# Midwest Cover Crops Council
# Annual Meeting Report
# March 11 – 12, 2008
# Adams-Mark Hotel
# Indianapolis, IN

The Midwest Cover Crops Council (MCCC) is a diverse network from academia, production agriculture, non-governmental organizations, commodity interests, private sector, and representatives from federal and state agencies across the Upper Midwest. The MCCC facilitates the transition of agroecosystems toward widespread use of cover crops throughout the Midwest to promote ecological, economic, and social sustainability. Within twenty years, we aim to have thirty percent of croplands in the Upper Midwest employ cover crops as a means to improve air, soil and water quality and provide economic benefits to farmers.

The second annual meeting of the MCCC was convened in Indianapolis and included a diverse array of scientists, farmers, extension and agency personnel, companies, NGO representatives and other interested stakeholders. The primary aims of this gathering were (1) networking among stakeholders; (2) identification of upcoming activities and priorities; (3) information sharing about cover crops efforts; (4) refinement of new tools; (5) learning opportunities and early stage data collection associated with MCCC's potential use of strategic communications; and (6) strengthening of MCCC infrastructure.

The meeting was highly rated by its participants, focusing primarily on small group working sessions with evening time for interaction among network members. This report contains the results from this meeting.

## News from Participating Regions

At the onset of the conference, each state/province provided a brief overview of activities associated with cover crops to provide a general sense of what is transpiring across the MCCC region. These presentations are included as appendices to this report.

## Strategic Communications

A key component outlined in the MCCC strategic plan is the use of strategic communications techniques and campaigns to achieve policy objectives; alter farmer behavior; and raise public awareness about the benefits and potentials of cover crops. To this end, Dr. Hyunhi Cho, Purdue faculty member specializing in strategic communications, offered a powerpoint presentation on the elements, approaches, and impacts of strategic communications. This presentation was followed by small group work to gather key early-stage data from meeting participants on the purpose, prospective audiences, and potential messages. This data yielded three primary objectives:

- Successful development of public policy that increases public funding for research, education, and outreach within five years
- Establishment of public policy that awards farmers incentives to transition toward cover crops and consistently plant them
- Substantial increase in farmer awareness and use of cover crops across the Upper Midwest

For these objectives, strategic communications campaigns would target primary audiences including:

- Grower/producers, land owners, and agricultural organizations
- Regulators, policy-makers, and insurance industry
- Key influencers of growers, including crop consultants, NRCS offices, land grant personnel, and relevant environmental NGOS etc.

At this point, the timeframe for success ranges between five and twenty years. The shorter timeframe focuses on relevant policy changes, while the longer timeframe allows ample opportunity for broad adoption of cover crops by farmers.

The most appropriate messages to achieve the above objectives include:

- Cover crops improve environmental quality
- Cover crops deliver direct and indirect profitability to farmers – a great case for public investment

The right media outlets are critical to achieving the objectives, reaching target audiences, and disseminating appropriate messages. The most appropriate media outlets include:

- Agricultural journals (farming magazines, professional journals, agribusiness publications, etc.)
- Commodity group publications (with an eye both to farmer adoption and to legislative influence)
- Producer conferences, field days, radio shows, and newspaper coverage in rural communities

MCCC will need to engage in further thinking about what are the most effective outlets for reaching relevant policymakers or those who influence regulation and policy development/implementation.

To effectively develop and implement a strategic communications campaign, background research to develop a clearer sense of objectives, audience and messages will need to be conducted. Research questions include:

- What are farmer perceptions about cover crops?
- What are barriers farmers encounter when attempting to use cover crops?
- What is current perception of researchers and key influencers with respect to cover crops?
- What is the most appropriate name to convey what cover crops means? (e.g. cover crops, third crops, living cover, etc.)

As MCCC moves more directly into experimentation with strategic communications tools, it will need to locate funding sources to carry out the above research and associated campaign development and implementation. [1]

The Executive Committee will work to explore next steps associated with the early stage conversations associated with strategic communications and its potential for transforming farmer attitudes and policy.

