



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Weekly Crop Update User Survey

It has been several years since we surveyed you, the Weekly Crop Update's readers and subscribers, to see what you find useful about this publication and to try to get some ideas on how it could be improved. We hope that you will take some time to complete the survey and let us know what you think. The online survey is at: https://delaware.qualtrics.com/SE/?SID=SV_bmy_pKOsFJVnkKp

Vegetable Crops

Vegetable Crop Insects - *Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu*

Cabbage

Continue to scout all fields for harlequin bugs, beet armyworm, fall armyworm, diamondback and cabbage looper larvae.

Lima Beans

Continue to scout all fields for lygus bugs, stinkbugs, corn earworm, soybean loopers and beet armyworm.

Peppers

Be sure to maintain a 5 to 7-day spray schedule for corn borer, corn earworm, beet armyworm and fall armyworm control. You should also watch for flares in aphid populations.

Snap Beans

All fresh market and processing snap beans will need to be sprayed from the bud stage through harvest for corn borer and corn earworm control.

Spinach

Continue to sample for webworm and beet armyworm larvae. Controls should be applied when worms are small and before webbing occurs.

Sweet Corn

Our last trap catches for the season will be September 13. If you have questions about spray intervals, please call Joanne Whalen at 302-831-1303 for more information.

Low Plant Tissue Potassium and Calcium - *Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu*

Growers, consultants, and soils laboratories have noted that plant tissue tests on several vegetables (such as watermelon) have been showing lower than expected levels of potassium (K) and calcium (Ca) in plant tissues this year, even though soil levels are high.

There are a number of possible causes for these lower than expected tissue test results. High rates of nitrogen applied to vegetable crops can often reduce the levels of K and Ca in plant tissue. High nitrogen promotes foliage growth and more leaf area. This can have a dilution

effect on K and Ca as there is less available proportionally to supply the new leaves.

The use of fertilizers high in ammonium and/or urea (which quickly released ammonium) can cause a temporary suppression of K and Ca uptake because ammonium is a competing cation. This suppression lasts until the ammonium is converted into nitrate in the soil by nitrifying bacteria. In drip irrigated vegetables where Urea Ammonium Nitrate (UAN) solutions are used as the nitrogen source during regular fertigation, this suppression can last throughout much of the season. The use of fertilizers with calcium nitrate and potassium nitrate as the nitrogen source can eliminate this competitive effect.

Very high levels of K fertilization can also reduce Ca uptake and excess magnesium can interfere with both K and Ca uptake.

In addition to dilution effects and cation competition, use of acidifying nitrogen fertilizers such as UAN or ammonium sulfate will drop the soil pH. When soil pH drops below 5.3, root function can be negatively affected, which will further limit K and Ca uptake. This can occur if soil pH is marginal to begin the season. It is common practice to lime fields on a 3 year rotation throughout the region. In the third year before the next liming, many fields fall into this marginal pH category.

Lower than normal K and Ca in leaf tissues can also be related to high temperatures and plant stress. In periods with extreme high temperatures, plant stomates close earlier in the day, transpiration is reduced, and K and Ca uptake are reduced because less water is being taken up by the plant.

Managing plant tissue K and Ca requires balancing fertilization. Where high nitrogen rates are being used to push high production, additional K should also be added in equal or higher amounts than nitrogen (1:1 to 1:2 ratio). This is particularly true for fruiting crops such as tomatoes, peppers, watermelons, and cantaloupes. Additional fertilizer calcium will also be needed for crops susceptible to blossom end rot.

Excess Nitrogen and Vegetables and Fruits

-Gordon Johnson, *Extension Vegetable & Fruit Specialist*; gcjohn@udel.edu

Vegetable crops vary considerably in their needs for nitrogen with crops such as sweet potatoes falling on the low end and tomatoes on the high end. While a lack of nitrogen will definitely limit vegetable productivity, excess nitrogen can also cause production problems.

