CALENDAR OF EVENTS

8/26  NWMHRS Open House & 25th Anniversary Celebration
8/26  Vineyard Management Meeting
     NWMHRS
9/1   Pesticide Container Recycling Deadline
9/30  MSHS Scholarship Deadline
12/7-9 Gt. Lakes Fruit, Vegetable & Farm Market Expo.
     Grand Rapids, MI -- DeVos Center
1/18-19, 2005 NW MI Orchard & Vineyard Show
     Grand Traverse Resort

NWMHRS ANNUAL OPEN HOUSE AND 25TH ANNIVERSARY CELEBRATION
The NW Michigan Horticultural Research Station's 25th Anniversary Celebration will take place on August 26, 2004. Activities will include tours, displays, social time, dinner and a special commemorative program. Please join us for this special celebration. The schedule is as follows:

3:00 p.m.  Grounds open in exhibit area
3:00-5:00  Researchers present in exhibit area to discuss research activities and results
3:15-5:00  Wagon tours of the station. A wagon will leave every 10 minutes for a 40 minute tour
5:00-6:00  Social hour
6:00-7:15  Dinner
7:15-8:15  Special 25th Anniversary program

Cost for the dinner is $10 per person. Tickets are available at the Leelanau County Extension office and the NWMHRS, or to reserve tickets for pick up at the door, call the Leelanau County Extension office at 231/256-9888.

VINEYARD MANAGEMENT MEETING DURING OPEN HOUSE

There will be a meeting for grape growers about 3:30 pm on the Aug 26th day of the 25th Anniversary open house of the NW station. Dr. Tom Zabadal will be on hand to demonstrate and discuss several topics:

(1) Vine recovery from winter injury in a vineyard not pruned in 2003
(2) Use of vertically divided canopies to control vigor and manage vine canopies
(3) Crop estimation and adjustment - two approaches
(4) Adjusting vineyard and winery practices in an unusually cool growing season - a group discussion
(5) Mechanization of summer pruning
(6) Influence of vine spacing on vine performance and fruit quality.

PREDICTED PEAK APPLE HARVEST DATES 2004
Philip Schwallier, District Horticulture Agent, CHES Coordinator
Apple maturity for 2004 is quite mixed across the state. The southwest and southeast part of the state experienced early warm temperatures and an earlier than normal bloom. Bloom was as much as 6 days early. Cooler weather set in and bloom development slowed. Northern areas bloomed closer to normal. Cool weather continued to occur after bloom and throughout the thinning season into June.

Early bloom and cool weather give us predicted harvest dates roughly 1 week ahead of normal in the southern areas and closer to normal in the northern areas (Table 1). These predicted harvest dates are for the center or peak harvest of these varieties. This year the state will harvest apples roughly one week ahead of normal and 12 days ahead of last year.

<table>
<thead>
<tr>
<th>Table 1. 2004 Predicted Peak Harvest Dates.</th>
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<tr>
<td>Full Bloom Date</td>
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<tr>
<td>Station</td>
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<tr>
<td>SWMREC</td>
</tr>
<tr>
<td>Deerfield</td>
</tr>
<tr>
<td>Flint</td>
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<tr>
<td>Peach Ridge</td>
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<td>Ludington</td>
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<td>NWMHRS</td>
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POST HARVEST PRUNING IN CHERRIES
By Jim Nugent, MSU Extension and Jim Flore, Dept. of Horticulture, MSU

For over a decade the cherry industry has been doing more and more pruning of bearing trees between cherry and apple harvest. This is a time of year when we have labor available and don't have to fight the inefficiencies inherent with dormant pruning in the snow and cold.

To date we have observed no negative impact on winter hardiness of trees, nor any effect on spring flower bud hardiness. However, because of the concern for potential increased susceptibility to winter injury and possible influence on next season's growth, we suggest the following precautions:
1. Do not prune after mid September.
2. Avoid exceptionally heavy pruning, particularly of sweet cherries, at this time.
3. Do not prune young tart or sweet cherries that have not filled their space in late summer.

Having said that extra heavy pruning should be avoided in late summer, I want to comment that many sweet and tart orchards need exactly that! Too many orchards are getting too tall for the spacings at which they are planted. The result is excessive shading in the lower canopy which results in loss of lower fruiting wood, trees too tall to get adequate spray coverage for controlling cherry leaf spot and brown rot, and a large drop for cherries onto the harvester, which may increase fruit bruising and softening.

This season we conducted a preliminary study to evaluate the effect of drop height on soft fruit problems in tarts. While this preliminary study is very limited in scope, the data show a strong trend towards increased damage as the drop height increases. For all of these reasons, it is very important that tree height be limited!

