

## **Project Summary**

The *Organic Tree Fruit Education and Research Collaborative* will allow growers to take advantage of increasing consumer interest in local organic tree fruit products. The project builds on the efforts of the Midwest Organic Tree Fruit Network by supporting the formalization of the Organic Tree Fruit Association (OTFA), a membership organization that will serve the needs of its organic tree fruit growers in a professional capacity. Once formalized as a 501c3 non-profit organization, OTFA will continue educational opportunities, such as seminars, field days, fact sheets, its quarterly newsletter, *Just Picked*, and a thriving website, all of which disseminate vital information to growers. The Association will also initiate a new Organic Tree Fruit Research Program aimed at addressing organic disease and pest management issues specific to the humid regions of the United States. The Research Program will facilitate organic tree fruit research appropriate to these regions by identifying and cataloguing potential 1.) on-farm tree fruit research sites, 2.) tree fruit research programs, 3.) scientists interested in organic research and 4.) specific projects that would benefit from collaborative, multi-state testing.

## **Project Purpose**

The purpose of the *Organic Tree Fruit Education and Research Collaborative* is to make locally grown tree fruit crops more competitive in the Minnesota and the region by helping growers take advantage of the increasing interest in local organic products. Producers of locally grown tree fruit will gain a market advantage by promoting their local fruit as certified organic or using organic practices. Moving to organic production will also reduce the input of synthetic pesticides and improve environmental quality. To achieve this goal, the project will strive to develop and disseminate information on new and improved organic practices appropriate for the region and the local environmental conditions.

Improving the effectiveness of organic practices will increase the number of growers utilizing organic management, the amount of acreage in organic production and the amount of organic tree fruit produced. Currently, despite increased consumer demand for food that is both “local” and “organic,” Minnesota-grown organic tree fruits can be difficult to find, even during peak season. Grocers and cooperatives who would gladly fill their shelves with locally grown organic apples, pears, cherries, apricots and plums must often settle for organic fruit from Washington, California, Chile or New Zealand or feature local fruit that is conventionally produced. There are a few reasons why this is the case: 1.) The wet, temperate climate combined with a landscape speckled with woodlots and brush covered fencerows in Minnesota, and throughout the Upper Midwestern and Eastern regions, provides ideal conditions for orchard pests and disease and makes organic orchard management challenging. 2.) Much of the current research on organic practices comes out of warmer and/or more arid regions and is not always relevant for growers in humid climates. 3.) Midwestern and Eastern growers are widely dispersed and lack a formal organization capable of assessing production needs, coordinating existing research, facilitating new research, disseminating information and representing their interests in the larger community.

The objectives of this project are as follows:

1. **Complete formalization of the Organic Tree Fruit Association (OTFA), a new professional growers association, which will be instrumental in carrying out related objectives.** OTFA is an outgrowth of the Midwest Organic Tree Fruit Network. The Network was formed in 2004 by a group of growers seeking to share information at the Upper Midwest Organic Farming Conference, which is a project of Midwest Organic and Sustainable Education Service (MOSES). From 2004 to the present, the informal Network, with support from USDA Risk Management Agency, has hosted 15 well-attended field days, sponsored two grower retreats and published 20 issues of *Just Picked*, a quarterly newsletter. It also created a thriving list-serve as well as a website, which includes information on relevant events, news and research and receives thousands of hits each month. The enthusiastic response to activities and projects of the Network indicated a need for a formal organization that could serve the interests of organic tree fruit growers in a more sustained and professional capacity. OTFA, with a grower-volunteer Board of Directors, is currently in the process of writing its by-laws and applying for 501c3 non-profit status. The organization will be based in Minnesota, but membership will be open to tree fruit growers throughout the region. The list-serve, now with 308 participants, will continue to operate under the name “Midwest Organic Tree Fruit Network.” The OTFA website and electronic newsletter will continue to be free services to all individuals interested in organic tree fruit production.
  
2. **Continue educational opportunities in order to provide organic tree fruit growers with information they need to be competitive in local and regional markets.** During the three-year funding period, OTFA will organize one informational seminar and two field days per year. These face-to-face meetings have proven to be the most effective way to deliver information and allow growers to learn from one another as well as the speakers.
  - A. The first seminar will focus on exploring the options in organic tree fruit production and will include discussions of organic management, organic certification and transition to organic production. Conventional growers, transitioning growers, organic growers and growers who practice organic management but are not certified will be encouraged to attend. The seminar will be held during the first quarter of 2010 in a retreat-like setting in a location central to the Midwest to facilitate participation from growers across the region. Speakers will include an organic inspector and two successful organic tree fruit growers. They will provide detailed and specific information on organic tree fruit production in the region, including the most effective disease and pest management regimes allowed under the National Organic Program (NOP). 2011 and 2012 seminars will be developed with member input.

