

What's Inside

The Pumpkin Project, Page 2

WA State Commission on Pesticide Registration Request for Proposals, Page 3

Support from Organic and Sustainable Agriculture, 'Safe Food Initiative', Page 3

Small Farm Newsletters, Page 4

Greenhouse Raspberry Production in Cold Climates, Page 4

Creating a Vision for the University of Idaho Sandpoint R&E Center, Page 5

Growing a Community Food System, Page 5

Rural Roots Leadership Team, Page 6

Pea Viner Corners, Page 6

Jim McGinty's Sustainable Farming/Gardening Book Recommendations, Page 7

Inland Northwest Food and Farming Calendar, Page 8

Look for Spring's Focus Topics

IPM for Codling Moth Control

Organic Weed Control in Basil

Early Season Tomatoes

Bringing Home the Harvest

Newsletter of Rural Roots:
The Inland Northwest Community Food Systems Association

Fall 1999

Volume 2, Number 1

Farmer Cooperators Needed for Marketing Feasibility Study

Restaurant, grocery store, and institution markets seem to hold great potential for small acreage farmers in the Inland Northwest who practice sustainable agriculture. While this is the perception, we need to quantify the potential of these markets, the benefits to farmers in the region, and the challenges to meeting the demands of these markets...thus, a marketing feasibility study. The objectives of the study would include increasing purchases of local, sustainably grown foods by Inland Northwest grocery stores, restaurants and institutions.

The feasibility study needs to be **farmer-driven** if it is to be successful.

The feasibility study would estimate the potential market, determine the opportunities, challenges and benefits perceived by buyers and consumers to purchasing local sustainably grown foods. It would also determine the potential of linking small acreage farmers in the region to provide the quantity and quality of foods to buyers, and would quantify the production and marketing challenges of farmers who practice sustainable agriculture.

The feasibility study needs to be farmer-driven if it is to be successful. Farmers will be asked to participate in the development of the study, to identify potential markets, and to survey consumers, restaurant and grocery store owners, etc. Farmers will also be interviewed about their production and marketing challenges.

If you are interested in participating in the feasibility study, attend the discussion on October 28th from 2:30 to 4:30 p.m. at the WSU Spokane County Extension office, 222 N. Havana (next to the Spokane County fairgrounds). The discussion will be part of the Rural Roots fall membership meeting, but nonmembers are invited to participate.

For more information or to pre-register, contact Colette DePhelps, Rural Roots Program Coordinator at 509/447-0909 or dephelps@povn.com



The Pumpkin Project

by Diane Green, Greentree Naturals

The "Pumpkin Project" is an idea that came to me after talking with a number of children and asking them if they knew where their Halloween pumpkins came from. All of the children that I queried named the grocery store where their parents shopped. None of them had gardens or had ever grown a pumpkin!

It would seem that we are getting farther away from thinking about the food that we eat and where it comes from. I feel that it is very important that we teach our children about farming and the concept of where their food is grown. As a society, we have gotten so far removed from thinking about our food source. You go to the grocery store, and the fruits, grains and vegetables are just always there. We eat foods that have been shipped thousands of miles to our community, and rarely consider all that has gone into growing and cultivating this sustenance.

For me to be a successful small acreage farmer, education is the key to my survival. The education of the consumer will bring a more sustainable community food system. If I can get the children to think about the process, maybe they will influence their parents to support local farmers, or plant their own garden.

I want people to think about it. I want our children to be in touch with the process. When thousands of acres of farm land are being lost weekly, and hundreds of farmers are stopping food production, we need to seriously be looking at this and work towards making a change. We need to think about developing a local Community Food System. For this to be successful, we need to educate the consumer and their children.

At a potluck last fall, I met the first\second grade teacher from our neighborhood, rural elementary school. Cindy Bailey teaches at Northside Elementary School two miles from my farm. When I shared my idea about the Pumpkin Project with her, she was excited and interested to work this into her classroom.

I visited the classroom the end of April. I arrived with pots, soil and Pumpkin seeds. I wore a straw hat and overalls, brought my lady bug hand puppet, and a coloring book about Organic Farmers. My main goal was to get these kids thinking about the farmer who grew the fruits and vegetables at the supermarket where their parents shopped. To me, there is nothing more magical than planting a seed and watching it grow. My hope is that some of them find the magic that turned me into a farmer. If only one of twenty students turns out to be a farmer, then I have accomplished my task! And so, these twenty school children planted their pumpkin seeds.

