

Plant Science Says



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Cindy Morris Receives Franklin Award



Cindy Morris, an affiliate professor in our department working with INRA in France, recently received the Franklin Award for a project entitled "New paradigms for the life History of Plant Pathogens." The objective was to find *Pseudomonas syringae*

in the headwaters of the Snake and Yellowstone Rivers and to compare them to those in the Alps. Here in Montana and Wyoming she found this bacterium wherever she looked.

For 182 years, The Franklin Institute has honored the greatest men and women of science, engineering, and technology. The Franklin Institute Awards are among the oldest and most prestigious comprehensive science awards in the world.

Among science's highest honors, The Franklin Institute Awards identify individuals whose great innovation has benefited humanity, advanced science, launched new fields of inquiry, and deepened our understanding of the universe. This year they gave 75 awards, of which nine were in the natural sciences.

Towne's Harvest CSA Update by David Baumbauer

The Friends of Local Foods student club has been gardening 2.5 acres at the Horticulture Farm this summer. The marketing strategy

has been a combination of Community Supported Agriculture (CSA) and the Tuesday evening Farmers Market. On Wednesday, August 15th, the students hosted a luncheon to thank President Gamble, Deans Gough and Baker and Department heads Sherwood, Wraith and Dunnagan for their support of the project.



The CSA membership is comprised of 40 share holders that prepaid \$400 for a 14 week share of the harvest. The Gallatin Valley Food Bank has financially supported one of the gardeners in exchange for 25 shares. Surplus produce and/or quantities of a variety too small to make shares go to the Tuesday night Farmers Market. To date, they have harvested over 3000 pounds of produce, including 400 pounds of green beans and 275 pounds of basil.

If you are interested in volunteering at the garden or want to learn more about the Friends of Local Foods, check out www.townesharvest.montana.edu.

Vegetable Oils as Biobased Chemical Feedstocks and the Source of Omega-3 Fats

By Chaofu Lu

Many plant species produce "unusual" fatty acids in their seeds that have special chemical properties. These fatty acids can be engineered in oilseed crops to provide valuable industrial chemical feedstocks. At the 2007 American Oil Chemist's Society meeting in Quebec City, I was invited to present our recent advances in this field. This lecture was based on our paper published last year in *The Plant Journal*, which was *highlighted as one of the six most significant advances in Arabidopsis research in 2006 selected by the Multinational Arabidopsis Steering Committee*. The novel genomic approach described in this paper will continue to be one of the essential tools for my four-year NSF Plant Genome Research project starting September 1, 2007. The goals of this multi-institutional collaborative project are to develop and utilize the genomic resources to understand the metabolism of unusual fatty acids in oilseeds, and ultimately to produce such fatty acids in oilseed crops to provide economical feedstocks for the oleochemical industry. Camelina is not a major food oil crop, and is relatively less expensive to produce than other oilseed crops, therefore camelina has great potential for such purposes. We have successfully generated transgenic camelina lines producing hydroxy fatty acids that may provide an economical alternative to castor oils for certain industrial applications.

Biobased Alternatives to Chemical Feedstocks was one of the hot topics in the AOCs meeting. In the Plenary Lecture, Thomas Dorr, USDA Undersecretary, discussed the initiatives now underway at the federal level, especially with the USDA, to accelerate the development of the carbohydrate economy. He mentioned that more in fact has been accomplished on biofuels and bio-based products in this decade than in the previous 30 years combined. Bio-diesel production was two million gallons in 2000 and 245 million last year. The USDA is now projecting 375 million gallons for this year growing to about

700 million gallons in 2010 assuming continuation of the bio-diesel tax credit. The USDA is deeply involved in research on genetically enhanced feedstocks for a wide range of new biobased products including lubricants, hydraulic fluids, metal-working fluids, composites, and biodegradable plastics. The Biopreferred Program, managed by the office of USDA's chief economist, Keith Collins, is designed to identify and list biobased products for preferred procurement by federal agencies. To date, over 2,100 companies have identified over 11,700 biobased products for listing.

