

May, 2004



BOUNDARY COUNTY MASTER GARDENERS MASTER FOOD PRESERVERS



Times Running Out to Register For The:
2004

Inland Northwest
Master Gardener
Conference

June 17-19, 2004

North Idaho College

Registration fee \$40.

Banquet \$25 /NIC Culinary School.

Lodging available at NIC dorm.

\$20 per night, per person.

Double occupancy.

Conference attendance limited to 200.



Conference Basket

CarolJean Hubbard and Gini Woodward
have done a marvelous job on
the basket.

We could still add a couple
of items so if you are won-
dering what to put in it, stop
by the Extension Office and take a look at
what's in the basket.



Master Food Preservers Pressure Gauge Testing

We need volunteers to coordinate a pres-
sure gauge testing clinic at the Farmers
Market. Let Joanne know if this is some-
thing you would be willing to do and we will
work out the details.

Sarah Howe
Extension Educator

Joanne Erickson
Master Gardener Coordinator

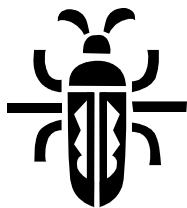
Forest Insect & Disease Field Day

June 30, 2004

8:00 a.m. - 4:00 p.m.

Pre-register at Extension Office or
call 267-3235

Fee: \$5.00



This is a good opportu-
nity for Master Garden-
ers to obtain continuing
education on insects and
diseases.

2004 Horticulture Series Schedule

Remaining workshops for the 2004 Horticulture Series are listed below.

June 15 8:00-4:00 1st Native Plant Tour
Moyie River/Deer Creek
Scot Anderson & Emma Fields
Fee: \$10.00

June 29 6:00-8:00 pm Landscape for Fire Prevention
Chris Schnepf
Fee: \$5.00

August 24 8:00-4:00 2nd Native Plant Tour
Roman Nose/Snow Creek
Scot Anderson/Emma Fields
Fee: \$10.00



Natural Ponds is still pending.



Master Gardeners For Plant Clinic

Take a look at the enclosed Plant Clinic calendar and call the office and schedule days that are convenient for you.

Remember, Tuesdays 9:00—1:00 p.m.
Thursdays 1:00—4:00 p.m.

There's also the opportunity to have a space at the Farmers Market on Saturdays from 8:00—1:00 p.m. for both Master Gardeners and Master Food Preservers. There's a folder of information at the Extension Office that contains information specifically for the Farmers Market. If you schedule a day at the Market, your welcome to pick up for folder or any other resource material to assist you.

There Are At Least Two Sides To Every Earwig

They chew the tender new leaves of your seedlings into useless lace. They crawl into your backyard orchard and leave russeted scars on your fruit. They fall out of the neglected laundry you're finally folding. But before you decide there's no such thing as a good earwig, think again:

They eat weeds and weed seeds. They eat the eggs and larvae of root maggots, cutworms, aphids and hundreds of other insect pests—indeed, they bolt down any critter they can physically overwhelm. They even convert your decaying plant material to the organic matter your soil so dearly needs.

"Earwigs are omnivores, and that can be a good thing," says Ed Bechinski, University of Idaho Extension integrated pest management specialist. "But most people simply don't like the way they look, the way they behave or the way they smell. Earwigs have this behavior that just disturbs a lot of people."

In what Bechinski describes as an absolutely empty threat, a frightened earwig will respond by rearing up the tip of its abdomen "sort of like a scorpion" and approaching you with its pincers. But if it actually dared to pinch you, you would barely feel it, he says.

Earwigs are happiest when their bodies are completely surrounded, which is why you'll often shake them out of the strangest places. But while you might find them anyplace, you won't find them laying their eggs indoors: they only do that in soil outside. Amazingly, they are one of the few known insects to actually demonstrate maternal care for the young that emerge from those carefully placed eggs.

Bechinski encourages gardeners and homeowners to weigh an insects' benefits against its costs before grabbing a spray bottle of insecticide. While some insects are overwhelmingly beneficial, even those with a dastardly Mr. Hyde side—like earwigs, may be worth keeping around for the good that they do.

Of the roughly 25,000 to 75,000 or so insect species that inhabit Idaho, Bechinski estimates that no more than 100 make regular pests of themselves on a year-in, year-out

University of Idaho HomeWise Plant Disease Agents Succumb During Composting

Source: Krishna Mohan, Plant Pathologist,
Para Research and Extension Center
Marlene Fritz, Communications Specialist, Boise

You added some mildewed or other diseased plants to your compost pile last fall and are wondering whether you'll be spreading plant diseases along with your compost through your garden this spring, you can stop worrying.

