

**Hazelnut Development Initiative
Strategic Planning Meeting
November 19, 2007**

**University of Minnesota
St. Paul Campus
220 Skok Hall
St. Paul, MN**

**Contact:
Donald Wyse, Co-director
Center for Integrated Natural Resources and
Agricultural Management**

**Wysex001@umn.edu
651 470 9878**

**The following document includes 10 year goals and a
strategic action plan for a Midwestern hazelnut industry.**

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Hazelnut Breeding and Propagation—10 Year Goals

Year 1	Year 5	Year 10
Develop criteria to determine suitable superior plant material. Identify suitable existing hazelnut plants to be entered into clonal replicated evaluation trials	Identify improved/superior hazelnut plants for clonal propagation for replicated evaluation trials	Continual system for active development and identification of superior hazelnut germplasm for designated production regions
Initiate research for the development of micropropagation of hazelnuts	Continue to develop micropropagation techniques for hazelnuts	Developed ability to produce supply of hazelnut plants to meet market demand
Research development of vegetative propagation techniques for nursery operators and on-farm propagation	Conduct on farm trials to improve vegetative propagation of hazelnuts and evaluate plants produced by different propagation needs	Producers will have the ability to vegetatively propagate hazelnuts on their farm
Develop sites and develop capacity for replicated trials to evaluate elite hazelnut germplasm	Establish on farm yield trials to evaluate specific seedling populations, micropropagated plants and other vegetatively propagated hazelnuts from selected ideal hazelnut germplasm	Extensive test plantings of seedlings and vegetative propagated hazelnut germplasm with the production data available to the public
Organize hazelnut research consortium in the Midwest with representation from Badgersett, Forest Agriculture, Ohio State, Rutgers, Purdue, Oregon, U of MN, Michigan State University, Iowa State, UW-Madison	Midwest hazelnut research consortium organized and functioning	Research program supported by a hazelnut research consortium to provide support by for regional hazelnut industry
Initiate intensive genetic improvement program to improve nut quality, nut/kernel size, kernel percentage, oil content, growth habit, etc.	Expand hazelnut breeding and germplasm collection and evaluation programs	Hazelnut breeding programs have capacity to produce superior hazelnut cultivars with ideal traits for Midwestern hazelnut industry
Research Partners	DOE, SARE, R&E, Graduate Students, Regional Development	
Capacity Building	Transfer ability to vegetatively propagate hazelnuts to producers	

**Hazelnut Breeding and Propagation—Outline for Strategic Action
—Who will do what and when?**

What	Who	When
Identify ideal plants for use in vegetative propagation studies	Regional hazelnut producers, University of Mn, private and public breeders	Continue current activities and expand effort in 2008
Develop regional hazelnut variety trial consortium	WI-Fishbach, Forest Agriculture Enterprises, McCown, MN-Erickson, Wyse, Adams	Organize in January 2008
Develop proposal to support hazelnut micropropagation research and development	A team of hazelnut producers, breeder public and private breeders and other university personnel will coordinate effort	Initiate team development in January 2008

Hazelnut Industry Infrastructure and Marketing – 10 Year Goals

Year 1	Year 5	Year 10
Identify hazelnut producers. Organize hazelnut producers to develop statewide/regional hazelnut growers' organizations or networks	Develop operating capacity of state hazelnut organizations through membership dues and the creation of operating committees	Have regional hazelnut network in place with resources to provide exchange of information and to represent needs of the hazelnut industry to obtain greater resources
Initiate a network of information sharing with existing growers and potential new growers with internal quality control	Create committees to organize policy, education, research and marketing activities for the state organizations	Use regional network to share information, attract resources, influence policy, and conduct continuing education programs
Facilitate educational meetings on development of hazelnut production and marketing. Develop body of knowledge necessary to address concerns of hazelnut industry	Develop best management practices that will result in a reliable supply of hazelnuts for aggregate marketing	Hazelnut markets developed to support wholesale aggregation, diversified markets, value added markets and regional branding
Organize policy discussions to support hazelnut industry and draft policy briefs. Review new farm bill to identify opportunities for funding hazelnut development	Use policy briefs to influence a state and federal agriculture policy and legislation	Federal and state policies in place that support the hazelnut industry
Create system to identify research needs and develop process to develop action plans	Develop support for research agenda from state, federal, local and private sources	Have in place a continuing long term research program for hazelnut industry
Resources and Partners	Aveda, General Mills, Ferrero Roche (Ontario), etc.	
Capacity Building	Develop skills necessary to organize hazelnut industry	

