

FIELD & FEEDLOT



NORTHWEST AREA EXTENSION

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Extension Web Sites

Ag Decision Maker

<http://www.extension.iastate.edu/agdm/>

Beef Center

<http://www.iowabeefcenter.org/>

Manure Management

<http://www.agronext.iastate.edu/immag/>

Pork Center

<http://www.ipic.iastate.edu/>

ISU Extension Dairy Team

<http://www.extension.iastate.edu/DairyTeam/>

Cash Rental Rate Increase Slows in 2009

By Ron Hook, ISUE Farm Management Specialist

Cash rental rates for Iowa farmland continued to rise modestly in 2009. Survey results from Iowa State University Extension estimated the average cash rent for corn and soybean land in the state to be \$185 per acre, compared to \$177 in the 2008 survey. Nine of the 12 areas in Iowa that were surveyed showed increases, ranging from \$4 to \$21 per acre. One area showed no change and two areas showed decreases of \$1 and \$11 per acre. Area 2 in north central Iowa had the highest increase over last year and the highest rents reported overall.

In Area 1 the survey showed average rent increased \$12 from \$174 to \$186 per acre. The highest average was reported for O'Brien County at \$213 per acre and the lowest average was reported for Emmet County at \$161.

In Area 2 the survey showed average rent increased \$21 from \$180 to \$201 per acre. The highest average in Area 2 was reported for Wright County at \$208 per acre and the lowest average was reported for Pocahontas County at \$190.

In Area 5 the survey showed average rent increased \$13 from \$185 to \$198 per acre. The highest average in Area 5 was reported for Ida County at \$222 per acre and the lowest average was reported for Plymouth county at \$177.

Responses received in 2009 were again more variable than in previous years. This variability is likely due to the volatility of corn and soybean prices in the past few years and led to a wide range of opinions about typical rents in some counties.

The latest survey also presents typical dollars of rent per bushel of corn and soybean yield for each county, based on the county average yield for each crop during the last 5 years. This year the rent per bushel ranged from \$.80 to \$1.37 for corn and from \$2.74 to \$4.56 for soybeans. The survey also includes typical rental rates for land producing oats, hay and pasture.

Estimates of rental rates were based on survey responses from over 1,271 landowners, farmers, and agribusiness people familiar with the land rental market. A complete summary of the 2009 "Cash Rental Rates for Iowa" is available at: <http://www.extension.iastate.edu/agdm/wholefarm/html/c2-10.html>.

Survey results are intended to be used as guidelines, only. The appropriate rent for an individual farm should take into account factors such as fertility levels, USDA program variables, size, shape, and accessibility of fields, existence of seed production or manure application contracts, local grain prices, longevity of the lease, and other services provided by the tenant. Ag Decision Maker file C2-20 (<http://www.extension.iastate.edu/agdm/wholefarm/html/c2-20.html>) has more discussion about how to determine fair cash rent. An electronic decision aid worksheet is included.

Farmland leasing information meetings are being planned for this summer around the state. Contact your County Extension office, Tom Olsen, ISUE Farm Management Specialist, 712-662-7131, tolsen@iastate.edu, or Ron Hook, ISUE Farm Management Specialist, 712-754-3648, rhook@iastate.edu for more information.

Drift Management Considerations

By Joel Dejong, ISU Extension Field Agronomist, with thanks to Mark Hanna and Kristine Schaeffer's ICM News article of the same title.

Using pesticides for economic crop production is a widely accepted practice – and it will continue. Applying pesticides in a timely and safe manner becomes difficult at times during the growing season, but it is a necessity. There is nothing I like less than the phone calls I get every year about herbicide drift problems. In addition, there is no county in Iowa where rural residents that farm outnumber non-farming rural residents anymore, which might be a contributor to more potential issues. Crop producers need to put management practices in place to

keep their pesticide applications on their own crops – not the farmstead or crop of a neighbor. And remember, all movement of pesticides to off label crops is illegal!