The children kept a daily journal of the pumpkin's growth. They measured and noted any and all changes of the seed into a pumpkin plant. The kids really took on an ownership with their plants. After four weeks of growing their plants in the classroom, they hardened them off by taking them outside every day. In the fifth week, the class came to our farm and transplanted their seedlings into the ground. Next to each plant, there is a decorative stake with each child's name on it. The kids were incredible. They had become very attached to their plants. One little girl even kissed her pumpkin goodbye. I promised the kids that I would take good care of their pumpkins. In the fall, when the children return to school, they will come to the farm and harvest their pumpkins.

My goal is to create a model program for area schools to do the same project throughout the region. I hope to help teachers connect with area farmers so that they can do the same project. I considered this a great success and am already making plans with Cindy Bailey to do the project again next spring.



Bringing Home the Harvest is a quarterly newsletter of Rural Roots: The Inland Northwest Community Food Systems Association.

Bringing Home the Harvest shares the knowledge and experience of people working in community food systems and the opportunities and challenges facing small acreage farmers and market gardeners in the Inland Northwest. In addition to sharing information and resources, *Bringing Home the Harvest* helps make connections between producers and consumers in northern Idaho and eastern Washington. It encourages sustainably produced foods, and works to enhance the economic viability of small scale producers and the communities where they live.

Articles for publication and letters to the editors are welcome and must include the name and address of the author. Opinions expressed in the newsletter are those of the individual authors and not necessarily those of Rural Roots.

Editors

Colette DePhelps
Program Coordinator
Rural Roots
509/447-0909
dephelps@povn.com

Vickie Parker-Clark, Ph.D.
Extension Educator
Small Farms/Crops/Horticulture
University of Idaho
208/667-6426
vickiepc@uidaho.edu



Washington State Commission on Pesticide Registration Request for Proposals - With New Emphasis on Non-Chemical Controls

The 1995 Washington State Legislature created the Washington State Commission on Pesticide Registration (WSCPR) to assist users of pesticides into obtaining and maintaining pesticide registrations for minor uses in Washington State. The 1999 Legislature has authorized the WSCPR to fund a wider array of proposals designed to more fully meet the state's pest management needs (See Network article page...). The WSCPR intends to allocate 50% of the available funds for pesticide registration projects and 50% of the available funds on integrated pest management and pesticide resistance projects.

Proposals must originate from the affected pest management user group (i.e., tree fruit growers, vegetation management applicators, pest control operators, organic vegetable growers). For more information, contact: Alan Schreiber aschreib@cbvcp.com <http://www.wscpr.org/index.html>

Support from organic and sustainable agriculture and small farm advocates key to passage of 'Safe Food Initiative'

Washington State University's (WSU) 'Safe Food Initiative (SFI)', a \$7.5 million legislative funding request, was recently passed by the Washington State legislature with full funding. Organic and sustainable agriculture and small farm advocates played an important role in the passage of the SFI, by calling and writing legislators in support of the Initiative earlier this year. The Washington Sustainable Food & Farming Network (Network), which organized support from the organic and sustainable agriculture and small farm communities for the SFI, saw a unique opportunity with the SFI to create some much-needed institutional change at WSU, which has primarily focused its resources on conventional, large-scale agriculture. The Network is a diverse alliance of individuals and organizations (including Rural Roots) from throughout Washington working to promote organic and sustainable agriculture and small farming.

This legislation creates two new positions at WSU that directly focus on organic and sustainable agriculture and small farming. WSU has committed to the creation of a Small Farm Program at the WSU Puyallup Research and Extension Center, which will develop new programs to support small farmers, particularly in Western Washington, with production and marketing, development of community food systems, and access to land. Research on sustainable production practices in Eastern Washington for dryland crops will also be addressed through the SFI positions.

In conjunction with the SFI, the mandate of the Washington State Commission on Pesticide Registration was broadened from its original mandate of only supporting pesticide-based research, to include funding for research on biological and cultural pest control methods, which do not involve the use of synthetic chemicals.

The Network has signed a 'Letter of Mutual Commitment' with WSU leaders in the College of Agriculture, which includes the Small Farm Program and other initiatives at WSU to 'increase the availability and quality of WSU research, education and extension programs in the areas of sustainable and organic agriculture, community food systems and small farm viability'. A series of meetings between the Network and WSU leadership has taken place over the past several months. There appears to be new understanding and commitment to organic and sustainable agriculture, and the issues facing small farmers, on the part of WSU.

