

THIRD CROP OPPORTUNITIES IN THE BLUE EARTH RIVER BASIN

CONFERENCE PROCEEDINGS



FAIRMONT, MN
FEBRUARY 7TH AND 27TH 2003

ABOUT THE ORGANIZATIONS



BLUE EARTH RIVER BASIN INITIATIVE

The Blue Earth River Basin Initiative (BERBI) was officially formed in 1993 as a Joint Powers Organization of Soil and Water Conservation Districts (SWCD). SWCD members include Blue Earth, Cottonwood, Jackson, Martin, Steele, Waseca, and Watonwan counties. The major focus of BERBI is implementation and getting conservation practices on the land. BERBI has a unique relationship with its member Districts and acts as a vehicle to develop projects in cooperation with the Districts and others, an approach that has proven very effective in realizing projects in the basin.

INSTITUTE FOR AGRICULTURE AND TRADE POLICY

The Institute for Agriculture and Trade Policy (IATP) was founded in 1986 by environmental and farm leaders who saw the need for an independent research organization dedicated to addressing the links between natural resource conservation and agriculture policies. IATP's mission is to foster economically, socially and environmentally sustainable communities and regions, and one of its strengths is its ability to bring together different constituencies to address environmental and socioeconomic issues.



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FOREWORD

On February 7th, 2003, over 30 participants gathered in Fairmont, a small town in southwestern Minnesota for the first meeting of a workshop series entitled “Third Crop Opportunities in the Blue Earth River Basin.” At the meeting, hosted by the Institute for Agriculture and Trade Policy (IATP) and the Blue Earth River Basin Initiative (BERBI), participants explored some of the new opportunities for agriculture to provide diversification and other environmental benefits while ensuring adequate returns for the farmers.

The second meeting was held February 27th, 2003 and had close to 50 attendees. On this day, new market developments were discussed and farmers had the opportunity to network with businesses interested in sourcing locally, as well as with other farmers and organizations working to magnify the strength of individual farmers’ marketing capacity by creating cooperatives and marketing groups.

The third crop concept emerged from the growing recognition of the problems that result from the current dominance of corn and soybean production. The corn-soybean rotation in the Blue Earth River Basin has resulted in increased soil erosion, decreased water quality, and commodity prices falling well below the cost of production. Yet, despite these problems, it has been recognized that agriculture is a preferred use of the landscape, as other types of production and urbanization have more detrimental effects on the environment. Unfortunately, the farming community is struggling because of the lack of profitability in small-scale farming and the replacement of small farms by increasingly large farms, the least preferred form of agriculture because of its monotonous fields, high-intensity production, and vast use of chemicals and minimal economic return to local communities. Both IATP and BERBI, as well as many other organizations and farmers recognize this, and are working to diversify crops grown in the Blue Earth River Basin and to provide opportunities for additional incomes to family farmers in the region in order to revitalize the farming community.

In essence, third crops are alternatives to the traditional corn-soybean rotation that can help improve farm incomes and diversify farm landscapes while providing environmental benefits. Third crops could be new, specialty crops such as herbs or specialty vegetables. The concept can also be related to the way these crops are produced and processed and thus includes organic or sustainably produced crops, or even include traditional crops used for new purposes. Third crops also include other less traditional forms of farm income such as energy production and agritourism, and a host of other practices that help diversify farms and landscapes and produce environmental benefits otherwise difficult or costly to achieve. These practices can include providing recreational opportunities, such as ecotourism, hunting or fishing, as well as environmental benefits such as wildlife habitat, water storage, carbon sequestration, nitrogen mitigation, and a wide range of other opportunities. Most importantly, third crops can help diversify farms, break pest cycles, and bring additional incomes to farm families, as well as many other positive outcomes.

At the workshops, landowners met with companies, organizations, and other landowners working with third crops to talk about opportunities for value-added agriculture that increase environmental sustainability as well as profitability. Most people involved in third crops expressed a concern about about developing markets for these new crops. Because of this concern, the workshops focused on marketing, new market development, and networking opportunities.

Faculty and representatives from University of Minnesota, Minnesota Department of Agriculture and Minnesota Department of Transportation presented topics ranging from working landscapes and sustainable agriculture systems to how to transition to third crops. Speakers from the private sector interested in sourcing locally included AVEDA Corporation. Most importantly, a significant portion of the participants were local farmers hoping to gain or share insight and ideas to bring the third crop concept fully into the Blue Earth River Basin.

THE BLUE EARTH RIVER BASIN

The Blue Earth River Basin, covering 2.3 million acres in south central Minnesota, is the largest sub-basin within the Minnesota River Basin. It is intensively farmed, with more than 90 percent of the land used for corn, soybean and hog production. Commodity prices remain well below the cost of production, and farmers have little choice but to grow the crops for which markets exist and government programs provide support. This agricultural system has contributed to water quality problems, insufficient wildlife habitat, and ailing rural communities. The Blue Earth River Basin is also a large contributor of nitrogen to the Gulf of Mexico, reducing oxygen levels and marine aquatic habitat.

