NOAA WEATHER RADIO

NOAA Weather Radio not only provides you with a current forecast and weather conditions for your area, but it can also save your life.

Every year people around the country are saved because they received a timely warning from a NOAA weather radio. NOAA Weather Radio broadcasts weather and hazard information for every county in the United States 24 hours a day.

Broadcasts are made over seven channels, each covering a three-to-seven county area. The frequency range for the seven channels is centered around 162.450 mhz.

Wisconsin has 21 transmitters that provide at least partial weather radio coverage in the state.

With summer arriving in the Badger state, you need to be aware of potentially hazardous weather situations quickly. The best way to keep abreast of rapidly changing summer weather conditions is to purchase a NOAA weather radio.

A NOAA weather radio can be purchased at most major electronics stores. The average price can range anywhere between $30-80, depending on the features included on the radio. Any of the radios regardless of the price will provide you with up to the minute warnings and statements. However, it is always a good idea to purchase a radio with some type of automatic alert system and a battery backup.

Some of the more expensive radios will include the new Same/Specific area message Encoding/Technology. With Same technology it is even easier to get specific county severe weather information. You can program your weather radio to provide a tone alert only when weather affects your county.

You can program the radio to alert you to multiple counties and specify only specific types of warnings or watches. Programming multiple counties is especially handy if you live and work in different counties.

The National Weather Service strongly recommends that all homes, schools, businesses and other places where groups of people gather should have a tone-alert weather radio.

Every year advance notice of severe weather such as thunderstorms, flash floods and tornadoes has proven to be a life saver.

Adapted from WISC-TV.

It is necessary to the happiness of man that he be mentally faithful to himself.
Thomas Paine

REPORTS FROM THE FIELD

Temperatures. Since our last report two weeks ago, the weather looks as if it has finally taken a turn in the right direction. Early last week temperatures began to rebound near normal and precipitation has been in the adequate to surplus range for most major growing regions in the state. As for Growing Degree-Days (GDD) we are still currently running behind our historical averages and much behind the 2001 growing season. Depending on your location in the state, Growing Degree-Days range from around 200 GDD in the north to about 400 GDD in the south and central growing areas (base temperature of 40°F). Based on these data and stages of plant growth in the field, we project that we are about 7-10 days behind normal but this can easily be made up given some above average temperatures.

Plant Growth. In the south and central growing areas plant growth has really taken off over the last week. We are starting to see signs of premature hook development (roughneck) especially along bed edges of the variety Ben Lear and newer plantings. Other varieties are ranging from ¼" bud elongation on bed interiors to over one inch of new growth near ditch edges. Plant growth is somewhat variable on some Stevens beds particularly where some spring injury occurred due to exposed vines earlier in the year. Although the frost protection season started only about two weeks ago, northern growers are also starting to see some plant movement ranging from cabbage head to ½" new growth along bed edges.

Insect activity. Along with the plant growth comes increased insect activity. Last week we were finding very young fireworm, sparganothis, spanworms of various sorts and cutworms (i.e. False Armyworm and Blossom worm). This week, all of these insects have increased in size and number and some webbing from fireworm and sparganothis is now becoming evident. Growers in the south and central should be on the look out as insecticide treatments will be common by the end of the week. Products of choice for this first go-around will most likely be one of the following depending on the insects that you're finding. Imidan, Orthene, or Lorsban have proven to be very effective for early season pests and are priced from lowest to highest per acre with Lorsban being the most expensive. Northern growers are probably at least one week behind the south in terms of plant growth and insect development.

Grass Control. On producing beds growers now have a choice between the old stand by Poast or Select, a new grass herbicide registered last year by the Valent Company. When comparing prices on a per acre basis, we find that growers can save some money using Select and still achieve the results that Poast offered. Check with your local Agrichemical dealer for cost savings, you might be surprised.