November 9, 1999 the Network will be holding its first eastern Washington meeting in Spokane. All are welcome to attend. For more information on the Spokane meeting or to get involved in the Network, please contact: Colette DePhelps, 509/447-0909, dephelps@povn.com or the Network's coordinator, Bonnie Rice, 360/592-3094, brice@televar.com

Small Farm Newsletters

Growing for Market

PO Box 3747
Lawrence, KS 66046

News and ideas for market gardeners.

Pacific Northwest Sustainable Agriculture

College of Agriculture and Home Economics
PO Box 64624
Washington State University
Pullman, WA 99164-6242

The intent of this newsletter is to discuss profitable low input and sustainable farming systems and practices that protect both human health and environmental resources.

Small Farm Digest

Subscriptions are free.
For information call Betty Hodges
Small Farm Program
USDD Mail Stop 2220
1400 Independence Ave. S.W.
Washington, DC 20250-2220
Phone (800) 583-3071
On the web www.reeusda.gov/smallfarm

Small Farm Today

3903 W. Ridge Trail Rd.
Clark, MO 65243-9525
Phone (800) 633-2535

Dedicated to the preservation and promotion of small farming, rural living, sustainability, community and agripreneurship.



Greenhouse Raspberry Production in Cold Climates

by **Marvin P. Pritts, Professor, Department of Fruit and Vegetable Sciences
Cornell University**

Reprinted from Capital Vegetable News Vol. 1 # 6

Raspberries are uniquely suited for year around production using greenhouses for the off-season. Raspberries are a high value crop that retail for \$3.00 to \$6.00 per 1/2 pint (180g) during the winter and early spring. No domestic sources of winter raspberries exist, with the exception of a few producers in a small region in southern California along the coast. The vast majority of winter raspberries are flown in from the Southern Hemisphere. Quality is generally poor because raspberries have an extremely short postharvest life, and bruise easily during shipping.

In the northeastern United States, many greenhouses are empty during the winter months. These greenhouses could be used to grow high quality raspberries with only moderate inputs, providing greenhouse owners with an opportunity to produce an extremely high

Raspberries are well-suited to greenhouse production,
and the economics appear to be favorable.

value crop during a time of year when they are realizing no return on their capital investment. In our first attempt at growing greenhouse raspberries, we have obtained the equivalent of \$500 - \$1000 of exceptionally high quality fruit from as little as 25 feet of row (15 plants) between mid-February to mid-April. In addition, by holding dormant raspberry plants in cold storage during the winter and bringing them into the greenhouse at staggered intervals, they can be made to ripen for several months prior and up to the normal raspberry season, dramatically extending the season of availability.

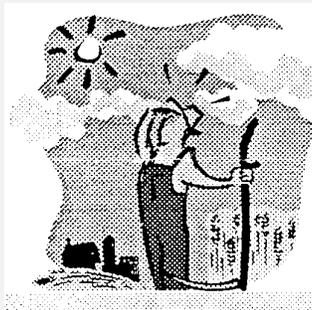
Production

We planted summer-bearing (floricane-fruiting) tissue-cultured raspberry plugs into 3.8 liter (1 gal) pots filled with equal parts of sand:peat:perlite:vermiculite in May, allowing them to grow outdoors on a gravel bed with irrigation until late December, then brought them into the greenhouse. While outdoors, the plants were fertilized weekly with a balanced soluble fertilizer solution containing 100 ppm N, and pest outbreaks were managed using conventional practices. Once in the greenhouse, canes were used to circulate air down the rows to reduce pockets of high humidity and the subsequent risk of fungal infection. Temperatures were maintained between 13-18C (55-65). Supplemental light was provided to first year plants during off-peak hours (2200-600 HR, 150 mmol/m²sl of PAR).

Six weeks after moving the plants into the greenhouse, they flowered. Bumble bees were used to pollinate the flowers, and fruiting began in late February, about 10 weeks after moving the plants indoors. Primocanes were removed at regular intervals during the fruiting period.

With the one-year-old plants, we used double rows (with row centers 1.5m (5 ft) apart) and a pot-to-pot spacing so that approximately 26 plants were contained in each 3m length of row. Each plant produced about one pint (350g) of fruit.

