

How Should Livestock Farmers and Horse Owners Prepare for Farm Disruptions from the COVID-19 Outbreak?

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Successful animal farmers, whether they raise cattle, sheep, horses or other agricultural species, are generally very good at anticipating and solving problems. For example, those of us in northern regions prepare for our extended winters by stockpiling feed, battening down our barns, and keeping snowdrifts out of the dooryard. With the looming disruptions that could potentially occur due to the spread of the COVID-19 Coronavirus, animal managers should start to think about getting ready for on-farm disruptions in much the same way that we prepare for winters in New England.

During the upcoming months, a scenario that may occur on family farms, especially on those with older owners, is temporary incapacitation or off-farm travel of the primary animal caretaker(s). While all of the infrastructure will still be available for animal care, properly trained individuals may not be available to complete some or all of the daily chores. With proper planning and smart use of technology, animal managers can anticipate and solve these potentially serious problems.

Following are several approaches that your farm can implement to keep your animals healthy and trained staff in place during the next months.

- 1) Identify **Routine Activities** that are critical to the operation of the farm, and that cannot be postponed.
- 2) **Record Standard Operating Procedures** for all of the routine procedures, safety practices and sources of consumable goods that are necessary for the maintenance of animal welfare.
- 3) Establish **“Remote” Means of Communication**. These may be used to document that critical work has been completed, to identify animals that might need additional monitoring or care, and to rapidly respond to potential problems (i.e., fence down, equipment does not work).
- 4) **Recruit a Back-Up Workforce** - Identify and train off-farm personnel who would be willing and able to take over in an emergency. Set up procedures so that workers (including family members) may safely work on your farm, and that will minimize the risk of inadvertently infecting workers with Coronavirus.
- 5) Think about **restricting visitors to your farm**. Make a list of those who typically visit your farm, buildings or home, and decide which ones are essential. Set strict rules for the

admission of essential visitors to protect healthy farm workers from coronavirus infection.

Make a list of routine activities that would not get done if the owners / current workers got sick or had to leave the area to take care of sick relatives. To ensure that critical activities are adequately addressed, the items on this list need to be prioritized 1) according to each item's potential impact on animal welfare, and 2) by how its loss would affect farm production / profitability.

Many farms not only care for their animals, but also complete routine activities related to the production of a product. With a potential lessening of available workforce, some of these labor-intensive activities might need to be temporarily modified or curtailed. For example, growing steers maintained in a feedlot could be moved to a well-fenced field and given access to growing pasture and round bale hay. Their weight gain might be lessened, but a smaller, untrained work force would at least be able to keep them healthy.

(WHAT ASPECTS OF YOUR OPERATION COULD BE PLACED ON HOLD?)

Most of the animal producers that I know are excellent at multi-tasking, and are intimately familiar with all of the daily tasks on their farm. This will probably not be the case for workers who are brought in on an emergency basis, so any organizing that you can do in advance would help immensely. Now is the perfect time to record all of your daily work details by writing everything down, and technology can help you to do this. Use your cell phone to video record your daily activities while narrating important details. These videos can be used later to formulate written S.O.P.s (**Standard Operating Procedures**) and electronic visual guides.

(ARE YOU PREPARED TO PROVIDE ACCURATE DESCRIPTIONS OF IMPORTANT PROCEDURES ON YOUR FARM?)

Try to anticipate questions that might come up when a neighbor is taking care of your farm. Where does the hay / grain come from, and who could be called to order it? Does your farm have an account to pay for feed and other commodities? What is the contact information for your veterinarian, for the company that maintains your equipment, and for the artificial insemination technician? All of these need to be available as hard copies in a central location, and should be also be accessible via cell phone.

Setting up detailed S.O.P.s can be a lot of work – that is why many farms do not have them! Remember that any work that you invest in organization will benefit you not only for this upcoming disruption, but for other unanticipated emergencies, and even for scheduled work breaks such as planned vacations.

(WHAT ARE YOUR IMPORTANT PROCEDURES / QUESTIONS?)