Excess nitrogen will often delay maturity in crops. This is a particular problem in fruiting vegetables and vegetables with harvested roots and tubers. Too much nitrogen will favor the growth of foliage over flowering and fruiting or formation of storage organs such as tubers and roots. In a crop such as pumpkins, this can result in delaying fruit set so long that the crop will not mature in time for sales. Excess nitrogen can also reduce yields by limiting storage organ formation. Sweet potatoes would be a good example of a crop that will have reduced yields with excess nitrogen.

Excess nitrogen can also cause reductions in the quality of fruits and storage organs both in flavor and physical characteristics. High nitrogen applications can result in lower sugar content, lower acidity, and reduced firmness in fruits and storage organs. It can cause reduction in nutritional content. In leafy green vegetables, it can result in the accumulation of nitrates in the plant tissue to unhealthy levels. High nitrogen can cause reduced volatile production and negatively impact flavor and aroma in vegetables and fruits. Excess nitrogen can increase disorders such as hollow stems of broccoli and reduce storage and keeping qualities of fruits and vegetables.

Excessive production of foliage from high nitrogen applications can also lead to an increase in disease pressure from having a higher proportion of young tissue that is more susceptible to infections, by creating a more humid microclimate favorable for disease development, and by making it more difficult to get good coverage with fungicides.

Excess nitrogen can cause reductions in the levels of other mineral nutrients in plants such as potassium, calcium, and magnesium, often resulting in the development of deficiencies and associated disorders.

Recommended nitrogen rates and timings for most vegetable crops grown in our region can be found in the Commercial Vegetable Production Recommendations (online at <http://ag.udel.edu/extension/vegprogram/publications.htm>). These recommended rates have been developed over many years of research by our universities. Applications in excess of these recommended rates is justified only under special circumstances (excess rainfall and leaching for example).

Don't Mix PVC Pipe and Polyethylene Greenhouse Film - *Emmalea Ernest, Extension Associate-Vegetable Crops; emmalea@udel.edu*

Here is another article you can file under “Learn from My Mistakes/Mishaps” (previous example [here](#)). When my inflated poly greenhouse at the Georgetown research farm went flat about a month ago I thought the blower had gone bad. It turned out that there were actually giant holes in my less-than-one-year-old five-year greenhouse film. The holes corresponded to areas of wear in places where the plastic touched the PVC electrical conduit. There was no sign of wear around the metal support structure. Could the conduit be reacting with the plastic film?



Greenhouse film around the PVC conduit with cloudy discoloration and signs of wear.



One of numerous large holes where the conduit touches the greenhouse film.

Yes, it turns out, that PVC electrical conduit can out-gas chlorine which destroys the UV light stabilizers in the polyethylene greenhouse film and causes the film to degrade. In talking with various greenhouse suppliers and plastic manufacturers I learned that there is a sizable list of materials that can react with greenhouse film and cause wear including any type of PVC pipe or PVC tape, oil based paints or wood preservatives, chlorine based disinfectants, and certain pesticides, especially those containing sulfur or copper.

To prevent premature wear to greenhouse film, manufacturers recommend that surfaces that the film touches should be covered with white acrylic latex paint (but not the mildew resistant kinds that contain fungicides) or non-PVC tape. The film should not be in direct contact with any of the materials listed above that can cause breakdown or wear. In fact failure to follow these recommendations can cause the warranty on the film to be void. There seem to be some differences between manufacturers in tolerance of films to chemical interactions and installation recommendations and requirements, so it is a good idea to check with your greenhouse film supplier and the film manufacturer if you have a concern.

I have been told that some growers wrap PVC pipe that contacts the greenhouse film with old poly film. That would be an inexpensive means of dealing with the problem, but in my greenhouse I was concerned about that creating habitat for pests and diseases. After talking with the plastic manufacturer of the new film I am

purchasing, I have decided to try covering the conduit with pipe insulation made out of polyethylene, which is readily available and inexpensive.



