CALENDAR OF EVENTS

6/20	**Cherry Administrative Board Meeting** Radisson Hotel, Kalamazoo
6/25	**IPM Update – Benzie Co.**
6/25	**Timber Sales Meeting** NW Michigan Horticultural Research Station
6/26	**IPM Update – Leelanau Co**. Larry Esch farm
7/6-7/13	**National Cherry Festival**
7/8-7/12	**Cherry Connection** NW Mich Hort Res Station
7/31	**SW MI Viticulture Open House** SW MI Research Station, Benton Harbor
8/29	**NW Michigan Hort Res Station Open House**

RECORD LOW TART CROP EXPECTED

By Jim Nugent, District Horticulturist, MSUE

Since beginning to keep records in 1925, the smallest tart cherry crop in Michigan history was 18 million lbs in 1927. The 1943 Michigan crop was 21.6 M lbs and the 1945 crop was 28 M lbs. During a CIAB conference call on 6/12, the processors and growers estimated that SW Michigan has about 7 M and WC Michigan has about 5 M. If these numbers turn out to be accurate, then anything under 6 in NW would be the smallest since records were kept in 1925. It appears that NW Michigan has a crop of something less than 2 M. The CIAB estimate, at this time, for the national crop is approximately 60 M lbs.

The USDA has decided not to conduct the normal cherry count ("objective yield survey") for Michigan, but will still publish a tart cherry crop estimate. This will be conducted by sending out questionnaires to a sample of growers. From these results, USDA will determine the crop estimate. This estimate will be published by USDA about July 1.

NONINSURED ASSISTANCE PROGRAM THROUGH FSA

By Jim Bardenhagen, Leelanau County MSUE

Growers signed up through FSA for the Noninsured Assistance Program (NAP) for tart and/or sweet cherries will want to read through "Worksheet A" which is in this newsletter. This can be used to estimate expected revenue and to assess whether or not to harvest NAP acreage. We are currently working with the State FSA office to modify the sweet cherry non-harvest factor from .5 to .8 to better reflect the variable cost associated with mechanical harvest. We feel the .5 factor was derived from hand harvest of fresh sweet cherries out west. If the factor gets lowered to .8, use the tart cherry section in Worksheet A. Check with the local FSA office prior to harvest to see if the factor has been changed.

A payment rate for fresh versus processed is also being pursued with FSA.

ESTIMATING CROPS
By Jim Nugent

It is very easy to assess whether or not it's worth harvesting most orchards in NW Michigan, i.e., no fruit, no harvest! However, there are a few blocks where an estimate needs to be made to determine whether or not it is worthwhile to harvest all or a portion of blocks. This is mainly limited to sweet cherries. In this newsletter we have included a worksheet to help estimate the variable costs that determine the break-even point for harvesting. The earlier in the season one can estimate that a block is not worth harvesting, the greater the potential savings.

To estimate crop size on trees with very light crops, it may be easiest to estimate the number of cherries per tree and convert this to estimated pounds per tree. On average, Montmorency tart cherries weigh about 4.5 grams per cherry, which equates to 100 cherries per lb. With a very small crop, the fruit will likely be larger, but will still take 90-95 cherries/lb. Sweets vary more in size due in large part to cultivar differences. For example, Golds probably average only slightly larger than Monts at about 5 grams per cherry or maybe 90 cherries/lb. Larger fruited commonly grown dark sweets average more like 7.0-7.5 grams/fruit, or about 60-65 cherries/lb.

ZERO INTEREST MONEY AVAILABLE
By Jim Nugent

Last year the State of Michigan legislature appropriated $200M for loans at zero interest to farmers suffering from natural disasters. Most of this money has been loaned to farmers, but as of today, there is still some of this money available on a first come, first serve basis for those that qualify. These loans are made through your existing bank, i.e., Farm Credit Service or any commercial bank. There is a limit of $100,000 per producer. If interested, contact your banker as soon as possible.

There is also still some zero interest money available through this same program for food processors. As with farmers, this is accessed through existing commercial lenders.

DISASTER ASSISTANCE EFFORTS
By Jim Bardenhagen, Leelanau Co. MSUE

Last week, cherry industry representatives and MSU Extension held a conference call with Federal Legislative aids from Senator Levin and Senator Stabenow's office, USDA, and state and local FSA representatives on crop disaster assistance for severely hurt fruit crops in Michigan.

Last Friday, the Grand Traverse Fruit Council and area hort society members, Cherry Marketing Institute and local processors gave Representative Dave Camp and legislative aids for Senators Levin, Stabenow and Representative Stupak a tour of orchards in the Old Mission Peninsula and Peninsula Fruit Exchange plant. They saw first hand how non-existent the tart and sweet cherry crops are.

