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Highlights >>>

Come Join Us and Explore Nature's Bounty

Our summer event, "Readings in the Garden" will feature author, traveler, storyteller, Lynne Smith Diebel, June 22, at Michael Fields from 3:00 to 5:00 p.m. a \$30 donation is suggested.

Hear about her travel adventures canoeing and cycling in Wisconsin and Minnesota, seeking out the greener spaces and green thinking minds that are creating sustainable landscapes and businesses along the way. Tour our organic gardens and enjoy a sip of organic wine and a taste of locally grown and prepared appetizers.

Lynne Smith Diebel is a writer whose books are centered on the landscapes and natural world of Wisconsin and Minnesota. Since childhood, she has been a canoeist, bicyclist and photographer. She grew up in southern Minnesota, earned a BA in English at Northwestern University in Evanston, Illinois, and has lived in Stoughton, Wisconsin since 1974.

Published Books include:

- *Green Travel Guide to Southern Wisconsin: Environmentally and Socially Responsible Travel*, University of Wisconsin Press, 2010; *Green Travel Guide to Northern Wisconsin*, University of Wisconsin Press, 2011; both with Pat Dillon

Supporter Donates Farm

In 2013 the Institute received a gift of prime conventional farmland in Indiana from Betty Phelps Refior, a resident of Whitewater, Wisconsin, a passionate environmentalist and supporter of organic agriculture. Betty has attended the MFAI's Whole Farm Workshops for many years. Her recent interests and projects include habitat security for bees and birds.

Betty wants her family farm to be an example to farmers and urban dwellers on how best to protect the land for future generations. Over the course of the next three years, Michael Fields will convert the farm to organic and have it certified.

The farm is located near Peru, Indiana, in the heart of the corn and soybean belt. For many decades, the farm has been used to grow corn and soybeans using conventional methods. Betty says she donated the farm to Michael Fields because she wants it converted to organic agriculture. This donation will be a legacy for Betty, who is 92 years old, is a passionate environmentalist and has become especially concerned about the environment after learning about bee colony collapse occurring in various areas of the country. She states, "I care very much about that farm," and wants her family's farm to be an example to farmers and urban dwellers how best to protect the land for future generations.

The 226 acre farm has been in Betty's family since 1887 and in addition to the cropland includes a house, machine shed, grain bins, and 20 acres of trees. This farm will be a model for how farmers can make the transition to organic agriculture. It will take three years of farming with non-chemical fertilizers and pesticides to make the conversion and until the land is USDA certified as organic the crops will not bring premium prices. The long term plan is to show farmers in the area that organic practices are better for the soil and are profitable.

Organic crops yield less than conventional, but farmers can make up the difference through higher prices. Organic crops can have roughly twice as much market value and cost less to grow.



We will be honoring Betty's longstanding support of organic agriculture and the work of Michael Fields' at a Reception - May 8th 2014, in Madison, WI.

Michael Fields Agricultural Institute is a 501(c)(3) non-profit organization with the mission to nurture the ecological, social and economic resiliency of food and farming systems through education, research, policy, and market development.

We envision an ever-creative cultural process in which farmers and consumers create agricultural landscapes with healthy regional systems of land use, food production and distribution.



May 1

- *The Cooler will be open for business May 1st Monday-Friday from 8:00 a.m. - 4:00 p.m. You will find seasonal organic vegetables, fruit, and flowers from our Gardens.*

May 29 & May 31

- *Watch Us... The Gardens at MFAI will be aired on "Outdoor Wisconsin", Milwaukee Public Television, May 29th at 9pm and again May 31st at 9am.*

The filming was done last Summer and will tour the vegetable gardens, interview the garden manager and interns, as well as spend some time at the East Troy Farmers Market.

Contact us at (262) 642-3303
www.michaelfields.org



Celebrate 30 Years "Party in the Barn"

Save the Date!
Friday, October 11th, 2014
2pm ~ 5 pm

Join us for some FUN, FABULOUS FOOD, MUSIC and much more.
\$60 Donation. Call (262) 642-3303 x120 for more information.

Cover Crop Research at MFAI...

Agriculture faces a daunting task: meeting the food, feed and fiber needs of a growing population which will reach 9 billion people by 2050. Couple this with competition for land to produce fuel crops, unchecked loss of agricultural land to development and the impact of climate change and the problem is compounded. The Environmental Protection Agency estimated in 2012 that the U.S. loses 3,000 acres of farmland per day to development. Add to this soil loss from erosion and you can see why we're concerned!

Cover crops are a key component of soil improvement. In addition to protecting the soil surface when no crops are present (that's where the name comes from), they provide a host of ecosystem services and benefits depending on which species are chosen and when they are grown.

In the case of soil improvement, they capture otherwise wasted solar energy and use it to fix atmospheric carbon dioxide, taking it "out of play" in terms of the greenhouse activity by storing it in the soil. Legumes do the same with nitrogen, reducing the need for commercially produced fertilizer which requires large amounts of finite fossil energy to manufacture and which contributes to greenhouse gas release.

