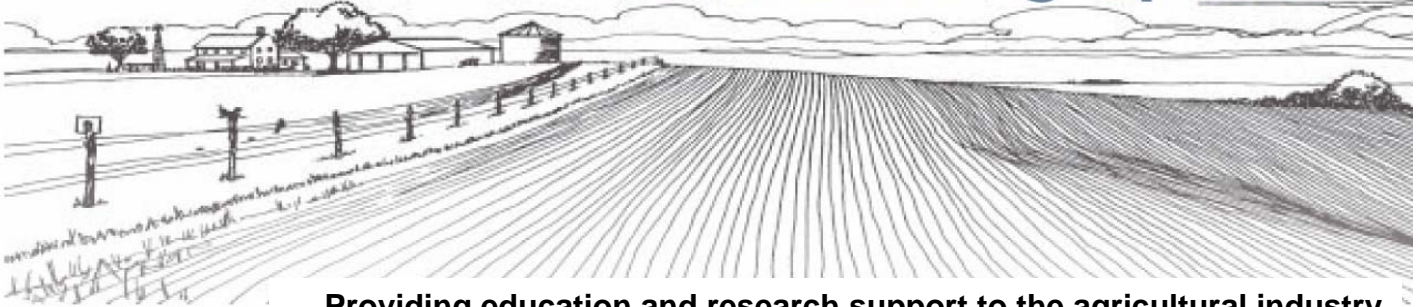


Extension Ag Update



**Providing education and research support to the agricultural industry
November / December 2008**

How to Cope with Stress on the Farm

Robert "Chip" E. Petrea, Extension Specialist, Farm Safety, Department of Agricultural and Biological Engineering, (217) 333-5035, repetrea@uiuc.edu

Accidents are a major cause of death and injury among agricultural workers. A study by the National Institute for Occupational Safety and Health showed that farmers also have the highest rates of death as a result of stress-related conditions. Heart and artery disease, hypertension, ulcers and nervous disorders top the list of killers.

America's farmers and ranchers have to cope with more stress than the average worker. Droughts, floods, pests, long hours, financial concerns and other complications can lead to feelings of isolation and frustration.

Experts agree that there are steps people can take to help to cope with stress in their lives. These are not meant as "instant solutions." If one feels overwhelmed, there are many people and organizations available to listen and help.

To help reduce stress, the West Virginia University Extension Service and the National Safety Council suggest the following:

- Acknowledge that stress exists in your life.
- Don't minimize your reactions to stress. If you keep stress buried inside, it is likely to create mental and physical problems.
- Talk about your problems with family, friends, clergy or professional counselors. This will help you clear your head and focus on eliminating or reducing anxiety and stress-related ailments.
- Eat well-balanced meals and try to limit caffeine and alcohol intake. If you smoke, quit.
- Get enough sleep. If you have trouble sleeping, try light reading or listening to relaxing music.
- Keep all machinery in good condition. Eliminating possible breakdowns will help reduce stressful moments.

RESEARCH RESULTS

Managing Cover Crops with Rolling and Crimping Techniques

Laura McGinnis, USDA, ARS

www.ars.usda.gov/is/AR/archive/sep08/roller0908.htm

Rolling hay, rye and other cover crops could be the fastest way for some farmers to prepare their fields for planting. That's thanks to rolling machines--developed by Agricultural Research Service (ARS) scientists--that can quickly flatten mature, high-biomass cover crops such as rye. Each roller consists of a long cylinder adorned with a series of thick, blunt, steel crimping bars, each about one-quarter-inch thick. As a standard tractor pulls the roller over the field, pressure from the bars flattens and damages the cover crop without cutting or uprooting it. Within three weeks, the rolled cover crop dries out, forming a mat of dead biomass into which farmers can plant crops

Since 2001, ARS has been conducting research to find the best crimping roller design for conditions in the southeastern United States, and the benefits from this research are gaining recognition. ARS scientists Ted Kornecki and Randy Raper and their colleagues at the agency's National Soil Dynamics Laboratory (NSDL) in Auburn, Ala., compared three different roller designs. The first roller has a traditional design with long, straight, horizontal bars. The second has diagonal bars that curve around the roller. The third has a smooth drum attached to a crimping bar that mashes the rye as the machine moves forward.

NSDL scientists, who developed the curved-bar and crimping roller designs, found that all three models killed enough rye--90 percent or more--to enable farmers to begin planting cash crops in the field within three weeks. The crimping-bar roller yielded the best results. The scientists also found that the curved-bar and the crimping rollers provided smoother rides than the traditional straight-bar roller. Future studies will help scientists maximize the efficiency and comfort of these machines. The one-pass process saves money, reduces soil erosion and runoff, helps control weeds, conserves water in the soil and decreases or eliminates the need for herbicides.