## Upcoming MCCC Initiatives

During the course of the meeting, small groups met around key themes identified by the MCCC over a two year period to develop specific, fundable efforts that would move the work forward on a variety of key priorities associated with cover crops. These small groups identified purpose, impacts, activities, resources, leads, and questions which are outlined in the below sub-sections.

### Cover Crop Management

*Lead:* Tom Kaspar, Soil Tilth Lab, Iowa *(temporary lead)*

*Purpose:* Generate practical information to assist farmers in making cover crops work with reduced risk across the Upper Midwest

Managing cover crops is a critical question for farmers: *what are appropriate planting and kill methods and the correct varieties and species?* To successfully develop and convey this information to farmers – the target audience for cover crops adoption – this group will develop a guide, *"Cover Crop Management for Dummies in a Cash Crop System."* To produce this body of information, they will:

- Conduct species trials in various *testing locations* for appropriate legumes, grass and brassica, including exploration of ease of use, level of risk, incorporation in reduced till system, establishment in conventional corn, winter hardiness, rotation fit, kill tillage, soil moisture, compatibility with cash crops, establishment in manure based systems,

[1] Early stage strategic communications investments in *ActionMedia* made by Green Lands, Blue Waters should be reviewed and used where appropriate.

seeding cost, harvest options, cover crop mixtures, nutrient content and availability, different systems
- Conduct on-farm research and demonstrations and experiment station research
- Convene field days and prepare news releases to relevant media outlets with results
- Organize farmer/cover crop experts study groups
- Develop website with cover crop management information
- Generate corps of built-in mentors in sub-regions with local experience and a track record with using these crops

Successful implementation of a comprehensive effort for this initiative will require a coordinator, two research sites in each state/province and four demonstration/on-farm sites in each state or province.

The budget is estimated at $600,000 with $100,000 for a regional coordinator (wages, travel, supplies); field trials/demos ($80,000 for all states/provinces demos; $200,000 for research); outreach (field days – 4 per state/province; $2000/site = $32,000). We will need a weigh wagon and other equipment for data collection, funding for on farm efforts (rent, custom work, seed, lab analysis), project coordinator, and outreach expenses (website development/maintenance and field days).

*Funding* should be obtained at federal, regional and local levels. State grants include Clean Water opportunities in IN, commodity groups, environmental and conservation groups, Soil and Crop Improvement Association, NRCS watershed area, NRI, SARE, EPA, Great Lakes Program (for Ontario), local seed agribusiness dealers, input companies.

*Partners* include farmers, agricultural and environmental groups, farm groups, Soil and Water districts, and relevant commodity groups.

*Strategic communications* will be employed with this effort to increase levels of funding support for the research, education, and outreach outlined in this effort.

*(Kasper, Wenning, Overstreet, Anderson, Verhallen, Plumer, Campbell, Sundermeier, Belkhohn, Reiknkdma, Martins, Swain, van Eerd, Hoorman)*

## Agronomic Benefits and Challenges

Two sub-groups convened to explore different dimensions associated with the agronomic benefits and challenges of cover crops. One group focused on *quantifying improved soil quality and nitrogen management in systems using cover crops*. The other developed an approach entitled *"Prescription Cover Crops"* to address customization of cover crops for particular uses and regions. These efforts are described below.

<u>Quantifying Soil Quality and N Management Associated with Cover Crops</u>

Determining the economic benefits and nitrogen management of cover crops are major components in building the case for changing producer behavior. This effort will focus on demonstrating nutrient efficiency, soil quality, and agroecosystem stability for economically viable crop production. Our overall aim with this effort is to stabilize yield, improve soil quality, and increase N use efficiency. Activities will include:

- Synthesis and review of prior research for MCCC matrix
- Inclusion of this review in MCCC database[2]
- Long term N fate research in crop and tillage rotation trials
- Collaborative on-farm demonstrations in different regions
- Survey farmer and extension agent perceptions related to nitrogen use and cover crops
- Targeted education of farmers, educators, and agricultural agencies using publications, websites, fact sheets, and field days.

The result of these efforts will generate clear data demonstrating minimization of farmer risk associated with nitrogen over application and correct N crediting of cover crops. This research will be conducted on multiple sites across the region.