Another Hot Topic session "Omega-3: Yesterday, Today, and Tomorrow" featured Susan Allport, author of *The Queen of Fats* and William Lands, author of *Fish, Omega-3 and Human Health*. Allport presented the role of different fats, the relationship between fat intake and coronary heart disease (CHD), and described the evolution of the topic of omega-3. Lands stressed that problems (e.g., chronic inflammatory diseases common in industrialized nations) arise when we ingest foods containing excessive levels of omega-6 fat and insufficient omega-3. The damage is cumulative over the years. He referred the audience to the KIM-2 software that helps users design a healthy diet and learn the components of their food at: <http://efaeducation.nih.gov/sig/kim.html>.

Plants are a great source of the valuable omega-3 fats. Camelina oils are naturally high in omega-3 fatty acid (ALA, ~35%). We have recently developed some germplasm lines that accumulate 40-45% of ALA, approaching the level found in flaxseed oil, a predominant source of the vegetable omega-3 fats. Camelina is an ancient oilseed crop, but has recently attracted worldwide attention, especially in Montana, for its unique properties. However, the lack of a clear utilization pattern of camelina oil limits its large-scale production and usage. Genetic modification of fatty acid compositions of camelina oil may help camelina become a truly "gold-of-pleasure" oilseed crop. These were also the messages that I told the participants of the National Plant Lipids

Cooperative symposium at Lake Tahoe in June.

53rd Annual Conference - Scholarship of Teaching and Learning, June 20-22, 2007, University of Illinois
by Tracy Dougher

We have known since 1987 that students learn (and general audiences alike): 26% of what they are hearing, 30% of what they see, 50% of what they see and hear and 90% of what they say they are doing so it amazes me that keynote and blue ribbon speakers at a teaching/learning meeting are still in traditional lecture mode (what they are hearing, only 26% learning). I'm going to cut to the chase on this one, I found the meetings did not pick up until the third and final day when I had to choose between some very interesting concurrent sessions. Don't get me wrong, the *a cappella* group provided exciting entertainment in their long-sleeved letter sweaters at an outdoor BBQ in Illinois ninety plus degree heat and humidity. Needless to say, the networking BBQ on the second day was rather short.

I went with an eye toward the new freshman course that I am developing and the evaluation of teaching which MSU's Teaching/Learning Committee is considering taking on for a future project. I was not short-changed with the concurrent sessions on: An innovative teaching approach to enhance student retention, providing a service learning opportunity to students, academic rigor, re-envisioning our disciplines, assessment instruments for student motivation, perceived threat within the secondary agricultural classroom, and describing student cognition. What sticks out in my mind most from those sessions is that as mild mannered as I am, even some of my actions in the class room 'threaten' my students and hinder their learning.

Eight concurrent roundtable discussions at lunch (saying what we are doing, 90% learning going on here!) provided insight into other teacher perspectives on several learning topics. Each group took notes and summaries should be forthcoming (I'll share those too when I receive them). I recorded and participated in the discussion on

developing students' abilities to think critically and understand concepts.

My most interesting conversation was with Dr. Susie Whittington at the Ohio State University. As MSU continues the conversation on the best approach to in-depth assessment of teaching, Dr. Whittington is holding workshops on removing the bias in evaluation of teachers. We are all biased by our favorite mode of teaching and when we evaluate we need to get past that to recognize all forms of good teaching. I'll be working on this one with the MSU Teaching/Learning Committee this fall. There is never enough room to give an in-depth report on the great sessions I attended. Again this year, I'll be giving a seminar on Sept 18th with more detail on some of the sessions I attended. Come find out if you are a 'threat' to your students! And I'll also make a shameless plug for next year's NACTA meeting which will be held at Utah State University (only 6 hours away).

FarWest Show 2007
By Bill Hoch

Bill Hoch and David Baumbauer participated in the 2007 edition of the FarWest nursery show in Portland, OR August 22nd-24th. Held at the Oregon Convention Center, FarWest showcases the nursery industry in the Pacific Northwest with 1200 exhibitors and a full slate of seminars.



Terra Nova Nursery

There are 2000 nurseries and nursery related businesses in Oregon, making it the largest sector of Oregon's agriculture economy approaching one billion dollars in

revenue. Wednesday was spent touring a variety of nurseries in the Willamette Valley, including a rootstock producer, a tissue culture propagator of herbaceous ornamentals, and traditional field nurseries.