RESOURCES TO CONSIDER

Publications Plus --*University of Illinois Agricultural and Horticultural Publications*

Call 1-800-345-6087 or order on the web www.PublicationsPlus.uiuc.edu

It's a one-stop shop for a current catalog of research-based information (Mastercard and VISA accepted)

Illinois Invasive Plant Posters

New Illinois Invasive Plant publications are available from the University of Illinois, Illinois Natural History Survey, USDA-APHIS-PPQ, and the River to River Cooperative Weed Management Area. There are five posters in the collection. The large poster is 17" by 38" highlighting the four major habitats of Illinois (grassland, woodland, wetland, agriculture) and the top four invasive plants in those habitats. In addition, there are four smaller (8.5" by 11") posters corresponding to the four habitats on the large poster. Each small poster showcases 8 to 12 plants with a photo and distribution in Illinois on the front and information on identification and why the plant is considered invasive on the back. These publications are free of charge. If you would like copies of the publications, please contact Dawn Refsell at drefsell@illinois.edu with your name, shipping address and the quantity and titles you are requesting

Abnormal Corn Ears Poster (ACE-1) and webpage

Peter Thomison and Allen Geyer, The Ohio State University

<http://agcrops.osu.edu/corn/documents/AbnormalCornEarsPoster.pdf>

Do you know what these look like? Blunt ears (“beer can ears”), “silk balling”, hail damaged ears, crazy top, smut, and barrenness. To help growers sort out various ear disorders and their possible causes, we’ve prepared a poster “Abnormal Corn Ears” and an accompanying web page “Troubleshooting Abnormal Corn Ears and Related Disorders”. In the poster, ten abnormal corn ears with distinct symptoms and causes are highlighted.

The webpage, “Troubleshooting Abnormal Corn Ears and Related Disorders” at <http://agcrops.osu.edu/corn/EarAbnormalities.php> provides more detailed diagnostic information on various corn ear disorders.

The poster can be downloaded in one-page form from the website or you can order a 26 x 33 inch poster for \$10 plus shipping from: The Ohio State University, Communications and Technology, Media Distribution, 216 Kottman Hall, 2021 Coffey Road, Columbus, OH 43210-1044 E-mail: pubs@ag.osu.edu Phone 614-292-1607 Fax 614-292-1248

Practical Weed Science for the Field Scout--Corn and Soybean, IPM1007

K.W. Bradley, et. al

<http://tinyurl.com/6oLmLo>

This field reference guide offers dozens of close-up photos and specific identification keys of important weeds. It also includes discussions on deciding whether an economic threshold exists for implementing a weed management procedure. Lastly, there is information on crop response to herbicides.

For a copy, download it from the website or order a copy from Extension Pubs., Univ. of Missouri, 2800 Maguire Blvd., Columbia, MO 65211 Fax: 1-573-884-5038. Phone: 1-573-882-7216.

Wisconsin Agricultural Biogas Casebook

www.focusonenergy.com/files/Document_Management_System/Renewables/2008BiogasCaseStudy.pdf

This online report includes 17 case studies of dairy farm anaerobic digesters that produce renewable energy. These studies are for those interested in digesters and to provide insight on how to implement their own system.

Using Manure Nutrients for Crop Production - PMR 1003

John Sawyer, Department of Agronomy, Iowa State University

<http://www.extension.iastate.edu/Publications/PMR1003.pdf>

The publication has in-depth discussion on managing manure nutrients for crop production - especially manure nutrient characteristics, similarity/differences to fertilizer nutrients, manure nutrient processing in soils, and management practices that can affect nutrient supply and success as a nutrient resource for growing crops.

SOIL! Get the Inside Scoop

Help kids explore the world of soil with a new book, written by soil scientists, specifically for children ages 9-12. This 36-page, full-color book is packed full of color images and fascinating facts to help students understand soils, including a look at the scientists who work with soils. Order your copy from the Soil Science Society of America at www.soils.org/pdf/soil-scoop.pdf; by phone 608-268-4960 or email books@soils.org

Soil Science: Step-by-Step Field Analysis

This guide describes practical procedures and tips for conducting "real-world" site-specific activities for improved natural resource management. The 255-page book features a water-resistant softcover and coil binding -- perfect for field work. Order your copy from the Soil Science Society of America at portal.sciencesocieties.org/Purchase/SearchCatalog.aspx; by phone 608-268-4960, or email books@soils.org

INTERNET RESOURCES

Copies of **2008 University of Illinois Corn, Soybean, and Forage Variety Trials** are available at local Extension offices or on the web.

- Corn, Soybean, Small Grains, Forage Performance Testing
<http://www.cropsci.uiuc.edu/vt/>
- Varietal Information Program for Soybeans
<http://www.vipsoybeans.org/>
 - includes insect and disease resistance data

Illinois Farm Economics Update: Impact of Current Financial Crisis on the Ag Economy

<http://www.farmdoc.uiuc.edu/index.html>.

The recent turmoil in financial markets is very large by any reasonable standard of comparison. The farmdoc team prepared the following articles to illustrate the impact of the current financial crisis on the agricultural economy and decision-making. Focus is devoted to five main topics – the nature of the financial crisis, impacts on the short-term availability of credit, the connection between the financial meltdown and commodity prices, crop insurance decisions, and land rental and lease negotiations.