- B. The six field days, two per year, will be hosted by volunteer OTFA member-growers with experience in organic orchard management. Participants will be able to see the results of organic pest and disease management practices firsthand; growers will have an opportunity to share ongoing experiments in the orchard and dialogue with participants about lessons learned. At the discretion of the host grower, field days will include a guest speaker (such as a land-grant university pest-management researcher, a horticultural specialist or an organic inspector) to address issues specific to organic tree fruit production. Field days will be held in different parts of the region to reach a greater number of growers and highlight a range of specific practices in diverse locales.
- C. New comprehensive fact sheets on “Organic Certification for Organic Tree Fruit Growers” and “Disease and Pest Management in Organic Orchards” will be developed for distribution at events and will be available for download online. The fact sheets will provide thorough, accurate and relevant information in a concise and accessible format. They will also include a list of electronic and print resources for growers to access more information. An additional fact sheet will provide information on the new Organic Tree Fruit Research Program (see below).
- D. The quarterly newsletter, *Just Picked*, will be published in print for subscribers and made available online for anyone interested in organic tree fruit production. It will continue to feature grower profiles, information on field days and other events, related news and the latest research on organic orchard management from around the nation. Like other OTFA projects, the newsletter is produced by and for growers with a strong emphasis on practical, applicable information intended to make the operations of organic tree fruit growers in the Midwest more successful.
- 3. Initiate the Organic Tree Fruit Research Program in order to coordinate current research and facilitate new research relevant to organic tree fruit production in Minnesota and the Upper Midwest.** OTFA will make organic pest and disease management research a key priority. It will catalogue existing research, assess its relevance for the Midwest and the East and list potential collaborators in on-farm research. In order to ensure significant grower input, OTFA will use existing infrastructure to solicit possible grower participants, gain information on their research needs and solicit feedback on individual projects as well as the program in general. The OTFA Board will convene a Research Committee to oversee the program and hire research staff to develop an Organic Tree Fruit Research Catalogue.

The Catalogue, which is a crucial first step in creating a successful Research Program, will meet the following objectives:

- A. Farm Research Sites. Create a list, broken down by region, of apple growers who are willing to participate in on-farm organic research. Overview of each farm will contain information on size, varieties, planting density, microclimate, and current production practices. This list will be made available to scientists looking for sites to replicate studies
- B. Organic Tree Fruit Research Sites. Create a list of current universities, private facilities, State Departments of Agriculture, and institutions that have organic orchards planted for research purposes.
- C. Scientists Interested in Organic Tree Fruit Research. Create a list of researchers who have participated in organic research and are currently researching, or who are interested in future organic tree fruit research projects.
- D. Current Organic Research Projects. Create a list of current projects going on around the Midwestern and Eastern growing regions.

Some possible research projects:

- Set up an evaluation system for disease resistant cultivars coming from fruit breeding programs in Minnesota, Illinois, Wisconsin, New York and elsewhere.
- Test the regional effectiveness of the apple maggot attract-and-kill system being developed by US Agricultural Research Service.
- Test soil-borne pathogens as bio-control of apple pests that pupate in the soil being developed at Michigan State University. Replicate testing in several regions

The *Organic Tree Fruit Education and Research Collaborative* is important and timely for Minnesota's tree fruit industry. It will result in the sharing of information and the coordination of research from regions with similar production challenges throughout the United States. While the arid Western and Mountain areas have similar growing conditions and are geographically close together, the humid regions of the Midwest and East extend over thousands of miles. Growers in Washington, Oregon and California often share information and participate in interstate conferences and field days. The high concentration of tree fruit production and almost exclusive production of U.S. organic tree fruit in this region allows for efficient dissemination of constantly evolving and improving "western" organic methods. By contrast, Midwestern growers are scattered over numerous states, many of which are just beginning to fund research on land grant universities. Wisconsin, Iowa, Illinois and Michigan currently have organic tree fruit research projects. But each state has so few organic tree fruit growers that their respective tree fruit associations or horticulture societies cannot devote sufficient time or energy to organic topics. While the Great Lakes Expo held in Michigan is making an effort to provide more organic information for this large regional conference other state conferences on tree fruit see little or no organic information presented. Coordination among these organizations on organic topics is rare.

