

Mink 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 Mink Biosecurity Standard. 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:

Robert and Beth Brown have a 2,000 breeding female mink operation which typically houses 12,000 to 14,000 mink at pelting time. Robert and Beth work full-time on the farm along with their 28-year-old son, Steve, who works with them part-time and part-time for the next door dairy farmer. They also employ one year-round, full-time employee, Fred, who has been with them for 20 years. The Browns top up their labour with two summer students and then three additional full-time workers during pelting season.

The farm is located on 75 acres. The residence, mink operation and wooded area occupy 15 acres. The remaining 60 acres are rented to the neighbouring dairy farmer for forages and some cash crop. Manure from both the dairy farm and mink operation is spread on the forage fields. Robert has his own solid manure spreader and tractor and applies the manure from the mink operation on the fields closest to the sheds. However, sometimes those fields receive manure from the dairy farm.

The mink production area is completely enclosed by an eight-foot high, 2" wire mesh fence which was installed two years ago. There are two strands of electrified wire above the wire mesh to deter wildlife. There are two gates, one at the main entrance into the enclosed area and one at the back for taking manure and composted carcasses out to the fields. The main entranceway is packed gravel and it does not appear that any wildlife has gained access to the production area by tunneling under the gate. However, the laneway at the back can get soft during the spring and fall making it easier for animals to gain access. So far the Browns' dog, Diesel, seems to be doing a good job of scaring away wildlife as well as the cats from the dairy farm. Diesel roams the inside perimeter of the fence frequently and lets the Browns know if anyone drives in the laneway.

The mink operation consists of five, naturally ventilated sheds. The barns are older but have been screened along all sides to keep birds out when the curtains are open. They use sawdust from the local sawmill for the bedding the mink nest boxes. They have a solid manure system and spread the manure on the surrounding fields.

New breeding stock is sourced from within Ontario from herds with a good herd health record. They particularly ask about Aleutian Disease (AD) and Foot Pad Necrosis. The Browns have a designated area at the end of one row in one of their sheds for new animals so they can monitor their health. They do one Aleutian test on all purchased animals before allowing contact with any of the resident animals. They have never had a problem with Foot Pad Necrosis and they screen for AD, testing 20% of their existing herd each fall prior to pelting. They have never had any of their mink test positive for AD.

There used to be a veterinarian at the local clinic that took an interest in mink production. All six mink farms in the area relied on him for their herd health and medication recommendations. A couple of years ago, he sold his interest in the practice and now there is no veterinarian in their area who works with mink. Robert and Beth keep a notebook in which they record any herd health issues, when vaccinations or other medications are given, and from where new animals have been purchased.