Articles include:

- The Current Financial Crisis: How Did We Get Here?
- Financial Markets in Agriculture
- Implications of Credit Market Problems for Crop Prices
- Increased Probabilities of Crop Insurance Payments
- 2009 Rental Decisions Given Volatile Commodity Prices and Higher Input Costs

The Insurance Policy: Protecting Your Business by Understanding Your Policy,

<http://www.btny.purdue.edu/Pubs/PPP/PPP-49.pdf>

If there is a pesticide spill on your farm – is the clean-up covered? If the spill occurs on a road – is the clean-up covered? This is the type of discussion this publication encourages you to have with your insurance agent to fully understand what your policies do and do not cover.

Does pasture-finished beef make the grade? (Research Brief #77)

www.cias.wisc.edu/wp-content/uploads/2008/10/rb77.pdf

Finishing beef animals on pasture can potentially reduce the overhead costs of facilities and equipment compared to confinement finishing. Researchers at UW-Madison set out to learn if beef animals finished on pasture can make the Select and Choice quality grades for conventional meat markets.

Forage Fescues in the Northern USA

www.cias.wisc.edu/wp-content/uploads/2008/10/fescuefinalweb.pdf

Tall fescue, meadow fescue and festulolium have potential value as forages for grazing operations in the northern USA. Meadow fescue is the most cold tolerant of these grasses, with excellent forage quality and palatability, and relatively high drought tolerance. Tall fescue has the highest yield potential, good palatability for soft-leaf varieties and excellent heat and drought tolerance. Festulolium exhibits high forage quality and good summer production. This publication focuses on the use and culture of meadow fescue, tall fescue and festulolium, with additional information on their history and introduction to North America

Tall Fescue On-line Monograph

forages.oregonstate.edu/is/tfis/book.cfm?PageID=372

This on-line monograph describes historical, current, and potential future uses of tall fescue, one of the most important forage, turf, and soil conservation species in the world

Minnesota Greenbook 2008: A Multitude of Ideas to Sustain Agriculture

<http://www.mda.state.mn.us/protecting/sustainable/greenbook2008.htm>

The annual edition of the Minnesota Department of Agriculture's (MDA) Greenbook. Published for 19 years, the Greenbook highlights the results of innovative demonstration projects that test new approaches to marketing agricultural products as well as raising crops and livestock. The demonstration projects are funded by the MDA's Sustainable Agriculture On-Farm Demonstration Grant program, which targets farming practices that rely more on renewable resources, enhancing the environment, and increasing profitability. It highlights 22 projects in five major topic areas: alternative markets and specialty crops; energy; fruits and vegetables; cropping systems and soil fertility; and livestock.

Organic Agriculture

www.organicag.org

Research conducted by the Leopold Center for Sustainable Agriculture and other institutions is summarized on this new website. There are over 70 research projects covering topics from animal health and welfare issues to information about poultry, meat, grains and fruit and vegetables.

An Illustrated Guide to Sheep and Goat Production

attra.ncat.org/attra-pub/PDF/sheep_illus.pdf

Sheep and goats are can be valuable and enjoyable additions to many farms, providing meat, milk and fiber products, as well as brush control and pasture improvement services. This new, basic and graphic introduction to sheep and goat production discusses animal selection, feeding, breeding and young stock, equipment and handling, and marketing.

EDUCATIONAL OPPORTUNITIES

University of Illinois Agriculture Events

New programs are being confirmed every day. Keep in touch with your Extension Office for programs addressing the topics that interest you and are offered in your County. To find your counties website go to: <http://web.extension.uiuc.edu/state/findoffice.html>

Statewide University of Illinois Extension Calendar Website

<http://web.extension.uiuc.edu/state/calendar.cfm>

To search for programs throughout the state, check out Extension's searchable calendar. Search by location, topic or date to find a program of your interest.

AG FACTS

Adoption of Herbicide-tolerant (HT) crops in 2008

- 92 percent of soybean acreage
- 63 percent of U.S. corn acreage
- 68 percent of cotton acreage
-

Adoption of Insect-resistant (Bt) crops in 2008

- 63 percent of U.S. cotton acreage
- 57 percent of U.S. corn acreage
-

Adoption of crop varieties with more than one GE trait (stacked traits) in 2008

- 40 percent of U.S. corn acreage
- 45 percent of cotton acreage
-

Worldwide, more than 280 million acres of GE crops with HT and/or Bt traits were planted in 23 countries in 2007, with the U.S. accounting for about 50 percent. Argentina, Brazil, Canada, India, China, Paraguay, and South Africa accounted for about 49 percent.

SOURCE: www.ers.usda.gov/AmberWaves/September08/Findings/GECrops.htm

About the Ag Update Newsletter

The Ag Update Newsletter is a bi-monthly newsletter providing education and research support to the agricultural industry. Current and past issues may be found at the following website <http://www.urbanext.uiuc.edu/agupdate/index.html>

Contact your county Extension office and request to be put on their agricultural mailing list to receive the local agricultural newsletter and notices about upcoming agricultural events near you. To find your counties location, phone and website go to: <http://web.aces.uiuc.edu/ve/>

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