The Blue Earth River Basin is in the heart of the Corn Belt and is home to incredibly productive soils, good climatic conditions, and agriculture that produces some of the highest yields in the country. A variety of agriculturally based businesses are in Mankato and the surrounding area. The thriving cities of Minneapolis and St. Paul - with more than two million consumers - are only a couple of hours away. The region has a solid transportation infrastructure of highways and rail. This is a place with remarkable potential for a sustainable local agricultural system and flourishing rural communities.

Yet despite these assets, serious economic concerns exist. Nearly nine percent of the Blue Earth River Basin population falls below the poverty line, with some counties having as much as 12.9% below poverty. Out of approximately 305,000 persons living in the basin, 18% are above 65 years of age, and only about 25% are under the age of 18.

Furthermore, agriculture in the Blue Earth River basin and throughout Minnesota has required increasing government payments. Minnesota received over \$318 million in government payments in 1997. 51,228 farms in Minnesota are in debt and the total debt for Minnesota farms in 1997 was almost \$7.5 billion. Furthermore, the average size of the farms in the basin increased nine percent from 1992 to 1997, driving small farms out of business and contributing to the loss of diversity of the agricultural landscape. All of these trends indicate that current agricultural production systems have not provided the expected economic base to local communities.

About 1070 farmers farm in the Blue Earth River Basin. The average farmer is 48.7 years old. In addition, the total number of full-time farmers in the basin has declined by 15.3% in the five years from 1992 to 1997. These are facts that testify that there is a considerable need for young farmers in order to prevent the farm community from disappearing and to renew agricultural practices in the basin. The number of young farmers in the basin is very low, in part due to the high debt of many of these farms.

Yet, despite the difficulties that farmers face, while working with farmers in the basin, IATP and BERBI have found incredible examples of innovative farming practices and enthusiasm for the third crop concept. A transition away from unsustainable practices and an increase in crop diversity is desperately needed, but in order to make the large-scale conversion of cropland to perennial crops economically sustainable, farmers need markets for these crops. This was the driver behind the Third Crop workshops. Much focus was placed on connecting producers with markets for third crops and the meetings emphasized networking and opportunities to make real connections with industry, organizations, and other third croppers.

These data are from the Agriculture Census of 1997 and the U.S. Census of 2000.

ACKNOWLEDGEMENTS

The Institute for Agriculture and Trade Policy's (IATP) work with third crops was made possible thanks to a generous contribution from the National Fish and Wildlife Foundation (NFWF), and the North American Fund for Environmental Cooperation (NAFEC).

Thank you to all the presenters who provided useful knowledge and new ideas, and to the participants who inspired the discussions and shared experiences, concerns, and a passion for farming. We would also like to extend our gratitude to the many individuals whose dedication of time, energy, and resources made the Third Crop Workshops successful.

CONFERENCE AGENDA

FEBRUARY 7TH, 2003

8.30 Registration and Morning Coffee

9.00 Welcome and Introduction

Linda Meschke, Blue Earth River Basin Initiative

Morning Address: Gerald Boler, Martin County Commissioner

SESSION 1- THIRD CROPS AND WORKING LANDSCAPES

9.15 Working Landscapes and Third Crops - A Changing Agricultural System

Don Wyse, Ph.D. University of Minnesota

9.45 Diversification Opportunities for Third Croppers

Meg Moynihan, Minnesota Department of Agriculture

10.15 Break

SESSION 2- NON-CROP THIRD CROPS

10.30 Alternative Energy as a Third Crop

Lisa Daniels, Windustry

11.15 Marketing Your Landscape Through Ecosystem Services

Dennis Keeney, Ph.D., Iowa State University,

and Senior Fellow at the Institute for Agriculture and Trade Policy

12.00 Lunch

SESSION 3- THIRD CROP MARKETS

1.00 New Market Opportunities for Third Crops

Mike Demchik, Ph.D., University of Minnesota Extension Service

2.00 Panel of All Speakers with Q&As from the Audience

3.00 Evaluation and Adjourn

FEBRUARY 27TH, 2003

8.30 Registration and Morning Coffee

9.00 Welcome and Introduction

Linda Meschke, Blue Earth River Basin Initiative

SESSION 1 – THIRD CROPS

9.15 Making the Transition to a Third Crop System

Paul Porter, Ph.D., University of Minnesota

10.00 Break

SESSION 2 – SUCCESS STORIES

10.15 Panel of Local Producers

SESSION 3 – THIRD CROP MARKETING

11.00 AVEDA and Third Crops

Mary Tkach, AVEDA

11.30 Starting A Sustainable Crop Program

Jim Kleinschmit, Institute for Agriculture and Trade Policy

12.00 Questions for AVEDA, Institute for Agriculture and Trade Policy

12.15 Lunch

1.00 Marketing of Organic Herbs as Third Crops

Renne Soberg, Organic Herb Producer Coop

1.30 Department of Transportation and Third Crops

Bob Jacobson, Department of Transportation

SESSION 4 – THIRD CROP OPPORTUNITIES

2.00 Discussion of Obstacles and Opportunities for Specific Third Crops:

Specialty and Sustainably Grown Crops

Moderators: Paul Porter, Ph.D. University of Minnesota, and
Jim Kleinschmit, Institute for Agriculture and Trade Policy