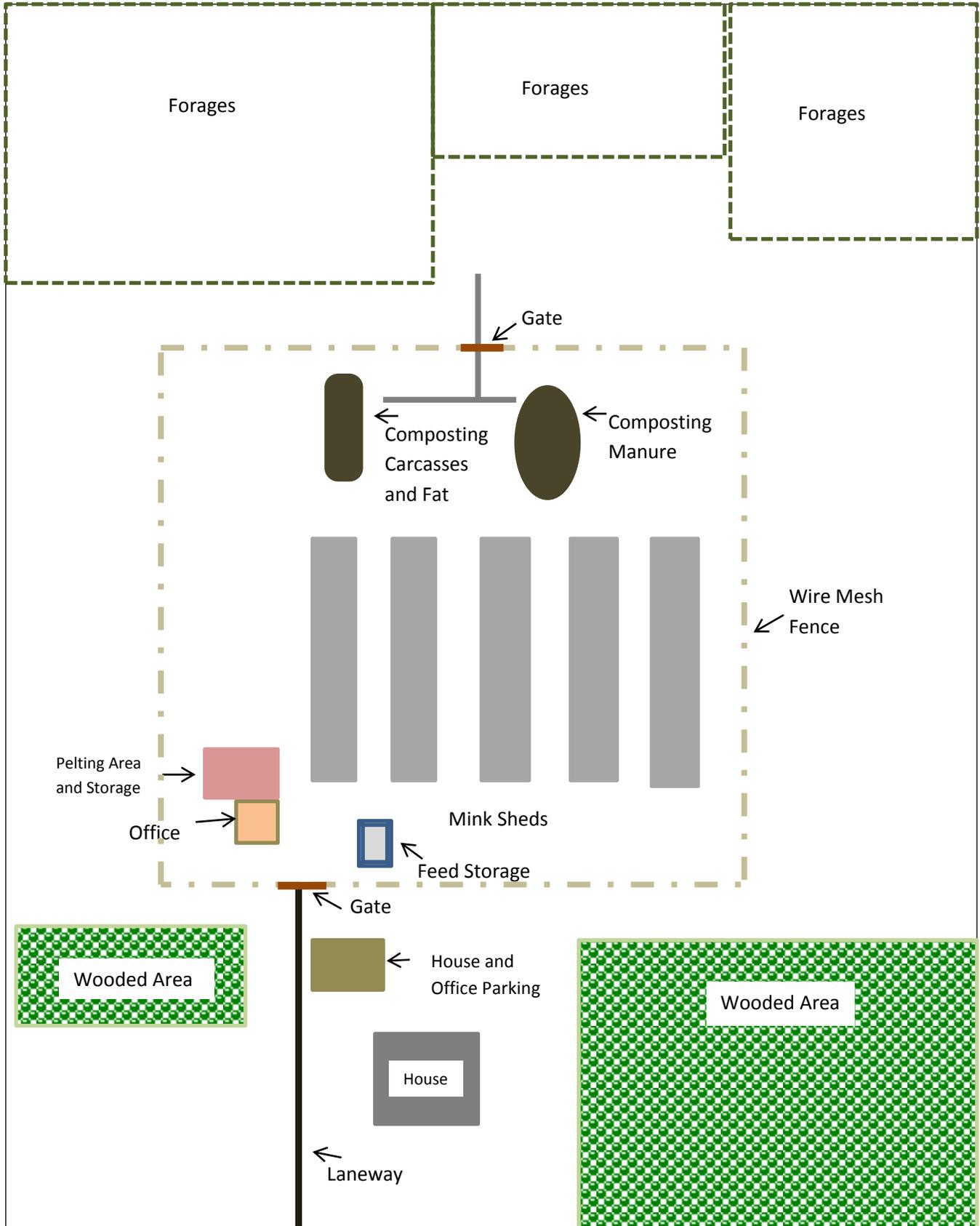
Steve attended a biosecurity workshop with his dairy employer and has been speaking to Robert and Beth about tightening up their access control. He suggested they start keeping a log book of all people and vehicle movement and be more diligent about shutting the doors to the sheds. They often leave the end doors open for better air flow during the summer. The gates in the perimeter fence are always shut but are not locked.

The Browns have designated boots for themselves and their employees that they wear in the mink sheds. These boots do not leave the farm; Beth put boot racks in the entry way to their farm office so that farm boots are left there at the end of the day. Steve wants to put a footbath at the main entrance/exit but Beth has read that all dirt has to be cleaned off the boots first or the disinfectant won't work. She is skeptical that everyone will be diligent about using the footbaths properly especially as they go back and forth to the mink sheds many times over the course of the day.

The Browns take their pelts to a custom pelting operation, which is also a mink farm, to be fleshed and prepared for the auction. They have a small pelting shed on farm with a designated freezer to store the pelts. The pelts are transported to the custom pelting operation in cardboard boxes. The boxes are burned at the custom pelting operation after use and are not returned to the farm. The custom pelting operation transports the pelts directly to the fur auction. The carcasses are composted with the discarded bedding and additional sawdust from the sawmill. The compost is spread on the cash cropped land; the dairy farmer does not want the carcass compost spread on any of the land he uses for forages.

Beth and Robert do not prepare their own mink feed. They do not want the challenge of sourcing feed ingredients or investing in feed mixing equipment and a larger feed and feed ingredient storage. Each day, Beth or Robert picks up a ready-to-feed mixture from a large mink farm located 20 miles from the Browns. They have a relatively small cooler that is sufficient for one day's feed volume.

Diagram of Farm Layout



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. Where and by what methods might this farm establish their CAZ, RAZ and CAPs (controlled access zone, restricted access zone, and controlled access points)?
2. List **three** access management issues faced by this farm and identify some possible changes they could make to reduce these risks.
3. Identify **three** biosecurity risks on this farm related to animal health management and suggest how these risks could be mitigated.
4. Identify **three** operational management biosecurity risks with this farm and list some possible solutions.
5. What is this farm doing that would be considered good biosecurity practices? List at least **five**.