We removed all of the canes after harvest, and transplanted into 7 gallon pots for the second year. Plants were placed outside for the growing season after harvest in April, and they were returned to the greenhouse in mid-December -- after the chilling requirement had been fulfilled. Rapidly satisfying the chilling requirement is one advantage that northern growers



Creating a Vision for the University of Idaho Sandpoint Research & Extension Center

Small acreage farmers will have the opportunity to create a proposal on how the Sandpoint R & E Center can help address their research and extension needs. The visioning session is scheduled for October 21st. A tour of the center will start promptly at 1 p.m. after which participants will identify needs and develop a proposal that includes creative ways to meet those needs. Small acreage farmers in eastern Washington, northern Idaho, and western Montana are invited to participate. For more information and to pre-register contact Colette DePhelps, 509/447-0909 or dephelps@povn.com

Growing a Community Food System

A new publication "Growing a Community Food System" by Steven Garrett, Washington State University Cooperative Extension and Gail Feenstra, University of California at Davis, is available for \$2.50 from the Washington State University Bulletins Office, Cooper Publications Bldg., P.O. Box 645912, Pullman, WA 99164-5912, 800-723-1763.

have over more southern producers. Outdoors, plants were watered regularly and fertilized once a week with a soluble balanced fertilizer (100 ppm N). Canes were held upright with trellises as they grew, and were exposed to full sun.

In the second year, we spaced plants 55cm (22 in) apart in the row (single rows), with 1.7m (5.5 ft) between rows. During 1997, we examined the performance of several varieties, evaluated two trellis configurations (an I and V trellis) and three light levels (ambient, 7.5 moles and 15 moles PAR per day). Light levels were measured 2m above the floor and supplemental light was provided when required to meet the predetermined level. Bumble bees were again used for pollination.

Cultivar Performance

We fruited a number of different cultivars over the two year period. Furthermore, we invited chefs and produce buyers to a blind tasting where our fruit was compared with the variety Heritage purchased from two local supermarkets. The most flavorful variety was "Tulameen", followed by "Chilliwack" and "NY7". "Titan" also produced flavorful and extremely large fruit. Early in the season, fruit size averaged 6 grams (some berries were 12g) and it fell to 3 grams over the 8 week harvest period. "Chilliwack" produced an average of 11 half-pints of fruit per plant between 18 February and 18 April. Fruit flavor was very good, although the size was smaller than with some of the other cultivars, and the color was darker. Of all the red raspberry cultivars that we evaluated, "Tulameen" was rated as having the highest quality, while the supermarket entries ranked lowest.

"Jewel" black raspberry also produced excellent fruit of large size, but yields were about 70% lower than those of the red raspberries because the harvest season was much shorter (6 vs. 9 wk).

Compared to field production, the greenhouse-produced berries were larger, firmer and much less prone to fruit rot. Only 6% of the greenhouse berries were crumbly or otherwise unmarketable, whereas the percentage of field-grown berries that are unmarketable is usually much higher. Fruit tended to be slightly less sweet and more acid in the greenhouse, but well within the limits of acceptability. Only "Royalty" purple raspberry and "Heritage" red raspberries (summer crop) did not produce fruit of acceptable flavor.

We found that "Titan" has a longer chilling requirement than "Tulameen" or "Chilliwack", so it needed to be chilled beyond mid-December in our climate. If plants are to be kept outdoors later than mid-December in New York, then the pots must be protected from the cold weather. Otherwise, plants can be brought into a cooler in early December and the remainder of their chilling requirement can be fulfilled there.

Management Practices

After harvest, we removed all canes and set the plant outside in late April. However, certain varieties failed to regrow primocanes until very late in summer, including Tulameen, Chilliwack and NY7 -- our most productive varieties. We believe this may have been due to the large amount of crop that we produced in conjunction with primocane removal to facilitate harvest, depleting the carbohydrate reserves. Fernandez and Pritts (1993, 1994) have shown that primocanes are the primary source for root carbohydrate, so it is not surprising that continual primocane removal will deplete reserves. In the future, we will retain some of the primocanes during the fruiting season so they can replenish root reserves. If we do this, plants will have to be kept in the greenhouse until the danger of heavy frost is over in spring.

Light Levels

Most surprising was the observation that supplemental lighting had no effect on either fruit size or number of either "Titan" or "Jewel". Plants grown under ambient light levels (which are very low in Ithaca, NY in winter) produced the same yields as plants grown under 15 moles/day, although production was delayed for 2-3 weeks. Fruiting laterals under low light conditions also tended to be quite long and would frequently break under the heavy fruit loads.