**Hazelnut Industry Infrastructure and Marketing—Outline for Strategic Action
—Who will do what and when?**

What needs to be done?	Who will do it?	When will it be done?
Initiate development of state network for hazelnut producers	Local hazelnut growers, NGOs and University of MN Extension	Start in late 2007 through June 2009
Conduct information sharing meetings that are recurring at both the state and regional level	Local growers, NGOs and University of MN Extension	Now and continual
Develop marketing strategy options	University of MN Food Science Department, State Agencies and private sector	During year 1
Identify research priorities and expand research to support growers needs	Grower research network, University of Minnesota, and private sector.	Now and continual

Hazelnut Agronomics and Production Systems—10 Year Goals

Year 1	Year 5	Year 10
Facilitate collection of hazelnut grower knowledge and experiences and put it into a format as a production manual for dissemination to producers	Continue development of grower developed production information with the release of the second or third edition of production manual	High quality producer based hazelnut production information available to new and established hazelnut producers in several different formats
Compile and develop hazelnut establishment, fertilization, irrigation, coppicing, weed management, harvesting information from a wide range of resources for use by producers and researchers	Develop YouTube clips (www.youtube.com) and other creative venues for presenting information to producers and policy makers. Develop/produce DVD focusing on hazelnut best management practices	High quality best management practice information available to producers, including suitable cultivars, weed management, pest control, cover crops, intercropping, fertility, establishment, irrigation, harvesting, etc.
Use MN Hazelnut Council's survey to identify research and education priorities to guide the development of research and education proposals for support of grower-implemented on-farm research. Conduct grant writing workshops for hazelnut producers. Write grant to obtain funds to support on-farm research	First and second round of on-farm research and education projects initiated and preliminary reports published. Capacity for funding hazelnut research and education is well developed, with a part-time staff person coordinating funding and management of research projects	A continuous funding stream is available for education and on-farm research, with a full time staff position to coordinate the efforts of the hazelnut growers group
Resources Partners	Muli-state growers group, SARE, MISA, CINRAM, University of MN, Rutgers, University of Nebraska, University of Wisconsin—Madison, Iowa State University, Wisc. and UMN-Extension, FFA, 4-H, LCCMR, DNR, Foundations, MPA, NRCS, USDA, DOE	A Upper Midwest hazelnut network or council to coordinate and support hazelnut initiatives in the region
Capacity Building	Organize hazelnut growers that are familiar with on-farm research methods and develop grant-writing skills. Develop capacity to develop and share information through conferences, workshops, websites, and publications	

**Hazelnut Agronomics and production Systems—Outline for Strategic Action
—Who will do what and when?**

What	Who	When
Organize BMP review team to develop a BMP information package and disseminate the information via websites and in print	Grower group, Badgersett, Extension-WI and MN, Rural Advantage	Initiate in January 2008
Prioritize information gaps and research priorities via grower survey	MN Hazelnut Growers Association, Rural Advantage, Extension, Badgersett, CINRAM	Dec 2007 through 2008
Act on finding of grower survey by writing grant proposals to fund research and education priorities	MN Hazelnut Growers Association, Rural Advantage, Badgersett, CINRAM, UMN-Extension	Initiate discussion in January 2008
Develop grant writing workshop or attend grant writing workshops sponsored by LSP for producers and others engaged in the hazelnut industry	SARE, CINRAM, UMN-Extension, Rural Advantage, MN Hazelnut Growers Association	Initiate discussion in January 2008

Development of Harvesting and Processing Equipment-10 Year Goals

Year 1	Year 5	Year 10
Identify potential harvesting and processing equipment developers and manufactures	Three Upper Midwestern processing and marketing centers in operation with prototype harvesting and processing equipment available at each site for use by producers	Six regional harvesting and marketing centers will be in operation with equipment available for use by hazelnut producers to harvest and process hazelnuts
Identify funding sources for development of processing and marketing centers and develop proposal requesting funds	Use resources to develop harvesting and processing equipment	Develop and maintain continual funding to support development of harvesting and processing equipment
Identify sources of hazelnuts for use in development and evaluation of harvesting and processing equipment	Develop prototype mechanical husker that will husk green hazelnuts with 90% husk removal. Develop dryer system for early harvested hazelnuts	Producers have access to mechanical husker that will husk green with 90% hush removal
Identify source of hazelnuts and equipment for use in development of husker and dryer	Develop prototype machine for cracking, sorting, and separating hazelnuts	Producers will have access to machines for cracking, sorting, and separating hazelnuts
Identify sources of hazelnuts and oil presses that could be developed for use in development of oil presses for hazelnuts	Develop prototype oil press for hazelnuts	Oil press available to hazelnut producers
Resources and Partners	Identify groups that have need or resources to develop harvesting and processing equipment: Forest Agriculture Enterprises, Kansas pecan Growers, Lee Pothast, Michael McNeil, Pendragon Specialties, Heartland Nuts and UMN Agricultural Engineering Dept. and others	
Capacity Building	Develop relationships with TEW—manufacturing, Legislative contacts, energy industry contacts	

