FIELD & FEEDLOT



IOWA STATE UNIVERSITY EXTENSION AND OUTREACH—NORTHWEST REGIONS

Extension Web Sites

Ag Decision Maker
www.extension.iastate.edu/agdm/
Beef Center
www.iowabeefcenter.org/
Manure Management
www.agronext.iastate.edu/immag/
Pork Center
www.ipic.iastate.edu/
ISU Extension Dairy Team

Dandelions in the Lawn

Margaret Murphy, ISU Extension and Outreach Horticulture Educator

Dandelions (*Taraxacum officinale*) are a perennial, broadleaf weed commonly found in lawns. Of course a weed to some is something else to others. Whenever I ask kids what their favorite flower is, without fail, many respond the dandelion. For homeowners, dandelions are anything but a favorite.

The dandelion grows best in full sun; however, once established it can survive shade and dry conditions. To effectively treat dandelions in the yard, you may need to use more than one method of control. Manual removal by digging up the plants can be effective especially for a new seedling that is not yet well-rooted. For an established plant with an extensive root system hand-pulling or hoeing is usually futile. It will take more effort to remove the established dandelion since the entire plant, taproot and all, needs to be dug out. You may have noticed specialized digging tools designed for dandelion removal available at garden centers. It is important to remain diligent when removing dandelions by digging since they will most likely need to be dug up regularly for several years to be successfully eliminated. Also, avoid letting the dandelion go to seed. Dandelion seeds can re-infect your yard plus be carried several miles by the wind.

For lawns heavily invaded by dandelions herbicides may offer more successful control. Dandelions are usually treated with a postemergence broadleaf herbicide such as 2, 4-D. You can also spot spray plants with a nonselective herbicide such as glyphosate. Remember a nonselective herbicide will kill all plants exposed to it including those you don't want to remove like the surrounding turf so it is best used with care on isolated weeds.

Control of established weeds with a postemergent treatment can still be difficult. So to help prevent new weeds from invading your turf, always apply good cultural practices that promote a healthy, vigorous lawn. Such practices include proper mowing, watering and fertilizing. Proper mowing is essential to the health and longevity of your lawn. Remember to raise the cutting height to about 3 inches. Taller grass competes better with weeds plus it encourages deeper root development. Also, an actively growing lawn needs about 1 to 1 ½ inches of water per week. The recommendation is to water deeply and less frequently again to help encourage strong root development. Lastly, it is generally not recommended to fertilize cool-season grasses, which includes Kentucky bluegrass, during the summer. In Iowa, the best time to fertilize your lawn is in May, mid-September and, again, in late October. When fertilizing, apply 1 lb. of actual nitrogen per 1,000 square feet in one application.

PQA Plus Version 2.0 and Porcine Epidemic Diarrhea Virus

Matt Swantek, ISU Extension and Outreach Swine Program Specialist

Iowa State University Extension Swine Specialist introduced Version 2.0 Pork Quality Assurance® Plus (PQA Plus®) during the World Pork Expo in Des Moines. Introduced in 1989, PQA Plus has been the setting the standards for pork production practices and animal well-being. Version 2 continues with updated 10 Good Production Practices including additions with Environmental Stewardship and Worker Safety, as part of the "We Care" program for relevant food safety standards and improved animal well-being.

PQA Plus version 2.0 revisions include:

- Participants must pass a 25 question test related to the 10 Good Production Practices.
- Recertification will be available via an online process after an initial face-to-face certification.

Iowa Pork Producers Association will be sponsoring (free registration) TQA and PQA Plus sessions Wednesday July 17, Northwest Iowa Community College, Building A, Room 116/119 in Sheldon and Tuesday August 20, Humboldt County Extension office, 727 Sumner Ave, Humboldt. Times are TQA from 12:30 p.m. to 3 p.m. and PQA Plus from 3:15 p.m. to 6 p.m.

Interested individuals should pre-register by contacting IPPA at (515) 225-7675 or lclemenson@iowapork.org.