On June 26th, representatives of the local hort societies, other growers and MSU Extension will attend the local FSA County Committee meeting to discuss various aspects and options related to the NAP program operation and other disaster assistance efforts for 2002.

It now appears unlikely that the NAP Program for 2002 will be re-opened due to the way the legislation was written and tied to crop insurance. However, the net effect of the conference call

and the tour is that there is strong interest in pursuing some kind of disaster assistance for the 2002 fruit crops like the General (Ad Hoc) Disaster Assistance or recent Market Loss Assistance for apples. It is also likely that low interest loans will also come if the USDA approves Governor Engler's request for disaster assistance. Low interest loans are also available for growers & processors from the State of Michigan - see related article in the newsletter.

While efforts are on going, growers can help by calling or e-mailing their Federal Legislators and expressing their concerns/needs. See phone numbers below:

Senator Carl Levin
E-Mail: senator2@levin.senate.gov
Washington:
Phone: (202) 224-6221
Traverse City:
Phone (231) 947-9569

Senator Debbie Stabenow
E-Mail: senator@stabenow.senate.gov
Washington:
Phone: (202) 224-4822
Traverse City:
Phone: (231) 929-1031

Representative Bart Stupak
E-Mail: stupak@mail.house.gov
Washington:
Phone: (202) 225-4735
Traverse City:
Phone: (800) 950-7371 or (231) 929-4711

All growers interested in NAP and other crop assistance programs from FSA need to **certify their 2002 crops with FSA by July 15th**. Please call your local FSA office and set up an appointment. This is important if you want to get the best benefits from these programs using your own yields rather than much lower state averages.

We will keep you informed as soon as we hear any new information about disaster assistance for 2002. The deadline for the ***2003 NAP program*** is ***November 20, 2002***. Please mark this date on your calendar. You need to re-sign up for 2003 even if you are currently enrolled in NAP.

GIBBERELLIC ACID USE ON BEARING TART CHERRIES
By Jim Nugent

Because of the high probability of setting a large crop next year, it's important to continue the application of gibb on mature tart cherries. Both Dr. Bukovac and I feel that it is actually desirable to increase the rate of gibberellic acid by 20%, but if you don't feel comfortable with this, at lease use the same rate as in the past.

SUMMER PRUNING
By Jim Nugent

For many years we have been successfully pruning bearing tart and sweet cherries after tart harvest and before early to mid September. This practice is recommended in orchards where trees have generally filled their space, not in young orchards where trees need maximum terminal growth. This year, with no crop on the trees, pruning could be done earlier in the summer on the mature orchards. In cases where shading is becoming a problem, the result should be positive.

Infection of sweet cherry spurs and terminals with bacterial canker is extremely severe in 2002. The pseudomonas pathogen that causes bacterial canker entered freeze damaged tissue following the May 19 through 21 freeze events. Pruning during the warm summer months should ensure that bacterial canker does not spread during pruning. This pathogen is favored by extended periods of cool, wet weather, not hot weather.

SELLING TIMBER - GOOD SOURCE OF INCOME FOR FARMERS
By Jim Bardenhagen, Leelanau Co. MSUE

With the low fruit crop yields expected this year, many growers may want to consider cutting some timber to boost their income. Maple trees remain in high demand and value.

If you are considering selling timber, there are some procedures and practices in selling timber that will yield you the best returns from timber sales. There will be a special meeting to explain the best way to approach timber sales for optimum returns and proper cutting performances.

The meeting details are as follows:

When: **Tuesday, June 25, 2002**
Time: **1:30 - 3:00 pm**
Location: **NW Hort Research Station Conference Room**
Cost: **Free**
Resource People: Dr. Karen Potter-Witter, MSU Forestry Specialist, Russ Kidd, MSU Extension District Forestry Agent, Rick Moore, Leelanau/Grand Traverse Water & Soil Conservation Service Forester

If you cannot make this meeting, MSU Extension also has Extension Bulletin E-1656 Timber Sales Contracts available at the MSU Extension offices. Please call for the bulletin or stop in and pick it up.

SUGGESTIONS FOR REDUCING COSTS IN MATURE CHERRY ORCHARDS WITH LOW HARVESTABLE CROP

- Sprays – **See article**
- Fungicides – Control of cherry leaf spot is very important. No need to control brown rot or powdery mildew.
- Insecticides – Eliminate except for trunk sprays.
- Miticides – Tolerance for mites is higher with no crop.
- Growth regulators – GA use is very important this year to prevent a limb buster next year.