Increasing droplet size so that small droplets don't move off the intended target is a key to drift reduction. Techniques include:

- Operating nozzles at a lower pressure
- Using a larger tip size (which also lowers pressure for a given application rate)
- Maintaining boom height at the lowest level consistent with nozzle overlap
- Using a low-drift nozzle style such as venturi or air-induction tip
- Driving more slowly near field borders when using a spray controller (lowers pressure)

In addition, weather factors are important. Avoid off-site drift by spraying when wind speeds are below 10 miles/hour (preferably between 3 and 10 mph), with prevailing winds away from sensitive areas, and avoiding application during dead calm conditions (e.g., atmospheric inversion). When winds are light, the direction also becomes more variable, and surprises can occur. If high wind speeds have persisted for several days and weeds or pest populations are continuing to grow, applicators may feel compelled to go ahead with applications. Before filling the sprayer and heading to the field, it's good to review just how far a spray droplet can travel.

Droplet sizes are measured in microns, and droplets less than 100 microns in diameter have quite a high risk of drift. A study comparing an 8006 flat fan tip spraying at 20 PSI showed that 6% of the droplets were smaller than 100 microns, and increasing pressure to 40 PSI doubled the number of those very drift-able droplets. All nozzle tips produce a range of droplets, although low-drift style nozzles minimize the number of small sized droplets (fines). As shown in the chart below, droplets 200 microns and less in diameter can travel across fence lines 25 feet or more with wind gusts of 15 mi/h. In some cases, a non-herbicide resistant crop or sensitive plant species may be only a few feet across a property line. Adjusting nozzle type and sprayer pressure and leaving an unsprayed buffer area may be necessary in certain situations.

Distances droplet sizes travel with various wind speeds from 3 feet boom height

Droplet size, Microns	5 mi/h	10 mi/h	15 mi/h	20 mi/h
100	24 ft	48 ft	72 ft	96 ft
200	9	18	26	35
400	5	9	14	18
500	4	7	10	14
600	3	6	9	12

So, here are six ways to reduce drift:

1. Check wind speed and direction (very important!!!)
2. Read the pesticide label (know if it volatilizes, which can later cause damage to nearby crops, etc.)
3. Use nozzles that produce large droplets (know which pesticides can be just as effective with large droplet sizes, and use them)
4. Lower your application pressure (but still make certain it is properly calibrated.)
5. Lower your boom height (make certain it still gives good uniform coverage. Wide angle nozzles allow us to do this better.)
6. Be aware of your surroundings (what can be damaged by your drift?)

Scouting Corn & Soybean Fields in June

By Mark Licht, ISU Extension Field Agronomist

June is a good time of year to walk fields to assess stands and get a feeling for what the crops look like. It is easier to identify and solve planting and other early season problems in late May and June rather than at harvest. If problems go unnoticed until harvest it is awfully hard to pinpoint what the cause was. Here are some things to check for as you walk your fields.

Planter Performance. Check planter performance by doing stand counts for each row unit at several places in the same field that were planted the same day under the same conditions. While making these stand counts look at things like plant spacing, doubles, skips, and variation in growth development. These observations indicate planter performance and will help you identify areas of the planter to adjust such as down pressure, depth settings, air pressure, brush settings, etc.

Corn Populations. Check corn populations for each hybrid and each field. Take stand counts from the same planter unit to get a good sense of the stand while eliminating the variances from different planting units. Plant populations at this time of year are good to do because you can remember which hybrids were used, the planting conditions, the seed characteristics (seed size, seed treatments, etc.), and planter performance. Count the number of plants for the following distances and multiple by 1,000 to get plants per acre.

Row Spacing	Distance to Measure
36 in	14 ft, 6 in
30 in	17 ft, 5 in
20 in	26 ft, 1 in

Dig Some Corn Plants. Look at how the nodal roots are forming; evaluate seed treatment performance on wireworms or white grubs; look for sidewall compaction; identify seed depth

placement. Dig where plants are missing to check for either a missing seed or seed/seedling rot. This can help identify planter performance, insecticide effectiveness, and seed quality.

Late Spring Nitrate Testing. If nitrogen availability is in question, a late spring nitrate test can be beneficial to determine if more nitrogen should be applied. Some questionable fields may include where manure was applied, areas with excessive rainfall, or fields where nitrogen applicator performance might be in question.