The composting process destroys most of the common agents that cause plant diseases in your garden. A well-managed compost pile can reach 120-140 degrees Fahrenheit and can remain at that temperature for a few days to a few weeks. Most fungi, bacteria, viruses and nematodes that infect the leaves, stems and roots of plants are likely to be inactivated or killed under those conditions, so are many weed seeds.

Composting damages even the hard survival structures produced by such exceptionally rugged fungi as rhizoctonia, fusarium, verticillium and sclerotinia. These structures can remain dormant for several years in normal soil, but the composting process can weaken them or even kill them outright or it can make them more vulnerable to parasitism by other molds and bacteria.

The combination of elevated heat and increased activity by antagonistic microbes is what does the trick. Toxic products released by decomposing organic matter under high temperatures also contribute.

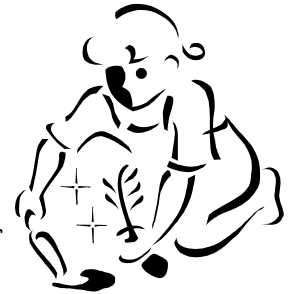
A whole range of bacteria and fungi become active in a hot compost pile and easily degrade many of the organisms that cause plant diseases. Disease causing organisms don't compete well with aggressive microorganisms that are favored by elevated temperatures.

In addition, as the pile cooks down, it may become colonized by a number of different beneficial microbes. Where the compost is later applied, these microbes can help suppress molds that cause root diseases.

But just because you've destroyed the disease causing agents in your compost doesn't mean you won't be seeing them again. If they're present in your neighborhood and if conditions are right, usually a combination of temperature, moisture, humidity and poor air circulation between plants, you'll see those nasty disease symptoms on your plants again.

University of Idaho HomeWise Three Nuggets of Wisdom When It Comes To Wood Mulches

Source: Bob Tripepi, UI Horticulture Professor
Marlene Fritz Communications Specialist, Boise



When you use wood based mulch to top-dress your borders and tree rings, keep these three University of Idaho Master Gardeners rules in mind:

1. Don't pile the mulch deeper than 2-3 inches
2. Avoid direct contact between the mulch and the trunks and stems of your plants.
3. Add nitrogen or a complete fertilizer to compensate for the nitrogen the mulch will take up as it decomposes.

Bob Tripepi, UI horticulture professor, calls bark his favorite mulch. Used correctly, it inhibits weeds, holds in moisture and holds onto soils. But used incorrectly, it can inhibit desirable plants, prompt rots, encourage rodents and even scald trees.

Bark mulch that's deeper than 3 inches keeps oxygen from reaching beneficial soil microbes, impeding their good work. Deep mulch can also limit oxygen availability to plant roots and interfere with water movement.

Bark mulch that's touching trunks and stems can spread rots to woody perennials and can draw burrowing, gnawing rodents to your vulnerable plantings. In the summer sun, dark colored mulch can even get hot enough to burn plant tissue.

Fresh bark mulch that still needs a long time to decompose will take nitrogen from your soil as the mulch breaks down; the microbes in the bark that are responsible for degradation will out-compete plant roots for any nitrogen that is nearby. The bigger the bark nuggets, the longer it will take for them to decompose and the more likely you'll need nitrogen enhancements in the meantime.

Don't expect bark mulch to improve your soils any time soon unless it's very, very fine, almost pulverized. Eventually it can add organic matter and improve tilth. The finer the materials, the easier it is for the earthworms and other soil fauna to move them into the soil.

What You Need to Know About Mercury in Fish and Shellfish

2004 EPA and FDA advice for women who might become pregnant, woman who are pregnant, nursing mothers and young children

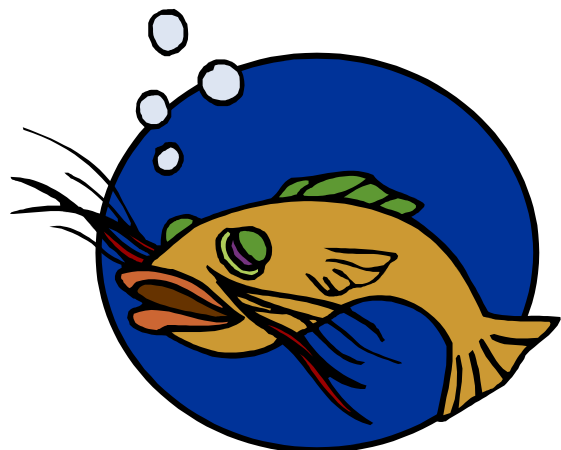
Fish and shellfish are an important part of a healthy diet. Fish and shellfish contain high-quality protein and other essential nutrients, are low in saturated fat and contain omega-3 fatty acids. A well-balanced diet that includes a variety of fish and shellfish can contribute to heart health and children's proper growth and development. So, women and young children in particular should include fish or shellfish in their diets due to the many nutritional benefits.