- Herbicides – Weed control can be reduced (but not eliminated) as moisture need for trees is reduced.
- Mowing – Can be reduced in many situations. Still important in fall to reduce vole habitat.
- Fertilizer – In hind site, nitrogen could have been reduced, but generally application was made prior to knowing crop size. Micronutrient applications can be decreased or eliminated unless a deficiency is known.

UPDATE: MAINTENANCE PROGRAM FOR CHERRY - ORCHARDS WITH NO CROP

By Gary Thornton, District Fruit IPM Agent

With this year's record setting short crop in tart cherries and very short crops in many other fruits, there will be a quite a few orchards that won't be harvested at all. Reductions in the spray bill are one way that growers can reduce this year's operating expenses.

Key points:

Minimize or eliminate insecticide sprays. If you are going to be harvesting the crop, then those blocks will require insecticide sprays to keep them marketable. If you are not going to be harvesting, then it is my opinion that sprays to control plum curculio and cherry fruit fly can be eliminated from this year's program. Keep in mind that insect populations may increase in the 2003 season as a result of this, assuming that even just a few cherries remain in the trees. This is more likely to be true for the plum curculio, than it is for the cherry fruit fly. I don't think that populations will go up much for next year, but the risk is there that they will go up some. If you want to reduce the populations for next year, a border spray around the exterior of the orchard would do the most good. This would be most beneficial in sweet cherry blocks, although it would reduce the risk in tarts as well. I don't think it is worthwhile in other crops. If the crop is completely non-existant then border sprays should not even be considered.

Trunk sprays. Even without a crop, trunks of stone fruit cherry trees are susceptible to the borer complex. Tart cherries are not as susceptible to injury as sweet cherry or peach though. Many growers do not apply these every year. The decision should be based on the borer pressure in the block. Perhaps to help with cash flow this spray could be skipped, but that remains a personal decision.

Cherry leaf spot control. Cherry leaf spot got a very early start this year, with two heavy infection periods on May 26th and 29th. Infections from these events are quite common in many tart and even some sweet cherry orchards. These will provide high levels of inoculum for future infection periods. The heavy infection period on June 14th-16th will spread the disease a great deal in orchards that are light on their fungicide program. Even without a crop or a very light crop this year, it is still very important to keep the leaves for as long as possible. Carbohydrate reserves are necessary to aid in the set of the crop in 2003 and they are also necessary to provide the tree and buds with cold hardiness necessary to survive the winter. If leaves remain on trees this summer, expect a heavy set with lots of early vegetative growth next spring. The bloom will have lots of green in it next spring, due to the high levels of carbohydrates that are not only supporting the fruit set, but also the vegetative growth.

> **Prior to Shuck split** - Chlorothalonil should be used and combined with one of the sterol inhibitors if back action is needed. Bravo formulations of chlorothalonil labeled for use on cherry read that "Bravo is NOT TO be applied after shuck split and before harvest".

In the case where no harvest is taking place, this obviously leads to a gray area that growers will have to interpret for themselves.

Post shuck split - Once the grower has decided to switch away from chlorothalonil, they should consider going to a reduced rate of a sterol inhibitor fungicide plus 3 lbs of Captan. This provides the best control on a protectant basis and I believe the most economical for the benefit you get. You will also get some mildew control if Elite or Nova is used. An example would be 4 oz of Elite plus 3 lbs of Captan.

Post Harvest - The time of harvest with no crop could certainly be considered as soon as the first tart cherries in your area are mature. At this time growers should evaluate their blocks. If it is clean of leaf spot, growers may want to consider bypassing any further sprays. If there are any levels of leaf spot in the orchard a final "post harvest" chlorothalonil, applied as a protectant, should be considered.

Powdery Mildew Control. Sprays timed for the first appearance of the tell tale whitish mycelium on the underside of the tart cherry leaves will maximize the impact of sprays that are applied that can control powdery mildew. Powdery mildew control is not as important in blocks that will not be harvested; however, some minimal level of control is desired in the event that this ends up being a particularly bad year for it. Infected leaves are not as efficient carbohydrate producers as healthy leaves and badly infected buds are also not as winter hardy as healthy buds. Nova and Elite are both rated as good for mildew control. A wetting agent may improve control with these products. The newly labeled product on cherries - Flint, should also work very well on cherry powdery mildew.

ESTIMATED TART CHERRY GROWER PRICE NEEDED TO MAKE HARVEST WORTHWHILE IN 2002

By Glenn Kole, Jim Nugent, and Jim Bardenhagen
MSU Extension

The frost damage in 2002 will result in some extremely low tart cherry crop yields that many growers have never experienced. Depending on your crop and variable harvest cost situations, it may be more advantageous to not harvest the crop. The sooner a decision is made on whether or not to harvest, the greater the potential savings.

