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Special points of interest:

- Pre-Harvest Tour scheduled for June 4.
- IFP Grower Handbook available for Fruit & Produce League members at the OSU Extension and Wy'East RC&D offices. This is an extremely informative book.

Pick up your copy today.

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Reducing Bird Damage

I recently read a report on bird-scarring techniques written by the B.C. Ministry of Agriculture that I thought you might find informative. It was entitled "The Use of Audible Bird Scare Devices in British Columbia in 2001". Although, most Wasco County growers don't use noisemakers to scare birds, the need for such devices may increase as more isolated blocks come into production in south county. Hood River cherry growers may also find these devices to be useful.

The article states that noisemakers do work to scare birds, but they need to be managed appropriately to be effective. If canons are used, the frequency of firing needs to be low at the beginning of the season. If the bird pressure grows and as the birds begin to become used to the cannons the firing frequency should increase. Firing the canon too frequently at the beginning of the season will cause the birds to get used to the noise more quickly.

To maximize the bird scaring effectiveness over the entire cropping

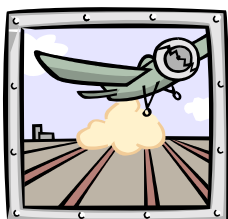


season the noises should be irregular and unpredictable, change direction and location often and integrate other bird-scarring devices into your program. This seems to be the key to the success of these systems.

In a 1994 study which was cited by the report, bird populations in orchards did not return to normal levels for two weeks following cessation of the cannon. Obviously, cannons can be an effective tool for reducing bird populations in orchards.

Communication needed for CFF Spray

Good communication is needed for a successful cherry fruit fly spray program.



In the past, there have been problems when workers have been inadvertently sprayed. This causes problems for the workers, you and the

pilot. Call the pilot immediately if you see him spraying a block where you have workers so that the application can be halted. Johnny Shearer would like to have your cell phone number, if possible, so that he can contact you more easily during harvest. If he does not already have it, please call him with that number.

OSU Budget Situation

As most of you know by now, the Oregon legislature has met twice in special session to re-balance the state budget. Both times the governor has vetoed major portions of the bills and countered with his own proposal.

The governor's budget proposes to address the \$87 million shortfall by taking \$27 million from the Oregon University System, the category that includes all of the state supported colleges and universities in the state. Of that \$27 million, \$23.5 million (87%) is directed at Oregon State University and the bulk of that is aimed at the Extension Service (including Ag and 4-H programs) the Ag Experiment Stations (including the Hood River station) and the Forest Research Lab.

Proposed reductions would mean a 50% budget cut for the OSU Extension Service and Experiment Stations.

The cuts to these three amount to about 25% of the biennial budgets for each, but since we are already half way through the biennium, all of the cuts would have to be taken in the second year. This means a 50% cut in each of these programs, which translates to serious program reductions.

Several groups, including the legislature have sued the governor in court to argue that he does not have the constitutional authority to direct the cuts to particular line items but can only order across the board cuts. Across the board cuts mean a 5% to 6% cut for all agencies and services, certainly something that most can adjust to without major trauma

The lawsuit is expected to take time, carrying beyond the July 1 starting date for the next budget.

Tips for Young Tree Care

Several years ago Dr. Tom Raese, USDA, Wenatchee studied young fruit tree growth and production under different weed control and fertilizer programs. Some of his findings may be useful to you.

- Competition with weeds for nutrients and water can significantly reduce growth of young apple and pear trees.
- When weeds were controlled, additional nitrogen fertilizer did not improve growth or yield.

- Where weeds were not controlled, high rates of nitrogen fertilizer (one pound of nitrogen per tree) did increase growth. (This amount is excessive)
- Mice love to hide in weeds and eat the bark of young trees.
- Careful, timely irrigation is essential to good growth of young trees. Weeds compete with trees for water.

For a complete look at this topic, see Tim Smith's excellent web site at <http://www.ncw.wsu.edu/newtrees.htm>.

New Cost of Establishment Study Available

The last few years have seen many growers make the decision to remove cherry trees and with new varieties. need to be made are in the ground, which are planting density. with this decision,



old blocks of replace them Many decisions before the trees not the least of rootstock and To help growers Clark Seavert

and I worked with several growers to put together a new cost of establishment study for standard and high density orchards.

The publication can be downloaded from the web for free at <http://eesc.orst.edu/agcomwebfile/edmat/em8802.pdf>. If you do not have access to the web, come to the Extension office and we will download it for you.

