

## **Crops Biosecurity Workshop Farm Case Study**

*This fictional farm example will illustrate and explain some of the key biosecurity points outlined in the National Farm-Level Biosecurity Standards. The questions related to the farm case will prepare you for completing your own farm self-assessment and action plan.*

### **Farm Management and Lay-out:**

Joe and Jill Smith, along with their teenaged sons Jeff and Justin, run a relatively small, 200-head short-keep feedlot operation. Their entire land base is comprised of a 200 acre home farm where the feedlot is located plus another 600 acres of owned and rented land in corn, soybeans, wheat and hay. Joe and Jill work full-time on the farm and the boys help out on weekends and school vacation.

In addition to the feedlot, the home farm boasts a very popular local apple orchard operation with small cold storage, an apple cider press, and retail store front. In 2010, Joe and Jill built a 30' x 96' greenhouse to grow potted plants and herbs to sell from their on-farm store. These were so popular with customers that two years later, they cultivated the field close to the greenhouse and planted an assortment of vegetables including potatoes, tomatoes, beans, carrots and sweet corn. There is also a large drive shed which is used for rental storage for vehicles.

The beef cattle are housed in an open-end covered feedlot/barn. Finishing rations of mostly grain and some forage are fed to the cattle. All hay and straw is produced on-farm. Manure is spread on the fields. They infrequently have deadstock but, if they do, it is placed near the manure pile for deadstock pickup. The feedlot is an all in, all out set up where all 200 head are marketed at roughly the same time.

They have six or seven barn cats to help keep down the pigeon population around the barn as they heard that birds can spread diseases and contaminate feed supplies. The cats have been neutered but don't always get their annual vaccinations as they are difficult to catch. They seem to know when it is time for their shots and live in the neighbor's sheep barn until they sense it is safe to return home.

There is one main laneway into the property which splits off toward the house and barn. The access to the back fields curves around the back of the barn. There is separate parking for their personal vehicles and visitors to the on-farm store. Both parking areas are gravel. The parking for the store has a large sign that states it is for store customers. There is a visitor book in the store with a sign asking customers to sign. Jill also provides hand sanitizer beside the visitor book for customers coming in to the store.

They do not operate as a pick-your-own facility however customers are allowed inside the greenhouse to select their potted plants and herbs. The store is locked when closed but the Smiths would like to put a gate on the laneway so that they could close off access when the store is not open as people often drive in and wander around the greenhouse and outside the store.

Water from the pond is used to irrigate the vegetable crops and also as a water source for the greenhouse. The water is tested for pathogens each spring.