Rural Roots Leadership Team

Colette DePhelps

Program Coordinator
Rural Roots, The Inland Northwest
Community Food Systems Association
P.O. Box 1618
Sandpoint, Idaho 83864
509/447-0909
dephelps@povn.com

Wally Adams

Coeur d'Alene Tractor
Coeur d'Alene, Idaho

Cindy dePaulis

Birds, Bees & Butterflies
Athol, Idaho

Diane Green

Greentree Naturals
Sandpoint, Idaho

Jim McGinty

Higher Ground Farm
Elk, Washington

Tina Pinzotti

Cataldo, Idaho

Maurice Robinette

Lazy R Ranch
Cheney, Washington

Cathy Weston

Post Falls, Idaho

Vickie Parker-Clark

Leadership Team Advisor
University of Idaho Extension
Coeur d'Alene, Idaho

Cinda Williams

Leadership Team Advisor
University of Idaho PSES Dept.
Moscow, Idaho

However, quality (determined by flavor ratings and soluble solids measurements) were not different among light levels.

Trellis configuration (I vs. V) also had little effect on fruit, although it was more difficult to harvest V-trellised plants as they required a greater amount of space. Therefore, we will use a standard I-configuration in future studies.

Pests

We regularly released *Amyseius cucumeris* for thrips control, lacewing larvae and *Aphidoletes* midge for aphids, and *Phytoseiulus persimilis* for our mites. Our major pest problem was twospotted spider mites which occurred in one house during the last two weeks of harvest. We hypothesize that a lower night temperature will reduce mite pressure.

Economics

At our orchard store, we sold raspberries for \$3 per 1/2 pint without consumer resistance, and the gross return per area (about \$30 to \$40/meter sq. for the 4 month period) was similar to the return that local growers typically received from bedding plants. One bedding plant grower in the area will be producing raspberries to coincide with bedding plant season in order to increase customer purchases during April and May.

Raspberries are well-suited to greenhouse production, and the economics appear to be favorable. We will learn much over the next few years as growers and researchers begin to experiment with this novel production system.

Pea Viner Corners

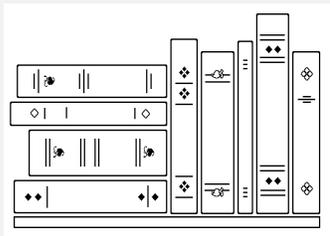
*Jim Vincent, Byron, New York **

While I was driving down the road the other evening, hurrying home from the pea field after delivering some parts to keep the harvest going, I stopped at an intersection. To the west, the sun was setting in a glorious array of amber and red. There stood the old foundation that had appropriately named the town, Pea Viner Corners. That foundation was where, forty years ago, stood the viners that each July held promise and opportunity for that community as the many hardy souls fed the elevators with the vines that yielded those tender peas.

A chill ran up my spine as I pulled over, turned off the truck engine, and looked over that old foundation. I thought to myself and tried to imagine that same scene forty years ago. In early July, there would be hundreds of people involved in bringing in the pea crop from the areas' farms and vining them at that corner. It would have involved many tractors with moving machines, as well as swathers, countless trucks, hayloaders, and a community coming together to harvest nature's plentiful bounty. Together they would accomplish so much because the race between the plow and the stork was dependent upon their effort. That community and American agriculture achieved a dramatic victory in that race.

I walked over and sat on the stones of the old foundation. Contemplating each shadow, I watched the last halo of the sun sink into the west. I thought of the community as it had existed, with its common goals and enterprising spirit. That community of forty years ago, and so much of rural America, has experienced its own sunset. Forty years ago, there was the general store, hardware store, feedmill, farm equipment dealership, a school house, and the community church bustling with activity at that time of year. They are all gone, all gone. This has been a victory so bittersweet for rural America, and has caused me so much anxiety.

I hear the crackle of the two-way radio as the pea harvesters talk to the canning factory. I thought of how those three machines with three people running them around the clock have replaced that row of viners and those hundreds of people. For a moment, I am overcome with guilt. Have I been a part of a coup that has led to the decline of rural America, its way of life,



Jim McGinty's

Sustainable Farming/Gardening book recommendations

"You can farm", by Joel Salatin - Good Earth Publications

"Dead snails leave no trails", Loren Nancarrow and Janet Hogan Taylor - Ten speed press

"Square foot gardening", Mel Bartholomew - Rodale Press

"Four season harvest", Eliot Coleman - Chelsea Green Press

"Sharing the harvest", Elizabeth Henderson - Chelsea Green Press

All are earth-friendly and useful reads.

