NEWSLETTER

Driftless Ag Update

Ag news for La Crosse, Vernon, and Crawford Counties from UW-Madison Extension

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Please contact your local extension office for the print version of any article included in this newsletter.



Here's your May Driftless Ag Update!

Hello and congratulations on receiving our May Driftless Ag Update! This newsletter is co-written by your local UW-Madison Extension Ag Educators, Beth Mcllquham (livestock) and Sam Bibby (crops).

Notes from your Regional Crops Educator- Sam Bibby

-Free Closing Wheel Trial. Thats right, I have 7 varieties of aftermarket closing wheels for anyone to try if they would like. 4 of the 7 will fit a John Deere 7200 or newer (or similar Kinze). All 7 should fit a JD 1750 or newer. If you would like to run these for a day or two that would be great. All we ask for is the right to measure emergence and stand counts. Give me a call to get on the list this spring.

- It's almost time to scout for early season insect pests in corn and soybeans. These pests can impact corn and soybean crops above and below ground.

- The Cool Bean Team at UW-Madison is looking for farmers who would like to send in soil health samples on their 2025 soybean fields. In exchange they will provide you with the results free of charge. For more information reach out to Mark Kendall at mark.kendall@wisc.edu or 608-574-5972

Notes from your Regional Livestock Educator- Beth Mcllquham

-Decision Tools Available: The UW-Madison Extension Livestock webpage has helpful tools for calculating costs, gestation, and yardage. These tools assist beef, small ruminant, and swine producers in making the best financial choices for your operations. From beef replacement heifer costs to freezer pig pricing, visit the Extension Livestock webpage today.

-Small Ruminant Event Email List: Are you a small ruminant producer? Join the small ruminant email list to receive information about upcoming small ruminant events and information straight to your inbox. Join the small ruminant email list today: <u>https://signup.e2ma.net/signup/2007169/1970562/.</u>

-Disease Digest: The UW-Madison Extension Livestock team has created a webpage that houses resources and information on Highly Pathogenic Avian Influenza. To see where HPAI is affecting livestock in the U.S., use the interactive map. For a tighter focus on how it is affecting Wisconsin's poultry, check out this map. If you suspect avian flu, contact your veterinarian immediately. For animal owners of all kinds, please evaluate your biosecurity protocols



The University of Wisconsin – Madison Division of Extension offers a virtual education program to help the Wisconsin agriculture community identify and respond to various behavioral health challenges. The next virtual Mental Health First Aid (MHFA) for the agriculture community is scheduled for Tuesday and Thursday, June 17 & 19, 2025, from 9:00 am noon via the Zoom platform. Participants are required to attend both virtual sessions. Pre-registration and approximately two hours of self-paced, online pre-work are required to participate in the June 17 & 19 trainings. To register for this free program, go to https://go.wisc.edu/1dlwnc

Nearly one in five adults lives with a mental illness, according to the National Institute of Mental Health. Research shows that suicide rates are higher within the rural and agricultural communities. The stigma of mental health challenges and thoughts of suicide is prevalent in our rural and farming communities. Mental Health First Aid helps community members better understand how they can support their friends, family members, and neighbors and help break the stigma around mental health.

Pest Management in Wisconsin Field Crops

A guide to managing weeds, insects, and diseases in corn, soybean, forages, and small grains



Thinking about herbicide applications this spring? Consult the Pest Management in WI Field Crops guide. https://cropsandsoils.extension.wisc.edu/ files/2025/01/A3646 2025 web.pdf

Badger Crop Connect

Badger Crop Connect 2025

Badger Crop Connect is back for 2025. Every Thursday from 12:30 to 1:30 via Zoom UW faculty and other topic experts will provide timely recommendations, share research findings and provide program updates. Register: https://uwmadison.zoom.us/meeting/regi ster/N3QobFJ-TH6dzLq8UVKUDw#/registration

3 Steps for Low-Stress Cattle Handling

Written by Beth Mcllquham_

Introduction

Reducing stress during livestock handling can increase productivity, maintain or improve meat quality, reduce sickness, and enhance animal welfare. Implementing low-stress handling techniques when working with cattle is the first step to reducing stress.

While temperament in cattle is moderately heritable, environment does play a role and even cattle that are less docile will benefit from low-stress handling methods. A good handler can help reduce fear in an animal, which is the primary driver of negative consequences associated with handling stress. Even if the animal is not experiencing any pain, fear can still cause physical responses in the body, such as high cortisol levels. These responses can ultimately lead to increased susceptibility to illness, lower meat quality, and overall lower performance.