Alternative Energy and Other Non-crop Third Crops

Moderator: Sarah Johnson, Windustry

Organic Agriculture

Moderator: Amy Shogren, Three Rivers RC&D, Mankato

3.00 Share Outcomes from Discussion with the Group

3.30 Evaluation and Adjourn

FIRST MEETING: FEBURARY 7TH

OPENING ADDRESS

Linda Meschke

Blue Earth River Basin Initiative

Linda Meschke opened the day by explaining that the goal of these workshops is to promote third crops as an alternative to corn and soybeans. The goal is to have attendees leave the workshop excited about third crops. This is the first day of a series of two workshops; with potential for other third crop workshops to follow alter this spring. The second day will be February 27, 2003. The focus for today is on background information; the 27th will focus on marketing opportunities.

Linda Meschke explained BERBI's interest in third crops. The Blue Earth River contributes over half of the pollution in the Mississippi River at Mankato, but only makes up 20 percent of the basin, so a disproportionate amount of the pollution in the system comes from the Blue Earth River and its basin.

To clean up the river, we must look at the treatment of the land. The vast majority of the land in the basin is in annual row crops. Crop diversity would help reduce the pollutants coming from the land. BERBI has spent \$3 million over 10 years to encourage change, which has resulted in an eight percent reduction in pollutants.

The third crop idea takes this work to the next level: cropping system change. Farmers are looking for change, and the forthcoming farm bill creates a helpful environment. This is the time for action. The key issue for success of third crops is markets. There are existing markets—but how do we bring them to the Blue Earth River Basin area? Among other initiatives, BERBI is going to promote a local tax-free zone for bio-based production to provide a market for local third crops.



Gerald Boler

Martin County Commissioner

Gerald Boler welcomed everyone to Fairmont County. He noted how area farmers have tried to make a living with corn and soybeans. Some areas, especially near water, are not as suitable for some crops. People can find niches with third crops. We are lucky to have people working to make money available for third crop promotion and development.



SESSION 1: THIRD CROPS AND WORKING LANDSCAPES

Don Wyse, Ph.D., University of Minnesota

Working Landscapes and Third Crops - A Changing Agricultural System



Don Wyse began his talk by describing some of his long-term research on the development of perennial grasses and legumes for seed production in Northwestern Minnesota. Third crops, such as these perennial grasses and legumes, have been an important part of the northern Minnesota economy for many years. Many of these perennial crops survived last summer's torrential rains, and at the same time protected the cropland on which they grew. Don pointed out that there is a need to develop perennial crops that provide landscape and ecosystem services throughout the region.

But how do we bring in perennial third crops? How do we link people who are doing work with third crops? We need to network with third crop practitioners to create a third crops initiative that will have enough community capital to influence the development of federal policy supporting cropping system diversity. Landscape problems are often created somewhat unthinkingly; we must move to a higher level of discovery to solve them, while balancing quality of life, economics, and the environment.

Currently, we have a meat focused production system based on corn and soybeans, and also produce a lot of high-fructose corn syrup. Over the last 25 years annual plants have increased and perennials have decreased on the Midwestern landscape. This reduction in perennial crop cover has reduced the level of ecosystem services provided by our current cropping systems. The current annual cropping system contributes to problems like hypoxia in the Gulf of Mexico. To create long term solutions to the hypoxia problem we must add more perennial cover to the Midwestern landscape.

In the spring, there is not a lot of vegetative cover in the landscape and few active roots in the annual cropping system, and water moves more directly into tile lines and rivers. There is vegetative cover by July, but it is gone again by October. Thus, we have only three months of active roots to recycle nutrients. Without active roots, soluble nutrients are lost from Midwestern fields and end up in the Gulf of Mexico and contribute to the development of the hypoxia zone. If we are going to make a real change in regard to hypoxia, we need to develop third crops that provide ecosystem services, like nutrient cycling and water management.

For example, one way to increase perenniality on the landscape is through the development of beef and dairy operations that are grass-based (rotational grazing). But how do we make it possible for more of these operations to become part of the landscape? We must get good products into the market at a premium. There must be a focus on the development of markets for products developed from landscape systems that provide landscape services.

There is research going on in Minnesota, including a study done by the Land Stewardship Project (LSP) and the University of Minnesota on the



impact of adding perennials to the landscape in the Chippewa River and Wells Creek watersheds. The project modeled four scenarios, from the current annual cropping system to complete intensively managed perennial vegetative cover, and has shown that adding perenniality reduces sediment load, nitrogen and phosphorous loss.

To accomplish these landscape goals we must take a systems perspective, and develop a comprehensive landscape plan that provides multiple landscape outcomes such as water quality, agricultural land use, wildlife habitat and economic stability. To affect change in this way, we must organize at the watershed/basin level, build an entrepreneur environment around new opportunities, share ideas across a region, develop enterprises around products and build stability in the marketplace. It is important to work as a community rather than individually.