Some of the problematic conduit, soon to be covered with pipe insulation.

Agronomic Crops

Agronomic Crop Insects - *Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu*

Alfalfa

Continue to sample fields on a weekly basis for defoliators including earworm, webworms and all armyworm species. We continue to get reports of fields with economic levels of defoliators. Although we have limited experience at this time of year with damage to re-growth, it will be important to check for the presence of larvae to determine if they are still present and holding back the re-growth.

Soybeans

Where economic populations levels of corn earworm are still present, late planted soybean fields that still have susceptible pods will still be at risk from pod damage. If economic levels of defoliators (i.e. worm defoliators including soybean looper, beet armyworm and green cloverworm) are present, you will also need to consider the maturity of the crop as well as the

health of the leaf canopy to make a treatment decision. In an article related to defoliation from soybean loopers, entomologists and agronomists in the south suggested that if economic levels are present:

“Fields will need to be protected as long as the pods are still green and until the lower leaves are just beginning to yellow. This should correspond, more or less, with the R6.5 stage (10 days after R6.0 = full green seed). If leaves are beginning to yellow up the stem, not from drought but from the maturity process, and there are any pods on the plant that are beginning to yellow, the field should be safe, that is no need to treat. Next you have to determine the health of the leaf canopy: is it robust, average, or thin. Each can tolerate different amounts of leaf loss before reducing yield potential. Robust fields (mid chest or higher) can tolerate a lot of feeding. Average fields (upper thigh to mid chest) can tolerate normal amounts of feeding. Thin canopy fields (mid thigh or below) cannot tolerate additional leaf loss. Also in this canopy assessment, you need to take a stab at estimating the current percent defoliation. This is not an exact measure, but your best estimate looking over the entire canopy top to bottom. The eyes tend to focus on those badly defoliated top leaves. Look beyond those and try to come up with an overall average.”

When it comes to stinkbugs, you should continue scouting until the latest planted fields reach the R7 growth stage (a few studies in the south even say through the R-7 stage) when beans should no longer be susceptible to stink bug feeding.

You will still need to consider the potential for grasshoppers and bean leaf beetles to feed on pods. Although bean leaf beetle populations have been generally low this past season, there are still some hot spots of activity, so you will need to examine pods for feeding damage. During the last wet fall, we did see significant pod scarring late in the season that resulted in moldy beans. Information from Ohio indicates that a “treatment is usually indicated when pod feeding reaches 10-15% and beetles are still present and actively feeding. In fields where the pods have started turning yellow and brown, the

adults will be leaving in search of greener pastures”.

If you do need to treat, be sure to check the label for the pre-harvest interval (time needed between last application and harvest) as well as other restrictions, including rotational restrictions.

Thoughts on Planting Soft Red Winter Wheat Early - *Richard Taylor, Extension Agronomist*; rtaylor@udel.edu

With corn harvest proceeding much earlier than in ‘normal’ years, many growers could be considering whether to go ahead and plant their wheat or barley crop in the next few weeks. The recommended or suggested planting date varies from county to county based on the Hessian fly-free date. (For more information on Hessian fly see the article by Joanne Whalen “[Agronomic Crop Insects - September 7, 2012](#)” in issue 20:25 of the Weekly Crop Update) The fly free dates are Oct. 3 for New Castle County, Oct. 8 for Kent County, and Oct. 10 for Sussex County.

For barley, we have conducted planting date studies in Sussex County comparing early-planted (September 26) barley with a close to suggested planting date (October 7). Our results indicated a fairly consistent 5 percent reduction in yield with September planted barley as compared with the October 7 planting date. Winter weather in the years the study was conducted did not result in significant visual winter injury to the barley so the impact appeared to be more of a general nature. Barley planting was dramatically affected by late planting unlike wheat. Delaying barley planting by just one week to October 15 resulted in a (four year average) yield reduction of over 15 percent and delaying two weeks to October 25 resulted in an over 20 percent yield reduction. Delaying planting barley until November increased the yield potential reduction to over 40 percent.

