July 2000 Regional Fruit Newsletter

CALENDAR OF EVENTS

July - August 2000

7/17 Deadline for Disaster Crop Assistance

7/19 2000 Summer Vegetable Tour
Oceana & Mason Counties
For details: 231/873-2129

8/2 Viticulture Field Day
SW Mich Hort Res & Extension Center
Benton Harbor, MI

8/11 Clarksville Station 25th Anniversary
Special Program & Tour, Free Lunch
Clarksville, MI

8/12 Leelanau Harvest Farm & Art Sale
NW Mich Hort Res Station
8:00-4:00 p.m.

8/31 NW Mich Hort Res Station Open House

THANK YOU NOTE

I would like to thank all of the area growers, dealers, friends and Extension personnel who participated in my retirement party on May 20th at Morrison's Yuba International Airport. It was a great party! Thanks again to everyone.

Sincerely, Keith Warren

SEAGULLS
By Jim Nugent & Jim Bardenhagen

Ring-billed gulls are causing more problems than ever for many cherry growers. Managing seagulls

generally remains a combination of tactics that includes harassment of some sort (e.g. exploding shells, cannons, etc.) with shooting. Shooting ring-billed gulls requires a federal permit from the U.S. Fish and Wildlife Service (Dept. of the Interior, Minnesota). This permit also requires the approval of the USDA's Michigan State Director of Animal Damage, Tony Duffiney. To expedite a

approval of the USDA's Michigan State Director of Animal Damage, Tony Duffiney. To expedite a process that usually takes many days, the following process has been put in place for cherry growers in NW Michigan so you can get approved in one working day.

- Get the permit application. This can be done either by having Tony Duffiney's office fax it to you, or by getting a copy of the application from your local Extension office or the NWMHRS. Tony's office is in Okemos, MI, phone 517/336-1928.
- Fill out application, being sure to indicate other efforts (besides shooting) to harass the seagulls, even if it's just driving through the orchards, etc.
- Write out a $25 check for the permit application fee.
- Fax a copy of the application and check to Tony Duffiney at 517/336-1934. If you don't have a fax, any Extension office or the NWMHRS will fax this in for you.
- After faxing, send the application and check as indicated into the U.S. Fish & Wildlife Service in Okemos.
- You should get a phone or fax response in 24 hours, otherwise contact Tony.
- Once the permit is received, Tony suggests targeting seagulls early in the morning as they are coming into the orchard. If using something like exploding shells, fire these just before or after killing a few gulls. Leave the dead gulls at the site. Later when exploding shells are fired, they will correlate these with death of birds. Preferably begin as soon as birds are coming into the orchards.

Once a permit is received, I understand it is easier in subsequent years to get a renewal.

Shell crackers are made to either fit 12 gauge shot guns (single short or double-barreled guns work better than guns with magazines) or with a pistol. Possible sources for shell crackers are: The local DNR office (922-5280) and ask for Tim Webb, Tony Duffiney (USDA Animal Damage Office), 517/336-1928, Critter Control in Traverse City at 947-2400 and Reed-Joseph in Missouri at 800-647-5554. Contact the NWMHRS if you have any questions.

BACTERIAL CANKER
By Jim Nugent

Bacterial canker (BC) can invade cherries through wood, leaves and/or fruit. It is favored by extended periods of cool, wet weather. These conditions were common during several extended periods since bloom. There is some fruit injury showing up this year, as well as some leaf injury.

The extent of leaf injury can be greatly affected by the spray program. In particular, sprays that have some tendency toward phytotoxicity can lead to significant invasion of the casual organisms into the leaves. Often it appears the spray-related problems are due to a combination of materials.

What's unusually prevalent in 2000, however, is invasion of BC into spurs on sweet cherries. The spur invasion was predisposed by a late frost event (or at least very cold temperatures) following bloom that was then followed by a lot of cool, wet weather. This combination of events is very unusual. The result has been very significant spur loss in some blocks, particularly in low areas.

There is no cure for the spur loss problem. Try to keep trees as healthy otherwise as possible. Make sure soil pH is above 6.2. Consider copper during the dormant season (late fall and/or early spring). Do not apply copper now! This could lead to much more serious problems.

CONTROL OF ALTERNARIA

By Jim Nugent

Control of Alternaria in sweet cherries has relied on the fungicides Rovral and Captan. With the loss of Rovral for use after bloom, only Captan remains for the control of this fruit rot disease. Unfortunately, some processors do not want Captan, leaving no effective fungicide available in these situations. Supplies of old Rovral can be used according to the label on the container, but no new Rovral can be used after bloom. Alternaria does not appear to be too severe this season, due in part to relatively low early season cracking (a favorite site for alternaria infection). But for the future, control of this disease is going to be more dependent on Captan. Where Captan can't be used, I guess we pray for dry weather.

