



Shelby County Extension

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Upcoming Events:

February 7th- Swine Risk Management Class for Women

February 10th- FSQA Class 6-8 PM at Harlan Library

February 12th- Beginning Farmers Conference in Ames

February 22nd- Private Pesticide Applicator Training- 2 sessions

February 26th- Cornbelt Cow-Calf Conference

March 5th- Boots to Heels Rural Women's Conference in Atlantic

March 9th- Iowa Pork Regional Conference in Carroll

Ask the ISU Garden Expert

Get answers to all your yard and garden questions at www.yardandgarden.extension.iastate.edu. For specific questions, call the Hortline at (515) 294-3108, or email hortline@iastate.edu, Monday-Friday from 10 a.m. to noon and 1:00 to 4:30 p.m.

How do you force branches of spring-flowering trees and shrubs indoors?

Forcing can be done as soon as the buds start to swell. Forsythia and pussywillow can be forced as early as February. It's best to wait until March for more difficult-to-force ornamentals, such as crabapples, magnolias and redbuds.

Select branches containing round, plump buds (narrow, pointed buds are usually leaf buds; flower buds are generally larger and have a more rounded shape). Make clean, slanting cuts 1 to 2 feet from the tips of branches with a sharp hand shears. Selectively remove branches that won't destroy the natural shape of the plant. If pruning fruit trees in late winter, gather some of the pruned material for forcing indoors. If possible, collect the branches when temperatures are above 32 degrees Fahrenheit. If the plant material is frozen when collected, submerge the branches in a tub or pail of water for a few hours.

Later, set the branches in a tall container of water and place in a dimly lighted, cool (60 to 65 F) location. Spray or mist the branches two or three times a day to prevent the buds from drying out. Also change the water in the container daily during the forcing period. Daily changes of water should inhibit the growth of bacteria and fungi which could interfere with the absorption of water by the branches. When the flower buds begin to open, move the branches into a bright room. Keep the flowering branches out of direct sunlight and in a cool location to prolong the bloom period. *(continued on next page)*

Extension has so many programs going on each month it's hard to highlight them all in one newsletter! From Ag to 4-H, Family Life to Nutrition and Finance, there's always something happening! If you haven't seen all the programs we offer lately, visit us online (address below) or stop in the office. We're planning programming for 2011 right now, so if there's something you would like to learn about, please let us know. We'd love to hear your ideas!

-Kate Olson, Program Coordinator

DID YOU KNOW??

Ag and Hort Update is also available online!! The current and past issues are archived on our county homepage: www.extension.iastate.edu/shelby. Online newsletters also contain active links to get you to websites and publications mentioned in the articles! Contact me to be added to our email list.

The time period required to force branches into bloom depends upon the plant species and collection date. Forsythia and pussywillow generally take only one to three weeks to force. Magnolia branches may take three to five weeks. The closer it is to the plant's normal outdoor flowering period, the less time it will take to force the cut branches indoors.

When is the best time to prune shade trees?

February through March is generally regarded as the best time to prune most deciduous trees. The absence of foliage at this time of year gives the individual a clear view of the tree and allows the selection and removal of appropriate branches. Also, the walling-off or compartmentalization of wounds occurs most rapidly just prior to the onset of growth in spring. Oaks are an exception. The winter months – December, January and February – are the best time to prune oak trees.

Large amounts of sap often flow from pruning cuts on maple, birch and elm when pruned in late winter. However, the loss of sap doesn't harm the trees. The trees won't "bleed" to death. Eventually the flow of sap will slow and stop.

Cows have defoliated the lower branches on several Black Hills spruce trees. Will the trees recover?

The presence or absence of vegetative buds on the defoliated branches will determine the extent of damage to the Black Hills spruce trees. If vegetative buds are still present on the branches, the buds will break in spring and produce new green growth. The trees could recover fully in two or three years.

If the buds have been destroyed (eaten by the cows), the affected branches will not be able to produce new growth. The branches above the damage will continue to grow. The destruction of the tree's lower branches will not kill the trees, but will negatively impact their appearance and function.