Meg Moynihan, Minnesota Department of Agriculture Diversification Opportunities for Third Croppers

Meg Moynihan works at the Department of Agriculture on diversification. According to Meg, the Department of Agriculture can serve farmers who want to diversify. A lot of work within the Department is focused on organics because of its popularity, but it is receptive to all sorts of things. The MDA could help find information about diversification.

Some of the benefits of diversification include spreading of risk, nutrient cycling, breaking pest cycles, adding value to crops, and increasing quality of life. There are many possible ways to diversify (including livestock integration, organics, agroforestry, perennial crops, managed grazing systems, and on-farm processing), and likewise a number of marketing opportunities and strategies (including direct marketing, contracts and brokers, CSAs, and farmer-owned coops) associated with diversification. A third cropper needs to keep the big picture in mind. Many larger-scale forces (including an aging population, ethnic shifts and increased health information) are affecting buying and consumption patterns.

There are important considerations for someone hoping to start a third crop enterprise. It is vital that such a person think through these issues of logistics, cost, risk, skills, equipment needs, personal likes and dislikes, and community support prior to starting an enterprise.

There are a number of resources for crop diversification.

- Minnesota Grown Opportunities – www.mda.state.mn.us/mgo
- Sustainable Agriculture Demonstration Grants
- Value-Added Agricultural Cooperative Grant Program
- Sustainable Agriculture Loans
- Agricultural BMP Loans
- Organic Certification Cost Share
- Minnesota Institute for Sustainable Agriculture’s business planning guide (call Beth at 615-625-8217)

There are, of course, rewards of diversification, but to realize them a producer must plan, do the homework, and not bite off more than can be chewed.



SESSION 2: NON-CROP THIRD CROPS

Lisa Daniels, Windustry

Alternative Energy as a Third Crop



Windustry, a non-profit partnered with IATP, is an information project that works to create an understanding of wind energy opportunities for rural landowners and communities. Information is available through the Windustry web site, www.windustry.org.

In the Midwest, there are two main sources of renewable energy, biomass and wind. Renewable energy projects can provide decentralized, distributed electricity generation, economic benefits for farmers and rural communities (including potential for local ownership and control), and even broader environmental benefits. Farm-based energy can be viewed as a significant new crop, as a clean energy source, and as a new industry for the rural economy. The major markets for renewable energy are driven by public policy, through incentives or renewable energy standards. The markets can also be consumer driven, through green pricing programs.

Biomass can come from many sources, including crops (like switchgrass) or processing byproducts and animal manure. One example of a biomass project is the Haubenschild Farm, which features a methane biomass recovery system, or methane digester. The farm uses about half of the energy produced, and sells the other half. The benefits of the project include odor control, generation of electricity, pathogen reduction, green house gas reduction, and increased value of manure as fertilizer. Another example of a biomass project is the Switchgrass Biomass Project in Centerville, Iowa, www.cvrcd.org. The project involves 6,000 acres of switchgrass from 70 growers, and is currently in the research phase.

Wind power can be pursued in three ways: 1) by leasing your land to a wind developer; 2) by forming an ownership entity for a commercial-sized project; or, 3) by installing a turbine on your land to produce your own electricity (this would be a smaller size turbine).

When you lease your land to a wind developer, there are no set standards, so contracts range from good to bad to ugly. However, it is a way to get involved in wind energy with no outlay of cash. It is important to be careful when considering a lease agreement, as the agreements are long term, ranging from 20 years to perpetuity.

Some other landowner/farmer options include organizing with other landowners to negotiate collectively for a large area, partnering with a wind developer, owning and operating your own wind turbine, forming a value added wind business, or partnering with an electric coop or municipality in your region.

One recent advance for wind power is the January 30, 2003 MN PUC decision, which sets a schedule for the SW MN power line. This is an upgrade to move energy off the Buffalo Ridge to population centers, and moves up the deadline for Xcel to build or purchase a mandated 425 MW (60 MW of this are set aside for locally-owned projects) of wind-generated electricity by 2006.

Challenges for agricultural electricity include access to capital, access to the grid, access to markets, access to information, public policy, and grassroots support.

**Dennis Keeney, Ph.D., Iowa State University, and
the Institute for Agriculture and Trade Policy
Marketing Your Landscape through Ecosystem Services**

Dennis Keeney spoke about other, non-energy non-crop third crop opportunities for farmers. Options include agrotourism, nutrient trading, carbon credits, watershed protection, conservation easements, recreational activities and the sale of hunting and fishing rights.

Agrotourism, which allows people to visit a working farm for enjoyment, education or active involvement in the farm operation, can include activities such as a bed and breakfast, farm stays, farm tours, picnics, hayrides, pick-your-own operations, direct marketing, festivals and petting zoos. For success, agrotourism enterprises require a location close to an urban center or other attraction, dedicated family cooperation, a strong business plan, and willingness to work hard. There are many examples of successful agro-tourism programs, from New England to California, as well as Europe, Australia and New Zealand. You can read about some Minnesota agrotourism enterprises at the Country Heritage Adventures web site, <http://www.mnfarmtours.com/>.