The field trip ended with a wonderful planked salmon dinner at Carlton Nursery featuring the finest in Oregon cuisine and beverages. Thursday and Friday mornings were spent in seminars and afternoons exploring the expansive trade show. It was a pleasure to visit with a number of MSU alumni who are actively involved in the green industry.

2007 Annual APS Meeting San Diego, CA July 27th - Aug. 1st

By Wendy Johnson

The annual American Phytopathological Society (APS) meeting this year in sunny San Diego, CA had my head spinning... literally. I caught a sinus infection! This year's meeting was held in conjunction with the Society of Nematologists (SoN) with over 1,650 attendees from 45 countries. In between nose blows and infectious handshakes, I attended a grape research workshop, listened to the food safety symposiums, joined the diagnostics committee, went to Sea World, and gave a poster presentation on my root lesion nematode survey of Montana.

At the grape research workshop 'What's working, what's not?' a panel of vineyard managers from the area came to discuss

with university faculty the latest in disease issues. Panel members were from Beringer, Frog's Leap Winery, Blackstone, Cakebread Cellars, etc. I was elated to hear them speak about how many acres they manage, and what wine giants consider feasible in a control program for west coast diseases.

The food safety issues were abundant and it was interesting to listen to what speakers from the USDA/APHIS and CDC had to say about their research from recent outbreaks of food-borne illness relating to the handling of fruits, vegetables, and nuts. Most of the speakers spoke extensively on the protocols used to track and contain the sources of an epidemic, or a potential outbreak. What I never thought about before was the livelihood of the farmer who suffers from the quarantine after contamination from a flood. Another speaker also presented her data on how enteric bacteria form biofilms to survive on plant surfaces and what genes are required for this adaptation.



After all the work, Nina, Mary, and I zigzagged across Sea World at the extension social to see dolphins and sharks. Sea World's big ticket, the gigantic orcas turned cute and cuddly, brought the extension social to an end. As we watched, I realized the orcas acts to amuse the kiddies were made silly when synchronized with musicians, big screens, and fireworks at Shamu stadium. A trolley ride away from the Town and Country resort gave way to great seafood and atmosphere in Old Town. A little further on the trolley downtown expanded into the bay area, offering views of

naval ships and a seaport village with parks and tourist splendors.

After Two Years, Malians depart to Launch the Mali Agribusiness Network, An Entrepreneurial Incubator
By Florence Dunkel

The Malian team is departing for Mali. We are in the process of saying goodbye for a while. They are in the process of launching an all-Malian, sustainable, participatory, holistic Network to assist small-scale farmers in helping themselves meet their own goals. Here are the specifics.

Adama Berthe, instructor at the Agricultural University of Mali (IPR/IFRA) completed his courses in Plant Sciences / Plant Pathology (PSPP) and internship with the Montana Seed Potato Lab and returned



Susie and Elaine, and the entire Montana Seed Potato crew bid farewell and good luck to Adama Berthe as he departs to initiate a similar lab/field program in Mali.

to Mali on 23 July. Adama spent 22 months at Montana State in English courses, PSPP courses and in an intensive internship with Dr. Mike Sun and his technicians. Back in his laboratory at the University in Mali, Adama has been meristem culturing and growing out plantlets from the International Potato Research Center (CIP) and from seed suppliers in Europe. Dr. Barry Jacobsen visited Adama's laboratory and greenhouse facility in Mali mid August 2007 and reports that Adama is going full-steam ahead in meeting deadlines for the arrival of Aissata Thera in early September and for the

growing season of Generation One seed potatoes. Adama will continue progress on his M.S. degree requirements in Mali.



Adama Berthe analyzes Montana potato leaf samples in the Plant Growth Center while designing the Mali-style Certified Disease-Free Seed Potato System.

Aissata Thera, tenured scientist in the Mali agricultural research service completed all coursework for her M.S. in Plant Pathology and has left for Mali to prepare for the village visits of Americans and Malians attending the launching of the Mali Agribusiness Network (25 September to 1 October 2007). One of these villages, the village of Borko near Mopti has been chosen to test the seed potatoes produced by Adama because Aissata and Dr. Jacobsen determined that it is a *Ralstonia solanacearum*-free location and has a special, isolated microclimate ideal for disease-free seed potato production, one of the first initiatives of the Mali Agribusiness Network. Aissata will complete her thesis revisions and defend her thesis via video conference in September 2007.