However, nearly all fish and shellfish contain traces of mercury. For most people, the risk from mercury by eating fish and shellfish is not a health concern. Yet, some fish and shellfish contain higher levels of mercury that may harm an unborn baby or young child's developing nervous system. The risks from mercury in fish and shellfish depend on the amount of fish and shellfish eaten and the levels of mercury in the fish and shellfish. Therefore, the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA) are advising women who may become pregnant, pregnant women, nursing mothers and young children to avoid some types of fish and eat fish and shellfish that are lower in mercury.

By following these three recommendations for selecting and eating fish or shellfish, women and young children will receive the benefits of eating fish and shellfish and be confident that they have reduced their exposure to the harmful effects of mercury.

1. Do not eat Shark, Swordfish, King Macerel, or Tilefish because they contain high levels of mercury.
2. Eat up to 12 ounces (2 average meals) a week of a variety of fish and shellfish that are low in mercury.
 - a. Five of the most commonly eaten fish that are low in mercury are shrimp, canned light tuna, salmon, pollock and catfish.
 - b. Another commonly eaten fish, albacore ("white") tuna has more mercury than canned light tuna. So, when choosing your two meals of fish and shellfish, you may eat up to 6 ounces (one average meal) of albacore tuna per week.
3. Check local advisories about the safety of fish caught by family and friends in your local lakes, rivers and coastal areas. If no advice is available, eat up to 6 ounces (one average meal) per week of fish you catch from local waters, but don't consume any other fish during that week. Recommends

Follow these same recommendations when feeding fish and shellfish to your young child, but serve smaller portions.



Potential Dangers of Mercury to Adults Menacing Metal, No Matter Your Age.

Mercury, a toxic metal long deemed dangerous for developing fetuses and nursing infants, is now considered a potential threat to adults as well. There is particular concern for seafood lovers who eat fish daily.

Thanks to coal-fired power plants that emit mercury and landfills that harbor discarded mercury, the toxic metal is ubiquitous in air and water. But it's only a problem when bacteria convert it to methyl mercury (one of the most toxic forms of the metal), which accumulates in fish (and humans) over time. While nearly all fish contain some methyl mercury, older, larger, predatory fish by far contain the most. And no food preparation or cooking method can remove it.

As a neurotoxin, mercury damages the brain and nervous system, causing confusion, depression, memory loss and tremors. Other side effects of mercury toxicity include fatigue, hair loss and metallic taste in the mouth. Because mercury poisoning takes time to develop, it's more common in older people. But it can easily be missed if the symptoms are mistaken for signs of aging.

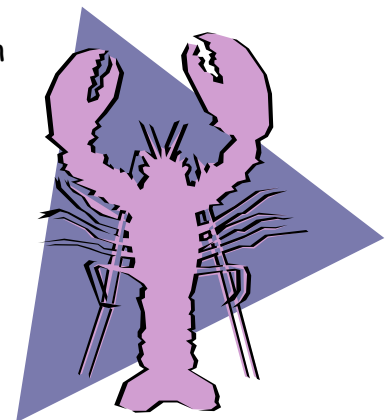
The Mercury-Fish Link. A recent study measured mercury in the blood of more than 100 patients in a San Francisco medical practice who displayed a variety of these symptoms and found that 89 percent had high mercury levels. The common thread? Many of these people consumed much more than 12 ounces of seafood per week. When they decreased their fish intake, mercury levels decreased and symptoms subsided or resolved.

Disheartening Effects? Another possible effect of mercury toxicity is an increased risk of heart disease. Researchers at Johns Hopkins University studied 1,400 men and found a significantly higher risk of heart attack in those with the highest mercury levels in their toenails, a reliable indicator of exposure. An earlier Finnish study backs up the potential for harm.

Mercury may induce the oxidation of low-density lipoproteins ("bad" LDL's), promoting clotting and increasing an inflammatory response. Ironically, the omega-3 fats found in fish provide heart-protective benefits, such as curtailing blood clotting, decreasing abnormal heart rhythms and reducing triglyceride levels. Does this offset the danger from mercury? Partly.

The researchers also measured the men's blood levels of docosahexaenoic acid (DHA)-an omega-3 fatty acid and found that high levels still lowered heart attack risk. The take-home message is to try to minimize mercury intake by choosing wisely, not stop eating fish altogether.