Nutrient trading is a scheme in which someone, usually an industry or waste treatment facility, can meet their regulatory obligations by buying nutrient credits (usually nitrogen or phosphorus) from another entity, such as agriculture, that is less polluting. This works because it is less expensive for the polluter to buy the credits than to reduce their own emissions. Similarly, carbon sequestration is the removal and storage of atmospheric carbon dioxide for which farmers can get credits for trading. (Forests and agriculture can be both sources and sinks of carbon dioxide.)

Unfortunately, nutrient trading and carbon credits are probably not yet ready for prime time, for several reasons. It's hard to estimate non point source reductions, and often major nutrient sources to waters are non point now, so no offset is available. Nutrient trading does, however, allow targeting to farms doing a good job of controlling nutrient losses. An online trading resource, NutrientNet, <http://www.nutrientnet.org>, has been established to assist in developing trading programs.

Another third crop opportunity is farming for wildlife. There are firms now organized to assist (for a fee) in developing a business plan to create wildlife habitat and make money. This kind of enterprise can include raising native grass seed, creating a hunting preserve, or involvement in federal and state conservation programs like CREP, CRP, WRP, or RIM.

There are also some opportunities for policy to promote non-crop agricultural opportunities, such as legislation to promote urban forestry, increase management of private woodlands, promote conservation practices such as CRP, or support for development of new cropping systems and new markets.

Many of these enterprises take larger-scale cooperation (on a watershed, state, regional or even global level) to be successful.

SESSION 3: THIRD CROP MARKETS

Mike Demchik, Ph.D., University of Minnesota Extension Service

New Market Opportunities for Third Crops



Mike Demchik spoke about markets for alternative crop products. He started by pointing out that the key to a successful business is selling your product for more than you have in it.

Specialty markets are scale dependent, based on appeal, and can be approached either by providing customers with what they want or by convincing customers that they want what you have to offer.

The scale of markets ranges from “commodity” to “specialty.” A commodity market features goods that are “flowable,” available in large, consistent supplies, and provide economies of scale, thin margins, and a low cost per unit. (An example of this might be selling soybeans directly to an elevator).

On the other end, a specialty market is one for goods that might be “non-flowable,” inconsistent, and appealing to small or disparate markets. (An example of this might be direct marketing black currant jam to a consumer). Markets occur along a spectrum between these two extremes.

While specialty markets can offer potentially greater profit, they do have challenges, including greater risk, higher likelihood of failure, higher costs, greater knowledge needs, and the fact that many farmers aren't comfortable with marketing.

One example of a specialty market is agroforestry products. There are three things you must assess in selling any product: 1) your market (marketing), 2) how you will sell it (merchandising), and, 3) how people will know you have it (advertising). With a commodity, often you grow what everyone else grows, and sell to the same people – so you have a fairly sure market. With a specialty product, you don't have that sure market – so you have to know your market well.

To know a market, you should assess its size, who the buyers are (Retail? Wholesale?), who the other sellers are, buyer behavior (when and how do they want the product?), and what comparative advantage you have (what do you do better than anyone else?).

Agroforestry is the incorporation of woody crops into a farming system. The crops can include decorative florals, wood (wood-energy, pulp, saw timber), food, native seeds, crafts, and other things like hunting licences. Decorative florals are things like willow, forsythia, red birch, and bittersweet. The local market arises because local products are much fresher than products shipped in from elsewhere, and there is value in freshness. They do produce these elsewhere, but shipping time gives local growers an advantage.

DISCUSSION WITH PANEL OF ALL SPEAKERS

Q: Why are there discrepancies in the amount of money you get for selling electricity?

A: The price you receive for selling electricity depends on the size of the electric system, and the size of your production (usually the size of your turbine). Turbines under 40 kW qualify for net billing. Commercial scale projects have to negotiate a rate. In the Haubenschild's example, the rate was relatively high because the electric cooperative was very supportive of alternative energy.

Q: The issue is not removing corn and soybeans, its adding perennialization, adding cover to the landscape. We need systems to preserve highly productive land. How much cover is needed to receive environmental benefits?

A: It is important to have cover in the spring, and some cover in the fall also. We need to keep the nutrient flow down from September to June. This doesn't take a lot of roots – just some active root cover. The problem is that there hasn't been much development of crops specifically for use as cover crops – we need specialized development of cover crops.

Q: With recreational activities on farms, what are the liability needs and issues?

A: This is one of the biggest issues. There is a group that appraises agricultural land working on the issue. A contact point would be Clay Wallinga out of Windom.

Q: Would it be a start to do cover crops on a priority basis? Should we target sloped areas first?

A: Each landscape environment has its own considerations. We need to think strategically about each landscape regardless of slope. The key is in research and development – we need to find a way to make cover crops profitable.

Q: What about no-till farming?

A: Even in no-till farming, there is movement of nutrients. You will have less surface movement of nutrients. For a real effect, you need active roots. Also, there hasn't been enough research into genuine no-till cropping.

Q: What about increased fall application of nitrogen? Is that a significant factor in nutrient runoff?

A: Yes, but there is the issue of huge farm operations—applying all the nitrogen in the spring might take too much time. This might be another good area for research. The practice could be banned, in which case it would become a policy issue.