Partners will include corn growers associations, fertilizer companies, environmental groups, and watershed groups.

Funding for long-term trials will be very challenging. We will explore opportunities from corn growers, fertilizer companies, USDA, N SF, SARE, Gates Foundation, IPNI, Packard Foundation, and US Wildlife and Fisheries.

Van Eerd, Carlson, Kladivko, Verhallen, Hoorman, Kaspar, Deen, Kuenstler, Islam, Gentry, Bernstein

<u>Prescription Cover Crops: Aggregating and Creating Accessible Knowledge</u>

Developing cropping systems that include cover crops should be oriented primarily toward the reduction of producer risk. Over the long term, designing cover crops systems that are prescriptive for improving soil quality and reducing weeds, pests and diseases will be critical. Several research questions have been identified by this working group as well as the need for a multidisciplinary (e.g. economics, entomology, weed science, agronomy, plant pathology, etc.) database available on the web and based upon a comprehensive literature review focusing on this question. We intend to align the output from this review to fit with NRCS RUSLE2. Our activities will include:

- Develop database that encompasses Crop/Cover and Crop/Pest compatibility information using information from grower survey and focus groups[3]

[2] Include these outcomes into overall MCCC database

[3] This effort will be folded into the Database Development component of MCCC Infrastructure, outlined later in this report.

- Create and implement grower survey and focus groups
- Establish farmer advisory committee
- Generate early stage prototype of database design and interface in conjunction with other groups working on MCCC database models
- Develop screening 'toolkit' that assesses weeds, insects and pathogens.

*Staffing needs* will include a coordinator to collate relevant data as well as expertise in database design and web-based programming for searchable online database creation with a farmer advisory committee supervising the efforts.

*Partners* in this effort will include corn growers associations (and other state and regional level commodity groups), fertilizer companies, environmental groups, and watershed groups (e.g. Practical Farmers of Iowa, Innovative Farmers of Ontario, Minnesota Department of Agriculture demonstration program), multidisciplinary group of research and extension personnel. Strategic communications tools for this component would be most beneficial with respect to tailoring educational components.

*Funding* for this effort will be sought through SARE, CSREES IPM, IOP AND RAMP, Project GREEN, EPA, Great Lakes initiatives, commodity groups, NRI, and the CS Mott Group.

*Overall* cost is estimated at $130,000, including a FT coordinator (8 months @ $70,000); computer specialist (6 months @ $30,000); equipment ($2000 computer); and travel ($25,000 for multistate focus group convocation or coordinator travel. For the screening toolkit, 3 university positions (post doc, technician and graduate student) will be required, as well as lab, greenhouse and farm trials. Estimated budget for this component is $800,000.

*Strategic communications needs:* marketing the database to maximize its use and format/design of database for user friendliness.

Anderson, Campbell, Van Eerd, Verhallen

## Bioenergy and Cover Crops

The purpose of this endeavor is to increase productivity (including protein, nitrogen, carbon, and energy) while improving water, air, and soil quality using cover crops in a bioenergy-producing cropping system. Moreover, the use of cover crops is designed to mitigate economic and ecological consequences of bioenergy/cellulosic feedstock production. The cropping systems that emerge from such an effort should support environmentally and economically viable energy production. Activities include:

- Conduct research to quantify/measure economic and ecological consequences of cover crops use in a bioenergy-oriented cropping system, including types and management sets for using cover crops with corn silage, aerial seeding into standing corn, and clear field corn technology and use, plow versus no-till in management system

- Develop common research protocol across MCCC states/province to explore yield increases and simultaneous improvements in water, air and soil quality
- Explore how to establish transition to cover crops/adoption by farmers
- Explore ecological and economic value of cover crops as it is included in the rotation; how can it be used for things like animal feed, soil amendment, or energy
- Quantify biomass removal
- Develop fact sheets, on farm demonstrations field tours, partner workshops and farmer meetings to share results
- Explore how to implement cover crops in an annual biocropping system? (Dennis/corn silage, soybean, sorghum, wheat, biomass removal)

Partners include USDA ARS Reap and Sun grant sites, NC regional project, GLBRC (MI and WI), GLCI (grazing lands and conservation initiatives).