News released from the Iowa Pork Industry Center is Porcine Epidemic Diarrhea Virus (PEDV) has been diagnosed in Iowa. PEDV is a coronavirus related to transmissible gastroenteritis virus (TGEV) that was first diagnosed more than 40 years ago in Great Britain. Since then, there have been sporadic outbreaks in Europe and it has become an endemic pig disease in Asia since 1982. PEDV affects only pigs and there are no other known hosts. It also poses no known public health threat. Iowa Pork Industry Center director Rodney "Butch " Baker said the primary clinical sign is severe diarrhea, which can cause high mortality rates in very young pigs. "The incubation period is very short -- 12 to 24 hours -- and the virus is shed for seven to 10 days," he said. "Treatment is similar to that for other viral enteric diseases with clean, dry, draft free environment and high quality drinking water."

Veterinarians should contact the veterinary diagnostic laboratory for information on what samples are preferred, and Baker said Iowa State University Veterinary Diagnostic Laboratory is well prepared to diagnose PEDV and other pathogens that may mimic PEDV.

Biosecurity is the key to prevent the introduction of the virus. County fair exhibitors and participates should be cautious about visitors to the farm and traveling to and from their fairs/shows. More information on biosecurity and other facts about this virus and its potential impact is on this IPIC fact sheet. Links to additional sources of information on the IPIC website under Disease--Porcine Epidemic Diarrhea Virus.

Is This the Year to Spray Fungicides?

Joel DeJong, ISU Extension and Outreach Field Agronomist; with thanks to Clarke McGrath from Southwest Iowa

"Should we apply a fungicide?" We get that question every year, and it isn't an easy one to answer. Fungicide application decisions are tough to make, and even with the best information for each acre, results will vary widely.

Iowa State University (and many other universities across the Midwest), agribusinesses and growers have all been conducting hundreds of replicated plots, strip trials and side-by-side comparisons in attempts to determine the profitability of fungicide applications to corn and soybeans. What do field trials show? Interestingly, the results mirror what growers see--a wide range of yield responses. I'd love to share an "average" response, but the longer we do these trials, the harder it is to say anything about an "average" response. So rather than share a bunch of yield data from past trials, it might be more helpful to share some "guidelines" that all this work has helped to fine-tune for when we can expect the best return from fungicides. I don't claim to have it all figured out, but field experience blended with many conversations with agronomists, researchers and growers have given me some perspective.

Most everyone agrees the number-one factor affecting the odds of fungicide application profitability is management of common diseases. If crop diseases are present, yield responses to applications are typically higher on hybrids/varieties that have low disease resistance scores. If disease levels are high enough, genetics with solid disease resistance may respond well, too.

Warm, humid conditions around the time of grain fill favor the development of diseases. Crop history and crop residue levels can contribute, too; several pathogens that survive in corn and/or soybean residue, corn-on-corn and other high-residue systems can increase disease levels. Geography can also influence disease. For example, southeast Iowa tends to be warmer and more humid than much of the state and historically has had higher levels of many diseases. While sometimes we see fungicide applications increase yields in fields with low disease pressure, increasing disease pressure is a better indicator to the potential profitability of treating.

Application timing can influence the odds of a positive return. Combining label recommendations and field observations is critical. If applied too early, the residual effects of the product may be gone as diseases set in. If applied too late, it may not effectively control the diseases already established.

Most agronomists agree that the full tassel stage (VT) through blister stage (R2) for corn, and around R2 to R4 in soybeans are the optimum windows if a fungicide is needed.

Key factors to consider

Fungicide applications can do a great job of disease control. The tough part is factoring in weather conditions, genetics, your cropping system and potential disease pressure. Here are recommendations based on what we've seen the last several seasons:

* In corn, consider treating if disease is present on the third leaf below the ear leaf (or higher) on 50% of plants prior to tasseling. In soybeans, we typically pull the trigger on diseases when they move above the bottom third of the canopy.