Identifying stress through body language

Cattle in a state of fear or under stress can be identified through their body language. Obvious signs of fear in cattle are running, kicking, vocalizing, and aggressive behaviors towards handlers. Subtle signs of fear are heavy breathing and showing the whites of their eyes. Stressed cattle can cause serious injury to themselves and humans. Relaxed cattle are quiet and walk or trot calmly. When lowstress handling techniques are used, the risk of injury is lowered.

3 Steps for low-stress cattle handling

Besides increasing performance and lowering sickness and injury rates, consumers have indicated that they care that their food is humanely raised. Implementing lowstress handling is a great place to start and comes with many other benefits. Although it may sound like a daunting task, utilizing low-stress handling techniques can be done in smaller steps.

Step 1: Put away the electric prod

Your first step is to put away the electric prod. To decrease use, place electric prods away from where you're handling cattle but still be accessible in an emergency. This way, instead of instinctively reaching for it, the inconvenience of going to grab it can decrease electric prod use.

<u>Step 2: Understand cattle's natural instincts</u>

Understand cattle's natural instincts. We should utilize these instincts to work for us instead of against us. The fact that cattle are prey animals drives a lot of their behaviors. Cattle are herd animals and like to be in groups. When moving them, keeping cattle in small groups (2-5 head) can help keep them calmer and easier to handle.

Additionally, cattle want to see you. Humans are naturally predators and since cattle are prey animals, their instinct is to be able to keep handlers in sight. Cattle want to go towards lighted areas, and resist going into darker areas. It is easier to see any potential threats in areas that are light. Keep in mind that shadows can reduce cattle flow through an area.

Step 3: Study and use cattle's natural flight zone

Good handlers study and use cattle's flight zone and point of balance. These two concepts are illustrated in Figure 1. Walking into the flight zone makes the animal move away from the handler. Stepping out of the flight zone will take pressure off and remove the animal's desire to continue to move away. Note that the size of flight zones varies between animals. The point of balance allows handlers to move the animal forwards or backwards. Stepping into the flight zone in front of the point of balance will make the animal move backwards. Stepping into the flight zone behind the point of balance will drive the animal forwards. Keep in mind that cattle have a blind spot directly behind them. If you approach the animal in the blind spot, they may get spooked. Walking in a zigzag pattern behind cattle helps let them know you are there.

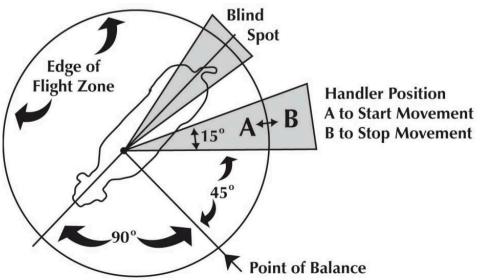


Figure 1. Flight Zone and Point of Balance (Source: Beef Quality Assurance Cattle Care & Handling Guides)

Extra Tip: Taking breaks

Calm cattle are easier to move than stressed cattle. Fearful cattle are more reactive, more easily injured, and more likely to engage in aggressive behaviors. If a handling situation does get intense, take a little break and release pressure on the cattle.

Even taking a brief break can help both the animal and handler calm down and come back to the situation in a more positive light

<u>Summary</u>

Keep in mind that past negative handling experiences can affect future handling situations, even if the new ones are positive. Over time, implementing low-stress handling techniques while working your cattle can save you time, money, injury, and headaches.

Avian Influenza and Biosecurity in 2025

Written by Ronald P Kean

Introduction

Recently, there has been an outbreak of highly pathogenic avian influenza (HPAI) in a commercial poultry flock in eastern Wisconsin. In response to this outbreak, a great deal of time and effort will be spent quarantining and testing adjacent flocks, and flocks testing positive are depopulated. This virus does not discriminate between large or small flocks, or husbandry type. In the past, large commercial flocks were infected, as well as small hobby flocks. In response to confirmed AI outbreaks, many countries refuse to allow poultry and egg shipments from affected states. Because of the public health and economic consequences, it is important for all poultry owners to do everything they can to prevent infection in their flocks.