Funding support can be generated from Sun Grant Bioenergy, Department of Energy, CSREES, NRCS/GLCI, conservation groups (US Fish and Wildlife Service, Pheasants Forever, Ducks Unlimited).

Pennington, Neal, Al Kaisi, Ochsner, Albrecht, Rorobough, Seemon, Reeder, Harrigan, Hoorman, Wyse

## New Varieties and Seed Sources

*Lead:* Dale Mutch, Michigan State University

*Purpose:* Identify and breed appropriate germplasm and species for landscape uses (e.g. energy crops, organic and conventional systems).

Widespread use of cover crops across the Upper Midwest cannot occur unless an appropriate level of effort associated with development of new varieties and seed sources is undertaken. Therefore, over the next several years MCCC partners will work to identify cover germplasm:

- identify appropriate germplasm (species) for landscape use (if and where none are currently available) – species/variety/crop management zone map/temperature, rainfall, soil type, frost date
- facilitate meeting w/plant breeders interested in breeding cover crops to prepare for long-term development of viable germplasm for farmer use.
- survey companies, breeders, universities, other relevant institutions to determine current germplasm development and seed source opportunities and challenges
- survey and/or conduct focus groups with growers to identify desired key traits
- facilitate the development of a producer network
- develop testing to conduct regional screening for appropriate germplasm species for cover crops, including on-farm varietal trials

- disseminate data and information from these efforts, including the use of NRCS RUSLE2 system, producer network, website, seed companies, Extension, books, conferences
- convene 3rd crop hearings to raise awareness with key policymakers

Outcomes from these efforts will include (1) comprehensive list of available germplasm; (2) facilitation of plant breeder gathering interested in breeding cover crops; (3) broader activism and availability of new varieties and seed sources; (4) coherent network of key stakeholders required to release high quality varieties and seeds to farmers; and (5) match most ideal species/germplasm with cropping systems.

*Staffing needs* include use of existing plant breeders, regional educators, and graduate students for each state involved. These efforts will require coordination of regional projects (including testing, screening and breeding), engagement of seed industry, land grant universities, and farmers.

Using a *strategic communications* approach, this group will work to engage key influencers at the state and federal level to expand interest and funding availability for these efforts. Options include convocation of Third Crop Hearings, communications with key legislators with an eye to obtaining earmarked funding, and strategies for connecting with top USDA breeders to move thinking beyond grains to cover crops.

To adequately carry out these efforts (the research component) will require a total of $1,000,000 per year. A coordinator ($75,000/year), state support ($15,000/state x 10 states); on farm trials ($150,000/year), and information dissemination and communication ($100,000/year).

*Funding* sources can include key state and federal level legislators and regional policymakers, private companies (Monsanto, Syngenta, BASE, Dupont, ETAL, etc.), bundling at state and federal levels, oil companies, federal support, foundations, and environmental working groups.

*Partners* include existing plant breeders, regional Extension educators, graduate students, land grant universities, American Seed Trade Association, and growers.

*Mutch, Robison, Wyse, Abram, Albrecht, Sarah Carlson*

## Water Quality

Understanding nutrient cycling in integrated cover crops systems helps determine the way in which cover crops usage enhances water quality and provides ecosystems services. The MCCC will thus conduct research with relevant extension programming that quantifies nitrogen and phosphorus cycling (uptake and release) in integrated cover crop systems that include and exclude manure. The Water Quality sub-group of the MCCC will conduct research to determine the long-term benefits of cover crops specifically with respect to nitrogen, phosphorus and carbon and the resulting effects on water quality. Using novel research methods, the group will:

- Use slurry seeding (for low disturbance) to explore N cycling questions in integrated cover crop systems (including variability in seeding, manure application methods, different crops, different manures, soil and cover crop demonstration plots)
- Determine cost to farmers for adapting to this approach
- Explore feasibility of changing NRCS policy, supporting 'bundling' and implementation of cover crops in existing systems
- Convene field days and meetings as well as curriculum development and other educational programs via Extension

*Funding* opportunities include USDA (CSREES 406), US Fish and Wildlife Service, state NRCS, state legislatures, and NRI. NT clubs will be used to purchase an NT drill, SWCD still has drills, the Oregon Ryegrass Growers Seed comm will also be pursued as potential partners and resource providers.