For winter wheat, experience has to be our guide with respect to planting date. We have evaluated the ideal planting date versus later planting dates but not against a September planting date for wheat. However, we can use

both past experiences and basic agronomic knowledge to evaluate the risk involved with early planting wheat.

Since September planting dates are before the Hessian fly-free date for all our counties, we can surmise that the risk of lodging during grain fill will be increased versus planting after the fly-free date. You do need to keep in mind that the fly-free date is based on temperature averages and during warmer than normal falls fly emergence and egg-laying activity can extend past the listed dates. Larval activity can cause lodging, stunting, and yield loss since wheat tillers can be severely injured. In past variety trials, we have seen significant injury and yield reductions on susceptible varieties. Early planting of wheat can increase your risk of an infestation especially if wheat is planted in fields with wheat stubble or in fields next to one with wheat stubble.

For wheat that is planted following dryland corn, the greatest risk this year likely is due to excessive soil residual nitrogen (N); or, if the fall weather is warm and moist, to fall N mineralization from the high levels of nitrate in the dryland corn residue. High fall N availability can lead to excessive growth that will be more susceptible to winter kill or injury if we have a cold, open winter. In past years, we have had many growers asking what they could do about all the excessive top growth that occurs when wheat is planted in September and fertility levels are high. In some areas of the country, the extra foliage is used to graze cattle or sheep but most Delaware farmers do not have this option. The option tried has been to mow off and sometimes remove the excessive top growth. This has at least in part been successful in reducing winter injury but there are significant costs associated with the practice.

Another concern that again depends on fall weather conditions as well as insect populations and a residue of disease inoculum is the development in September planted wheat of disease or insect problems. In particular, barley yellow dwarf virus, which is transmitted in the fall by aphids feeding on the lush growth, can cause more severe injury than spring infections. The lush growth of early planted wheat could be

more of an attractant for aphids but certainly will have a longer exposure to the risk of infestation.

All these cautions are not to say that you should never plant wheat or barley before the fly-free date only that you should be aware of the possible consequences and make a decision on when to plant and how many acres to plant from a position of knowledge.

Grain Marketing Highlights - *Carl German, Extension Crops Marketing Specialist;*
clgerman@udel.edu

USDA's September 12 U.S. and World Supply and Demand Highlights

Trader reaction to the September report was apparently negative for the corn and soybean markets with corn and wheat futures trading lower as of 1 p.m., Wednesday, September 12. Soybean futures were surging higher. Trader attention in the ensuing weeks will turn to the status of the 2012 crop harvest with both the U.S. corn and soybean 2012 average yield

estimates being revised downward (.6 and .8 bushels per acre). There were no changes made in planted or harvested acreage estimates across the board.

Brazilian and Argentine corn production estimates for the '12/'13 marketing year were unchanged from last month for a combined total of 98 MMT (million metric tons). Argentine corn production for the '11/'12 marketing year was unchanged at 21 MMT. The estimate for Brazilian '11/'12 marketing year corn was reduced slightly from 72.8 to 72.7 MMT.

Projected Brazilian and Argentine soybean production was unchanged from last month for the '12/'13 marketing year for a combined total of 136 MMT, a projected increase of 28.5 MMT from the drought stressed '11/'12 Southern Hemisphere crop. Argentine soybean production for the '11/'12 marketing year was left unchanged at 41 MMT while Brazilian production was revised upward from 65.6 to 66.5 MMT, for a combined total of 107.5 MMT.