This analysis was assembled to help you analyze the most profitable strategy for your situation. ***Table I*** shows the estimated cash operating cost reduction by leaving tarts in the orchard. ***Table II*** and ***Figure 1*** represent the authors' best estimate of the price needed at various yields to make harvest worthwhile, itemized by type of harvester.

If your operation is covered under FSA's Noninsured Assistance Program (NAP) for tart and/or sweet cherries, *Worksheet A* is included to determine the impact that harvest vs nonharvest has on NAP payments.

Assumptions for this analysis:

1. All labor needed, whether "family" or not, is charged to each system at the stated per hour levels plus 25% is added to cover additional payroll costs such as Social Security, workers' compensation, unemployment, etc.
2. "Overhead" costs, including depreciation, interest, insurances, and property taxes, are

considered to be there whether you market your tarts or not. Therefore, these costs are not included in this analysis.

3. Use this analysis as a general guide only. Because costs vary from farm to farm, efforts should be made to fill in "Your Farm" cost data.
4. Costs per acre were based on costs expected under the very low yield situations anticipated for 2002, so should not be directly extrapolated to normal or above normal yields.
5. No diversion is assumed, therefore, no sampling costs or diversion certificates are considered.

Explanation of footnotes from the following worksheet:

Note A: Per acre variable costs were considered not significantly different between double and single rollout systems; added acreage harvested (on double vs. single) was offset with added labor expenses, leaving per acre charges virtually identical.

Note B: It is possible to have a savings in chemicals (insecticides, fungicides and/or ethephon) if the decision to nonharvest a block is made early enough in the season. For this analysis, we assumed only a savings in the cost an of ethrel application. A decision to not harvest made earlier in the season should result in greater spray savings.

Note C: Trucking from pad to processor is expected to increase due to low delivery tonnage. 1.5¢ per lb. was used for this analysis.

Note D: If you are enrolled in the NAP program, there is an economic advantage to harvest that is generally in the range of $20 to $100/acre over nonharvest for tart cherries. **The advantage to harvest under NAP rules is much greater for sweets.** See *Worksheet A* to calculate additional value of harvest for NAP acreage.

"WORKSHEET A"
Noninsured Crop Assistance Program (NAP) Calculation
For Determining the Value of Harvest vs Nonharvest

Tart Cherries

Payments for tart cherries enrolled in the NAP program are reduced by 20% when orchard is left unharvested. To calculate the differential effect harvesting has on income per acre, use the following. Please note that the NAP payment rate for 2002 is not yet available. Payment rate for 2001 for tart cherries was $0.152/lb. The following uses the 2001 rate ($0.152) as an example.

A. 5 year average production history (APH) per acre: (A)_____lbs
B. 50% of APH -- Multiply A times .5 (B)_____lbs
C. Harvested (or estimated) yield/acre in 2002 (C)_____lbs
D. Lbs to receive NAP payment = B minus C (D)_____lbs
E. Payment amount = payment rate times payment level
= $0.152* times .55 (E)$_____
F. Payment if harvested – multiply D times E (F)$_____/acre
G. Payment if not harvested = F times .8** (G)$_____/acre
H. Value of harvest over nonharvest = F minus G (H)$_____/acre

H is the NAP payment benefit for tart cherries of harvest over nonharvest. Add this value to your expected tart cherry income per acre to determine the value of harvest vs nonharvest.

* Payment rate is for 2001. Replace with the 2002 rate when available.
** Payment adjustment for nonharvest is .8 for tarts.

Sweet Cherries

Payments for sweet cherries enrolled in the NAP program are reduced by 50% when orchard is not harvested. In most situations with very light crops, the cost advantage of harvesting NAP acreage will exceed the variable cost of harvesting, even when little to no fruit is present on trees. The payment rate for 2002 is not yet available, so the following uses the 2001 rate of $617.33/ton or $.309/lb.

A. 5 year average production history (APH) per acre: (A)_____lbs
B. 50% of APH -- Multiply A times .5 (B)_____lbs
C. Harvested (or estimated) yield/acre in 2002 (C)_____lbs
D. Lbs to receive NAP payment = B minus C (D)_____lbs
E. Payment amount = payment rate times payment level
= $0.309* times .55 (E)$_____
F. Payment if harvested – multiply D times E (F)$_____/acre
G. Payment if not harvested = F times .5** (G)_____/acre
H. Value of harvest over nonharvest = F minus G (H)_____/acre

H is the NAP payment benefit for sweet cherries of harvest over nonharvest. Add this value to your expected cherry income per acre to determine the value of harvest vs nonharvest. In nearly all cases it will pay to harvest sweets enrolled in NAP.

* Payment rate is for 2001. Replace with the 2002 rate when available.
** Payment adjustment for nonharvest is .5 for sweets.