* Scout genetics with moderate to low disease resistance more intensively. Also, scout more often if the weather's warm and humid and if rainy weather is present or predicted for July and August.

* Watch corn-on-corn, beans-on-beans and any high-residue fields closely. Keep a close eye on any fields with a history of disease issues. Late-planted crops are often more susceptible to foliar diseases. Narrow rows can limit air movement, retain moisture and potentially harbor more disease pressure.

* Confirm that the fungicide is labeled to control the diseases present--remember that bacterial diseases (like Goss's Wilt in corn) are not controlled by fungicides, and some fungal pathogens (such as Sudden Death Syndrome in soybeans) are beyond the reach of our foliar applied fungicides.

* Use proper application timing and additives. We occasionally see crop injury stemming from mistakes in these areas. Apply labeled rates--we already have confirmed disease resistance to strobilurins in the Midwest; cutting rates can only make the problem worse.

* Results tend to be better in wetter years (like 2013 is shaping up to be) than in dry years like 2012. If we remain on the wet side of things, watch your fields closely.

"Should we apply a fungicide?" You are right--I still didn't give a direct answer to that question. But with your field information, the criteria above and some discussions with your local agronomists--you can make great decisions for your operation.

Precision Feeding of Dairy Heifers

Kevin Lager, ISU Extension and Outreach Dairy Field Specialist

Feed accounts for approximately fifty percent of overall costs on a dairy, and the current situation of high feed cost is making the situation more challenging. Whether finding the on-farm feed supply at levels that may not maintain the herd until the next forage crop or if searching for an opportunity to feed heifers less feed while reducing the amount of manure that must be managed, there may be an opportunity for precision feeding management.

Precision feeding of heifers, or limit feeding heifers, consists of providing all essential nutrients to the heifer using smaller quantities of feed while meeting the desired growth rate. This system is based upon the principle of using feed efficiency (feed to gain). Ration digestibility is a key component of feed efficiency, thus requiring high quality feeds to be included in the formulated rations. This system requires attention to detail with key management components of this system that include:

Body weight measurements (monthly is best) – allows for proper monitoring of performance and, if necessary, ration adjustment

Group heifers by size – prevent dominant heifer from reducing timid heifer's access to feed

Adequate bunk space (between 14 and 24 inches per animal, depending upon age) – feeding done once daily so it is important that all heifers can access the bunk simultaneously

Below are rations that were utilized in published research. Heifers that consume bedding will limit the effectiveness of precision feeding as they will not be consuming the formulated ration.

Rations used in published research

Ingredient, % of DM	High Corn Silage	Low Corn Silage
Corn silage	76.92	32.98
Ground corn	0.00	27.98
Soybean hulls	7.21	25.00
Sodium bicarbonate	0.67	0.67
Canola meal	5.67	9.62
Expeller soybean meal	7.12	0.00
Mineral Mix	2.40	3.75

Heifers between 380 and 750 pounds growing at 1.8 lb/d. Adapted from Moody et al., 2007

Research has shown that heifers fed in a precision feeding system perform similarly to heifers in traditional feeding systems. Precision feeding of heifers may not work for all management systems, thus it is important to work with a system that best fits your management style. Further information on this topic may be found in the publications section of the Iowa State University Extension and Outreach Dairy team website: http://www.extension.iastate.edu/dairyteam/home/dairyteam

Rural Safety: We All Share the Road

Kaye Strohbehn, ISU Extension and Outreach Agriculture Producer and Consumer Education Specialist

Overview of Rural Road Accidents

Each year many of us hear or learn of at least one devastating farm related rural road accident. According to the Iowa Department of Transportation, crashes on rural roads occur at more than twice the rate of accidents on state roads. In fact, the Iowa Fatality Assessment &Control Evaluation (FACE) indicates the majority of all Iowa agriculture fatalities occur between the months of June, July and August. Further, of the fatalities that occur during these months the majority involve moving tractors, trucks or automobiles.