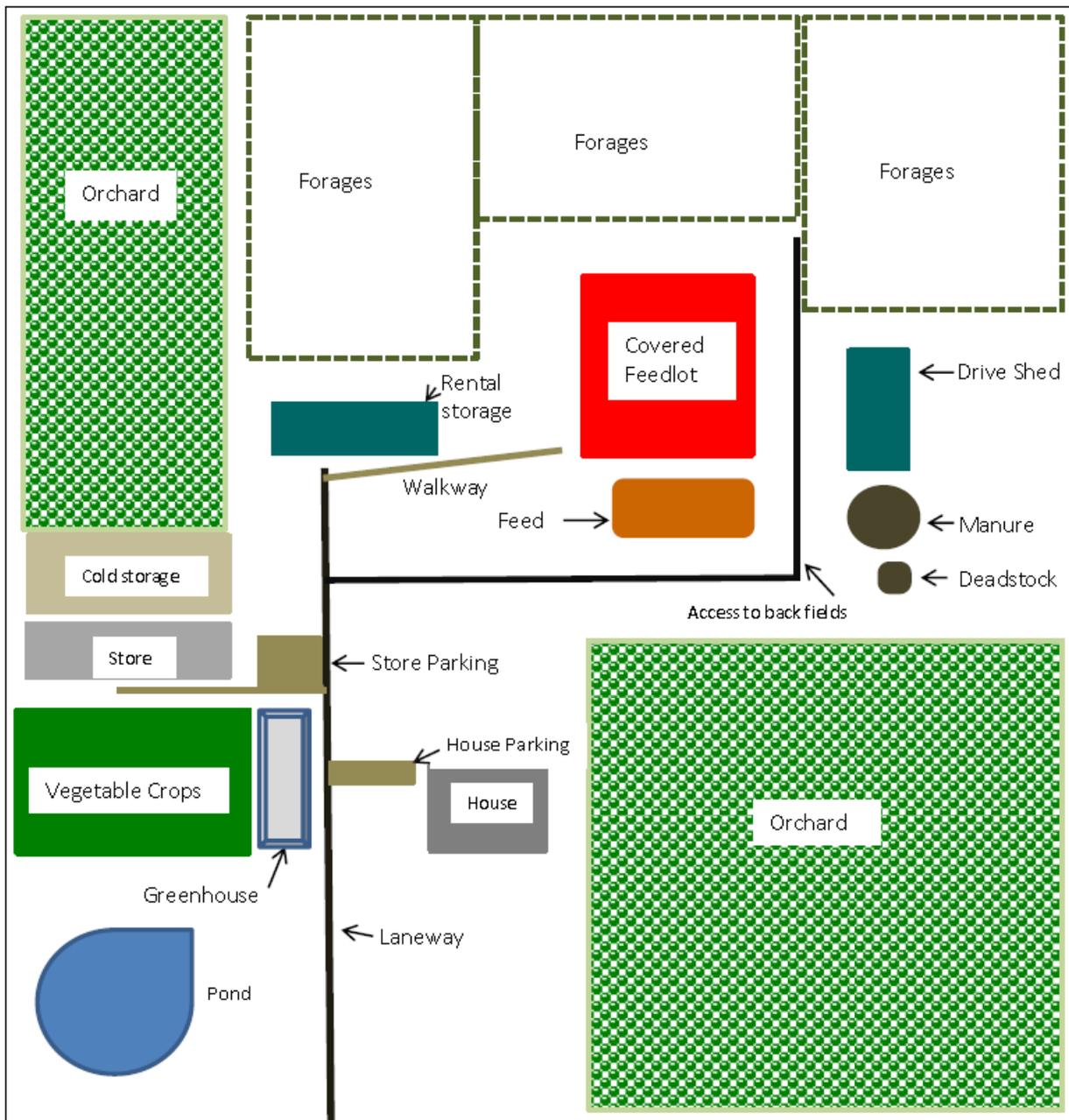
Jill does not allow Joe or the boys to come into the store or greenhouse wearing their "barn boots" but sometimes wonders if some of her neighbors, who are also customers, might be wearing footwear used around their barns when they come in to make purchases. She doesn't say anything though as she doesn't want to offend them.

The Smiths have their crop input supplier do their crop scouting during the growing season and also have them do soil sampling in the spring and fall. The scouts typically bring in an ATV on a trailer pulled behind a pick-up truck and park it near the drive shed. They can access 400 acres of the Smith's land via trails and laneways from the home farm.

The Smiths keep a gas powered pressure washer in their drive shed to clean their field equipment. Their crop protection products are typically custom applied by their crop input supplier. The company is well respected in the area and also does all the custom application for the Smith's neighbours. All purchased crop seed is certified seed.

### Home Farm Layout

**Note:** Map is not to scale and only shows a portion of the farming operation.



## Farm Case Study Questions

*In many cases, there is no single correct answer. The choice of action may depend on several factors, and what is practical and achievable under the circumstances.*

1. List **three** access management issues faced by this farm and identify some possible changes they could make to reduce these risks.
2. Identify **three** biosecurity risks on this farm related to plant health management and suggest how these risks could be mitigated.
3. Identify **three** operational management biosecurity risks with this farm and list some possible solutions, e.g. equipment, buildings, manure, water, wildlife, recordkeeping, etc..
4. What is this farm doing that would be considered good biosecurity practices? List at least **five**.