*Partners* include NRCS, Farm Bureau, watershed and environmental groups, state departments of agriculture, and state and federal environmental protection agencies.

*Strategic communications* needs include social science research on the barriers to adoption and assistance with crafting packages to USDA, ISDA, relevant agencies, and other groups working with farmers. Moreover, assistance with translational writing, where technical information is prepared in an accessible format for a broad audience will be critical.

Harrigan, Kaster, Albrecht, Al-Kaisi, Hoorman, Ochsner, van Eerd, Kladivko, Watts, Norris, Kuenstler

## Risk Management

A key barrier to broader adoption of cover crops by farmers involves the perception and management of risk. Participants believe that risk management is a key consideration that should be attended to by MCCC in all facets of work. The primary risks affecting farmers with respect to cover crops include: (1) capital investment (time, labor, social, equipment); (2) management (knowledge, learning, consequences of wrong choices, lack of information, species sequence) and (3) how to measure and balance investment and management for individual operations and their costs/benefits.

A team of meeting participants met to discuss issues associated with perceived and real risk, resulting in a plan of work that includes

- Identify loan and grant opportunities for transition to cover crops; crop sharing via USDA federal, watershed boards, county commissions, NGOs, environmental groups (Jeri Neal/IA)
- Development of small eco-regional cover crop adoption plans (Tim Harrigan, Dan Towery, Pat Serem, Todd Maste)
- Creation of farmer/producer learning groups (Roger W., Mike B)

- Identification of loan/grant opportunities for transition, start up costs, cost-sharing (Carmen)

Furthermore, this working group identified a matrix outlining perceived and real risks and appropriate responses by MCCC for farmers.

**COVER CROP SPECIES AND PRACTICES**

| Producer Risks for Cover Crops Adoption | Producer Oppy's for Cover Crops Adoption |
|---|---|
| *Investment Risk:*<br>Time<br>Labor<br>Social<br>Equipment *(esp. Year 1)* } **Capital** | Information out to citizens, NGOs, others to gain support for cover crops concept<br>Can we convince SWCB to purchase 'community equipment'<br>Can we share ideas regionally about equipment modification?<br>Learning groups<br>Database development by MCCC |
| Need financial incentive | Grant programs $ (state, fed'l & local conservation & practice incentives) |
| Scale-acreage | Small and targeted acreages may be best entry point |
| Yield – of what? | Identify what are best $ programs (Finpak et al)<br>Farmer training in states<br>Regional agreement on information needs |
| Lack relevant information | What if we encourage an invasive species |
| Learning curve risk | Communication between ourselves and clients |
| Investment risk transition (equipment modification, capital) | Can we develop regional transition plans (what has worked/not worked) – find early innovators |
| Production management: rotation and variety are management and site specific | How to use failures as success stories |
| Weather/climate risk – especially via establishment | |
| Hassle factor | New Equipment Design – one-pass equipment |

*The MCCC Executive Committee will need to review the above proposed activities and ideas in conjunction with the Risk Management small group to determine how best to move forward with these risk management initiatives by MCCC.*

## MCCC Infrastructure

The research, extension and relevant programs proposed in this meeting report delineate the array of activities required to fulfill the broad aim cover crop usage in 30% of cropping systems in the Upper Midwest in the next fifteen to twenty years. To effectively achieve this suite of efforts requires a robust and adequate infrastructure. Because MCCC is a network, careful

consideration and stewardship of the whole is the linchpin in maintaining this complex system of research, education, outreach, fundraising, communications, information dissemination, networking and evaluation. At this meeting, the MCCC identified several key areas for organizational development and support and developed a series of ideas to strengthen these infrastructure dimensions.