Avian influenza is caused by a virus. It is not uncommon for wild birds (esp. waterfowl and shorebirds) to carry this virus. As these birds migrate, influenza can spread long distances quickly. The wild birds often don't show any signs of sickness, but continue to spread the virus in their feces. Domestic poultry (including chickens, turkeys, pheasants, ducks, geese, quail, and guineafowl), as well as pet birds, can be infected by exposure to wild waterfowl, or their droppings. This exposure could be to the wild birds or their feces directly, or exposure to contaminated shoes, clothing, crates or other equipment.



Avian Influenza and Biosecurity in 2025

Ronald Kean

Biosecurity

While biosecurity is always important, bird owners should be especially vigilant at this time. The United States Dept. of Agriculture (USDA) has a web site with a great deal of information about biosecurity for birds: <u>https://www.aphis.usda.gov/livestock-poultry-disease/avian/defend-the-flock</u>

Biosecurity means doing everything you can to keep diseases out of your flock. "Bio" refers to life, and "security" indicates protection. Biosecurity is the key to keeping your poultry healthy. It is what you do to reduce the chances of an infectious disease being carried to your farm, your backyard, your aviary, or your pet birds, by people, animals, equipment, or vehicles, either accidentally or on purpose.

<u>Suggestions to improve biosecurity</u>

Isolate your flock from other birds, both wild and domestic

- Keep feed in covered feeders, preferably inside the house to discourage wild birds from feeding
- If birds are allowed outdoors, eliminate standing water that may attract wild birds
- Screen windows to make them bird-proof
- Eliminate nesting sites for sparrows and other common birds
- Change shoes / have dedicated footwear or disposable boots for use in your facilities
- Clean and disinfect any equipment before it enters your facility

Keep your facilities free of rodents

- Eliminate nesting sites for rodents (excess equipment, covered areas, etc.)
- Store feed in rodent-proof containers
- Keep open feed in hanging feeders
- Keep surrounding areas clean and keep grass mowed short or consider a gravel buffer strip
- Consider traps, baits, etc. as necessary

Don't spread disease to your birds

- Although visiting other flocks, bird shows, etc. can be fun, consider the risk
- If you are around other birds, shower and change clothes before attending to your birds
- Source new birds from clean flocks
- If possible, all-in, all-out management is best, rather than mixing birds of different ages

Signs of Avian Influenza

There are numerous strains of AI virus. These are usually classified as LPAI (low pathogenic AI) or HPAI (highly pathogenic AI), depending on the severity of their effects. Similar to human influenza viruses, AI viruses mutate frequently, so pathogenicity can change over time.

LPAI strains may cause very few signs in birds, and may go unnoticed. They usually cause mild to moderate respiratory illness and there is often a decrease in egg production, if the birds are laying. Secondary infections may be a problem in these birds as well. LPAI may be discovered after an infection occurred by blood-testing for antibodies against AI.

HPAI strains are quite severe. Birds die quickly without showing signs. There is often discoloration and swelling of the comb, wattles, and hocks, as well as respiratory illness and diarrhea. Internally, there may be hemorrhages in various organs. Mortality may approach 100%.

Avian Influenza and Humans

Although it is rare, humans can get Avian Influenza from birds. For the past decade, a strain in Asia, Europe, and Africa (H5N1) has infected humans and caused a number of deaths. In 2025, H5N1 was detected in dairy cows and poultry in the United States. The Centers for Disease Control and Prevention maintains a current summary of cases in the U.S.

Managing Slugs in Wisconsin Field Crops

Slugs are becoming an increasingly challenging pest for Wisconsin farmers who use conservation cropping practices like no-till and cover crops. The increased adoption of these practices in recent years, along with milder winters and wetter springs projected for Wisconsin in the future, may increase the importance of slugs as pests of field crops.

What are slugs?

Slugs are molluscs, a group that also includes snails, scallops, squids, and octopi. Importantly, slugs are not insects. The gray garden slug (Deroceras reticulatum) (Photo 1) is the most common slug pest in Wisconsin field crops. Scouting for slugs in field crops has also revealed the presence of the orange-banded Arion (Arion fasciatus) (Photo 2). Slugs feed on a variety of plants and can be serious pests in field crops like corn, soybeans, and alfalfa. They can be particularly problematic in fields that use no-till or reduced-tillage and cover crops1. These practices minimally disturb the soil and leave heavy residue in the field, providing a cool, dark, moist, and stable microclimate that is an ideal habitat for slugs.



Photo 1. Gray garden slugs. Photo by Bruce Martin (right), L. Flandermeyer (left)

Photo 2. An orange-banded Arion (Arion fascitaus) slug found in Arlington, WI. Photo by L. Flandermeyer.