Assa Kante, tenured scientist in the Mali agricultural research service, completed her M.S. at Montana State in Agricultural Education May 2007 and an internship in Agricultural Communications at Oklahoma State University August 2007. She has returned to Mali to prepare for the launching of the Mali Agribusiness Network. The specific Network initiative that she is coordinating is quality improvement for export of Malian shea butter to Montana and

other US locations. Shea butter is a product from the nut of the shea tree which only grows in the near Sahelian areas of sub-Saharan Africa. It is the village women farmers that produce it in a lengthy extraction process. Profits form an important economic base for health and education of these women and their children.

To assist in export regulations, processes, formulation, packaging, Assa, the other Malians, and Dr. Florence Dunkel invited to Bozeman August 23-27, Binta Bocoum, leader of Project Karite (Shea Butter) in the Mali Ministry of Promotion of Women, Children, and the Family. Dr. Dunkel also arranged for Ms. Bocoum, Assa and other members of the MSU team to visit the Department of Commerce in Helena and other US locations. Ms. Bocoum has continued on to companies/foundations with which the *Network* collaborates in Olympia Washington, Washington, D.C., and New York, NY to learn and arrange for the export process with fair return of profit to village women farmers. Meanwhile, August 30, Assa returned to Mali to arrange for the American/Malian visit during the launching event to the first village to be aided by the *Network* exporting shea butter.

Keriba Coulibaly, tenured scientist in the Mali agricultural research service, has completed courses in English and in Plant Sciences and holistic management and an internship with the Montana Seed Potato Lab, Dr. Norm Weeden and Dr. Dunkel and will return to Mali 17 September 2007. As his part of the Agribusiness *Network*, he will initiate a participatory assessment and quantitative quality analysis of the cowpea crop, *Vigna unculata*, being harvested throughout Mali September-October 2007. Keriba will also initiate an on-farm participatory research project to evaluate traditional Malian processes for postharvest protection of cowpeas, processes he has tested in Dr. Dunkel's laboratory. Protein deficiency seems to be a major problem in parts of Mali due to the cereal (millet/sorghum) – based diet. Adding cowpeas on a regular basis would solve the problem, but farmers say they cannot store cowpeas more than 2 months without their

being destroyed by bruchid beetles, *Callosobruchus maculatus*. No-cost procedures for postharvest cowpea protection appropriate for Malian villages are known, but not used. Keriba will also continue the Mali secondary school project initiated 2005 on cowpea postharvest protection (a USDA project collaborative with Manhattan MT Public Schools). Keriba will continue progress on his M.S. degree requirements in Mali.

Abdoulaye Camara, IPM scientist with the Mali agricultural research service, has completed courses in holistic management and microbiology and an internship with the Plant Diagnostic Lab and the Center for Biofilm Engineering, supervised by Dr. Jacobsen and Dr. Mark Burr, respectively. Abdoulaye will return to Mali 20 September to prepare for the launching of the *Network*. He will be setting up a biotech lab at l'Institut d'Economie Rurale (IER) and will continue progress on his M.S. degree requirements in Mali.

Sidy Ba, assistant professor in engineering at the National Agricultural University of Mali, is completing his M.S. thesis research in Environmental Engineering with the wetlands purification process in the Plant Growth Center and a slow sand filtration technique. Dr. Warren Jones in Civil Engineering. Sidy departs 10 September to prepare demonstrations for the *Network* launching event 27 September 2007 in Bamako, Mali. He will return for one (Fall 07) semester to complete his thesis and defend.

To transition back to Mali and launch the *Network*, Dr. Kadiatou Gamby worked with Dr. Dunkel and the Malians and MSU faculty 19-15 August. Dr. Gamby is the director of fruit and vegetable research for Mali and the Mali leader of this Higher Education for Development grant that brought the Malians to MSU for training. She has just received the 1007 national award for agricultural research in Mali. All Malians receiving the long-term training at MSU (and our partner institution, University of St. Thomas, St. Paul MN) are required by US Agency for International Development regulations to

reside in Mali for 2 years following this training at Montana State. Dr. Dunkel is project director.