Policy

Public funding and support will be critical to the twin aims of securing adequate funds for research, outreach, teaching and farmer incentives *and* increasing farmer adoption rates of cover crops usage. A small working group considered policy dimensions and factors associated with cover crops, including:

- We should take five years to develop a strategy to build appropriate partnerships to constructively and appropriately provide information to legislators working on the Farm Bill.
- What role can rural economic development investments play in supporting cover crops adoption and incentive programs?
- What are most important policy needs?
- Can we promote environmental benefits as a way to encourage supportive policy?
- What can we learn from the Chesapeake Bay model about policy support?
- Can NRCS work toward becoming a united front on cover crops for the Upper Midwest/

Activities include:

- Promote cover crops (via incentives) across Indiana via NRCS IN for ultimate presentation in Washington (Barry Fisher, Jeremy, Bill, Shannon, Central USA agronomist)
- Develop cover crops program for use by NRCS employees and Extension educators
- Training of NRCS employees and Extension educators (use existing training schedules)
- Evaluate opportunities associated with Great Lakes
- Talk to regional representative/s of Global Nutrient Group (Bill Dean)
- Conduct education for commodity groups (corn and soybean state technical committees and growers – each state must do)
- Convene conference call for MCCC members that offers learning opportunities for Chesapeake Bay and Ohio Lake/Grand Lake/St. Mary's models and identify other such resources (Shannon Carlson/PFI and Sandra Batie/MSU)
- Develop and distribute document outlining landscape systems that are less 'leaky' for Monsanto and meetings with other entities (Don Wyse)

MCCC should engage in additional capacity building to better understand how the policy advocacy process works and what learning will be required to be an effective partner in supporting policy change.

Internal Communication: Listservs and Website Development

*Lead:* Dean Baas

How will the MCCC maintain effective contact among its membership? What are the communications needs, appropriate level of detail and frequency, and staffing requirements to provide effective internal communications across the network? Participants propose:

- Development of a listserv for membership
- Creation and maintenance of an MCCC website
- Identification of permanent 'home' for MCCC
- Promotion of website

To fulfill these communications objectives, the MCCC will need funding and/or a time commitment for a coordinator to develop and sustain the above communications mechanisms. Moreover, communications expertise on how to shape, best use, and modify communications practices would be helpful.

Oversight will be provided by a Design Committee, whose membership includes: Erin Taylor (listserv support); state coordinators (for six months – OH/Alan S.; ON/Anne V.; ND/Laura; IN/Eileen; remainder/MCCC Executive Committee). Our early stage goals include:

- Set up listserv within 30 days of this meeting (Erin)
- Develop and test website within 3 months; go live within 6 months
- Provide part-time temporary coordinator (Dean Baas)
- Conduct conference call to design website at 1 month mark (Dean Baas)
- Determine a server home
- Develop ideas for site promotion[4]

The MCCC will thus have to identify grant opportunities (including building infrastructure communications into existing grant proposals) to support infrastructure and strategic communications needs of MCCC.[5]

Web-based Database Development

*Lead:* Tom Kaspar

A consistently identified need across MCCC involves the development and maintenance of a multifaceted cover crops database. To be accessible by any user on the internet, this database

[4] Explore communications strategies to enhance usage and public awareness of MCCC website

[5] Note funding mechanisms: add in $ to each grant proposal for infrastructure support to MCCC to include database and website development and maintenance and strategic communications support.

will be designed for researchers, Extension personnel, growers, and other interested parties. To produce this database, the following activities should be undertaken:

- Comprehensive literature review (including integration of existing reviews) and aggregation of cover crops information from relevant literature bases
- Organization of literature citations and electronic copies in reference database
- Collect and solicit data and background information with follow-up organization and supervision
- Coordinate with and include content from Extension/outreach survey of programs and resources
- Hire professional database expert to design and set up database, including involvement of MCCC members to designate fields and categories
- Secure hourly undergraduate employment for data entry
- Conduct focus groups and surveys with farmers and relevant users to produce additional information on cover crops and proposed content/uses/design of database, with funding for these focus groups in each locale across MCCC region
- Develop proposal to fund above process

*Proposed Structure*

- Use similar format to matrix (biomass)
- Incorporate input from focus groups
- Establish advisory committee
- Establish consistent/universal cover crops terminology
- Include published and unpublished sources (papers, demos, etc.)
- Develop consistent columns and categories within columns
- Incorporate background information on location, soil, crops and cropping systems

*Elements of Design*

- Growth versus GDD
- Collect existing data
- Identify information/data/location gaps for future research/demonstrations
- Provide summary points on what we know
- Provide databases for use by modelers
- Consider linking with geographic information systems

Funding options include: NRI, Practical Farmers of Iowa, MWCCC, tillage and agricultural meetings, MOSES. National Soil Tilth Lab could host at Iowa State University.