Comment: We've been trying to do conservation tillage, but the improvement has been marginal. Maybe the improvement has been marginal because conservation is only a first step—maybe to see real results we need to take it to the next level.

Q: Can bittersweet be harvested in the winter?

A: Yes, but the quality may decline. Bittersweet is usually harvested in late September (it is sold for the Christmas market).

Q: Is there a book about decorative florals available?

A: There are publications, and there is a website in development between the University of Minnesota and the University of Nebraska.

Q: How would you get into decorative florals?

A: Contact the Mickan Brothers or Evergreen Industries.

Q: Farmers are an aging group. They want immediate profits. There is interest from small producers, but small producers are pressed for time. The solution can't come from one place, so we must work together. Who should the target audience of farmers be? Younger ones? Older ones?

A: One idea might be an older farmer who wants to pass on the family farm – someone with a definite successor. We need to have young, high-quality minds returning to farming communities. We need to act voluntarily so we aren't forced to act. We need to bring the public in on these issues, and need to convince bankers to invest in long-term projects.

SECOND MEETING: FEBURARY 27TH

OPENING ADDRESS

Linda Meschke

Blue Earth River Basin Initiative



Linda welcomed everyone to the second day of the third crop workshop. She hoped everyone would find the day interesting, get excited about third crop opportunities, learn something new, and have an opportunity to network with others.

IATP and BERBI are planning a third meeting on third crops and health, details to be announced.

New things are happening with third crops every day. The issue is growing rapidly. Here is a little background.

BERBI is a joint powers organization of seven SWCDs, founded in 1993, and is implementation focused. Linda recapped the pollution issues in the Blue Earth River Basin.

If we are serious about cleaning the river, we must: 1) become more sustainable; 2) have a cropping systems change; 3) build a stewardship ethic; and 4) recognize that Best Management Practices (BMPs) alone won't get us there.

Third Crops are any crop other than corn or soybeans, non-row crops, working lands (not land retirement), perennials, smaller acreages, sensitive areas, or non-crops (energy production, hunting rights, etc.). Non-crop third crops are other ways to generate revenue.

The benefits of third crops are environmental, economic, and social - the triple bottom line!

SESSION 1: THIRD CROPS

Paul Porter, Ph.D., University of Minnesota
Making the Transition to a Third Crop System

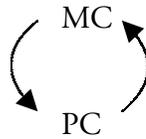
Paul was really trying to get across the point of a mindset change; he started by saying that “I can guarantee you that this is not what Linda was expecting!” and passed around a little survey to engage the audience in his talk.

He asked the audience what they grew on their land last year, and got a wealth of responses, from corn and soybeans to peas, oats and alfalfa, apples, chestnuts, grass, pumpkins and squash, raspberries and strawberries, to microbial activity, pheasants, and Native wildflowers. He added another important product – memories.

That was just last year – what about over the history of the land? What’s changed over the years? Paul asked this to the oldest person in the room who said loss of small diverse farm, and increased use of technology. There has been a progression to where we are: bigger towns and smaller farms and the rate of change has increased. We have transitioned to where we are; we will transition to where we’re going. How do we feel about where we’re going?

Paul then asked: Why don’t you grow more “things” on your land? On the vast majority of land, its corn and soybeans, maybe we should grow more of other things? To transition, and to be willing or wanting to change, requires a change of mindset. One has to believe that change is necessary and good; one has to want change, and one has to know how to make the change. “Half the battle is just wanting to change” – Linda Meschke

A policy change may be necessary, and requires: 1) a good idea; 2) a driver – someone to champion the cause: and 3) a mindset change. Making the transition to a third crop system requires both a mindset change and a policy change, and they feed off each other:



SESSION 2: SUCCESS STORIES

Panel of Local Farmers and Third Croppers
Dan and Terese Hall, Arlyn Valvick, and Jeanne Quan

Dan and Terese Hall converted their farm from conventional corn/soybeans to all grass with rotational grazing. They own 30 acres and rent an 80-acre pasture yet still cannot make a full living from grass, and therefore they also operate a fence building business. Grazing is the “retirement plan.” Grass is for long-term farming, if you don’t own the land, you need at least a six-year lease, and it is very much a learning experience. The profit potential is very good; there are farmers who make about \$1000/acre on grass. The Halls buy bottle calves, sell about 30 through direct marketing, and sell the rest as feeders. They also have chickens, ducks, sheep, and goats. Ducks are used as fly control and are very efficient.

Dan and Terese have learned that people drive by and think they know what you do, but if you don't bring them in and tell them, they won't really know. Most importantly, it's not about the money you make, its that you enjoy what you do. That's why they direct market in southwest Minnesota - their neighbors eat too.

Arlyn Valvick is the president of the Sioux City Farm Bureau and also a corn, soybean, and small grain farmer who put 50 CRP acres into organic farming five years ago. Since then, he has transitioned 50 more acres into certified organic and is constantly learning more about farming. He enjoys organic farming and has also realized that it is economically profitable and is going to stay with it. The lessons from organic farming have helped him with his conventional farming as well.