Dr. Kadiatou Gamby, director of fruit and vegetable research for Mali brings her country's thank yous to Dr. John Sherwood, Department Head for the training of Malians and its administration.

Beyond the science and engineering, these Malians have reached far into the communities of Montana to share their culture and we wish them well in their new venture to help their own country.

Malians Invited to Washington, D.C. for Higher Education for Development Synergy 2007 Conference

Aissata Thera, Abdoulaye Camara, Assa Kante, Keriba Coulibaly, and Sidy Ba were given a mini-grant by Higher Education for Development (US Agency for International Development [AID] funding) to accompany Dr. Florence Dunkel to Washington D.C. 7-11 August to participate in the Synergy in Partnerships Conference, Fairmont Hotel. In addition to meeting with 150 of their counterparts (and their University administrators) from around the world, including Afganistan and Vietnam, Dr. Dunkel set up a series of specific conferences just for these *Network* leaders, about to launch something bold and new in Mali.

MSU-Malians, Dr. Dunkel, and Dr. Norm Peterson, Montana State University Vice Provost for International Education, met with Dr. George Ayittey, professor of economics at American University and author of several books including *Africa Unchained: Blueprint for the Future*. After a 3 hour discussion of

“cheetahs and hippos” and development efforts in Mali, the Malians decided to invite Dr. Ayittey to participate in a forward looking discussion at their Kickoff event in Mali to launch the Mali Agribusiness *Network* and to present an all-campus address in Bozeman as part of the new follow-on USDA grant.



Montana State Malians and Dr. Dunkel meet with Land-O-Lakes Foundation representative at Higher Education for Development meetings, Washington, D.C.

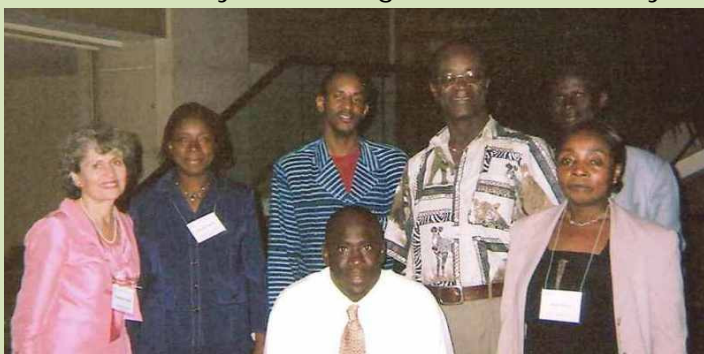
The PSPP scientists and other Malians and Dr. Dunkel also met with the international director for Land-of-Lakes, a farmer-owned cooperative, the representative of the Martin and Flora Hewlett Foundation for alleviating poverty world-wide, and the representative of the Ambassador of Mali to the US.



Keriba Coulibaly and Aissata Thera and the Montana State-initiated Malian Agribusiness Network networks with representatives of the William and Flora Hewlett Foundation and other potential supporters at HED meetings in Washington, D.C. August 7-11, 2007.

For the past 3 years, these Malians and their 2 colleagues, Adama Berthe and Belco Tamboura, who had already returned to Mali have been testing for the past 3 years a new model for USAID-funded long-term training. Our model is the single-country model and our innovation is to develop a cross-trained,

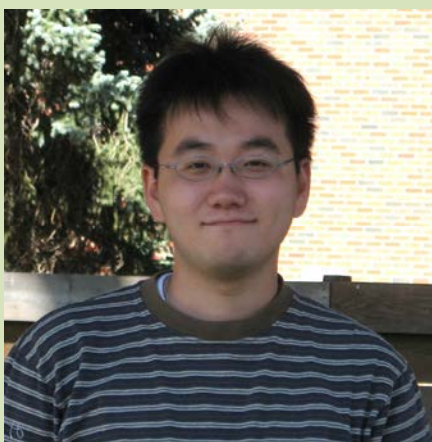
collaboratively-trained team to infuse bottom-up, farmer-first techniques into agricultural services of Africa. The meetings in Washington D.C. brought the Montana State single-country team together with the regional team, the model being tested by the Ohio State University and Michigan State University.



Malians with Dr. Dunkel engage Dr. George Ayittey, American University professor and author of "Africa Unchained: Blueprint for the Future" while in Washington, D.C.