Wasco County Pre-Harvest Cherry Tour

Tuesday, June 4, 2002

Stop #1

(8:15 AM)
(8:30 AM)

Hazel Dell Farms, Old Dufur Rd.

Coffee and donuts thanks to Wilbur-Ellis

1. New rootstocks
2. Vogel Central Leader
3. Spanish Bush
4. Steep Leader

Stop #2**Mel Omeg's Cemetery Block, Three Mile Rd.**

Soft drinks thanks to Wilbur-Ellis

1. A look at the weather station network
2. Watermark blocks and data loggers
3. An IFP spray program
 - a. OBLR control without Lorsban
 - b. Powdery mildew control
 - c. Low volume spraying
4. Powdery Mildew trial

Stop #3**Dave Cooper Orchard, 2270 Dry Hollow Rd.**

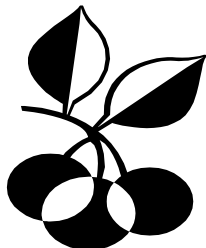
1. No host lunch
2. Migrant Education Report
3. Wasco County Fruit & Produce League Report
4. Oregon Sweet Cherry Commission Report
5. Crop Prediction

Stop #4**Orchard View Farms, 4055 Skyline Rd.**

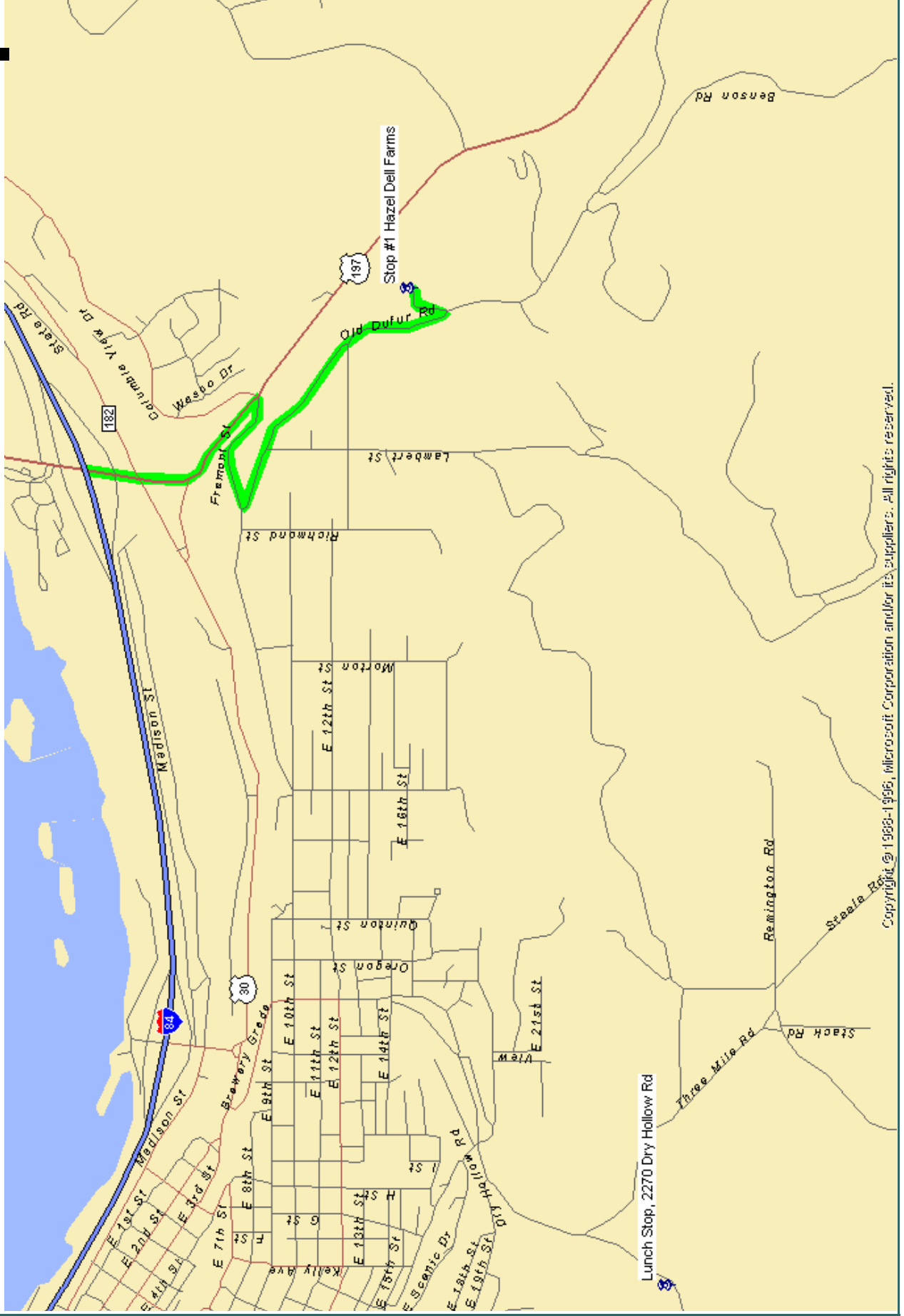
1. Gibraltar Production with Apogee/Ethrel treatments
2. Crop Thinning Experiment, Bing/Gisela 5
3. Chelan Production