Soybean Populations. A final plant population of 100,000 plants per acre is enough of a stand to attain maximum soybean yields. If populations are not quite at 100,000 don't get to antsy to replant; research has shown that replanting is not economical until populations fall below 75,000 plants per acre. Doubles and skips are not as critical for soybean as for corn because soybeans adjust to voids by increasing branching. Count the number of plants in 3 feet of row and multiple by the following factors.

Row Spacing	One Plant Per Three Foot of Row Equals
36	5,000
30	6,000
20	8,500
15	11,500
10	17,500
7	25,000

Look at Soybean Plants. Like corn, digging soybeans and looking in the furrow or at the roots can be of value. Look for seed treatment performance. Was there seed rot or seedling diseases causing problems and hurting stands? Also, keep an eye out for bean leaf beetles. Damage from the overwintering generation should be visible. Did the seed treatment insecticide work?

Soybean Cyst Nematodes. You may be able to dig some plants to visually see soybean cyst nematodes on the roots. If you don't have a good eye, keep an eye on problem areas to go back to in mid-summer or the fall for taking soil samples to determine soybean cyst nematode egg counts.

Field Records and Notes. If you haven't done so already, making field maps and recording field activities and observation can be extremely important. Include things like hybrid/variety, planting dates, seeding rates, planting conditions, tillage operations, pesticide applications, fertilizer applications, stand counts, test results, etc. The more information you can keep the better able you will be to determine what worked or what went wrong.

Sheep Updates

By Dennis DeWitt, ISU Extension Livestock Field Specialist

The Iowa Sheep & Wool Festival is Saturday, June 13 and Sunday, June 14 at the Dallas County Fairgrounds in Adel. The gates open Saturday at 8:00 A.M. for viewing of the Hall of Breeds, sheep equipment and industry exhibits. The first educational session begins at 9:00 A.M. For a full viewing of the two day festival schedule go to www.iowasheep.com and click on the information.

“What works for my sheep operation may work for yours!” sheep tour will be on Saturday, June 27 beginning at the Community Center, 225 Main Street, Sanborn, Iowa. Registration for the tour begins at 9:45 A.M. Two sheep operations will be toured in the morning, returning to Community Center, Sanborn for lunch and tour two additional sheep operations Saturday afternoon. The four sheep producer farms on the tour vary from 75-550 ewes and will offer drastically different options ranging from almost all dry lot to mostly all pasture system; from all old worn out buildings to new hoop structures; and from primarily commercial ewe lamb marketing to all market lamb sales. These four sheep producers are using 11 different sheep breeds also. The producers will share what works in their operation may work in yours. Dr. Dan Morrical, ISU Extension Sheep Specialist, Dr. Kris Kohl, ISU Extension Ag Engineer and Dennis DeWitt, ISU Extension Livestock Specialist will be present to answer sheep producer questions about breeding, feeding, weaning and improving the environment in facilities, equipment and handling to make economical enhancements to reduce cost and labor to improve profits. The Northwest Iowa Sheep Producers Association and Iowa State University Extension are hosting the tour with financial support from the Iowa Sheep and Wool Promotion Board.

Feedlot Monitoring Program Workshop

By Beth Doran, ISU Extension Beef Field Specialist

The Feedlot Monitoring Program has been around for a long time, but there have been some major changes and enhancements to the program. To explain these, ISU Extension and the Iowa Beef Center are holding a hands-on workshop featuring the ISU Feedlot Monitoring Program. The workshop will be Thursday, June 18 at the Plymouth County Extension Office in LeMars, IA from 10 a.m. to 3:00 p.m.

The workshop will begin with an introductory presentation. Participants will then do a basic exercise involving entering data, doing a closeout and billing a custom feeder. A sample set of data will be provided for this part of the workshop.

In the afternoon, a new free download will be featured, and participants will be able to ask and discuss questions that they have experienced while using the program. For this part of the workshop to be most useful, participants should bring a copy of their data and their questions.

Participants have the option to bring their own computer or use a supplied computer for the workshop. To register, contact the Sioux County Extension Office at 712-737-4230. Registration (\$20/person) is due June 12 at the Sioux County Extension Office and includes refreshments and a noon meal.