New Graduate Students

Dai Ito (Mary Burrows)



Hello everyone. My name is Dai Ito. I was born in 1985 and I am from Japan. Please call me "Ty" since it's easier to say and my given name sounds a little bit

unique in English even though my name means "big" or "great" in my native language.

I went to college in Florida and I've never been to a place like this before where it gets very, very cold in the winter. So, right now I am worried about this coming winter. It would be good if someone could let me know how to pass the really cold winter.

My hobbies are fishing, computer and walking. I used to play Kendo (Japanese fencing) when I was very young. I also used to go a lot to Akihabara, a part of Tokyo that might be familiar to some of you.

I've heard that Montana is the best place for fly-fishing. My uncle used to come here a lot, and I know someone from Japan that moved here just for the fishing. Besides learning and researching, fishing is something I want to try while I'm here in Montana.

Grants

Sands, David C. " Survey of Plant Pathogens as Potential Biological Control Agents for the Invasive Weeds, Orange and Yellow Hawkweed." USDA Forest Service.

Publications

The following article was chosen as Editor's pick:

Hogg A.C., R.H. Johnston, and A. T. Dyer. 2007. Applying real-time quantitative PCR to Fusarium crown rot of wheat. *Plant Dis.* 91:1021-1028.

Chaofu Lu_, James G Wallis and John Browse. "An analysis of expressed sequence tags of developing castor endosperm using a full-length cDNA library." *BMC Plant Biology*, 2007, 7:42.

Moore-Gough, C. Plant Problems in the Northern Rockies. *American Nurseryman Magazine*. August 15, 2007. Vol. 206 No. 4: pp 8-10. Includes photos by Moore-Gough, Tanya Daniels (Carbon Co. Agent), Janna Kincheloe (Judith Basin Co. Agent) and Nina Zidack.

Moore-Gough, C., R.E. Gough. Regional Reports - Plants that Thrive on Neglect: Upper Plains. *Fine Gardening Magazine*. September/October 2007. No. 117: p. 66.

Direct Deposit Pay Stubs and Paychecks

Beginning September 11, direct deposit pay stubs will no longer be distributed in paper copy, but they will be available online at MyInfo.

Beginning October 11, those employees that do not participate in direct deposit will need to pick up their paychecks at the Personnel and Payroll office in Montana Hall.

Bridger Run

Matt Lavin finished 6th in the Bridger Run this year. There were only in two runners in the 30-50 category that finished ahead of him.

Congratulations Matt!

Planting Trees and Shrubs By Cheryl Moore Gough

Late summer and fall mark the end of our growing season, but it's a great time to take advantage of the local nursery's end of season sale, and plant trees and shrubs. The heat of summer is over, the plants' demands for water are lower, and the roots will make good growth in the warm fall soil. Just be sure to plant early enough in the fall to give your plants a good head start before the ground freezes.



Protect the roots of your new trees and shrubs before planting. It takes less than a minute in bright sunlight for small feeder roots to die. Without these, the plant must struggle to absorb moisture; transplant shock will be greater and survival lower. Make the planting hole at least a foot greater in diameter and 6 inches deeper than the plant's rootball. If your soil is heavy, loosen soil compacted on the inside of the hole during digging.

In general, plant at the same depth as the plant grew in the nursery. Set the graft union on fruit trees about two inches above the soil line and the union on grafted roses about two inches below the soil line. Use plenty of water in the planting hole, but no fertilizer. And finally, put a thick organic mulch around the plant to protect it from winter damage. Be sure to allow space between the trunk and the mulch to avoid rodents' nesting next to the trunk.

If you form a basin around the base of the tree to hold irrigation water during establishment, be sure to break a hole in one side of the mound before winter. This allows puddle water to drain away from the trunk, preventing it from freezing and damaging the trunk and root system.

Fall is the best time of year to renew your beds, and divide spring-flowering perennials and rhubarb. Most perennial plants need to be divided every couple of years in order to remain vigorous and to keep them productive, but at the very least, clean up your beds to reduce the number of overwintering pests.