Stop #5**Dave Meyer Orchards, 3755 Skyline Rd.**

1. Bin Picking, methodology and equipment



Preharvest Tour Map



Cherry Powdery Mildew Control

Early season identification and spread

By shuck fall it may be possible to see the first mildew colonies appearing on leaves. This is called the **primary infection** since the colony was established from overwintering spores. These will be small white spots with a powdery appearance. In the early season, look for infected leaves in the tree crotch or on root suckers, where leaves are succulent and humidity is high.

The white powdery spores are called **conidia**. Conidia spread the disease during the late spring and summer causing additional **secondary infection**. As the disease progresses, colonies will spread to cover more of the entire leaf surface. Infected leaves may be somewhat distorted and colonies may be found most easily on the underside of the leaves. Tree centers and root suckers are still the best place to find the disease.



Cherry mildew fruit infection

Fruit and late season infection

The initial stages of fruit infection are difficult to identify. It is often necessary to look across the cherry so as to view the white powdery spores as they stick up above the horizon. You will need a hand lens at this stage to properly identify. Be careful! Sometimes dust can be misidentified as spores. As the infection progresses the white powdery spores become more obvious and pronounced and identification can be made without a lens. Eventually, the infected area becomes sunken and pitted.

By mid-summer, **overwintering spores** are beginning to form on leaves. The overwintering spore is called an **ascospore** and it develops within a **cleistothecium**. The cleistothecium appears on leaves as a small ball, visible to the naked eye. It is the ascospore that starts the infection process the following spring.

Conditions for primary infection

Typically, it takes 1/10 inch of rain (or irrigation) and temperatures of at least 50° F in the early spring for primary infection to occur.

Conditions for secondary infection

The summer stage differs in that there is no need for rain, only high humidity. However, in the Mid-Columbia, conditions of high humidity most often occur after a series of light showers that raise the humidity during warm weather. Ideal conditions for the spread of the disease during the late spring and summer are simply high humidity and temperatures of 70° F to 80° F.

Control

The key to control of the disease on the fruit is to keep the disease off the leaves. This means a regular, consistent spray program from shuck fall to harvest.

One suggested spray program that takes resistance management into account includes the following:

Product	# of applications	Timing	Residual
Oil	2	shuck fall to pit hardening	10-12 days
Abound	1	after oil	10-14 days
DMI (rotate products) (Rally, Rubigan, Elite, Orbit)	1-4	late season to harvest	10-14 days

Powdery Mildew....Continued

Effectiveness of Control Products *

Fungicide	Brown Rot Fruit Rot	Powdery Mildew	Powdery Mildew Resistance in WA ***
Abound	Good	Excellent **	No resistance reported
Elite	Good to Excellent	Excellent **	OK at labeled rates
Oil	Not applicable	Good to Excellent	No resistance reported
Orbit	Excellent	Excellent **	Severe resistance
Rally	Good	Excellent **	Resistance reported
Rubigan	Good	Good to fair **	???

* Ratings of fungicide effectiveness from Dr. Jay Pscheidt, OSU. Resistance ratings from Dr. Gary Grove, WSU.

** Resistant pathogens will lower the effectiveness of these fungicides.

*** Mid-Columbia resistance levels may be significantly different.

Chemicals named are not an endorsement of the product, but are mentioned for educational purposes only.

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Horticultural Mineral Oil

- Apply prior to pit hardening.
- Don't apply within 15 days of a micronized sulfur application.
- Don't apply azinphos-methyl before, during or after an oil application.
- Don't apply oils with spreader stickers, Nu-Film-P or Nu-Film-17 (pinolene based products).
- Don't apply when temperatures are in excess of 90°F. there have been no reports of damage when applications were made when temperatures were below 90° F but climbed above 90°F later in the day.
- Don't apply 24 hours before or after a frost.
- Don't spray oil on heat or water stressed plants.
- Don't spray oil on wet foliage, as oil will simply run off.