**Development of Harvesting and Processing Equipment—Outline for Strategic Action
—Who will do what and when?**

What	Who	When
Develop task force to research the development of processing equipment necessary for commercial marketing of hazelnuts	Roy Cerling Scott Josiah NFS Staff Forest Agriculture Enterprises	Now through first 6 months of 2008
Develop funding task force to identify funding sources to support the development of hazelnut processing equipment	Jason Fishbach WI RC&D's MN RC&D's Nancy Adams Donald Wyse	Now through first 6 months of 2008
Develop capacity to source a supply of hazelnuts that can be used to test processing equipment	MN and WI Hazelnut growers groups	Now through first 6 months of 2008
Identify individuals that can provide leadership for the development of regional processing and marketing centers	Forest Agriculture Enterprises, MN and WI producer groups, Heartland Nuts and more, etc.	First half of 2008

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Parking for meeting—take Buford Ave on the St. Paul Campus to Buford Circle to the Pay Lot on Upper Buford Circle in front of Skok Hall (see map)

8:30-9:00 Refreshments

9:00-12:30 Hazelnut Efforts to Date (Breeding, Propagation, Establishment, Harvesting, Processing and Marketing Issues) As a presenter in the program please present the concerns or issues that you feel need to be addressed to commercialize hybrid hazelnut production in the Midwest.

Introductions and Welcome: Donald Wyse, Center for Integrated Natural Resources and Agricultural Management

Plant Breeding and Selection:

OVERVIEW: Hybrid Hazelnut Development in the Midwest, Phil Rutter, Badgersett Research Corporation (45 min)

Rutgers Hazelnut Breeding Program: Tom Molnar, Rutgers University (45 min)

Hazelnut Selection in Nebraska, Scott Josiah, University of Nebraska/Arbor Day (30 min)

Plant Propagation:

Mark Shepard, Forest Agriculture Enterprises (30 min)

Lois Braun, Don Wyse, Dean Current, University of Minnesota (15 min)

Deb McCown, Knight Hollow Nursery (15)

Others,

BREAK

Hazelnut Production:

Nancy Adams, MN hazelnut producer (10 min)

Norm Erichson, MN hazelnut producer (10 min)

Michael McNeill, Iowa hazelnut producer (10 min)

Roy Cerling, MN hazelnut producer (10 min)

Dennis Gibson, MN hazelnut producer (10 min)

Others.

Hazelnut Processing and Marketing:

Reginaldo Haslett-Marroquin, processing/marketing (15 min)

Jason Fischbach, Living Forest Cooperative Growers (15 min)

Jeff Jensen, Rural Advantage (15 min)

Others

12:30 – 1:00 Lunch Student Union St. Paul Campus

1:00 – 2:30 Discussion of Hazelnut Development Priorities (What needs to be done?)

- Breeding—germplasm development
- Vegetative propagation—microprop, etc.
- Establishment
- Markets
- Development of harvesting and processing equipment: picker, husker, cracker, sorter by size, sorter to separate meat from shells, oil press.
- Funding—state, federal, foundations

2:30-2:45 BREAK

2:45 – 4:00 Outlining a Strategic Plan (Who will do what and when?)

- 1 year plan, breeding, propagation, establishment, development of harvesting and processing equipment, funding
- 5 year plan, breeding, propagation, establishment, development of harvesting and processing equipment, funding
- 10 year plan, breeding, propagation, establishment, development of harvesting and processing equipment, funding

List of Attendees:

Nursery Producers

Deb McCown (Knight Hollow Nursery)
Phil Rutter (Badgersett Research Corp.)
Brandon Rutter (Badgersett Research Corp.)
Mark Shepard (New Forest Enterprises)
Gail Soens (Bailey's Nursery)

Growers

Nancy Adams (Minnesota)
Roy Cerling (Minnesota)
Teresa Cerling (Minnesota)
Norm Erickson (Minnesota)
Michael McNeill (Iowa)
Jim Mickleson (Minnesota)
(also Mark Shepard, listed above, Wisc.)

Researchers

Dean Current (U of M)
Mike Demchik (UW Stevens Point)
Tom Molnar (Rutgers)
Scott Josiah (University of Nebraska)
Brent McCown (UW Madison)
Don Wyse (U of M)

Extension and Non-Profits

Jason Fischbach (UW Extension, Ashland)
Jeff Jensen (Rural Advantage, Minnesota)

Students

Lois Braun (U of M, graduate)
Katie Cafruny (U of M, undergraduate)