PESTICIDE UPDATE
By Jim Nugent & Gary Thornton

Pyramite has added several fruit crops to its label. It provides excellent control of European red mite, good control of two-spotted spider mite, plus is labeled for the control of pear psylla and several species of leafhoppers and aphids. The list of crops now labeled for use is as follows:

a. Peaches, nectarines, plums, grapes, and pears -- all with a 7 day, pre-harvest interval (phi)

b. Apples -- 25 day phi

c. Cherries and apricots -- post-harvest use only (300 days phi)

Pyramite is used for ERM control at 4.4-6.6 oz/acre, while the labeled rate for two-spotted mite and pear psylla is 8.8 - 13.2 oz/acre.

Pyramite comes in a package with five 4.4 ounce water-soluble bags.

CHERRY FRUIT FLY
By Jim Nugent and Duke Elsner

Last season, populations of cherry fruit flies (CFF) were extremely prevalent in many orchards after harvest. In blocks with high population pressure, consider applying Guthion in with the post-harvest fungicide. Also, keep in mind that population pressure from CFF will continue to increase as the cherry season progresses, and given the high population that developed post-harvest in some blocks last season, this is a year to keep a tight control program. For short pre-harvest interval insecticides, Imidan (7 day) tarts only and Sevin 50W or 80S (3 day) are good choices. Ambush and Pounce 25WP (3 day) are rated "good" in the spray calendar, but our field experience leads us to feel they are fair to poor. Sevin XLR and liquid Ambush/Pounce do not provide control.

TART HARVEST UPDATE
By Jim Nugent

Tart cherry harvest is virtually complete in SW Michigan, where production is slightly above the USDA crop estimate. However, this appears to be offset by Pennsylvania picking out below estimate by about the same amount. Quality is reported down in SW Michigan. So far, quality looks good in NW Michigan. Processors are expressing confidence that export to Europe should be strong.

ESTIMATED COST SAVINGS BY LEAVING TARTS IN THE ORCHARD
By Glenn Kole, Jim Nugent, and Jim Bardenhagen

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

Many tart blocks may be very light in yield this year. Given that costs to harvest are relatively constant per acre regardless of yields, costs saved by non-harvest could be significant for the low yielding blocks. In addition, because of an industry surplus, a portion of the tart crop will be restricted. In general, options for the restricted tonnage under the Federal Marketing Order are:

- Export for diversion credit
- Approved new products for diversion credit
- Reserve pool
- In-orchard diversion
- At-plant diversion

The mix of these options available to growers will vary by processor.

The following page illustrates what the authors believe to be the best estimate of cost savings by leaving tarts in the orchard, itemized by harvester type. Comparing these cost savings with expected returns (after marketing assessments) from the restricted tonnage options (as listed above) may help with your decisions on restricted tonnage. You need to explore with your processor(s) their best estimate of expected returns for each of their options for restricted tonnage.

Assumptions: (for cost-savings chart)

- All labor needed, whether "family" or not, is charged to each system at the stated per hour levels, including fringes.
- "Overhead" costs - namely 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 decision aid.
- Use as a general guide only; efforts should be made to fill in "Your Farm" cost data.

Conclusions: Regardless of harvest systems, very low yielding blocks are costly to harvest on a "per lb." basis. Therefore, particular attention should be placed on analyzing options for very low yielding blocks.

Explanation of footnotes from the following chart:

Note 1: Per acre charges 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 2: It was felt that any present savings in chemicals or fertilizers not applied would be at least equally offset by added costs and/or lower yields later.

Note 3: Shaking on the ground in the event of non-harvest is assumed here. Since this is a cost incurred only if not harvesting, it shows as a negative figure. Fifty percent of shaker repairs, fuel, and one operator were used in determining this adjustment.

If experiencing very light yields, the cherries may not need to be shaken on the ground; however, an additional spray may be advisable. Therefore, if leaving the fruit on the trees, this adjustment amount can be reduced or

leaving the fruit on the trees, this adjustment amount can be reduced or eliminated, generating more savings.

Note 4: Trucking from pad to processor is expected to average .5¢ to 1.5¢ per lb. at current fuel prices. 1¢ per lb. was used for this analysis.