Organic tree fruit research has also begun in New England and Appalachia that could apply to Midwestern growing conditions. However, at this time there is no formal organization to tie emerging research together. While departments of agriculture, state extension, and universities independently fund small regional organic projects, a coordinated effort is needed if research outcomes are to impact organic tree fruit production outside of the arid western region. No single state or researcher has the ability to make a serious impact or to find the funding to coordinate with researchers outside of their regions. The Organic Tree Fruit Association can be the organization to bring researchers together, access funding and disseminate information directly to organic tree fruit growers. However, a small group of growers will not be able to fund a project of this scope with membership dues and local fundraising events. Outside funding is critical to the advancement of organic tree fruit research and production in the Midwest.

USDA Risk Management funding for the Organic Tree Fruit Network ends in October of 2009. Funding for *Organic Tree Fruit Education and Research Collaborative* has not been submitted to any other Federal or State grant program.

### **Potential Impact**

The Organic Tree Fruit Association anticipates that at least 500 tree fruit growers (conventional, transitioning and organic) will benefit directly from the *Organic Tree Fruit Education and Research Collaborative*. The potential impact, however, as growers gain new knowledge, implement innovative practices and recognize more options, is much broader. All tree fruit growers in the Midwest and the East deal with high humidity and the unique challenges it poses to organic pest and disease management. Some conventional orchard managers opt to use chemicals prohibited by the NOP in order to control problems. Other conventional growers use organic management practices successfully but do not become USDA certified organic. In Minnesota, this has resulted in a marked shortfall in local organic tree fruit. Apples are an example. The 2007 Agriculture Census found that Minnesota has 569 apple orchards and a total of 3,645 acres in apples. However, according to a 2005 USDA Economic Research Service survey, the state has only 22 acres of certified organic apples. This number does not include smaller growers, grossing under \$5,000 per year, who use organic methods and legally market their products as organic without certification. Nonetheless, compare Minnesota's 22 acres of organic apples to another Midwestern state, Michigan, which has a similar climate and pest complex but 278 acres in organic apples. Although census data on organic tree fruit sales is not yet available, the potential for economic growth in Minnesota's organic fruit industry is significant, even with the current state of research.

Through the Organic Tree Fruit Research Program and its other continued educational opportunities, OTFA will provide experienced growers with new and better tools for organically managing their orchards. It will also provide growers who are interested in transitioning to organic production with information they need to make sound marketing decisions. OTFA is confident that its programmatic efforts will increase grower interest in organic management,

production and certification. A subsequent increase in the amount of acreage in organic production and the amount of organic tree fruit produced will have substantial economic and environmental impact in the state, the region and beyond.

The *Organic Tree Fruit Education and Research Collaborative* will not only benefit organic tree fruit growers but also the general public. In addition to growing high quality fruit and contributing to local economies, organic growers provide many environmental services to the larger community. Organic management reduces the use of harmful chemicals, conserves resources and improves biodiversity. Well-managed organic tree fruit orchards are sustainable, profitable, competitive operations that produce value-added fruit sought after by consumers. This project will help growers overcome current limitations, capitalize on consumer demand and improve local economies and ecosystems in the humid regions of the United States. Moreover, because the information generated by this project will be available to everyone, it has the potential to benefit *all* tree fruit growers seeking to reduce costs and make their operations more ecologically sustainable.

OTFA Membership. OTFA is a professional organization and, therefore, the direct beneficiaries of incorporating the organization are professional organic (certified and not certified) tree fruit growers. Based on participation in projects of the Midwest Organic Tree Fruit Network, OTFA expects to gain at least 35 members in 2010. Growers who join OTFA in the first year will become charter members and will have the opportunity to participate in the development of the organization at its nascent stage. Each year, effort will be made to increase membership by increasing awareness of OTFA through educational opportunities and existing infrastructure. Benefits of membership in OTFA include:

- Officially recognized professional status as an organic tree fruit grower
- Representation of interests within the larger community, especially with regard to the National Organic Program and other regulation that impacts organic growers
- Opportunity to influence activities of OTFA, including content of seminars, location of field days and focus of research
- Opportunity to speak at seminars, host fields days and participate in on-farm research
- Increased visibility of operation and increased professional networking opportunities
- Practical support on disease and pest management and other production issues
- Practical support on financial management, business and marketing issues
- Camaraderie of peer-to-peer interactions

Educational Opportunities. Educational opportunities are intended to reach a wide range of tree fruit growers. The seminars are for experienced conventional and organic growers. Field days, fact sheets and the *Just Picked* newsletter draw tree fruit growers who are certified organic, transitioning, conventional, part-conventional/ part-organic, beginning growers as well as others interested in organic tree fruit production.