U.S. S&D Summary, 9/12/12, Million Bushels

Crop Year	Corn			Soybeans			Wheat		
	11-12	12-13	12-13	11-12	12-13	12-13	11-12	12-13	12-13
Report Date	09/12	08/10	09/12	09/12	08/10	09/12	09/12	08/10	09/12
Carryin	1,128	1,021	1,181	215	145	130	862	743	743
Production	12,358	10,779	10,727	3,056	2,692	2,634	1,999	2,268	2,268
Imports	25	75	75	16	20	20	112	130	130
Tot Supply	13,511	11,875	11,983	3,287	2,857	2,785	2,974	3,141	3,141
Feed	4,400	4,075	4,150				163	220	220
Crush/Mill*	1,360	1,320	1,320	1,705	1,515	1,500	941	950	950
Ethanol Prod	5,000	4,500	4,500						
Seed/Other	30	30	30	101	116	114	77	73	73
Exports	1,540	1,300	1,250	1,360	1,110	1,055	1,050	1,200	1,200
Total Use	12,330	11,225	11,250	3,157	2,742	2,670	2,231	2,443	2,443
Carryout	1,181	650	733	130	115	115	743	698	698
Stocks/Use Rate	9.6%	5.8%	6.5%	4.1%	4.2%	4.3%	33.3%	28.6%	28.6%
Avg Price	\$6.25	\$8.20	\$7.90	\$12.45	\$16.00	\$16.00	\$7.24	\$8.30	\$8.10

*Excludes corn for ethanol

- Projected corn ending stocks for the '12/'13 marketing year were increased by 83 million bushels from last month (650 to 733 million bushels), largely attributed to reductions in demand/use categories for the '11/'12 and '12/'13 marketing years.
- Ending stocks-to-use estimates for '12/'13 marketing year corn increased from 5.8% last month to 6.5% in the September report.
- Ending stocks for U.S. soybeans were essentially unchanged from last month at 4.3%.
- Ending stocks for all U.S. wheat and stocks-to-use were left unchanged at 698 million bushels and 28.6%, respectively.

- USDA's projection for the season average price for U.S. corn was reduced from \$8.20 to \$7.90 per bushel (ranging from a low of \$7.20 to a high of \$8.60 per bushel).
- The season average price for U.S. soybeans was unchanged from last month at \$16.00 per bushel (ranging from \$15.00 to \$17.00 per bushel).
- The season average price for all U.S. wheat was lowered 20 cents to \$8.10 per bushel (ranging from \$7.50 to \$8.70 per bushel).

World S& D Summary, 8/10/12, Million Metric Tons

Crop Year	Corn			Soybeans			Wheat		
	11-12	12-13	12-13	11-12	12-13	12-13	11-12	12-13	12-13
Report Date	09/12	08/10	09/12	09/12	08/10	09/12	09/12	08/10	09/12
Carryin	876.68	849.01	841.06	237.09	260.46	258.13	695.04	662.83	658.73
Production	1004.20	984.98	980.66	307.35	312.40	311.78	892.99	860.42	857.37
Total Supply									
	504.47	508.74	508.84				144.80	134.09	132.09
Feed				225.43	227.03	226.91			
Crush	360.19	352.90	347.86	29.03	29.89	29.82	549.55	549.16	548.57
Other	864.66	861.64	856.70	254.46	256.92	256.73	694.35	683.25	680.66
Total Use									
	139.60	123.33	123.95	53.65	53.38	53.10	198.64	177.17	176.71
End Carryout	16.1%	14.3%	14.5%	21.1%	20.8%	20.7%	28.6%	25.9%	26.0%
Stocks/Use Rat	876.68	849.01	841.06	237.09	260.46	258.13	695.04	662.83	658.73

- Projected world ending stock estimates for corn were increased from 123.33 last month to 123.95 (+.62) MMT in the September report for the '11/'12 marketing year.
- World ending stock estimates were also increased by 3.63 MMT for the '11/'12 marketing year corn.
- World ending stocks for '12/'13 marketing year soybeans were reduced slightly from last month.

- World ending stocks for '11/'12 marketing year soybeans were increased from last month's estimates by 1.71 MMT.
- World ending stock projections for all wheat for the '12/'13 marketing year were reduced .46 MMT.
- World ending stock estimates for all wheat for the '11/'12 marketing year were increased by 1.05 MMT.