Jeanne Quan has been in the food industry for 30 years and said she particularly loves working with high quality raw materials. She works with small farmers to develop niche markets so that they don't have to sell their high quality products as commodities. She is also on the board of the St. Paul Farmers' Market. She also works with Pastureland, a small dairy, and some local clients. She believes that marketing local products is all about creating a brand and developing long-term relationships.

SESSION 3: THIRD CROP MARKETING

Mary Tkach, AVEDA Corporation

AVEDA and Third Crops

Aveda Corporation produces personal care products. It is a 25-year-old company, and was purchased five years ago by Estee Lauder. They create healthy products for salons and spas, the products are environmentally responsible, and plant-based. As a company, Aveda wants to reduce the negative impacts of human activity and try to give as much as possible back to society. Aveda's focus is on unique and traceable ingredient sourcing with indigenous, traditional, and community suppliers. They strive to reduce the number of middlemen through cooperative supplier relationships and using community-owned brokerships and by establishing long-term relationships.

Mary passed around samples of essential oils and showed graphs of the incredible value crops for these have after processing into essential oils. Aveda is hoping to source locally in the future and purchases large quantities of products including wheat, flaxseed, sunflower oil, soy oil, peppermint oil, meadowfoam seed oil, and canola oil.



Jim Kleinschmit, Institute for Agriculture and Trade Policy

Starting A Sustainable Crop Program

Jim's talk was focused on how IATP and its partners are creating incentives for sustainable production through a new sustainable crop production program.



Jim spoke about IATP, explaining that IATP is a non-profit organization based in Minneapolis that strives to create resilient family farms and rural communities, while protecting natural resources.

The goal of the Sustainable Crop Program is to develop a certifiable system that is beneficial to farmers, industry, and consumers. This will be accomplished by 1) establishing a market and mechanism for farmers to receive higher prices and/or incentives for sustainable production of traditional and third crops; 2) producing a set of sustainability standards for crop production that takes into account the interests and concerns of all stakeholders; and 3) creating a transparent verification and evaluation process that will guarantee the credibility of the sustainable production while helping to illustrate and quantify the progress made in meeting identified ecological, social, and economic criteria. A non-profit organization, the Third Crop Network, has been established to access non-traditional markets. The potential markets for crops certified

under the Sustainable Crop Program include: energy production, food and beverage, landscape management, such as tourism, wildlife, and open space, as well as bioindustrial products, such as plastics, fiber, and cosmetics.

While this program initially produces corn for biobased plastics, in the long term, certification will be applicable to other crops and growers.

**Renne Soberg, Organic Herb Producer Coop
Marketing of Organic Herbs as Third Crops**

The Organic Herb Producers Coop was established in 1999 and is a cooperative of 13 herb producers, centered in Lakeville, MN. Renne spoke about different products produced in the coop such as mullein seed extract, grape seed oil, echinacea, and essential oils including catnip, lemon balm, and pine.

Renne also spoke about wild crafting, which is gathering plant material from it's native wild environment, and how this form of herb production requires a long-term vision, and a caretaker attitude, and much attention not to overharvest so as to consider the needs of other human as well as animals.

The market for herbs is very large and a variety of herbs can be used in the medicinal industry. However, it can take three to four years to test and develop an herb crop, which involves both growing plants and cultivating relationships.



Bob Jacobson, Minnesota Department of Transportation (Mn/DOT)

Department of Transportation and Third Crops

Bob Jacobson talked about the Minnesota Department of Transportation's use of native species. Completion of the interstate highway system significantly increased the budget for mowing and maintenance when the number of acres under Mn/DOT's care was increased by nearly 50%. The reason they use native seeds has a lot to do with the fact that turf/lawn grass is expensive to maintain, forage grasses need to be hayed or mowed twice a year, and that natives require much lower maintenance.

Through his work, Bob has become familiar with the native seed industry and growers in the state. He has been working with the native seed industry for about 15 years. The trends he sees in the marketplace are that native species are more frequently being used in the Conservation Reserve Program (CRP), Reinvest in Minnesota (RIM), and Conservation Reserve and Enhancement Program (CREP), and are required for wetland restoration as mitigation of development impacts in both the governmental and private sector. Mn/DOT also uses native species for roadside seeding in areas they don't want to mow and in their living snow fence program. They are also being used as natural area buffers, in wildlife habitat enhancement programs, and in greenways projects. A number of government agencies require the use of natives for particular projects and programs. Species that are in high demand are mostly wetland and prairie species; however, demand for coniferous and deciduous hardwood forest species is also increasing.

Not all native species are the same. Varieties and cultivars have been bred to exhibit certain traits such as aggressive establishment and forage and seed production. They should not be used in restoration work where high species diversity is desired. Cultivars may work in set-aside programs where just a few species of grasses are desired. Ecovars are minimally selected and improved. Wild ecotypes of regional or local origin have high genetic variability and are most desirable for restoration. Then there is the origin certified (yellow tag) wild ecotypes. The demand for cultivars is decreasing, whereas the demand for local wild ecotypes is increasing. There is also an increase in stricter origin requirements (50 to 100 miles from a project location is common). There is a huge explosion in demand for wetland species.