What do slugs look like?

Slugs are legless, soft-bodied, and oblong. They are essentially snails without a shell. They have four tentacles on their head. The longer, upper pair of tentacles are used for seeing and smelling. The smaller, lower pair are used for feeling and tasting. Their body is covered with a slimy mucus, and they leave a characteristic slime trail wherever they go. The slime assists with movement and is a defensive measure to remove toxins or unwanted materials from their body. Their size varies depending on their species, with gray garden slugs reaching around 2 inches. Juvenile slugs resemble miniature adults. Slug eggs are small, white/translucent gelatinous spheres and are typically found under residue or in cavities near the soil surface (Photo 3).

What do slugs look like?



Slugs are hermaphrodites, meaning they possess both male and female reproductive organs, but they typically mate with one another to reproduce. Mating, egg-laying, hatching, and development are not synchronized, meaning slugs are found at various stages of development throughout the yearl.

Figure 1. The life cycle of a gray garden slug. Figure credit: Oregon State University

Slugs have four growth stages: egg, neonate, juvenile, and adult (Figure 1). Eggs typically hatch in early spring. Neonates primarily feed on algae and fungi. They progress quickly to juveniles who feed on plants. Increased feeding occurs as the slugs mature. Juveniles and adults can remain active throughout summer if conditions allow, but they typically rest (aestivate) under hot, dry conditions. Juveniles reach maturity in the late summer to early fall. Adults then feed, mate, and lay eggs (Photo 3). A gray field slug adult can lay from 300 to 500 eggs during its lifetime. Slugs can live for about 12 months, sometimes longer, and will die shortly after laying eggs. Slugs typically overwinter in the egg stage, but mild winters can allow adults and juveniles to survive1.



Photo 3. Slug egg cluster from notill field. Photo by L. Flandermeyer.



In general, slugs are most active from April to June and September to October. Slugs are nocturnal, typically feeding from dusk to dawn. They may also feed during rainy or overcast days. During the day, slugs hide in soil crevices and under crop residue, which is why reduced- and no-till fields are at greater risk for damage (Photo 4). They prefer high humidity and temperatures below 70°F1. Slug populations are expected to be large and problematic during a wet spring following a mild winter, or any spring after a wet fall.

Photo 4. Gray garden slug in soil crevice in corn field. Photo by L. Flandermeyer.

What are the symptoms of slug damage?

Slugs feed using their "rasp-like" mouthparts (called radula) to scrape the surface of plants. They can impact the seeds or seedlings. In corn, slugs scrape the leaves leaving window-pane damage, then ragged/shredded holes (Photo 5-6). In soybeans, slugs make holes in the cotyledons, then ragged holes on leaves (Photos 7-8)1. Slugs are particularly problematic if they destroy the exposed growing point on soybeans, leading to plant death and a greater chance of stand loss. Slug damage to corn can cause defoliation, but young plants have a good chance to recover because the growing point is underground. Slug feeding injury can be confused with other pest damage, like early season black cutworm damage (Photo 9) or feeding damage by adult corn rootworm beetles (Photo 10), so look for slugs in residue below the plant and characteristic slime trails (Photo 11) to correctly identify the culprit.

Ensuring that the furrow or slot is closed during planting helps mitigate damage to seeds and seedlings. Otherwise, slugs have a dark, cool "highway" to travel from seed to seed. If the plants are small enough– have less than 5 leaves– the slugs may destroy it entirely.

Integrated pest management (IPM) strategies for slugs

Management of slugs can be more challenging than controlling most insects and weeds. Several pest management tactics in concert are typically needed to decrease slug populations and their damage over time.

<u>Biological</u>

Ground beetles, toads, garter snakes, and birds all prey on slugs and keep their populations in check. Ground beetles appear to be the most significant arthropod predator of slugs in crop fields. Using methods to increase the number of these natural predators, such as using no-till and cover crops to attract beetles, can lead to effective biological control. If you are already using insecticides, be mindful to do spot treatments so as not to reduce beneficial insect populations. Avoiding insecticidal seed treatments (e.g., neonicotinoids) can help promote ground beetle populations and slug biocontrol in field crops.

<u>Chemical</u>

Insecticides will not be effective against slugs because they are not insects. Instead, look for a molluscicidal bait when facing severe infestations and need a rescue treatment.

COOPERATIVE EXTENSION SERVICE

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