Sample SOP: Worker Training to Identify, Report, and Respond to Animal Activity and Fecal Contamination in Produce Production Areas

**Revision: 5.0**
**Date: MM/DD/2020**

1—Purpose

Describes how workers are to identify, report, and respond to animal activity in produce production areas.

2—Scope

Applies to farm personnel including owners, managers, and workers.

3—Responsibility

Farm owners, managers, and workers must be able to recognize the signs of animal activity and take corrective actions to prevent the harvesting and packing of contaminated produce.

4—Materials

Worker training materials (videos, handouts, teaching notes)

5—Procedure

To be included in training programs for all workers and reviewed at least on an annual basis. Workers should:

1. Identify signs of wildlife or domesticated animal intrusion such as: downed fences, damaged product, presence of fecal material, animal tracks, or other indicators that the crop may be contaminated.
2. Report any food safety concerns in the field or packing area to a designated person who can determine what corrective actions to take.
3. NOT harvest or pack any product that is in close proximity to1 or in direct contact with fecal material.
4. Establish a buffer zone1 around any fecal material as designated by the farm food safety plan.
5. Follow procedures for proper removal and disposal of fecal material and contaminated product.
6. Be instructed to wash their hands with soap and water after handling contaminated product or fecal material.
7. Be instructed to wash and sanitize all tools, equipment, and other items that came into contact with or were used for the removal of contaminated product or fecal contamination.

1 If fecal contamination is identified in the field, it is recommended that a buffer zone around the contamination be established and that no product in the buffer zone be harvested. Suggested no-harvest buffer zones vary from a 0-25 foot radius, depending on the crop, climate, contamination event, and harvest equipment.

**Sample SOP: Pre-Plant Risk Assessment of Wildlife and Domesticated Animal Activity in or Near Produce Growing Areas**

**Revision: 5.0**
**Date: MM/DD/2020**

**1—Purpose**

Describes how to identify and assess wildlife and domesticated animal activity (e.g. tracks, trampling, rooting, feeding), feces, or harborages in produce fields that may pose a risk of contaminating fresh fruits and vegetables prior to planting or the start of the production season.

**2—Scope**

Applies to farm personnel including owners and managers.

**3—Responsibility**

Prior to planting or at the start of the growing season, farm owners/managers must assess potential food safety hazards associated with wildlife and domesticated animal presence, feces, and nesting areas in an effort to prevent the contamination of produce.

**4—Materials**

*Pre-plant Animal Activity Assessment Log*

**5—Procedure**

*To be completed prior to planting fresh fruits and vegetables to assess potential animal activity in or around production areas that may pose a risk of contamination to the crop*.

Assessment should include, but is not limited to:

* Identifying the location of domesticated animals, including pets and livestock, on the property as well as those on adjacent lands.
* Noting the wildlife present, their numbers (i.e. flocks, herds, or single animal) and any activity in or around fruit and vegetable production areas.
* Identifying the location of water sources used in production of fruits and vegetables in relation to wildlife and domesticated animal activity (i.e., upstream, uphill, downwind, etc.).
* Outlining any actions that are being taken or that will be taken to prevent animal intrusion into fields during fruit and vegetable production.

Sample SOP: Monitoring Wildlife and Domesticated Animal Activity During the Production Season

**Revision: 5.0**
**Date: MM/DD/2020**

1—Purpose

Describes how to monitor and manage wildlife and domesticated animal activities that could result in contamination of fresh fruits and vegetables during the production season.

2—Scope

Applies to farm personnel including owners, managers, and workers.

3—Responsibility

Fields must be monitored throughout the production season and during harvest to identify wildlife and domesticated animal activity that may pose a food safety risk to the crop. This responsibility can be designated to any farm personnel including owners, managers, or workers.

4—Materials

*Wildlife and Domesticated Animal Monitoring Log*

5—Procedure

*To be completed at least weekly during the production season and more frequently close to harvest. These activities can also be incorporated into daily activities on the farm*.

Farm owners or managers must establish a monitoring program to identify any evidence of produce contamination due to wildlife and domesticated animal activity throughout the production season and close to harvest.

1. Conduct periodic assessments of animal activity (presence, feces, crop destruction, or nesting areas) through the production season and record on the *Wildlife and Domesticated Animal Monitoring Log*.
* Monitor for wildlife or domesticated animal activity that may affect the safety of produce.
* Record monitoring activities such as the date, time, and location of your observations.
* If animal activity is found, devise methods to deter, reduce, or eliminate wildlife or domesticated animal activity in produce fields (e.g., constructing fences, using noise cannons, eliminating attractants such as cull piles, or other mitigation strategies) while keeping co-management and natural wildlife habitats in mind.
* Refer to the SOP for *Managing Wildlife and Domesticated Animal Intrusion and Contamination* if you determine there is a significant risk to the crop due to animal activity.
1. Train workers on how to recognize the signs of animal activity and implement practices to prevent the contamination of produce.
* See SOP for *Worker Training to Identify, Report, and Respond to Animal Activity in Produce Fields*.