To learn more about caring for Iowa trees, visit the ISU Extension Online Store at

www.extension.iastate.edu/store/ and [search for trees](#). Publications that are available for purchase or downloading include *Selecting an Arborist* - Reiman Gardens, RG 0214; *Pruning Ornamental Shrubs*, PM 1958; *Pruning Trees: Shade, Flowering, and Conifer* - Sustainable Urban Landscapes, SUL 0005; and *Landscape Plants for the Midwest*, PM 0212.

Questions on Starting Seedlings Indoors:

Will a fluorescent light fixture provide sufficient light for seedlings?

A standard fluorescent shop fixture containing two 40-watt tubes will provide sufficient light to grow seedlings indoors. For best results, place one cool white and one warm white tube in each fixture. Place the fluorescent lights no more than four to six inches above the seedlings. The lights should be on for 12 to 14 hours each day.

What type of germination medium should I use to start seedlings indoors?

The germination medium should be lightweight, porous and free of pathogens. Excellent seed-starting media are commercially prepared soilless mixes, such as Jiffy Mix. Use a high quality, well-drained potting mix when transplanting seedlings into individual pots or cell packs.

When should I sow my flower and vegetable seeds indoors?

The growth rate of the seedlings and the outdoor planting date determine when to sow seeds indoors. The crop time (number of weeks from sowing to planting outdoors) for several popular flowers and vegetables are as follows: 10 to 12 weeks - geranium; eight to 10 weeks - petunia and impatiens; six to eight weeks - marigold, pepper and eggplant; five to seven weeks - tomato, cabbage, broccoli and cauliflower; three to four weeks - cucumber, watermelon, muskmelon and squash.

Which types of containers can be used to start seedlings indoors?

Various containers can be used to germinate and grow transplants. Gardeners can purchase flats,

trays, cell packs, pots, compressed peat pellets and other commercial products. Cut-off milk cartons or plastic jugs, paper cups and egg cartons also can be used to start seeds. Previously used flats, trays and pots should be cleaned and disinfected before re-use. Wash the containers in soapy water; then disinfect them in a solution of one part chlorine bleach and nine parts water. Holes should be punched in the bottom of milk cartons, jugs, paper cups and similar containers to allow for drainage.

Do I need to purchase a heat mat to successfully germinate seeds indoors?

Most seeds germinate best when the medium temperature is consistently 70 to 75 F. Placing containers in a warm location in the house, such as on top of a radiator or near a heat register, usually works fine. In cool environments, electric heating cables or mats can be used to ensure warm medium temperatures.

Boots to Heels Rural Women's Conference Scheduled for March 5th in Atlantic

Women in Southwest Iowa are invited to a day of fun, learning and friendship during the fifth annual Boots to Heels Conference on Saturday, March 5th. The conference for rural women runs from 8:00 am to 3:00 pm at the Cass County Community Center in Atlantic.

The conference will start off with South-Dakota farm couple Troy and Stacy Hadrick, also known as Advocates for Agriculture, who will share their message "Discovering Your Influential Power". With a passion for agriculture, and a wealth of experience in dealing with consumers and the media, they will inspire you to find your passion and stand up for what you believe in!

Throughout the day, conference participants will be able to select from fourteen unique topics during four workshop sessions. Break-out workshop speakers will present information about exercise, scrapbooking, gardening, home energy costs, cake decorating and more. Each presenter has a wealth

of knowledge in her respective field and will provide practical tips based on first-hand experience.

Treats for the taste buds also await conference-goers, as breakfast, lunch and a special dessert are served up by several locally-owned businesses. Lunchtime entertainment, door prizes and plenty of time for conversation and networking will truly make this an event not to be missed!

Registration for the entire day, which includes a continental breakfast, lunch, and materials, is just \$30 if postmarked by February 25th. Registrations postmarked after that date are \$35. A special "bring a friend" rate of \$55 for two registrations is also available if postmarked by the 25th. Registration forms are available at the ISU Extension office or may be printed off at <http://www.extension.iastate.edu/shelby/news/Boots+to+Heels.htm>

Swine Risk Management Workshop for Women set for Feb. 7th in Harlan

Women interested in learning about swine marketing are encouraged to attend a free, half-day seminar on February 7th from 1-5 p.m. at the Shelby County Extension Office. ISU Specialists in Marketing, Farm Management and Swine production will present a class on risk management, including hedging, options, Livestock Gross Margin and Risk Protection insurance.