*Seminars.* OTFA anticipates that at least 30 growers will wish to participate in its Seminar on Organic Production and Certification to be held in the first quarter of 2010. The 2011 and 2012 seminars are expected to draw similar numbers. The number of attendees at these events is limited for the sake of group dynamics. Previous seminars organized by the Network targeted experienced tree fruit growers seeking more in-depth information on advanced apple production, business and marketing. A 2008 seminar in Trempealeau, WI, attracted 25 growers and, in 2009, 20 growers participated in a seminar in East Lansing, MI (which was the Network's first educational effort in Michigan). In general, interest in organic tree fruit production is on the rise. The Organic Farming Conference, organized by MOSES, has witnessed increasing interest in organic tree fruit production. In 2005, 40 growers attended the first ever Organic University (OU) course on apple production featuring local growers. The OU courses produced by MOSES are day-long courses (limited to 60 participants) held before the OFC. In 2006, another OU course, featuring Michael Phillips from New Hampshire, who has written the only comprehensive text on organic apple production, sold out early. In 2007, a 1.5-hour workshop on organic tree fruit production drew more than 200 people and many growers commented that they wanted more time devoted to the topic. And the 2008 OU course on Advanced Apples Production had 46 attendees. Participants in the 2010 OTFA Seminar on Organic Certification and Production will benefit by:

- Learning in a relatively small group of experienced growers where they can ask questions and explore advanced topics in depth
- Gaining information specific to organic fruit production in the Midwest
- Gaining a better understanding of ecologically responsible IPM methods
- Gaining information on the organic standards, the certification process, record-keeping, use of prohibited as well as OMRI approved inputs and other certification issues directly from organic inspector
- Exploring marketing options and considering costs/benefits of becoming organically certified
- Building relationships with other growers in the seminar
- Receiving new OTFA Fact Sheets

*Field Days.* The Network organized 15 field days in five different Midwestern states from 2004 to the present. Attendance at these events have ranged from 25 to 80 people and, as with other projects, the trends are toward increased numbers of participants. OTFA anticipates that, over the course of the three-year funding period, each field day will have 75 people in attendance, for a total of six field days and 450 attendees. The field days are open to anyone interested in organic tree fruit production and attract advanced as well as beginning growers. Attendees at OTFA field days will have the opportunity to:

- See the results of IPM and organic management methods first-hand
- Gain a better understanding how a successful local orchard manages pest and disease problems that are unique to the region
- Connect with other growers facing similar challenges in their orchards
- Consider using organic management, IPM methods and/or OMRI approved inputs rather than organophosphates and other harmful chemicals to control pest spikes
- Receive new OTFA Fact Sheets

*Fact Sheets.* The Network produced three brief fact sheets entitled “Planning the Organic Orchard,” “Considering Risks Before Starting an Organic Orchard” and “Resources for Organic Orchardists.” OTFA will develop two new, more comprehensive fact sheets: “Organic Certification for Organic Tree Fruit Growers” and “Disease and Pest Management in Organic Orchards.” These will be distributed at the annual seminars (approx. 30 x 3) and at each field day (approx. 70 x 6), totaling over 500 people who will receive them directly. In addition, like earlier the fact sheets, these will be available for download on the OTFA website. In the last 12 months (6/01/08 through 6/01/09), the website has received an average of 3677 hits per month. Notice about the new fact sheets will be sent out to the list-serve and included in the newsletter, *Just Picked*. An additional Fact Sheet on the Organic Tree Fruit Research Program will be published in 2011.

*Newsletter.* The 12-to-18 page newsletter, *Just Picked*, started in February of 2005. Five issues were produced in 2005. Quarterly issues were produced between 2006 and 2008. Thus far in 2009, two issues have been produced and, in September of this year, the last with USDA-RMA funding will go out to the 325 subscribing members. The number of subscriptions continues to grow and is expected to reach by the end of 2010. *Just Picked* will be published quarterly during 2010, 2011 and 2012, for a total of 12 issues. Contributions by growers are actively encouraged. The newsletter has become a valuable resource as well as a forum for organic tree fruit growers across the region. All current and back issues of the newsletter are available on the OTFA website.