- World stocks-to-use projections for the '12/'13 marketing year were increased slightly for corn, reduced slightly for soybeans, and increased slightly for wheat.

Market Strategy

Advancing new crop harvest sales for 2012 corn and soybeans continues to make sense considering price level and the lack of carry being reflected in these markets. The July '13 SRW wheat futures contract is currently bidding within 11 cents per bushel of the life-of-contract high. Currently, in e-trade Dec '12 corn futures are \$7.71; Nov '12 soybeans are \$17.48; and July '13 SRW wheat futures are bidding at \$8.64 per bushel.

For technical assistance on making grain marketing decisions contact Carl L. German, Extension Crops Marketing Specialist.

General

UD Extension Welcomes New Environmental Quality and Management Specialist - *Jennifer Volk, Extension Environmental Quality and Management Specialist*; jenvolk@udel.edu

My name is Jennifer Volk and I am the University of Delaware's new Extension Specialist in Environmental Quality and Management. I am very excited to be joining the Cooperative Extension and the nutrient management team! I received my Bachelor's Degree from UD in Environmental Chemistry and a Master's from UD studying the impacts of land use on water quality. Previously, I worked at the Delaware Department of Natural Resources and Environmental Control in the Watershed Assessment Section. There, I primarily worked with stakeholder groups to develop plans to improve the quality of Delaware's waters. I worked closely with colleagues at our local, state, and federal agricultural agencies to understand the most cost effective best management practices to minimize the loss of nutrients from agricultural lands. In my new role as an Extension Specialist, I look forward to working with Delaware's agricultural industry to identify solutions to our State's environmental

challenges in a way that maintains agriculture's economic viability. If you have questions or ideas about environmental issues impacting Delaware's agriculture, I would love to discuss them with you! Please feel free to call (302-730-4000), email (jenvolk@udel.edu), or stop in to see me the Paradee Center in Dover (69 Transportation Circle, Dover, DE 19901).

Announcements

Upcoming Workshops Aim to Benefit Farmers with Drought-Plagued Fields

Monday, September 17, 2012 8:00 a.m.
Paradee Center
69 Transportation Circle
Dover, DE

Monday, September 17, 2012 7:00 p.m.
Carvel Research and Education Center
16483 County Seat Highway
Georgetown, DE

Nearly 50% of the nation's farmers' crops have suffered losses from extremely dry conditions during the current growing season. Sharply rising prices and crop devastation will affect not just producers themselves, but all channels of the U.S. and global economies. Therefore, it is important Delaware farmers stay informed about risk management and farm safety-net options available to them, in order to keep funds available and cash flow steady.

Two workshops are to be held on September 17, 2012 featuring discussion and instruction on crop insurance, grain marketing, pending ag legislation, and general risk management. Admission is free and each meeting includes complementary risk management related materials and refreshments.

To register for either event **please call 302-424-8340 or 877-673-2767** (registration is not required, but ensures availability of materials for all attendants). Setting aside the time to attend may save you time and money in the future.

University of Delaware Irrigation Field Day

Wednesday, September 19, 2012 9:00 a.m.

UD Warrington Irrigation Research Farm
Corners of Rt. 5 and DE 290 Cool Spring Rd./ Hurdle
Ditch Rd.

4 miles south of Harbeson, DE
(Signs will be posted.)

The University of Delaware Irrigation Program invites farmers, industry and the general public to tour UD's Warrington Irrigation Research Farm on Wednesday, September 19 at 9:00 a.m. UD Irrigation Engineer James Adkins along with Sussex County Agent Cory Whaley and Kent County Agent Phillip Sylvester will present the following:

First Year Experiences with Subsurface Drip Irrigation (SDI)

Tour our newly installed 42 zone SDI research facility and discuss the potential of SDI to irrigate previously uneconomical fields. Join in a candid discussion of the benefits and challenges of SDI in sandy soils and the nuances every farmer should consider before installation.