The session is designed for any skill-level and includes hands-on computer model simulation of marketing tools, as well as interactive class discussion to increase understanding of concepts. Past participants have indicated this is a fun, beneficial and easy way to learn basic marketing concepts. Pre-registration is required for this class, and a minimum registration number must be met for the class to be held.

For more information, or to register for this workshop, contact the Shelby County Extension Office, or ISU Swine Field Specialist Dave Stender at 712-225-6196.

New Soybean Disease Guide Available at No Charge Online

A new publication from Iowa State University and the Iowa Soybean Association is designed to help farmers more effectively manage soybean diseases when they appear.

The publication, "Soybean Diseases" (CSI 0004), is a comprehensive compilation of soybean disease and management information. The 36-page guide includes information on 24 soybean diseases and features an overview of the major causes of plant disease; several photos of each disease; a glossary; and quick visual cues indicating which diseases are seed-transmitted.

Copies can be ordered online free of charge through the ISU Extension Online Store at www.extension.iastate.edu/store. Shipping will be covered by ISU Extension.

"This is the first complete publication on soybean diseases Iowa State has produced," said Daren Mueller, coordinator of the ISU Corn and Soybean Initiative and ISU's Integrated Pest Management (IPM) program. "Iowa State has created other issue-specific publications, but this is the first to put all that information in one place."

Mueller said the new publication was developed to mesh with existing scouting resources. "We developed a scouting field guide for soybeans," he said. "But the new publication offers more detailed disease information and outlines management options once you identify the disease using the field guide."

The publication was written by Mueller with ISU Extension colleagues Alison Robertson, plant pathologist; Greg Tylka, nematologist; and Adam Sisson with the ISU Corn and Soybean Initiative. Funding was supplied by the Iowa soybean checkoff, ISA and ISU Extension. For more information, contact Mueller at dsmuelle@iastate.edu or 515-460-8000.

SowBridge Educational Series Enters Fourth Year, Registration Now Open

The successful distance education program SowBridge begins its fourth year in March 2011 and Iowa State University (ISU) animal science associate professor and extension swine specialist Ken Stalder said suggestions from subscribers help maintain the program's value to the industry.

"We asked participants for suggestions on topics and speakers, and are happy to continue providing current content on topics that people are interested in," Stalder said. "SowBridge provides all participants with the opportunity to hear directly from experts, and to contact those experts following the individual sessions."

Stalder, who also is the Iowa contact for SowBridge, said the program is intended for people involved in managing or caring for boars, sows, and/or their litters, including operation owners, employees, technicians, managers, and technical service providers. SowBridge is designed to improve the understanding and application of various tools, techniques and technologies involved in daily care of the breeding herd and piglets.

"People from the United States, Canada, Australia, Ireland and West Indies took part in this past year's program, and they told us they appreciated having all employees participate in the sessions without requiring any travel or other expenses," Stalder said. "With the live phone presentation and slideshow viewed on computer, participants do not need internet access and can take part from anywhere."

Something new this year is a special rate for entities with more than one location. Cost is \$250 for the first registration from an entity and \$125 for each subsequent subscription from the same entity. This provides access to one phone line per session and all program materials for each registration.

Before each session, U.S. subscribers receive a CD containing that session's presentation, along with information on accessing the live speaker presentation. Most participants will call a toll-free

conference line to listen to and interact with presenters. Each session begins at 11:30 a.m. Central Time and lasts approximately 45 minutes.

Stalder said the year-long program is offered by subscription only with a Feb. 14, 2011 deadline to ensure participants will receive materials for the first session on March 2.

A brochure with information and registration form is available to view or print off at the Iowa Pork Industry Center (IPIC) Web site at www.ipic.iastate.edu/SowBridge/2011BrochureIPIC.pdf. Iowa residents who want more information can also call Stalder at 800-808-7675.

SowBridge is sponsored by a group of 11 state universities with Mark Whitney and Lee Johnston of the University of Minnesota serving as program coordinators. The program is coordinated through Iowa State.

Iowa Pork Regional Conference Offers Wealth of Information

Iowa pork producers are invited to learn more about pig health and growth numbers, and get updates on ventilation management and disease research projects at the 2011 Iowa Pork Regional Conferences scheduled for early March. The [Iowa Pork Industry Center](#) (IPIC), Iowa Pork Producers Association (IPPA), and [Iowa State University \(ISU\) Extension](#) cosponsor this annual series at different sites around the state.