Tim Dittl, *Ocean Spray Cranberries*

There is a humor that heals, a humor that helps, and a humor that harms and hurts. And one kind of humor that hurts is the humor that brings embarrassing attention to adverse personal attributes and physical features; the humor, for example, that ridicules what people can't help: the "baldy," "fatty," "skinny," "stand-up-shorty" kind of humor that is, at best, unkind, and is, at worst cruel and crude and cutting.
Richard L. Evans

NEW FRUIT RESEARCHER AT UW-MADISON

My name is Kevin Kosola, and I am a new faculty member in the Horticulture Department at the University of Wisconsin, Madison. As I start my first full field season in the position, I would like to introduce myself and my research program to those of you that I have not met yet. I was hired as a fruit crop physiologist and look forward to bringing my experience in root biology and environmental physiology to bear on fruit production in Wisconsin.

Research in my lab will focus primarily on the root biology of cranberry and other perennial fruit crops. Those of you working with cranberries may find some familiar faces in the lab- Beth Workmaster is the lab manager, and Dana Baumann is a master's degree student. Both are experienced cranberry researchers. We are establishing studies of cranberry root biology in the field, greenhouse, and laboratory. We are currently studying the effects of variation in water table depth on cranberry root growth and mortality in the greenhouse and the field.

I teach the undergraduate class on fruit crop production, one of the core production class options for horticulture majors. My main goal in this class is to introduce students to the unique challenges and opportunities of temperate fruit production. I will be bringing classes on field trips to talk to growers; it is important for students to see the integrated nature of the biology and business components of fruit production.

My research background is quite broad. I did my PhD work at the University of California, Davis, studying tomato nitrogen uptake and metabolism in the Vegetable Crops department. I then moved on to Florida and citrus, studying factors controlling citrus root growth and mortality; this was a postdoctoral position at the University of Florida Citrus Research and Education Center. A change in climate and crop plants characterized my subsequent move to Michigan State University. I studied the role of roots in weed competition and in hybrid poplar responses to defoliation by gypsy moths. I also had the opportunity to participate in a vegetable cover crops extension and research program. I believe this broad range of crops and research experience provides the background necessary for integrated research with perennial fruit crops under a wide range of conditions. We will be carrying out field surveys of rooting depth and mycorrhizal colonizations this summer; I hope to have the opportunity to meet you.

Kevin Kosola, UW-Madison Dept. of Horticulture

DISPOSAL OF PESTICIDES AND CONTAINERS

To avoid having to dispose of a tank load of the wrong pesticide, check out the job carefully before selecting the pesticide. After you have selected the proper pesticide, mix only enough for the job. Preventing a pesticide surplus is the best way to prevent a disposal problem.

Despite your best efforts, however, you cannot always avoid surplus pesticides, and you must take steps to dispose of them properly.

If you mix too much pesticide for a job, try to find other areas with the same pest problem and use any extra tank mix or rinse water on these areas. In some cases, small amounts of surplus pesticide can be diluted and reapplied to the treated area. Take extreme care to prevent excessive residues, especially with herbicides, by making sure that the total application rate does not exceed the maximum rate for which the pesticide is labeled.

To dispose of large quantities of pesticide, contact the Wisconsin Dept. of Agriculture, Trade and Consumer Protection for assistance in properly disposing of excess pesticides in an environmentally safe manner.

So-called empty pesticide containers are not really empty. They still contain small amounts of pesticides, even after they have been properly rinsed. All containers, regardless of their type, should be rinsed three times before disposal. The rinse water should be dumped into the sprayer tank. Otherwise, the rinse water must be treated as a surplus pesticide and disposed of properly. Rinse water should never be dumped on the ground. Use the following rinse-and-drain procedure to prepare containers for disposal:

1. Empty the container into the spray tank and drain in a vertical position for 30 seconds.
2. Refill the container one-fifth to one-fourth full with rinse water or other recommended solution.
3. Rinse thoroughly, pour into the spray tank and drain in a vertical position for 30 seconds.
4. Repeat steps 2 and 3 until the container has been rinsed three times. Empty the container into the spray tank and drain in a vertical position for 30 seconds.

Rinsed containers should not be used for any other purposes except where the label allows the container to be reused or recycled.

Disposal of any pesticide container or pesticide-related waste by open dumping or open burning is illegal. Although empty containers that have been properly cleaned can legally be placed in a sanitary landfill, recycling in one of the container recycling programs is the preferred method of disposal. For assistance in disposing of rinsed containers, contact the Wisconsin Dept. of Agriculture, Trade and Consumer Protection.