*List-serve.* In 2004, the Midwest Organic Tree Fruit Network started a list-serve with just eight growers. Today more than 300 people (mostly growers) belong to the list-serve, where they can ask questions, get helpful information and share experiences. Like many of the activities of OTFA, the list-serve is an access point for anyone interested in organic tree fruit production. Similarly, the *Organic Tree Fruit Education and Research Collaborative* will benefit organic growers directly, even as it accomplishes broader educational outreach.

Organic Tree Fruit Research Program. In a 2006 survey of organic agriculture in Michigan, “diseases” and “insect damage” ranked second on a question regarding production problems among fruit growers in general (the number one problem was the cost and availability of organic seed, which is not relevant for tree fruit growers). When asked about research needs, over half of the fruit and vegetable farmers mentioned insect and disease problems as their principle concern. Significantly, the same survey found that most organic growers (91% of those surveyed) rely more frequently on other growers for information than any other source (including the MSU Extension, MSU Campus and MI Dept. of Ag). The researchers note that “the ‘avoidance’ of university researchers raises questions for discussion, especially when we consider that 68% of MI organic farmers have some college education, and 18% have completed some level of graduate degree studies.” This also raises the question of whether or not the results of organic tree fruit research is being effectively transmitted to tree fruit growers.

As grower-run, member-based organization, OTFA will disseminate information generated by universities, government agencies and other research programs and facilitate relationships between scientists and growers by creating the Organic Tree Fruit Research Catalogue. This Catalogue will document potential farm research sites, tree fruit research programs, scientists interested in tree fruit research and current organic tree fruit projects. OTFA will identify five potential projects that would benefit from multi-state on-farm testing by the end of the grant period and later seek to source funding for those projects. Collaboration in relevant on-farm organic tree fruit research with significant grower input will be mutually beneficial and has the potential to change attitudes and behaviors of all those involved. The Catalogue will be available online. Eventually, reports on ongoing research will be disseminated via the OTFA newsletter, website and publication for distribution at seminars and field days, reaching at least 500 growers.

Over the long term, the Organic Tree Fruit Research Program will benefit growers and the organic tree fruit industry in the following ways:

- Growers will be able to participate actively in a multi-state research project that has potential to impact their operations.
- Researchers as well as growers from different states and different universities will be able to share information and collaborate on projects.
- Results will provide growers in humid regions across the nation with new information and new organic management strategies specific to their needs.
- New directions in research may be sought following the results of actual on-farm trials.
- Successful trials of disease resistant cultivars, apple maggot attract and/or kill systems or soil-borne pathogens, for example, may attract investment from the tree fruit industry as well as state and federal funders that will make technology widely available.
- Small and mid-sized organic tree fruit growers will be able to increase production, find new markets and advance the domestic organic tree fruit sector.

OTFA will solicit feedback from member and participants on research results to assess the effectiveness of the Organic Tree Fruit Research Program and to generate ideas for new research. The Research Committee will monitor and adapt program as necessary to best serve the needs and interests of growers and the organic tree fruit industry.

### **Expected Measurable Outcomes**

The overarching goal of the *Organic Tree Fruit Education and Research Collaborative* is to increase the competitiveness of organic tree fruit growers in the Minnesota and elsewhere in the humid regions of the United States. The demand for locally grown organic tree fruits already exists and is on the rise. In order for local organic tree fruit to be competitive, production of organic tree fruits in the Midwest must be able to meet that demand. This has potential to happen in a few ways: 1.) growers who are already practicing organic management (certified or not certified) can increase and/or expand production; 2.) conventional growers can transition to organic management and capitalize on this value-added market; and 3.) entrant growers can opt to manage and market their tree fruit organically. The difficulty of managing tree fruit crops organically in humid conditions, however, is currently a barrier to increasing production for all organic tree fruit growers. As stated elsewhere in this proposal, research-based methods and technologies that have the potential to increase tree fruit production in humid regions are not readily accessible. Both organizational and productive capacity must be improved in order for Minnesota's tree fruit crops to be competitive with "western" tree fruit crops and foreign imports. If funded, this project will allow OTFA to measure and positively impact:

- The sales/production level of OTFA member/participant growers
- Numbers of growers utilizing organic tree fruit management
- Effectiveness of OTFA educational opportunities in providing information
- Number of collaborative multi-state organic tree fruit projects

### **Organic Tree Fruit Association**

In order to function as a professional association capable of serving the interests of organic tree fruit growers, OTFA must first complete incorporation as a 501c3, recruit new members, elect a Board of Directors (to take the place of the current "acting" Board) and hire support staff to manage database, track membership, coordinate and promote events, manage website, edit newsletter, etc. Formal organization will allow OTFA to gather data on grower members/participants, solicit feedback, measure effectiveness of educational and research projects and respond to emerging needs and interests.