Characteristics of Rural and Gravel Roads

Unlike paved roads, rural and gravel roads often times increase our driving risks. Be mindful of the fact that rural roads often have the following characteristics:

- Little or no shoulders
- Narrow Lanes
- Soft shoulders
- Steep hills
- Less traffic signs
- Narrow Bridges
- Sharp curves
- Less maintenance
- Rough road surfaces

Tips for Improving Rural Road Safety

- **Livestock, Deer and Pets**-Decrease your speed and pay attention to livestock, deer and pets when traveling in rural areas.
- **Field Driveways**- As our crops continue to grow, field driveway visibility becomes reduced. Remember to reduce your speed near fields and unmarked road intersections.
- **Slow Moving Vehicle Emblems**- Look for slow moving vehicles traveling at a speed of 35 mph or less by looking for the orange colored reflective triangles on the back of the vehicle.
- **Gravel roads**- Lower your speed and be cautious of loose gravel on road sides, washboards, mud, and standing water.
- **Adjust your following distance**- Remember to adjust your following distance for slow moving vehicles. The recommended following distance is 3 seconds or more on rural paved roads and 6 seconds or more on gravel roads
- **Yield to on-coming traffic at narrow bridges**
- **Passing Slow Moving Vehicles**- Be cautious when passing slow moving vehicles and ensure they can see you before attempting to pass. Remember always pass on the left side.

In summary, rural road safety is the responsibility of all of us. Be cautious, be aware and have a safe and enjoyable summer!

For more information on rural road safety and factsheets, be sure to visit us on the web at www.extension.iastate.edu or contact one of your Agriculture and Natural Resources Education Specialists in Northwest Iowa.

Northwest Iowa 2013

IOWA STATE UNIVERSITY
Extension and Outreach

Farmland Leasing & Land Value Meetings

July 29 thru August 2 in 14 Northwest Iowa Locations!

Topics include:

- Updated land value & cash rental rate surveys
- Types of farmland lease arrangements
- Determining fair cash rents
- Writing and terminating a farm lease
- Landlord-Tenant & Family communications
- ISU EXTENSION web-based and other resources

2½-hour workshop!
Comprehensive workbook provided!

Registration Fee:
$20/person if pre-registered.
$25/person for walk-ins.
To register, call host county's ISU Extension office.

LOCATIONS, DATES, CONTACT PHONE:

Monday, July 29

- **Sibley**—Osceola County Call 712-754-3648
  9:00am: Osceola Community Hospital Education Room
- **Spirit Lake**—Dickinson County
  Call 712-336-3488
  1:30pm: Extension Office
- **Sioux Center**—Sioux County Call 712-737-4230
  6:30pm: New Life Reformed in Sioux Center

Tuesday, July 30

- **Sergeant Bluff**—Woodbury County
  Call 712-276-2157
  9:00am: Sergeant Bluff Community Center
- **Orange City**—Sioux County Call 712-737-4230
  1:30pm: Extension Office—Downstairs
- **Cherokee**—Cherokee County
  Call 712-225-6196
  6:30pm: Western Iowa Tech CC Auditorium

Wednesday, July 31

- **Emmetsburg**—Palo Alto County
  Call 712-852-2865
  9:00am: Extension Office (Old Library Bldg)
- **Estherville**—Emmet County
  Call 712-362-3434
  1:30pm: Iowa Lakes Electric Cooperative
- **Spencer**—Clay County
  Call 712-262-2264
  6:30pm: Spencer School Admin Bldg

Thursday, August 1

- **Storm Lake**—Buena Vista County
  Call 712-732-5056
  9am: Extension Office
- **Pocahontas**—Pocahontas County
  Call 712-335-3103
  1:30pm: Extension Office--Pocahontas
- **Le Mars**—Plymouth County
  Call 712-546-7835
  6:30pm: Le Mars Convention Center

Friday, August 2

- **Sheldon**—O'Brien County
  Call 712-957-5045
  9:00am: Iowa State Bank meeting room
- **Rock Rapids**—Lyon County
  Call 712-472-2576
  1:30pm: Forster Community Center