The benefits of growing native plants for seeds are many. They are perennials that demand relatively high prices. You can harvest the seed and the mulch and they can fit into a pasture/ grazing rotation. You can grow them in locations where corn and soybeans might not produce well, and the future demand appears to be stable due to the regulatory nature of the demand.

SESSION 4: THIRD CROP OPPORTUNITIES

Discussion of Obstacles and Opportunities for Specific Third Crops

The following notes are the outcomes of the discussions at the February 27th workshop and do not necessarily reflect the views of IATP or BERBI.

Sustainably Grown and Specialty Crops

Moderators: Paul Porter, Ph.D., University of Minnesota; Jim Kleinschmit, IATP

Some of the obstacles for changing over to perennials and cover crops include financial issues such as market prices as well as price and availability of seeds for these crops. There is a higher perceived risk involved with these crops, particularly pending market development and consolidation. Different specialized skills and knowledge may be needed, as issues such as an increase or change in weed populations and varieties or the potential side effects of previous chemical use can present new challenges for transitioning farmers. A real barrier for time-strapped farmers could be the predicted increase in time and labor required for making such a change in cropping practices.

However, conversion can also bring a wealth of new opportunities. The financial benefits include not only getting a higher price for potential niche crops, but also the fact that multiple uses and products can be derived from these new crops. While overall labor may be higher, the fact that this labor can be spread out over the year is an advantage to many. Other possible benefits include the potential for higher yields in traditional crops that can result from broadening crop rotations and the reduced need for mechanization and specialization. The ecological benefits are the most profound, including lowered use of energy, improved water quality and quantity (flooding) conditions, reduced soil erosion and an increase in overall diversity, which means an increase in wildlife habitat.

Alternative Energy and Other Non-crop Third Crops

Moderator: Sarah Johnson, Windustry

Wind turbines are not crops, but they fit nicely into the third crop idea in their ability to provide new and diversified revenue for rural landowners. Options for farmers range from leasing out land to wind development companies to building and owning their own wind turbines. There are three main challenges for farmers interested in developing their wind resource:

- 1) Access to information. Start with the Windustry project at IATP (<http://www.windustry.org> or (800) 946-3640).
- 2) Access to capital. Wind projects are capital intensive, requiring significant financial resources in the early stages. Some options include: working with neighbors to share the costs, using state and Federal incentives for wind energy, Federal Farm bill programs, and working with local banks and lenders who have experience with wind energy projects.
- 3) Access to markets. Minnesota has good public policy to support wind energy, but we need more policies that support a stable market. Transmission lines in windy areas are filling up fast. We need to add transmission capacity in order to bring more wind power to population centers, which would allow more landowners to benefit from their wind resource.

Organic Agriculture

Moderator: Amy Shogren, Three Rivers RC&D

Organic production presents many opportunities to access new markets for farmers such as coops, supermarkets, CSAs (Community Supported Agriculture), and through the Internet with e-mail orders for small businesses. These new opportunities are the result of a changing social view of organic production, people's concern with health and the environment, and increased education of the public that has resulted in a growing organic food market. One way to get connected with this expanding market is through organizations such as MOSA (Midwest Organic Services Association), which is based in Wisconsin and provides information, contacts, and networking opportunities for organic producers and processors, in addition to its third party labeling services. Additionally, meetings such as the MOSES (The Midwest Organic and Sustainable Education Service) conference, and other initiatives like IATP's marketing survey of the Blue Earth River Basin market for local and sustainable products open up new possibilities for farmers to make real connections with end users and consumers and to create their own markets. Finally, the new organic program through the United States Department of Agriculture will allow farmers to enter larger markets where such labeling is required.

Challenges for organic production include the costs and time of the certification process, and learning new growing practices. Markets are another large concern for new organic producers. Where do you find these markets, how do you connect with them, and how do you cope with the fluctuations in price? Connecting with the right organization or agency to find help with the transition is key to a successful transition into organic production. Other concerns include the extra time needed, sensitivity to weather changes, additional education, initial financing, where to find organic materials such as fertilizer and feed, and how to connect with a certifier. The main question for many new organic farmers is how to overcome the classic chicken and egg problem. Do you need a market before you start production, or a product before you find the market?

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APPENDIX III:

THIRD CROP RESOURCES

ORGANIZATIONS, ACADEMIC INSTITUTIONS, GOVERNMENT

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For an extensive list of Third Crop Resources,
please visit <http://www.thirdcrop.org/>

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<http://www.extension.umn.edu/>
For county offices:
<http://www.extension.umn.edu/offices/>

NEWSLETTERS

Third Crop Newsletter (from IATP)
Contact Person: Marin Byrne
Environment & Agriculture Program Assistant
Institute for Agriculture and Trade Policy
To subscribe, in the body of a message addressed to
listserv@iatp.org type subscribe the_third_crop
E-mail: mbyrne@iatp.org
<http://www.iatp.org>

Market Power Newsletter (from IATP)
Contact Person: Lina Gordy
Green Marketing Associate
Institute for Agriculture and Trade Policy
To subscribe, in the body of a message addressed to
listserv@iatp.org type subscribe labels
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<http://www.iatp.org>