Performance measure: Grower Survey. A professionally administered initial survey of OTFA member/participants will gather information on individual tree fruit operations: acreage, production levels, sales, location, tree fruit crops grown, marketing strategies, organic practices used and production problems. Follow-up annual surveys will be adapted from the initial Grower Survey and administered by OTFA staff (using a free service like Google Docs).

Baseline: The Grower Survey will provide a baseline of grower production/sales as well as demographic information to be used for educational and research project planning purposes.

Target: The primary target is to increase production of organic tree fruit by 10% each year of the funding period. The secondary target is to increase the number of growers utilizing organic management by 15% each year of the funding period.

### Educational Opportunities

The seminars and field days organized by OTFA as well as the newsletter, fact-sheets, website and list-serve function to disseminate information to people interested in organic tree fruit production. The *number of people who participate* in these events and forums is an important indicator of success of OTFA's efforts. However, it also important to measure the *effectiveness* of information provided and to be able to modify opportunities in response to member/participant feedback. Quarterly reports on numbers reached per project, evaluation totals and website hits will be reviewed by the Board of Directors.

#### *Seminars and Field Days*

Performance measures: First, performance will be measured by the number of attendees at seminar and field days. Second, an evaluation form, created by the Board of Directors, will ask participants to rate the effectiveness of seminars and field days on a 5-point scale (from "strongly disagree" to "strongly agree"). Sample evaluation statements include:

- a.) I currently use organic management in my orchard
- b.) I find this information on organic management valuable
- c.) I will likely change my practice because of this new information
- d.) I am seeking to increase/expand my production levels
- e.) I am interested in participating in on-farm organic management research
- f.) I am interested in new marketing options
- g.) I am interested in becoming certified organic

Evaluation forms will also include lines underneath each statement for respondents to elaborate on ratings and space elsewhere for undirected feedback on the event, comments on speakers, suggestions for future topics, etc. The generality of above statements will allow OTFA to 1.) measure of the effectiveness of a specific event, 2.) track trends in grower member/participant interests, and 3.) identify additional growers who are interested in research.

Baseline: The attendance at two previous seminars was 25 (in 2008) and 20 (in 2009) participants. Field days have ranged from 20 to 80 participants. A baseline for measuring the effectiveness of seminars and field days, in a consistent format that will be useful for purposes of analysis, has not been established.

Target (numbers reached): The target attendance for the 2010 seminar on Organic Management and Certification is 30 participants. As stated earlier, seminars (unlike field days, which can accommodate larger numbers of attendees) must be capped for the sake of group dynamics. Field days are likely to attract increasing numbers each year. The target for 2010 is 75 people at each of the two field days. The target for 2011 and 2012 field days are 85 and 100 people, respectively.

Target (effectiveness): Once a baseline of grower interests (through the initial survey and 2010 evaluations) has been established, more specific targets for both seminars and field days can be set. For example, if an interest in research averages a 4.5 rating, a field day may be scheduled at one of the orchards that is participating in the Organic Tree Fruit Research Program. If trends point toward grower interest in finding new markets or becoming certified organic, OTFA will devote more resources (at events, online, in the newsletter) to providing this information. If answers indicate that many respondents do not currently use organic management practices, OTFA will be prompted to provide more information directed toward beginning and conventional growers.

#### *Newsletter, Fact Sheets Website and List-serve*

Performance measure: Because all of these projects are available online, a key measure of the effectiveness is the numbers reached. However, OTFA will also analyze distribution of website hits in order to establish a clearer baseline of grower interests.

Baseline: The print version of the newsletter, *Just Picked*, currently goes out to 325 subscribers and is available online. Fact sheets are distributed to seminar and field day attendees and are also available online. The OFTA website receives an average of 3677 hits per month. Analysis will be done on website data to determine baseline-ranking of individual projects. The “Midwest Organic Tree Fruit Network” list-serve has 308 participants.

Target: By October of 2010, the number of people reached by *Just Picked* (print) and the list-serve will total 400 for each. The website is both an outgrowth and a reflection of the activities and projects of OTFA. If new programs that directly address grower production needs, such as the Organic Tree Fruit Research Program, are launched within the next year, OTFA expects website hits to reach an average of 5,000 per month.