Note 5: Michigan Cherry Committee (MCC) assessment is .5¢/lb. (.25¢/lb. for juice). CIAB assessment is .17¢/lb. (.085¢/lb for juice), but because CIAB is a handler expense rather than a grower expense, it is generally not deducted from grower payments and is therefore not included in this analysis. Add the CIAB assessment as a cost savings if your processor deducts it from your payments.

CASH OPERATING COSTS NOT INCURRED BY LEAVING TARTS IN THE ORCHARD										
	"One Man" Systems		**Double Incline**		**Double Incline**		**Rollout Systems**		**Your Farm**	
			(Fast)		**(Slower)**		**(Single or Double)**			
Acres of tarts handled per										
season (Per system)	85		94		64		94 (Dbl)			
							63 (Sgl)			
Hours to havest per acre										
(130 trees per acre average)	2		1.81		2.67		1.81 (Dbl)			
							2.70 (Sgl)			
	Cost per		**Cost per**		**Cost per**		**Cost per**		**Cost per**	
	Season/	**Cost per**	**Season/**	**Cost per**	**Season/**	**Cost per**	**Season/**	**Cost per**	**Season/**	**Cost per**
	System	**Acre**	**System**	**Acre**	**System**	**Acre**	**System**	**Acre**	**System**	**Acre**
A. Shaker Repairs	$7,000.00	$82.35	$6,200.00	$65.96	$6,200.00	$96.88	$3,400.00	$36.17		
B. Shaker fuel (fuel@ $1.70/gal.	1742.00	20.49	2892.00	30.77	2892.00	45.19	2601.00	27.67		
C. Shaker/Operator										
(@ $14.00/hr.) (#)	2392.00	28.14	4764.00	50.68	4764.00	74.44	2393.00	25.46		
	(1)		(2)		(2)					
Skimmer (@ $8.00/hr.) (#)	1367.00	16.08	1367.00	16.08	1367.00	21.36				
	(1)		(1)		(1)					
Skim/Opr Rollout (@$9.00/hr.)							3061.00	32.56		
							(2 dbl)			

Tank Mover/Ldrs (@ $9.00/hr.)	3060.00	36.00	3060.00	36.00	1530.00	23.91	3060.00	32.55		
(#)	(2)		(2)		(1)		(2)			
Pad Operator (@ $8.50/hr.)	1454.00	17.11	1454.00	17.11	1454.00	22.72	1454.00	15.47		
(#)	(1)		(1)		(1)		(1)			
Rollout Pullers @ $9.00/hr.)							6146.00	65.38		
							(4 dbl)			
Rollout Tractor Drivers							3914.00	41.64		
(@ $11.50/hr.)							(2 dbl)			
65 hp tractors	2380.00	28.00	2380.00	28.00	1190.00	18.59	4760.00	50.64		
(Repair & Fuel only $7.00/hr.)	(2)		(2)		(1)		(4 dbl)			
(1) Forklift	1360.00	16.00	1360.00	16.00	1019.00	15.93	1360.00	14.47		
(Repair & Fuel only $8.00/hr.										
Mowing: (1 mowing saved by non-		10.00		10.00		10.00		10.00		
harvest - fuel, repairs, labor only)										
Cooling Pad - Utilities only		5.00		5.00		5.00		5.00		
Chemicals Saved **(2)**				No Savings						
Fertilizer Saved **(2)**				No Savings						
Subtotal (Before trucking/										
assessment expenses or reductions		259.17		275.60		334.02		357.01		
for shaking on the ground)										
Shaking on the Ground **(3)**										
Costs incurred because of non-										
harvest (50% of A+B+C above		-65.49		-73.71		-108.26		-44.65		
adjusted for 1 man machine)										
Subtotal (after Shaking on Ground)		$193.68		$201.90		$225.77		$312.36		
Trucking & Assessments										
Trucking @ 1¢/lb.**(4)**		1.00		1.00		1.00		1.00		
MCC Assessment @ 0.5¢/lb.**(5)**		0.50		0.50		0.50		0.50		
Total Savings (including trucking,										
assessments & shaking on the ground)										

@ 1000#/A : Savings/lb.		20.8¢		21.7¢		24¢		32.7¢		
@ 2000#/A : Savings/lb.		11.2¢		11.6¢		12.8¢		17.1¢		
@ 3000#/A : Savings/lb.		7.9¢		8.2¢		9¢		11.9¢		
@ 4000#/A : Savings/lb.		6.3¢		6.5¢		7.1¢		9.3¢		

Please send any comments or suggestions regarding this site to:
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