IPIC extension program specialist Colin Johnson said that while the conference will offer information for owners and operators, others in the industry can benefit from attending.

“This is a conference that will offer a lot of useful information for lots of folks,” he said.

“Veterinarians, swine industry stakeholders, production employees and contract growers all will find knowledge they can use.”

Johnson said James McKean, ISU Extension swine veterinarian and IPIC associate director, will speak on two topics: “PRRS Control Strategies and

Regional Projects” and “Pig Production after the Removal of Growth Promotion Drugs.”

“Jim’s presentation on PRRS will include tools to reduce impacts, eliminate the virus and minimize opportunities for reinfection,” Johnson said. “He’ll also talk about Draft Compliance Policy Guide 209 and potential impacts on pork production, and offer suggestions and strategies for reducing impacts of losing growth promotants.”

Other speakers are Ron Ketchum of Swine Management Services, speaking on “Benchmarking Sows and the Post-Weaned Pig,” and local ISU Extension swine program specialists who’ll present timely information on ventilation management and the scheduling of a ventilation trailer for on-site training workshops.

This year’s dates of March 8-11 follow the same schedule and will be at the same respective locations as in 2010, and all sessions run from 1 to 4:30 p.m. There is no cost for those preregistered at least two business days prior to each location date. Walk-in registration is \$5 per person, payable at the door.

The closest location to Shelby County will be in Carroll on Wednesday, March 9th at the Carrollton Inn. Other scheduled locations include Sheldon, Nashua and Ainsworth. More information, including a link to the program brochure, is available on the IPIC Web site at www.ipic.iastate.edu/events.html. To preregister, people should call IPPA at 800-372-7675 or 515-225-7675.

IPIC was established in 1994 as a coordinated effort of the colleges of Agriculture (now Agriculture and Life Sciences) and Veterinary Medicine at ISU. Its mission is to promote efficient pork production technologies in Iowa, maintain Iowa's pork industry leadership and strengthen rural development efforts. IPIC focuses its efforts on programs that are integral and complimentary to ISU Extension. Through IPIC, Iowa producers receive accurate and timely information to make their operations more efficient and profitable.

Cornbelt Cow-Calf Conference Celebrates 40th Anniversary on February 26th

The premier educational event in Iowa for cow-calf producers has a big event planned next month and everyone is invited. The Cornbelt Cow-Calf Conference (CCCC) will celebrate its 40th anniversary of providing timely, accurate and important information to the beef cattle industry.

The Iowa Cattlemen's Association (ICA) has moved its annual convention and trade show to the same date and location this year to help publicly recognize the importance of this event. Iowa State University Extension beef program specialist Byron Leu said this year's conference on Feb. 26 will continue its successful traditions.

"The Cornbelt Cow-Calf Conference has been, and will continue to be, successful because it provides information and access to speakers that beef producers have come to expect," Leu said. "The steering committee does a great job of finding highly qualified and respected speakers in the industry who can speak with authority and sincerity on the topics pertinent to Midwestern operations." Leu has been part of the volunteer committee that oversees the conference for 25 years, both on the general committee and as chair of the program committee, and said the event has survived and thrived because of its dedication to the producers and the industry.

"The trade show has averaged 65-70 exhibitors for several years, and this consistency gives attendees the opportunity to hear, meet and share ideas with researchers, other area cattlemen, and industry and agency representatives in one location," Leu said. "One summary indicates more than 500 different exhibitors have participated through the years." In its early days, the CCCC's presentation and exhibits were production-oriented, Leu said. Now the topics are much more varied, which reflects the changing face of the industry to fewer farms and fewer cattle operations. One thing that hasn't changed much, however, is attendance. "We count between 500 and 550 in total attendance annually, including a consistent

percentage of Iowa's cow-calf producers," Leu said. "That's a good indication to us of the program's value to producers."

Of course this kind of programming and history couldn't happen without dedicated longtime volunteers, like Dale Uehling, Allan Seim, Steve Banyas, Darrell Limkeman, and the other committee members, Leu said. Former ISU Extension area livestock field specialist Cliff Iverson got the ball rolling in the early 1970s with a format and agenda very similar to the CCCC of today. Originally held in the old Ottumwa Coliseum, the CCCC now is held in the larger Bridge View Center in Ottumwa, which allows for more educational sessions and exhibit space.