Other services include biotillage; rooting action which loosens compacted soil, improving rooting depth for other crops while creating "biopores" which improve drainage and aeration and enhancing soil biological activity. In addition to providing a food source to soil microbes when they die, some species interact synergistically with bacteria and fungi and the outcome is a healthier soil.



In 2014, we are initiating several crop projects and will build on the new species evaluation initiated by Dr. Erin Silva in 2013. Projects include: cover crop strategies to facilitate organic transition and "reinvigorate" certified organic land; using improved oilseed radish varieties to manage chronic pest problems in conventional no-till production and investigating how harvest of cover crop biomass impact the N contribution to corn, an effort to make cover cropping more financially appealing which will increase adoption by farmers. We are also investigating the incorporation of cover cropping in the corn breeding program.

The Buzz in the Gardens

The Gardens at Michael Fields Agricultural Institute has three interns this year who are here from who arrived in early March and will be here through October. The interns will be attending workshops, planning and growing seedlings, raising the vegetables for market, organizing and selling at the local farmers market stand, and working on special projects.

Anna, originally from Chicago, is now a new Wisconsin resident. She moved to Whitewater early this year and loves it! She recently graduated with B.S. in Earth and Environmental Science and has a special love for rocks. That passion has shifted over to the world of farming in hopes of assisting with sustainable agriculture systems change internationally.

Jérôme comes from Lille, in the north of France. He is here as a volunteer for 8 months thanks to the French branch of the SCI, a worldwide non-profit organization which promotes volunteering for peace. He would like to become a farmer in France, so this is a great opportunity for him to get first-hand experience with organic agricultural practices, and to improve his English along the way.

Julie just arrived from Belgium for an 8 months internship in The Gardens. She's really looking forward to learning new techniques about organic agriculture. She recently graduated with a Master's degree in Environmental Sciences and is interested in measuring our impact on the environment and how we can reduce our food print on the earth. She has always had an interest in agriculture and spent four months in an organic experimental farm in India. She wants to learn more about this type of agriculture and how it can improve the protection of nature.

In addition to the changes in the gardens we've also put our fresh, organic produce online! In a partnership with FarmMatch.com, customers can now shop our current selections from the comfort of their home and we'll have everything ready for you when you get here. Check us out: www.FarmMatch.com/GardensatMichaelFields.



From the Director's Desk

Thirty years and counting! Michael Fields Agricultural Institute (MFAI) began talking about the advantages of organic and biodynamic agriculture thirty years ago when we were one of the few voices around promoting a type of agriculture which is free from chemicals. Thirty years later and the Institute has gone beyond organic gardens to research on biodynamics, plant breeding of organic corn and the promotion of cover crops.

Our anniversary year requires a certain amount of retrospection. When MFAI started out in the 1980's; what was happening in the farming arena? A financial crisis affecting farmers with heavy debt loads, farmland values dropped, and the US lost export market. Global warming and it's affect on farming was a new idea and not really taken seriously. The first American patent for GMO's (a bacterium used to clean up oil spills) was granted and biotechnology became viable for improving crop and livestock products. At the same time, enrollments in colleges of agriculture were dropping in wake of the farm crisis and scientists were beginning to talk of inorganic fertilizers infiltrating the ground water. Today's farmers are faced with the challenges to produce more, pollute less, meet consumer tastes, and do all of this with less resources. After thirty years, some of our worst fears have come to pass with the use of genetically modified organisms (GMO's) in plant breeding. This was supposed to mean fewer chemicals, but instead it has led to chemical resistant weeds and greater chemical use. Some of those same chemicals have resulted in dramatic reductions in bee populations and an increase in health-related illnesses. On a much brighter note, after thirty years, consumers are beginning to connect the dots between the food their families consume, the relationship that has to the health of their children, and environmental sustainability.

MFAI believes the need to address the human capital problem (lack of beginning farmers, the farmers average age now pushing 60 years old) in our food system so thirty years from now we have family farms as a mainstay of our communities. Therefore, a more holistic perspective is necessary, to move beyond the bottom line approach, "growing as much as possible." Local food production and the growth of gardens in urban communities will play a major role. Whether we are talking about the last thirty years or the next thirty, one thing won't change, we (urban, rural, rich or poor) need to work together to build a sustainable agriculture model that includes local food production systems and nutrient dense foods. In some ways, history is repeating itself, as all of us relearn what our grandparents knew how to do: garden, preserve and cook the fruits and vegetables we produce.

MFAI will continue to contribute to the goal of sustainability in farming practices, regardless of size or type of farming system, via education, research, and policy efforts.

Watch us, join us, and support us,

David H. Andrews

David Andrews, Executive Director

MFAI 30th Anniversary Sponsors



Did You Know...

- U.S. Agriculture uses 128 billion gallons of water daily
- U.S. Agricultural use accounts for 40% of fresh water withdrawals
- Globally agriculture uses 2 quadrillion gallons of water
- Globally agriculture accounts for 70% of fresh water use (enough to cover the entire U.S. with 2' of water)
- Irrigated farms use 2-3 times more water than their crops need and waste between 50% - 80% of irrigation water through leaks, runoff and evaporation