is defined by the Endangered Species Act (16 U.S.C. 1531-1544) (i.e., to harass, harm, capture, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct), in violation of the Endangered Species Act. This regulation does not require covered farms to take measures to exclude animals from outdoor growing areas, or to destroy animal habitat or otherwise clear farm borders around outdoor growing areas or drainages.

Most wildlife is protected by state or federal laws in some manner. Contact local wildlife law enforcement officers or licensed nuisance wildlife control operators for information on legal practices and effective solutions.

Wildlife and Food Safety

Wildlife on the farm is natural and often unavoidable. Although animals can be beneficial, such as predatory mammals or raptors that reduce rodent population, birds and bats that reduce insect pests, or others that pollinate crops, some may pose food safety risks.

Wild animals can be a problem for fruit and vegetable producers for several reasons. Many species such as deer, rabbits, raccoons, ground hogs, feral pigs, small rodents and birds can damage and destroy crops by feeding on or trampling them. These animals can carry pathogens in their feces. Fecal material from wild animals could be contaminated with the pathogen *E.coli*, contaminate crops and potentially cause illness in humans. The Food Safety Modernization Act (FSMA) Produce Safety Rule focuses on **reduction and prevention** of food safety risks and includes considerations and corrective actions a farm can take to identify and mitigate risks associated with wildlife on farms.

Controlling wildlife is a complex process that requires patience, compliance with state and federal laws, and implementation of multiple strategies. Often animals live in habitats around a farm that are not under the control of the grower. FSMA does not in any way support the removal of wildlife off farms and around farm or the termination of conservation practices already adopted by farmers. In fact, damaging natural resources like wildlife habitats, woodlands, and buffer zones could increase food safety risks. Co-management strategies should be implemented to limit wildlife access to produce and successfully address both conservation and food safety goals.

Assessing the Risks

The first step in developing a wildlife risk assessment during the growing season is to monitor on a regular basis all areas of the farm, and especially where water is present (creeks, ponds, rivers). Monitoring also allows growers to assess the kind of animals likely to be present on their farm, their behavior and the management practices that would be most effective. Understanding patterns and seasonal changes in wildlife can help you prevent problems and deter animals from entering production and processing areas. Particular attention should be paid to movement of wildlife that may enter from high risk areas, such as cattle feed lots, cull piles, or water retention ponds.

Throughout the growing season, especially during harvest, fields should be monitored for signs of animal intrusion. Before each harvest, farmers must train employees to watch for signs of contamination. §112.83 (b)(2) of the law requires that a grower must evaluate whether a “covered” produce can be harvested in accordance with the requirements of §112.112 if significant evidence of potential contamination with animal excreta is found. (Note: FSMA defines “covered” produce as that which is normally consumed raw.) Feces found in the field at harvest time should be flagged and the risk assessed to determine a justifiable no harvest buffer zone around it.

My Farm Checklist

_____ We observe wildlife movement patterns on the farm and also on adjacent land that could impact the farm.

_____ We scout fields for signs of animal activity, especially ahead of harvest, assess the risks and decide if the crop or a portion of the crop can be safely harvested.*

_____ We learn about strategies to deter wildlife, such as fences, decoys, noise deterrents, and ultrasonic devices.

_____ We consider fencing or netting, when possible. Although they can be expensive, they are the most effective way to limit wildlife access to vegetable or fruit crops. [USDA Natural Resource Conservation Service program may be available to assist with the cost of a fence. (NRCS Conservation Practice Standard, Code 382)].

_____ We train workers to recognize animal intrusion and not harvest produce that is visibly contaminated. We document their training.*

_____ We have SOPs in place that clearly describe the actions needed to be taken if produce contamination is present and documentation of any animal intrusion.

_____ When feasible, we conduct all post-harvest cleaning and packaging activities in a covered, enclosed area to exclude birds. If the area is not enclosed, we discourage birds by covering potential perches with bird screening, spikes, or other prevention methods.

_____ We know the county, state and federal laws regarding wildlife protection and conservation practices.

_____ We seek out resources to learn about wildlife management practices from extension and state agriculture and natural resource agencies.

* Required by the FSMA Produce Safety Rule

What FSMA Produce Rule Says:

§112.83(a) You must take the steps set forth in paragraph (b) of this section if under the circumstances there is a reasonable probability that grazing animals, working animals, or animal intrusion will contaminate covered produce. (b) You must : (1) Assess the relevant areas used for a covered activity for evidence of potential contamination of covered produce as needed during the growing season (based on your covered produce; your practices and conditions; and your observations and experience); and (2) If significant evidence of potential contamination is found (such as observations of animals, animal excreta or crop destruction), you must evaluate whether the covered produce can be harvested in accordance with the requirements of §112.112 and take measures reasonably necessary during growing to assist you later during harvest when you must identify, and not harvest, covered produce that is reasonably likely to be contaminated with known or reasonably foreseeable hazard.

Resources:

[FSMA Final Rule on Produce Safety:](https://www.fda.gov/food/guidanceregulation/fsma/ucm334114.htm)

(<https://www.fda.gov/food/guidanceregulation/fsma/ucm334114.htm>)

[Reducing Food Safety Risks in the Packhouse.](#) 2015. Penn State Extension.

(http://extension.psu.edu/food/safety/farm/gaps/reducing-food-safety-risks-in-the-packhouse/extension_publication_file)

[Wildlife and Animal Management Decision Tree.](#) 2014. Cornell University.

(<https://gaps.cornell.edu/sites/gaps.cornell.edu/files/shared/documents/wildlife/Animal%20Management-Tree.pdf>)

[The Southwest Arizona Track and Scat Glovebox Guide](#) (A Field Guide to Identify Signs of Wild and Domestic Animal Intrusion).

(http://cals-mac.arizona.edu/sites/cals-bigmac/files/track_and_scat_glovebox_guide.pdf)

This material was developed by the North Central Regional Center under a grant from the Food and Drug Administration. FDA has provided technical assistance in developing this material; however, this information has not been formally approved by FDA. It does not represent any agency determination or policy.

Prepared by: Smaranda Andrews, Iowa State University; Adam Janke, ISU Assistant Professor/Extension Wildlife Specialist; Linda Naeye, ISU Extension Program Specialist; Rhoda Burrows, South Dakota State University ; Manreet Bhullar, ISU Food Science and Human Nutrition; Angela Shaw, ISU Food Science and Human Nutrition.

Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, color, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran, or other protected classes. (Not all prohibited bases apply to all programs.) Inquiries regarding non-discrimination policies may be directed to the Diversity Advisor, 2150 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, 515-294-1482, extdiversity@iastate.edu. All other inquiries may be directed to 800-262-3804.