This year's conference begins with registration and the open trade show at 7:30 a.m. and the welcome at 9 a.m. Admission is \$15 which includes lunch and conference proceedings. No preregistration is necessary. A conference brochure is available at the Shelby County Extension Office, or can be viewed at www.iowabeefcenter.org/events/2011CCCC.pdf.

For more details on the two-day program including the ICA components, see the schedule at www.iowabeefcenter.org/events/2011CCCCICA.pdf.

IBC was established in 1996 with the goal of supporting the growth and vitality of the state's beef cattle industry. It comprises faculty and staff from ISU Extension, College of Agriculture and Life Sciences and College of Veterinary Medicine, and works to develop and deliver the latest research-based information regarding the beef cattle industry. For more information about IBC, visit www.iowabeefcenter.org or check out the IBC blog at <http://blogs.extension.iastate.edu/iowabeef/>.

..and justice for all

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Cooperative Extension Service, Iowa State University of Science and Technology, and the United States Department of Agriculture cooperating.

ISU researcher to get to root of many aspects of sustainable organic vegetable production

As the number of organic vegetable growers continues to increase, there has been startlingly little research done on the sustainability of these organic practices. An Iowa State University researcher is now examining which organic vegetable growing practices are best for the soil, water, yields and even nutrition.

Kathleen Delate, professor of horticulture and agronomy, is undertaking perhaps the most comprehensive study of organic vegetable-growing practices by looking at the use of cover crops, manure, tillage and mulch. "We are measuring a lot of things," said Delate. "We are hoping to provide organic producers with science-based information that they can use to make wise decisions affecting the sustainability of their operations. And we think much of this data can be used for conventional crops as well." Using 36 farm plots that each employ different combinations of variables, Delate hopes to discover which practices work best. The vegetables in the research include tomatoes, broccoli, onions, beans, squash and lettuce. The vegetables will be grown in rotation with one crop planted in the spring, followed in the fall by another.

"The first parameter we're looking at is cover crops. For cover crops, we are using hairy vetch and rye," said Delate. "That combination is one that we've had really good luck with for our vegetable farming." In the research, the rye and hairy vetch are planted in the fall after the second vegetable crop is harvested. The cover crops are allowed to stay in the ground all winter and are then destroyed in the spring prior to the first vegetable crop planting. Cover crop systems have been shown to improve soil quality and Delate hopes that they have other advantages. "One of the theories we'll be testing is that cover crops can actually attract beneficial insects," said Delate.

"We also have some data that the straw from the cover crop could prevent some aerial diseases, but it also keeps the soils moist, which could lead to some

root rot and a whole suite of soil quality issues. We're eager to see the outcomes," she said. In keeping with the organic nature of the research, rather than destroying the cover crops with chemicals, Delate's research team will use a large roller to break the plant stems of the plants. "The blades of the roller crush and kill the cover crops," said Delate. "It physically breaks the transfer of water and nutrients in the plant." None of the cover crop will be harvested and the plants will remain on the field and will add to the organic matter in the soil, said Delate.

The second parameter is the use of composted manure. Organic farming requires that farmers compost manure and apply it at least four months prior to harvesting. Delate's team will see if these practices have an effect on soil quality and nutrient runoff. The third input being measured by the Delate study is till versus no-till farming. Delate says that using no-till practices may be challenging. The crushed cover crop may present problems as vegetables are planted through it.

The final parameter is using plastic mulch in the crop production. Using plastic mulch involves growing crops through slits in thin, plastic sheets. Plastic mulch provides benefits such as soil moisture retention and weed suppression, and allows for earlier planting dates. During the research, soils will be tested regularly using lysimeters from the United States Department of Agriculture's Agricultural Research Service National Laboratory for the Agricultural and the Environment to see if nutrients are leaching through the soil.

One other aspect of the study involves food properties of the organic produce. "On top of everything else we're studying," Delate said, "our colleagues in Florida are going to run a nutritional analysis, including vitamins and minerals, of the crops in this study."

The research is conducted in partnership with the University of Florida, Gainesville, and funded by the Department of Agriculture through the National Institute for Food and Agriculture.