Sample SOP: Pre-Harvest Risk Assessment of Wildlife and Domesticated Animal Activity in
Produce Fields

**Revision: 5.0**
**Date: MM/DD/2020**

1—Purpose

Describes how to assess risks that wildlife and domesticated animal activity and fecal contamination may pose to contamination of the fresh produce crop prior to harvest.

2—Scope

Applies to farm workers including farm owners and managers.

3—Responsibility

Farm owners/managers must conduct a risk assessment prior to harvest to identify potential food safety hazards associated with wildlife and domesticated animal activity in effort to prevent the contamination of fresh produce.

4—Materials

*Pre-harvest Field Assessment Log*

5—Procedure

*To be completed prior to harvesting fresh fruits and vegetables to assess potential animal activity or fecal contamination in or around production areas that may pose a risk of contamination to the crop*.

1. Conduct an assessment of risk prior to each harvest to determine if there is wildlife and domesticated animal activity or contamination of product in the field. Refer to the *Pre-Harvest Field Assessment Log*.
2. Assessments must include, but are not limited to:
* Determining if animals have been in the field (i.e., evidence of downed fences, damaged product, animal tracks, feces) and if fecal contamination is present.
* Determining if fresh produce has been contaminated and if any corrective actions, such as buffer zones, need to be put into place.
* Determining if harvest should proceed or if harvest practices should be modified.
1. Document your observations and actions prior to harvest in the *Pre-Harvest Field Assessment Log*.

Sample SOP: Managing Wildlife and
Domesticated Animal Intrusion and Contamination

**Revision: 5.0**
**Date: MM/DD/2020**

1—Purpose

Describes how to manage wildlife and domesticated animal intrusion and fecal contamination in fresh fruit and vegetable production areas.

2—Scope

Applies to farm personnel including workers, owners, and managers.

3—Responsibility

Farm workers are most likely able to identify animal and fecal material presence because of their presence in the field. Farm owners and managers will make decisions about deterrent methods, corrective actions, and farm policy regarding continued animal intrusion and presence.

4—Materials

* *Wildlife and Domesticated Animal Monitoring log*
* Tools for removing and disposing of fecal contamination and affected fresh produce
* Clean water, hand soap, disposable towels (or other hand-drying method, such as an electric hand dryer)
* Detergents and sanitizers for tools and equipment that have come into contact with contaminated soil, product, or feces

5—Procedure

*To be completed upon finding evidence of animal intrusion or fecal contamination in fresh produce production areas.*

1. If wildlife or domesticated animal activity (e.g., extensive tracks, destroyed product) or fecal material is found in fresh fruit and vegetable production areas, the following actions should be taken:
	1. Determine if the animal intrusion has compromised the safety of the crop by scouting for extensiveness of crop destruction, animal activity, and fecal material.
	2. Repair or construct methods to exclude (or limit) animal entry into the field in the future. This might include fencing, noise deterrents, or removal of cull piles which may attract unwanted animals.1
	3. Record this observation and any actions taken as a result of the animal intrusion, including any methods to keep animals out of the field and what actions were taken to correct the incident.
2. If fecal contamination from wildlife or domesticated animal activity is found in fresh produce production areas or on the product itself, the following actions should be taken:
	1. Do not harvest any produce that may be contaminated with fecal material.

**Option 1:** Flag the affected area(s) and create a buffer zone2 to identify the affected product that is to be excluded from harvest.

* Evaluate the extensiveness of the contamination, weather conditions (such as rain that may cause splash), and whether the affected product and fecal material can be removed without causing further spread of contamination.
* Make a decision whether to remove fecal material and contaminated product, if possible; or whether flagging and creating a buffer provides sufficient protection from contamination.
* If extensive contamination is found throughout the field, evaluate whether harvest should proceed or whether actions, such as disking in the crop, should be taken to minimize the risk.

**Option 2:** Remove the feces and/or affected product from the field using designated tools or equipment.

* Clean and sanitize all equipment and tools used to flag, remove, and dispose of affected produce and fecal material.
* Any worker involved in the removal of contaminated product or animal fecal material must wash their hands with soap and water. Additionally, boots and clothing that may be soiled with contaminated product or feces should be changed to minimize the potential for cross-contamination.
	1. All actions must be documented in the *Wildlife and Domesticated Animal Monitoring Log*, including a description of the actions taken to reduce current food safety risks in the produce.

1. Note—Co-management: Be sure to check local, state, and federal laws and regulations that protect riparian habitat, removal of vegetation, or the construction of deterrent fences for wildlife corridors.

2. If fecal contamination is identified in the field, it is recommended that a buffer zone around the contamination be established and that no product in the buffer zone be harvested. Suggested no-harvest buffer zones vary from a 0-25 foot radius, depending on the crop, climate, contamination event, and harvest equipment.