Some suggestions for tree height to optimize light reception:

1. For triangular shaped trees, the height of the bearing area of the tree should be no more than three times the clear alleyway width. The clear alleyway is the distance between the branches of the trees from row to row, not the plant distances between rows. For
example, a six-foot clear alleyway would imply the tree height could be up to 3 X 6 ft., or 18 feet plus about four feet from the ground to the base of the desired fruting area, for a total height of about 22 feet.

2. For a rectangular shaped tree, the height of the bearing surface should be twice the drive alleyway distance. For example, again assuming a six foot clear alleyway implies a height of 2 X 6 ft., or 12 feet plus four feet from the ground to the desired base of the fruting area, for a total height of 16 ft.

These formulas address light only. You need also to consider the capability of your sprayer to adequately cover tops of trees and possibly the propensity of the block to have soft fruit problems. We hope to be able to collect more data on the effect of tree height on soft fruit in coming years.

PESTICIDE CONTAINER RECYCLING IN 2004
By Dan Busby, Groundwater Program Coordinator

What do you do with all of your empty pesticide containers? It is illegal to dispose of them on the farm (burning or burying them)! You can legally dispose of properly rinsed (triple rinsed or power rinsed—free of product and residue) at the landfill, but that will cost money. Recycle those plastic 2.5 gallon containers at:

Hamilton Agronomy: 6766 M-72, Traverse City
Wilbur-Ellis: 8075 US-31 N, Acme
UAP Great Lakes: US 31 S, Bear Lake

-Containers will only be collected during normal business hours.
-Containers must be properly rinsed and free of product and labeling.
-Please remove all foil and labels. Paper labels glued on are OK.
-September 1 is the deadline for this pesticide container collection!!
-Get your containers in after harvest.

NORTHWEST MICHIGAN FARM BUREAU OFFERS PESTICIDE STORAGE SIGNS
By Dan Busby, Groundwater Program Coordinator

Northwest Michigan Farm Bureau has supplied our local Groundwater Program with another 100 pesticide storage signs that are in compliance with applicable pesticide storage rules and regulations. Many of you may have one of these signs on your pesticide storage already. If not, give Dan Busby a call at 941-4191 and he can meet with you and supply you with one of these signs. The signs are available to farmers in Antrim, Benzie, Grand Traverse, and Leelanau counties. For more information contact Dan Busby at the Grand Traverse Conservation District Office at (231) 941-4191, or cell (231) 883-9962.

As we all know, the label is the law and materials may have certain posting requirements for pesticide storage facilities. You may have to complete a SARA Title III Emergency Plan and file this plan with your local Emergency Management team. Call Dan with the Grand Traverse Conservation District if you need assistance completing an emergency plan for your farm.

A big thank you to Northwest Michigan Farm Bureau for their contribution towards the Northwest Michigan Groundwater Stewardship Program!
HOW TO DISPOSE OF HAZARDOUS FARM MATERIALS IN NW MICHIGAN

By Dan Busby, Groundwater Program Coordinator

Reservations are required for all collections of hazardous farm material. If you need to dispose of farm pesticides, please contact Dan Busby at the Grand Traverse Conservation District office at (231) 941-4191. Dan can help you produce an inventory of the products and prepare the material for safe transport. He will schedule you for a farm chemical collection in the fall.

For collection of non-pesticide hazardous materials (batteries, alkyd paints, etc.) contact the county in which you live in to schedule an appointment. Please have an inventory of items you wish to bring in when you call. There may be a charge for disposal. Commercially generated material is not accepted. Contacts:

Antrim County: Janet Person, Antrim Conservation District office, 533-8363
Benzie County: Christi Walsh, Benzie County Recycling Program, 882-0554
Grand Traverse County: Kelly Ignace, Grand Traverse County Resource Recovery office, 941-5555.
Leelanau County: Sarah Lucas, Leelanau County Planning Department, 256-9812

COST-SHARE PRACTICES FOR 2004

By Dan Busby, Groundwater Stewardship Program

The Northwest Michigan Groundwater Stewardship Program has $14,500 available for stewardship practices implemented on the farm. Agricultural producers in Antrim, Benzie, Leelanau, and Grand Traverse Counties who have or will complete a new Farm*A*Syst are eligible for these cost-share funds.

Properly closing abandoned wells has always been high priority for the cost-share program. Abandoned wells cost $200-$500 to properly close and the closure must be completed by a licensed well driller. We cover 90% of the cost to close these wells and Dan Busby will administer the closure of the well. Just give Dan a call.

Pesticide storage buildings and liners (or epoxy sealers for concrete applications) for these buildings are a high priority cost share item and can help reduce risk on your farm ten-fold. Having a separate pesticide storage building with proper containment and having some type of impervious surface where you mix/fill will reduce your risk even more!

We offer 50% cost share up to $500 towards a pesticide storage building and 50% cost share up to $500 towards an impervious liner or concrete and sealer for your storage area. These funds can be used for improving your existing pesticide storage situation or can be used to purchase a separate pesticide storage “shed”.

