Introduction

Both the National Organic Program (NOP) and the Food and Drug Administration’s (FDA) Food Safety Modernization Act (FSMA) Produce Safety Regulations require periodic monitoring of practices, and that this monitoring be recorded. NOP requires monitoring of crops, soil and water to ensure that livestock do not contaminate them.

FDA requires that crops (not habitat) be monitored during the growing season and immediately prior to and during harvest for significant contamination by domestic and wild animals. If the crop is reasonably likely to be contaminated, FDA requires that steps be taken to identify and not harvest that part of the crop that is contaminated.

Requirements for Each Regulation

<table>
<thead>
<tr>
<th>National Organic Program</th>
<th>FDA FSMA Produce Safety</th>
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<tbody>
<tr>
<td>An organic production or handling system plan must describe the monitoring practices and procedures to be performed and maintained, including the frequency with which they will be performed, to verify that the plan is effectively implemented.</td>
<td>FDA requires monitoring of crops during the growing season for significant evidence of potential contamination by grazing animals, working animals, or wild or domestic animal intrusion. Observation of significant numbers of animals, significant amounts of animal feces or significant crop destruction, determines how much of the crop can or can’t be harvested. The grower takes steps during harvest to identify crops that are or may have been contaminated so they are not harvested.</td>
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<td>Organic livestock producers must manage manure so that it does not contaminate crops, soil, or water with plant nutrients, heavy metals, or pathogenic organisms. Producers must optimize recycling of nutrients and must manage pastures and other outdoor access areas in a manner that does not put soil or water quality at risk.</td>
<td>FDA requires that growers conduct a visual assessment for contamination immediately prior to and during harvest of crops to identify and not harvest what is or may be contaminated.</td>
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<td></td>
<td>FDA does not authorize harming or killing protected species.</td>
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Frequently Asked Questions

How often should crops be monitored?
The Produce Rule requires that crops be monitored during the growing season and immediately prior to and during harvest. The exact number of times is based on the crop, the grower’s practices and conditions, and the grower’s observations and experience. Outdoor packing areas should also be monitored. Some producers make food safety monitoring part of other activities, such as checking on pest and natural enemy insect presence or crop conditions. Growers can include training employees to monitor for significant animal contamination as a topic covered during employee training.

What should growers do if they observe significant numbers of animals, feces, tracks, trampling, rooting, and feeding in or near the crop field?
Identify the area of contamination (throughout the growth of the crop) and take corrective action, which could include creating a no-harvest zone or removing feces and contaminated crop from field.

How do growers reduce animal presence if they are causing significant contamination?
Remove feed (culls or spilled grains) and standing water that may be attracting animals. Use owl boxes, raptor perches, trapping (with proper permits), temporary electric fencing or permanent fencing, although it can be expensive. None of these practices is likely to completely solve the problem but may abate it significantly. Maintaining vegetative wildlife corridors will encourage the presence of beneficial rodent-eating predators. If animals or their signs are observed near the crop field, continuous monitoring in the field is all that is necessary. FDA’s regulation does not authorize the “taking” of threatened or endangered species as that term is defined by the Endangered Species Act.

One deer sighting in this apple orchard is not necessarily a significant food safety risk. You must check and record if the animal has left a significant amount of feces or damage, and if you frequently see the animal. When a herd of deer is seen in the crop, especially as it is reaching maturity, corrective action should be taken.
Do growers have to keep records of their monitoring and if so, what is the best way to do that?

FDA requires that growers monitor their crops for significant evidence of potential animal contamination during and before harvest. Documenting that employees have been trained on this topic as well as keeping a monitoring log are two ways you can demonstrate the farm’s monitoring systems. In addition to written documents, photos can be used to record monitoring activities. Here is an example of a monitoring log:

### Animal Pest Monitoring Log

<table>
<thead>
<tr>
<th>Date</th>
<th>Field or Location</th>
<th>Animal Presence</th>
<th>Number of Animals/Amount of Feces or Damage</th>
<th>If Significant, Type of Control</th>
<th>If Significant, What Is Corrective Action (CA)?</th>
<th>Date CA Done</th>
<th>Checked By</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/27</td>
<td>A2</td>
<td>Deer</td>
<td>1, no feces</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>LG</td>
</tr>
<tr>
<td>8/13</td>
<td>B4</td>
<td>Deer</td>
<td>1, feces</td>
<td>n/a</td>
<td>Stake out and do not harvest area around the feces.</td>
<td>8/31</td>
<td>LG</td>
</tr>
<tr>
<td>8/27</td>
<td>C1</td>
<td>Feral Pig</td>
<td>1, no feces</td>
<td>Electric fence</td>
<td>Fix the fence.</td>
<td>8/27</td>
<td>LG</td>
</tr>
</tbody>
</table>

**Footnotes**

1. Describe animal seen, or type of animal tracks, feces or trampling.
2. Control means: repellents, traps, organically allowed poisons, and fencing as a last resort
3. Growers should check for local, and state and federal laws and regulations (e.g., the Regional Water Quality Control Board, Department of Fish and Wildlife, and US Fish and Wildlife) that protect wildlife, riparian habitat, wetlands, restrict removal of vegetation or habitat, or restrict construction of fences in riparian areas or wildlife corridors.

### Conclusion

The NOP requires growers to monitor their practices so that they can achieve their objectives set down in their farm plans. FDA’s monitoring requirement also does that with a special emphasis on alleviating or minimizing food safety problems before they escalate. By monitoring the crop during its growth, and prior to and during harvest, the grower can reduce risk. Training employees and utilizing a log for records will keep track of animal activities and corrective actions over time.
Resources


References

1. Organic System Plan monitoring practices and frequency is described in the National Organic Program part §205.201(a) of the Federal Regulations. Full text of the regulations can be accessed here: https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=809c076a56d166fd00ea95d286bd0dc5&mc=true&n=pt7.3.205&r=PART&ty=HTML#se7.3.205_1201

2. Manure management to prevent contamination is explained in the National Organic Program part §205.239(e) of the Federal Regulations. Full text of the regulations can be accessed here: https://www.ecfr.gov/cgi-bin/text-idx?SID=dc3a2b87bf233bc5faded0f1205d3359&mc=true&node=se7.3.205_1239&rgn=div8

3. The FDA requires monitoring of crops during and before harvest to determine if there is evidence of significant animal contamination. This topic is covered in part §112.83 of the full regulatory text on the Standards for Growing, Harvesting, Packing, and Holding of Produce for Human Consumption. It can be accessed here: https://www.federalregister.gov/documents/2015/11/27/2015-28159/standards-for-the-growing-harvesting-packing-and-holding-of-produce-for-human-consumption#p-2262

4. The FDA requires growers to conduct a visual assessment for contamination before and during harvest to determine if there is evidence of significant animal contamination. This topic is covered in part §112.112 of the full regulatory text on the Standards for Growing, Harvesting, Packing, and Holding of Produce for Human Consumption. It can be accessed here: https://www.federalregister.gov/d/2015-28159/p-2270

5. The FDA requires growers to conduct a visual assessment for contamination before and during harvest to determine if there is evidence of significant animal contamination. This topic is covered in part §112.84 of the full regulatory text on the Standards for Growing, Harvesting, Packing, and Holding of Produce for Human Consumption. It can be accessed here: https://www.federalregister.gov/d/2015-28159/page-74559

Acknowledgments

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