Pesticide containers that are not empty cannot be accepted at a sanitary landfill. Some of these waste pesticides are classified as hazardous waste and must be managed according to applicable state and federal laws.

SPILLED MATERIALS

Should an accidental spill occur, follow these easy steps to clean up the spilled pesticide safely:

1. Control the spill by stopping the source of the spill. For example, if the spill is due to a broken hose, close the valve or temporarily patch the hose to stop the leak. (Remember to use the appropriate personal protective equipment when doing this.) If the source of the spill is a container leak, place the leaking container in a larger, watertight container.
2. Contain the spill so that it does not spread and get into water sources. This can be done by building a levy around the spill with materials that are specially designed to stop pesticide spills from spreading. Containment materials are available from chemical dealers and should be kept on hand in case of an emergency.

3. Clean up the spill immediately. Absorbent materials like ground corncobs, pet litter or sawdust should be spread on the spill area to soak up the pesticide. Next, the contaminated material must be shoveled into a leakproof container for proper disposal. Do not flush the area with water or use a cleaning solution until talking with trained personnel; this will help avoid the risks of chemical reaction and groundwater contamination.

4. Call the Department of Natural Resources to report any spill and to find out what, if any, reports need to be filed, and for any technical assistance. They will be able to identify what safety steps are necessary to thoroughly decontaminate the ground and how to dispose of the contaminated materials properly.

To help prevent exposure during cleanup, workers should wear the appropriate personal protective equipment. To help prevent exposure in the future, cleanup work clothes and personal protective equipment should be cleaned before work resumes. Finally, take corrective measures to help ensure that another pesticide spill will not occur.

Extracted from Pesticide Application Safety by David E. Baker, Dept. of Agricultural Engineering, University of Missouri-Columbia.

There is available a wide selection of books which will give development to the aesthetic and the cultural. Music, drama, poetry, fiction, and other cultural fields are available to everyone. The contributions come to us from great minds and great hearts and great sufferers and great thinkers.
In addition to all the serious study there should be time for just plain reading for pleasure. There are countless works of fiction which hilp us to understand ourselves and others better, and to get real pleasure in the learning.

S.W. Kimball

MEASURING SOIL pH

Many of the variables of growing cranberries are not manageable. Weather is a primary variable that we can do nothing about. We can manage spring and fall frosts by sprinkling and we can cool vines in the summer by irrigating, but beyond that the weather happens. We can't control summer heat, or lack of heat nor sunshine or lack of sunshine. We can't control populations of insects that move into marshes, but we can manage their populations in beds with pesticides.

One aspect that is somewhat manageable is soil pH. We know that keeping soil pH around 5.5 will provide optimal vine growth. We also know that conversion of ammonium to nitrate by soil microbes is minimal at 5.5 or below. Thus, managing soil pH is important.

Measuring soil pH is relatively easy. You can take samples and send them to a reputable lab. When you take annual soil samples soil pH is one parameter that is measured and reported. You can also measure pH yourself by mixing equal volumes of soil and distilled water, stirring the "mud" until well mixed, waiting 15-30 minutes and then taking measurements with a calibrated pH meter.

We asked the question "Does it matter where and when you take soil samples for measuring pH?" To answer the question we have taken soil samples monthly through the summer on individual beds at five marshes. We took 12 subsamples in a 15 meter grid and measured each subsample individually.

We found that it does make a difference where you sample. In a single bed we sometimes found differences in pH of greater than 1 pH unit. Usually the variability was less than half a pH unit. We did not find any consistent trends over time at a given location or set of locations. The time of sampling does not seem as important as where.

What does this mean for you? When you take soil samples to measure pH it is important to take samples from several locations in a bed and then pool the samples. As you take more samples and mix them together you will end up with a number that more accurately reflects the true soil pH. Taking one or two samples in a bed may give you the wrong answer. This may also influence the results of tissue tests, thus underscoring the importance of taking samples from many locations with a bed.

Teryl Roper, UW-Madison Extension Horticulturist

CRANBERRY FIELD DAY

The annual cranberry field day sponsored by the Wisconsin State Cranberry Growers Association and the University of Wisconsin-Extension will be held at Tamarack Flowage Marsh near Three Lakes on Wednesday August 14. More information will be sent to Wisconsin growers through the growers association.