Once you are not on-farm, and are relying on less experienced workers to care for your animals, you will want to have safeguards in place that can “automatically” avoid preventable disasters. There are many aspects of farm operation where a lapse of competent management may prove disastrous to your animals, and you have an obligation to your animals to identify and mitigate these risks. For example, you may have a flock of sheep on a rotational pasture system, and you rely on a high-voltage electric fence to keep out predators. The tolerance for error here is zero, because one night without an adequately charged fence may result in predation losses. The risk to animal welfare from fencing failure may be eliminated by asking workers to bring in animals every night, and animal movement could be made more efficient by setting up a fenced runway between your fields and your barn. Alternatively, you might be able to safely leave your animals out overnight by installing fence voltage monitors that light up as long as the voltage remains above a critical level, or better yet, that report outages to your cell phone. Solar fence chargers that are not tied to the electrical grid are less likely to be disabled after a power outage, and may be preferable to plugged-in fence chargers. Since even the most robust technology can fail, you also need to communicate to your workers that 24/7 electrification of your perimeter fence is *critical* to your animals’ well-being!

(WHICH ASPECTS OF ANIMAL MANAGEMENT ON YOUR FARM COULD BENEFIT FROM AN ANALYSIS AND REDUCTION OF RISK?)

Communication among all of the workers on a farm is essential for maintaining animal health and productivity, and we are very lucky to be living in the age of the “Smart Phone”. cellular phones are not only valuable for voice or text communication, but can also be used to better organize and document important events that occur during the workday. On the University of Maine’s teaching farm, scores of college students work together to care for our dairy cattle, horses and sheep, and our population of workers is constantly changing. In an effort to efficiently respond to animal-related issues on the farm, we have always required students to complete written chore notes using on-farm paper records, but time-sensitive concerns were not always communicated efficiently to the responsible staff member. We solved this problem a few years ago by setting up private Google Groups pages for each of our herds / flocks, and telling students that “a chore did not happen unless it was recorded on Google Groups.” Once it is set up, this free service will not only record all pertinent events on the farm in one cell phone-accessible place, but will send automatic email alerts to everyone involved. Consider the use of electronic group communication to allow real-time monitoring of your animals. Another technology that we have found to be an invaluable resource is the use an electronic video surveillance system to monitor our animals. Monitoring may be used to remotely identify animals that are not behaving normally or to monitor critical operations

(Have the animals been fed? Are the drinkers clean and running? Is a ewe going into labor? Which cow is in heat? Is an animal down?).

(HOW WILL YOU KEEP TRACK OF ACTIVITIES AND COMMUNICATE WITH YOUR WORKERS IF YOU ARE OFF-FARM FOR AN EXTENDED PERIOD OF TIME?)?

Where should a farm owner go to find temporary workers with the necessary skills to properly care for their animals? Many of us have neighboring farmers who also take care of animals. Think seriously about setting up a meeting with your neighbors to discuss how a group of common-minded local farmers might be able to cover each other's emergency needs.

Regional horse or livestock breed organizations, Cooperative Extension staff members and State Veterinarians' offices could potentially match farmers with skilled workers by alerting their constituent groups and developing resource-sharing electronic bulletin boards. Agricultural high schools, Future Farmers of America / 4-H, and University Animal Science programs may be good sources of trained agricultural workers in your community. If all of these groups invested some time today into developing worker-related resources, it might greatly ease any potential emergency situations in the future.

(HOW WILL YOU IDENTIFY WORKERS WHO YOU CAN TRUST TO KEEP YOUR ANIMALS SAFE?)

I encourage you to carefully review your farm's operations, identify all of your vital daily activities, and then set plans in place to allow their completion in the event of an emergency. Getting organized now will help protect your animals and your business from future uncertainty and will allow you to sleep better at night if farm labor becomes an issue.

Additional Note: This document was designed to initiate positive actions and discussions that will improve farmers' response to an emergency situation, but it is certainly not an all-inclusive guide to emergency preparedness. University of Maine Cooperative Extension has published a second, more detailed publication (see link below) on emergency preparedness for animal farmers that complements the information in this article:

<https://extension.umaine.edu/publications/1211e/>