Grieshop, Plumer, Watts, Kaspar, Ochsner, Gentry, Berstein, Al-Kaisi

<u>Extension/Outreach</u>

*Leads:* Jim Hoorman and Tom Rorabaugh

Education that occurs through effective outreach and Extension programs will be a primary tool for encouraging farmer adoption of cover corps. To coordinate and synergize MCCC Extension/ outreach-related cover crops work, we will:

- Identify representative from each state's land grant university to serve as point person and participant
- Conduct inventory and review existing Extension programs and content on cover crops
- Inventory and share existing powerpoint presentations on cover crops[6]
- Review relevant publications on cover crops
- Explore resources in each state and province associated with cover crops
- Develop a brief resource list for all resources that includes title, author, URL link and short 2 sentence description[7]
- Conduct survey/focus group as a part of planned curriculum
- Post to e-Extension website, linked from MCCC website
- Implement by July 1, 2008
- Convene conference call in October
- Convene a 'train the trainer' cover crops conference in 2 regional locations (OH and 2009 somewhere else), piggybacked with CTC (Ada/OH) with a target audience to include consultants, agencies, Extension, NRCS and others

Dennis will coordinate this effort with an estimated target date for completion by 2/25/09.

Funding required will be sought via registration fees and SARE funding and will support resource materials development, travel and relevant fees. Universities, NRCS, private industry, and Ontario may also have additional resources.

Rafiq, Jim, Mark, Bill K., Dave R., Christine B., Dennis P.

<u>Matrix</u>

Throughout the conference, input and activity to forward and refine the development of a cover crops comprehensive matrix transpired. This input was collected and aggregated by Michigan State University personnel and will be used to refine and complete the matrix for public use. In brief, some recommendations included:

- Criteria based, interactive
- Value in variety
- Accessible with dial-up connection

[6] Post to MCCC website
[7] For inclusion in MCCC database

- Inclusion of precipitation and soil type
- Identification of local and state experts
- Success for planting methods

MSU will complete the matrix with additional input sought in coming months.

## Conclusion

The MCCC has established an ambitious programmatic and organizational agenda, with a primary emphasis on establishing an internet presence and early stage database development to produce a common base of knowledge for carrying out research, outreach, extension, education, and relevant policy and communications initiatives. The primary challenge for MCCC over the next year will be to locate appropriate levels of staffing to ensure that the various dimensions of work outlined in this report are supported and carried out.

As the group considered the design of next year's meeting, they are eager to make time in the agenda for farmer presentations and further networking. An appropriate balance of planning, networking, and learning will provide participants with an array of opportunities associated with cover crops adoption. The meeting will take place in London, Ontario in February 2009.

## APPENDIX A

### Primary Recommendations

This annual meeting of the MCCC tendered several key recommendations for the Executive Committee to consider. The overall scope of work should encompass:

Funding

- Adequate support for strategic communications needs of all activities and infrastructure coordination/communications

Policy

- Developing effective strategies to provide information to policy makers concerning the benefits of cover crops and the environmental services provided in return for incentives for cover crops adoption
- Advocate for policy that provides funding for research and on-farm demonstrations at the state and federal levels
- Via EQIP, make cover crops a consistently funded initiative in every state in the Upper Midwest

Research

- Determine, analyze, aggregate, and disseminate what knowledge about cover crops already exists
- Conduct variety trials, including on farm research and demonstrations to fine tune planting date/rate to focus on risk reduction in local contexts.

Education

- Share information with growers via field days, news releases, websites (including reports), conferences, and study groups

These recommendations provide a broad directive for the network as a whole to produce knowledge, education, policy support, and infrastructure required to achieve the long-term goal of significant cover crops adoption.