#### Organic Tree Fruit Research Program

The Organic Tree Fruit Research Program is intended to provide information to researchers and growers who want to advance the state of research on organic tree fruit production in the wet, temperate climate of the Midwest and East.

Performance measure: Organic Tree Fruit Research Catalogue. Initially, the number of potential farm research sites, the number of relevant research projects as well as the number of research scientist interested in participating in multi-state research will be

primary indicators of the program’s success. By the end of the three-year funding period, the effectiveness of the Organic Tree Fruit Research Program will be measured by the number of potential collaborative projects. Over the long term, evaluations, updated grower surveys and feedback on the website will provide an indication of how the results of new research, new plant varieties, new technologies and new management methods actually impact organic tree fruit production.

Baseline: Currently, as stated earlier in this proposal, there is very little collaboration among researchers across different states, institutions, organizations and agencies who are working on organic tree fruit management research specific to a wet, temperate climate.

Targets by year:

- Year 1: Completion survey of OTFA members/participants  
Identification and assessment of existing research
- Year 2: Full Organic Tree Fruit Research Catalogue on-line
- Year 3: Five promising organic tree fruit research projects identified  
OTFA seeks to source project funding

Long-term: As the Organic Tree Fruit Research Program grows and attracts more participants, provides more information and facilitates more relationships among scientists in different states as well as between researchers and growers, it will result in innovative answers to organic tree fruit production problems and attract investment from private industry and public funders. OTFA expects to be able to measure the impact of this activity on the ground. Through its annual survey, OTFA will monitor, among other things, the use of organic management practices, the acreage in organic production and the amount of organic tree fruit produced. This will make organic tree fruit growers in the Midwestern and Eastern regions more competitive with their domestic counterparts in the Western regions as well as with foreign tree fruit producers.

**Work Plan**

**Project: Organic Tree Fruit Organization**

Project Activity	Who	Timeline
Complete incorporation of Organic Tree Fruit Association (OTFA) as 501c3 non-profit organization	Acting Board of Directors	November, 2009

Elect Board of Directors	OTFA membership with oversight from acting BOD	January, 2010
Assemble Membership Committee	OTFA Board of Directors	First Quarter, 2010
Hire Support Staff	OTFA Board of Directors	First Quarter, 2010
Initiate Membership Drive	Membership Committee and Support Staff	First Quarter, 2010
Create Memberships materials for distribution via educational opportunities	Membership Committee and Support Staff	First Quarter, 2010 and ongoing
Assemble Survey Committee	OTFA Board of Directors	First Quarter, 2010
Create initial Grower Survey	Survey Committee and Cooperative Development Services (CDS)	First Quarter, 2010
Distribute, collect and compile results of initial survey to identify organic growers and their interests for Research Catalogue as well as for planning and monitoring purposes	CDS	First and Second Quarters, 2010
Review Survey data (see Research work plan below)	Research Committee	By June, 2010
Create reports on membership, educational opportunities, and evaluations for BOD	Support Staff	Quarterly
Review reports	OTFA Board of Directors	Quarterly
Follow up survey	Support Staff	Annually

**Work Plan**

**Project: Educational Opportunities**

<b>Project Activity</b>	<b>Who</b>	<b>Timeline</b>
Assemble Education Committee	OTFA Board of Directors	First Quarter, 2010
Seminar: Gain commitments from organic inspector and two organic growers to be speakers	Education Committee	First Quarter, 2010
Seminar: Coordinate (date, location, specific content) on Organic Management and Certification	Education Committee, speakers and Support Staff	First Quarter, 2010
Prepare instructional materials, including new <i>Fact Sheets</i>	Education Committee, speakers and Support Staff	First Quarter, 2010
Prepare evaluations	Education Committee and Support Staff	
Seminar: Promote in <i>Just Picked</i> , on website, on list-serve, direct mailings, press releases	Support Staff	First quarter, 2010
Seminar: Conduct intensive seminar	Education Committee Rep., Support Staff and Speakers	First quarter, 2010
Seminar: distribute, collect and compile data from evaluation	Support Staff	First quarter, 2010
Field days: Identify two advanced growers willing to host field day	Education Committee and Support Staff	By March 30, 2010
Field day: Coordinate time, content and additional speaker	Support Staff and growers	By April 30, 2010
Field days: prepare instructional materials (including copies of Fact Sheets)	Support Staff	At least one week in advance of field day
Field days: Promote in <i>Just Picked</i> , on website, on list-serve, direct	Support Staff	Second and Third

mailings, press releases		Quarters, 2010
Field days: conduct two field days during growing season at two experienced growers' orchards	Support Staff and growers	Third quarter, 2010
Field days: distribute, collect and compile data from evaluation	Support Staff	Third quarter, 2010
Newsletter: Edit and layout contributions for publication	Contracted labor	Quarterly, 2010
Website: Update information on events, news, research, etc.	Support Staff	On-going