Where's the Mercury? The Food and Drug Administration (FDA) regulates commercial seafood, while the Environmental Protection Agency (EPA) oversees guidelines for fish caught by recreational fishermen. Mercury in fish is measured in parts per million (ppm), but safe consumption depends on a person's exposure per unit of body weight.

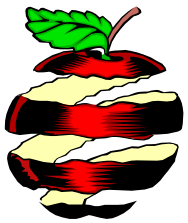


BOUNDARY COUNTY PLANT CLINIC/FARMERS MARKET SCHEDULE 2004

Tuesdays 9:00 am to 12:00 noon Thursdays 1:00 pm to 4:00 pm

SATURDAY 8:00 am– 1:00 pm	TUESDAY 9:00 am – 12 Noon	THURSDAY 1:00 pm – 4:00 pm	SATURDAY 8:00 am– 1:00 pm	TUESDAY 9:00 am– 12 Noon	THURSDAY 1:00 pm – 4:00 pm
May 1st	May 4 th	May 6 th	May 8	May 11 th	May 13 th
May 15	May 18 th	May 20 th	May 22	May 25 th Emma Fields	May 27 th
May 29	June 1 st Joan Poppino	June 3 rd	June 5	June 8 th	June 10 th
June 12	June 15 th	June 17 th .	June 19	June 22 nd	June 24 th
June 26	June 29 th	July 1 st	July 3	July 6 th	July 8 th Emma Fields
July 10	July 13 th Joan Poppino	July 15 th	July 17	July 20 th .	July 22 nd .
July 24	July 27 th	July 29 th	July 31	August 3 rd	August 5 th
August 7	August 10 th .	August 12 th .	August 14	August 17 th	August 19 th
August 21	August 24 th .	August 26 th	August 28	August 31 st	September 2 nd
September 4	September 7 th	September 9 th	September 11	September 14 th .	September 16 th Joan Poppino
September 18	September 21 st	September 23 rd	September 25	September 28 th .	September 30 th

Safe Procedures for Drying Apples at Home



1. Select mature, firm apples. Gala apples are a good choice for home drying. Wash. Pare, if desired and core. Cut into rings or slice 1/4 inch thick.
2. Soak slices in an ascorbic acid solution for 15 minutes. Use 2 teaspoons pure ascorbic acid crystals per 1 cu water. Pure crystals usually are available at drugstores. Vitamin C tablets can also be crushed and used: sixteen 500-milligram tablets equal 2 teaspoons ascorbic acid crystals. (Soaking in the ascorbic acid solution is a critical step because it helps keep the fruit from darkening and is an anti-bacterial agent against *E.coli* O157:H7.)
3. Remove fruit from ascorbic acid solution using a slotted spoon. Drain well.
4. Arrange in single layers on drying trays. Dry in oven or dehydrator at 140°F to 1145°F for 4 to 8 hours, or until leathery and pliable with no moist areas in center when cut. To test for dryness, remove a few pieces and let cool to room temperature-fruits seem more soft, moist and pliable when warm or hot than they actually are. Squeeze a handful of the fruit. If no moisture is left on the hand and pieces spring apart when released, they are appropriately dry.
5. Condition dried fruit by loosely placing in large plastic or glass containers, about 2/3 full. Cover and store in a warm, dry, well-ventilated place for 4 to 10 days. Stir or shake containers daily

to separate pieces. If beads of moisture form inside the container, return food to drying trays for further drying and then repeat the conditioning process.

6. Once conditioning is complete, place dried fruit in dry, scalded glass jars (preferable dark) or in moisture/vapor-proof freezer containers, boxes or bags, and store in the freezer or a cool, dry, dark place. Properly stored, dried fruits keep well for 6 to 12 months.

Source: Pat Kendall, Ph.D., RD. and Jennifer Burnham, M.S. candidate, Department of Food Science and Human Nutrition, Colorado State University Cooperative Extension

Water Stress Can Lengthen Vegetable Storage Life



Stressing maturing broccoli by withholding water has been found to lengthen subsequent shelf life at room temperature by up to more than a week. The greatest increases in shelf life were seen with quite severe water stress, resulting in about 30% less weight per plant relative to that of unstressed plants. Water stress has also been shown to lengthen store-age life of carrots, melons and celery.

The question is whether improved storability outweighs the reductions in yields due to water stress. Perhaps it might be possible to lengthen storage life to some extent without greatly affecting yields by withholding water for a short period of time just prior to harvest?

Source: March 2004 Westveg News

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**Next monthly MG/MFP Meeting is
July 12th, 10:00 am
(Extension Office is Closed July 5)**