The Potential for Variable Rate Center Pivot Irrigation (VRI)

Discuss the feasibility, practicality and affordability of VRI as a tool to improve irrigation management in highly variable fields. View a demonstration of the UD 4 tower VRI system and the potential applications of VRI technology outside of irrigation research.

Soil Moisture Monitoring as a Tool to Refine Irrigation Management

View many of the various options to monitor soil moisture levels with a discussion of the pros and cons of each option.

Irrigated Corn, Full Season and Double Soybean Irrigation Research Plots

Discuss the preliminary results of multiyear irrigation research to improve the yields of irrigated agronomic crops.

For more information contact: Karen Adams at 302-856-2585 ext. 540

2012 Delmarva Poultry Conference

Wednesday, September 26, 2012

Ronald E. Powell Convention Center
Ocean City, MD

7:00 - 8:00 am REGISTRATION/CHECK-IN

8:00 am Switchgrass as a Litter Alternative

Bill Brown, University of Delaware
Jennifer Timmons, University of Maryland

8:25 am Managing Water for Performance

Susan Watkins, University of Arkansas

8:55 am Ten Steps to Drier Houses and Better Paw Quality

Jesse Campbell, Auburn University

9:25 am Vegetative Environmental Buffer Update

Jim Passwaters, Delmarva Poultry Industry, Inc.

9:45 am Break/Refreshments/Exhibits

10:15 am Considerations for Attic Vent Installation

Jody Purswell, USDA-ARS

10:50 am Infectious Laryngotracheitis Disease Prevalence Patterns

Dan Bautista, University of Delaware

11:15 am Infectious Laryngotracheitis Control Strategies

David Shapiro, Perdue Farms, Inc.

11:40 am Using Technology to Enhance Management Decisions

Dan Goss, Verible

12:05 pm Flock Supervisors' Award

12:15 pm Lunch and Exhibits

1:30 pm Solar Energy for Poultry Farms

Jim Glancey, University of Delaware

2:00 pm Poultry Grower Experiences with Solar Energy

Dan Heller, Flintrock Farm

Robbie Issacs, Issacs Farm

Terri Wolf King (unconfirmed), Cornerstone Farm

2:45 pm LED Lights - New Technology in Lighting

Susan Watkins, University of Arkansas

3:15 pm Poultry House Water Supply

Jesse Campbell, Auburn University

A block of rooms has been reserved at the *Princess Bayside Beach Hotel* (Standard: \$55 + tax, Bayfront

efficiency: \$69 + tax)
800-854-9785 www.princessbayside.com

Rooms are reserved under:

Delmarva Poultry Conference

Reservations must be made BEFORE August 27, 2012

Registration form and additional information is online at: <http://agdev.anr.udel.edu/weeklycropupdate/wp-content/uploads/2012/08/2012DelmarvaPoultryConference.pdf>

or contact:

Lisa Collins: (302) 856-2585 x702 or lcollins@udel.edu

**Delaware Ag Week
January 14 – 18, 2013**

The University of Delaware Cooperative Extension, Delaware State University Cooperative Extension and the Delaware Department of Agriculture are cooperating to organize this annual week of agriculture-related events.

A schedule of sessions offered during Ag Week will be published in the final issue of WCU for the season.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of September 6 to September 12, 2012

Readings Taken from Midnight to Midnight

Rainfall:

0.82 inches: September 6

0.30 inch: September 8

0.03 inch: September 9

Air Temperature:

Highs ranged from 86°F on September 7 to 73°F on September 11.

Lows ranged from 64°F on September 8 to 48°F on September 11.

Soil Temperature:

75.2°F average

Additional Delaware weather data is available at http://www.deos.udel.edu/monthly_retrieval.html and <http://www.rec.udel.edu/TopLevel/Weather.htm>

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate - Vegetable Crops

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