To renew your beds, dig up and remove the perennials and all weeds that have encroached upon the garden. Work liberal amounts of compost into the beds. That means applying a layer of organic matter at least two inches deep and digging it into the soil. Remove the dead tops of healthy plants, leaving 2" stubs, and discard any that have dead or damaged crowns and roots. If your plants are too big, divide them and reset the divisions at the same depth they grew previously.

Some perennials are comparatively short-lived. Columbine, lupine, delphinium, and some flax die out after a few years. If your plants are old and unhealthy, discard them for new ones. On the other hand, iris, phlox, and the hardy asters can live for many years. Lift and divide these every year or two to keep their blooms large and healthy.

Peonies often do poorly if disturbed, and reestablish slowly, so try to leave them in place during bed renovation. However, if it's time to divide them, here's how to do it: Lift the plant from the ground with a spading fork. Remove the old dead stems and cut the crown into sections, each having several buds. Be careful not to damage the roots. Peonies that are planted too deeply won't flower, so be sure to replant the sections so the buds are no deeper than 2" below the soil surface. Mulch, after the ground has frozen, to help avoid fluctuating temperatures. If you have a peony that you suspect might have been planted too deeply, take a spading fork and gently lift the crown. Do not remove it from the ground, just lift it so it is not planted as deeply.

In the vegetable garden, rhubarb is another perennial that benefits from division. Lift the dormant crown using a spading fork or

similar implement and cut through it carefully using a spade, dividing the crown into sections. Be sure there is at least one main bud on each section you replant. Before replanting, prepare the soil by digging in manure or other organic matter. Replant the parent and move or give away the other sections. On light soils, plant the set so that one inch of soil covers the buds. On heavy or wet soils, plant so the buds are just above ground level. If you have several plants in your garden, space them 2 1/2 to 3 feet apart. It is also a good idea to place perennials, including rhubarb and asparagus to one end of your vegetable garden for ease of cultivation.

Fall, after the first hard frost, is a great time to work outside. The days are no longer beastly hot, and it's a pleasure to get out in the garden.

Bob's Byte

By Bob Johnston (Irene Decker filling in)

PowerPoint Tips

Using Different Backgrounds within one Presentation

Users of PowerPoint 2000 and lower will only have two background designs automatically supplied with the Masters (counting both the Slide Master and the Title Master). However, you can have any design you want on any slide. From the Format menu, select Background. Check the box that says "omit background items" or for 2007, "Hide background items" and this will make the slide ignore the Slide Master's design. You are now free to add whatever design you want to this slide. If you want to do this to many slides at once, go to the Slide Sorter, select the slides, and then use the Format menu command. Remember though that if you choose to do something like put a photographic background on many of your slides instead of doing it once on the Master, that your file size may increase dramatically.

PowerPoint 2002 and 2007 support multiple background masters.

Easily Changing from Caps to Lower Case (or Vice Versa)

If you have text that is in the wrong case, select the text, and then click Shift+F3 until it changes to the case style that you like. Clicking Shift+F3 toggles the text case between ALL CAPS, lower case, and Initial Capital styles. You'll be surprised how often you use this once you get the hang of it!

Recipe of the Month

Bread Salad

A crusty rosemary bread works nicely for this classic Italian salad. The bread - pulled into bite-sized pieces - tomatoes, cucumbers and red onions, are tossed with fresh herbs and just enough vinegar and oil to give them a nice glistening. Four generous servings."



- 1 clove garlic
- 1 (1 pound) loaf Italian bread
- 1 cup chopped tomatoes
- 1 cup cucumber - peeled, seeded and chopped
- 1 cup chopped red onion
- 1 clove garlic, minced
- 2 cups chopped fresh basil
- 1/8 cup chopped fresh thyme
- 1/4 cup olive oil
- 2 tablespoons balsamic vinegar

Rub a peeled clove around a wooden salad bowl. Pull apart or chop the bread into bite sized pieces.

In the prepared salad bowl, combine the bread, tomatoes, cucumbers, red onions, garlic, basil and thyme. Add enough olive oil and vinegar to lightly coat, toss and serve.

September Birthdays

Tracy Dougher	1
Katreena Kluck	1
Debbie Willits	3
Irene Decker	5
Oliver Neher	13
Nick Reynolds	21
Katie Hopp	21
Gary Strobel	23
Wendy Johnson	24
Bill Dyer	26
Mark Young	27
David Baumbauer	27