Jim McGinty lives in Elk, Washington, and is a member of the Rural Roots Leadership Team.

and its community? Is this the reason so many are questioning my vocation? I think of the town, those vacant storefronts, abandoned dairies, and broken dreams. I think of the sons and daughters from those farms for whom economic reality presented no promise, no future, and no more ties to the land. Farming presents so much apprehension and uncertainty. I don't need this darkness, this guilt.

This community, this rural America, has been so victorious. Our successes have made us one of the most productive parts of the American economy. But, again, I think of it as a bittersweet victory. Our commitment to development, innovation, and productive capacity has been so prolific that we stretch our imaginations to deal with the surpluses we create. We have room for fewer and fewer farmers.

I think of how many times I have been called to neighbors' kitchen tables to help them make the tough decision to continue to farm or not. The decision is so often terminal. I have shared their burden because I shared their pride. I shared their tears as they realized they were swimming against too strong a current. I reflect on the epic competition between economic reality and the hearts and the minds of my friends, my neighbors, and my community.

Can light come from this darkness? Can I keep the victory going? Should I keep the victory going? I think about the challenges. Agriculture and its capacities that were once held almost holy, are now taken for granted. Will I be able to recognize the new accountabilities as America redefines itself? I have come to recognize that as each generation is removed further from their agricultural heritage, we also have a new clientele. I feel so small, we involve so few, but our productive capacity remains. We have a reputation deficit to overcome. I think of the agents and elements of this change. Even my own sons, with their differences of defining experiences, with less ties to tradition, a desire for an easier life, and a broader perspective of a new world order, are questioning this farming vocation.

Again, I think about Pea Viner Corners. It is still a community. It has a diverse agenda, a renewed agenda. It is redefining itself. Its residents have unpredictable political ties, and they question government, business and even science. It is a community of commuters, commuting because the industrialization of agriculture and its efficiencies have led to no economic or employment opportunities at home. These commuters desire control over their community, and these same people are becoming a social and economic force. I am frustrated because they don't understand my vocation. I am frustrated because they seem to have a different environmental consciousness. But I have to remember; it is a collective responsibility that will make a revitalized community. As a farmer, I haven't done enough to understand their diverse perspectives, while dwelling on their inattention to mine.

I reflect on the opportunity that is, perhaps, in our own backyard. Maybe, just maybe, this intermeshing with suburbia is what agriculture needs. My new neighbors' perceptions of quality and freshness, as well as their environmental consciousness have certainly changed my marketplace. Perhaps there is common ground for understanding. Maybe if I, and all of agriculture, put forth some effort, we can work together again with our neighbors to bring back to rural America everything that makes community. I have been burdened by agriculture's declining economic and political influence. Perhaps this overlapping with rural America can provide the linkage to bring back community.

I think of the void that has been left in rural America. I think about that old foundation at Pea Viner Corners and of foundations all across rural America. Whether or not agriculture is the cause, I feel an obligation to fill that void with meaning.

*Jim Vincent is a commercial vegetable grower who farms approximately 5500 acres in northern New York.



Rural Roots



Inland Northwest Food and Farming Calendar

Oct. 21 - Creating a Vision for the Sandpoint Research & Extension Center, 1:00-4:00 pm, Sandpoint. Please pre-register with Colette DePhelps.

Oct. 28 - Rural Roots fall meeting.
9:00-Noon -- Leadership Team Meets
1:00-2:30 -- Membership Meeting
2:30-4:00 -- Discussion of distribution network feasibility study
Please pre-register w/Colette DePhelps.

Nov. 6 - “Wholesome Foods and Farms Forever” Conference, College of Southern Idaho, Twin Falls. The conference will focus on Soil Quality and Marketing issues. Invited speakers: Pat Takasugi, Director of the Idaho Dept. of Agriculture, renowned soil expert Elaine Ingham, organic crop consultant Woody Deryckx, and more. Contact: Jeff Rast, NCAP, 208-764-2332, jeffrast@northrim.net

Rural Roots
Post Office Box 1618
Sandpoint, Idaho 83864