

Essential Operations on ISU Farms: A COVID-19 Pandemic Response

RFR-A2032

Mark Honeyman, associate dean
for operations
College of Agriculture and Life Sciences

Introduction

In mid-March 2020, in response to the growing COVID-19 pandemic to keep students, faculty and staff safe, ISU moved all classes on-line, events were canceled and research was continued with additional precautions. Discussions were held about which university activities were ‘essential’ and ‘non-essential.’ As a guide for the ISU College of Agriculture and Life Sciences extensive network of field and farm operations, the following guidelines were developed and posted.

Essential Operations on ISU Farms

Animal care. Animal/livestock care, including feeding, mixing/delivering feed, breeding, parturition, hatching, husbandry, bedding, health care, milking, egg collection, animal identification, plus routine weighing, sorting, transport and marketing.

Manure management. Manure management, including manure collection, spreading, pumping, loading, agitation, composting, separation, bedding production, and harvest/collection.

Crop care. Plant/crop care, including annual crops, perennial crops, cover crops, orchards, vineyards, pastures, woodlands, etc. including planting, tillage, pest management, fertilizing, pruning, harvest and maintaining crop fields in bulk crops to sustain soil and field status (fertility, weed, insect, disease) for future field integrity for research continuity.

Machinery care. Maintenance and operation of agricultural machinery and equipment. Minor retrofits, if required.

Facility and land care. Maintenance of agricultural structures and infrastructure, including buildings, utilities, waterlines, wells, fences, waterways, terraces, sub-surface drainage, roads, ponds, and research infrastructure critical to future agricultural research. Less frequent mowing lawns, no detailed trimming.

Research support in addition to specific trials. Maintenance of unique, long-term continuous field research activities, including crop rotations (one set from the 1950s, for example), water quality studies, and soil fertility plots. These operational activities protect critical historical and future-looking research resources, and are put at risk if discontinued for one season. Maintenance of automated remote sensing data collection devices critical for modeling and databases that collect seasonal and climatological information. Examples include weather stations, flow meters, water samplers, etc. These instruments provide key data for web-based models and predictive algorithms. Germplasm/seed operations, including planting, pollinating, roguing, and harvest of invaluable, long-term irreplaceable germplasm. Maintenance of herds or flocks representing invaluable, long-term genetic lines key to future discoveries (e.g., cattle, chickens, pigs, etc.).

Non-Essential Operations on ISU Farms

- Construction projects performed by staff
- Major overhauls or retrofitting of machinery or facilities

- New research infrastructure installations
- New enterprises
- Planting perennials that can be delayed
- Facility maintenance or remodeling that can be delayed
- Purchases/sales of machinery, equipment, land
- Purchases of livestock unless required for an approved research project
- Purchases of perennial plant stock (trees etc.)
- Classes, short courses, tours, training sessions
- Public events including sales or auctions
- Student events of all kinds
- Field days and all gatherings including visitors
- Private research trials unless approved through the research evaluation process
- On-farm trials on private farms that require farm staff visits
- Demonstrations including home gardens, shows etc.
- Detailed lawn care

Other Considerations

- All questions related to whether field, farm, and agricultural research should proceed are to be directed to Dean, College of Agriculture and Life Sciences, or his representative.
- Site specific questions are to be directed to the farm manager or farm superintendent.
- All gatherings on farms such as agricultural demonstrations, field days, extension education or other learning events, displays, tours, and similar activities are canceled.
- Sustaining ISU Agriculture and Natural Resources Extension activities are mission critical to support Iowa's continued worldwide leadership in agricultural production and ensure a safe, productive United States food supply.