Another very important aspect of your pesticide storage and mix/fill location is that they are at least 150’ away and preferably downhill from any water well. We call this cost-share item an Offset Hydrant—moving that mix/fill and storage location away from wells and surface waters. It is a very important item for which we provide 90% cost share up to $750. This amount usually covers the cost of the plumbing and electrical needed.

We have spill kits available, which are required by the MDA Right-to-Farm Guidelines, for $15 (a $60 value). Assistance is offered to complete an Emergency Plan. If you are considering a practice that will reduce risk to your water, call Dan Busby at the Grand Traverse Conservation District at (231) 941-4191.
TISSUE SAMPLE ORCHARDS ASAP

Measuring the concentration of nutrients in plant parts best assesses the nutritional health of tree fruits. These nutrient concentrations are a direct measure of the nutritional status of the crop. In contrast, soil tests only estimate the ability of the top 8-10 inches of soil to supply nutrients and may not predict actual nutrient levels in the crop. Still, it is highly recommended to also take soil samples so orchard nutrient recommendations can be based on a combination that includes the pH from the soil test and nutrient needs from tissue analysis.

Leaf samples are best collected during mid July through mid August.

**Tree fruits:** Collect 100 leaves that come from the middle of the current season's growth. Do not sample spur leaves or leaves significantly damaged by insects, disease, wind or abrasion. Collect leaves from several different plants (at least 10 trees) throughout the variety or sampling area. Use leaves that can be reached from the ground from all sides of the tree. Remove leaves by pulling down (toward the shoot base) so that the stem (petiole) remains with the leaf. Once collected, wash if recently sprayed with a nutrient by using a light detergent solution followed by good water rinsing. Whether washing leaves or not, lay the leaves out on a sheet of paper and allow them to dry. Once dry, they can be placed in a paper bag with some holes punched along the edges so the leaves will continue to dry and not mold.

**Grapes:** Use only the petioles or stems of grape leaves. Samples should contain about 100 petioles collected in early August in northern areas. Remove the most recently matured leaves from near the middle of shoots. In many varieties, the undersides of leaves turn darker when they mature. Avoid damaged leaves and leaves adjacent to fruit clusters. Cut or pick leaves close to the shoot. Remove and discard the leaf blade. Place petioles in paper bags (washing not needed), and allow them to dry for several days at room temperature.

If having the test done by MSU, send samples directly to the MSU lab. Submition forms can be obtained from your local MSU Extension office or at the NWMHRS. Bags can be mailed separately, or several bags may be packaged and mailed together. The address for the lab is: MSU Soil Testing Laboratory, Plant and Soil Science Building, Michigan State University, East Lansing, MI 48824. Please pre-pay with a check for $27.00 for each sample, payable to Michigan State University.

FRUIT AND VEGETABLE INDUSTRY SCHOLARSHIPS AVAILABLE IN 2004

The Michigan State Horticultural Society and The Michigan Vegetable Council, Inc. have announced the availability of scholarships for students who intend to pursue careers in the Midwest fruit or vegetable industry, respectively. The awards are made available by these organizations, with the generous support of industry sponsors.

The target amount per scholarship is $1,000, but it could be more or less at the discretion of the selection committee.

To receive more information or an application contact:
**Fruit scholarships:** MI State Horticultural Society, 63806 90th Avenue, Hartford, MI 49057; phone (269) 424-3990, fax (269) 424-3096, or e-mail MIHortSociety@aol.com.

**Vegetable scholarships:** Michigan Vegetable Council, P.O. Box 277, Erie, MI 48133; phone (734) 848-8899, or email mivegouncil@charter.net.

Applications should be mailed or faxed by September 30, 2004.
ASSIGNMENT CHANGE

For the past 14 years, Erwin “Duke” Elsner, Ph.D, has been assisting the wine and viticulture industry through his role as Grand Traverse County and Kalkaska County Agricultural Agent. Commencing August 1, 2004 Duke Elsner will no longer be providing agricultural coverage for Kalkaska County. His new assignment will be 25% in support of the viticulture and wine industry for NW Michigan and 75% general agricultural coverage for Grand Traverse County.

IPM AGENT

Beginning September 7, Nikki Rothwell will be the new Fruit Integrated Pest Management (IPM) Agent located at MSU's Northwest Michigan Horticultural Research Station. She brings a wealth of experience in pest management to the area. Her future position as the IPM Agent for fruit will allow her to find innovative, systems-type methods to help minimize the risk from fruit pests.

Nikki began her academic career at Western Michigan University with a major in biology and minor in chemistry. She went on to receive her MS in entomology from MSU and her PhD from the University of Massachusetts. She currently holds adjunct teaching positions at University of Massachusetts and a community college. Nikki hails from Kingsley and is eager to be back working in Michigan.

Please join us in welcoming Nikki to the NW Michigan fruit industry. We look forward to the leadership she will provide to address the pest management concerns of our industry.