### Work Plan

#### Project: Organic Tree Fruit Research Program

Project Activity	Who	Timeline
Assemble Research Committee	OTFA Board of Directors	First Quarter, 2010
Hire Research Staff	Research Committee	First Quarter, 2010
Assess current published research and its relevance for growers in Midwestern and Eastern regions	Research Staff with oversight from Research Committee	By the end of Third Quarter, 2010
Identify potential farm sites (using Grower Survey data, making phone calls, going to organic farming events)	Research Staff with oversight from Research Committee	By the end of Fourth Quarter, 2010 and ongoing
Identify research sites, scientists and projects research (using assessment, making calls, going to organic farming events)	Research Staff with oversight from Research Committee	By the end of the Fourth Quarter, 2010 and ongoing
Compile and post Tree Fruit Research Catalogue	Research Staff	By the end of Fourth Quarter, 2011 and ongoing

Identify five potential research project that are relevant to Midwest and would benefit from multi-state testing	Research Staff	By the Third Quarter of 2012
Identify potential funding sources	Research Staff	By the Fourth Quarter of 2012

**Budget Summary & Narrative**

**Table 1. Formalizing OTFA - Year 1-3**

<b>Budget Summary Table Category</b>	<b>Description</b>	<b>Total Project Expenses Requested</b>
<b>Personnel</b>		
Support Staff		
Membership drive	\$15/hr x 80 hrs	\$1,200
Membership management	\$15/hr x 10hr/m x 36	\$5,400
BOD reports	\$15/hr x 20hr/qtr x 12	\$3,600
		<b>\$10,200</b>
<b>Fringe Benefits</b>		0
<b>Equipment</b>		0
<b>Supplies</b>		
Paper – Survey results BOD reports		\$90
Ink Cartridges		\$40
		<b>\$130</b>
<b>Contractual</b>		
Initial Grower Survey	Cooperative Development Services	\$10,000
		<b>\$10,000</b>
<b>Other</b>		
Communications		
Mailing – BOD reports	\$.75/piece x 8x18, plus	\$120
Conference calls - BOD	\$60/ call x 6/yr x 3	\$1080
Member drive mailing	\$.44 x 325	\$143
Publication		
Membership Brochure	\$1/piece x 325 (to be sent to JP subscribers)	\$325
		<b>\$1,668</b>
		<b>Sub-Total: \$21,998</b>
<b>Income</b>		
Member Dues	\$35 x 35	(- \$1,225)

**Table 1 Total: \$20,773**

Currently the acting OTFA Board of Directors, all of whom are growers, are volunteering time and incurring any costs of formalizing the organization, such as conference calls, long-distance phone calls and copying of Board materials. Once OTFA is incorporated, costs will increase

substantially as the organization seeks out new membership and hires the support staff necessary to achieve its objectives.

Any survey is an enormous undertaking and the success of OTFA programming depends on the grower survey being done thoroughly and professionally. OTFA will contract with Cooperative Development Services to make sure that the data is as complete and accurate as possible.

The income is an estimate. As of June, 2009, OTFA has 15 official members.

**Table 2. Educational Opportunities – Year 1-3**

<b>Budget Summary Table Category</b>	<b>Description</b>	<b>Total Project Expenses Requested</b>
<b>Personnel</b>		
Support Staff		
Website maintenance	\$20/hr x 5 hr/mo x 36	\$3,600
Fact Sheets	\$20/hr x 40hr/sheet x 3	\$2,400
Event coordination	\$20/hr x 90 hrs/yr x 3	\$5,400
Material preparation	\$ 20/hr x 60 hrs/yr x 3	\$3,600
		<b>\$15,000</b>
<b>Fringe Benefits</b>		0
<b>Equipment</b>		0
<b>Supplies</b>		
Paper – event materials, including Fact Sheets, promotional material		\$600
Pens – events		\$20
Ink jet cartridge – event materials		\$200
		<b>\$820</b>
<b>Contractual</b>		
Newsletter – layout, editing		\$12,600
Website hosting		\$475
		<b>\$13,075</b>
<b>Other</b>		
Meetings		
Facility rental – seminars	\$1,300 x 3	\$3,900
Rental – chairs, tables, tents	\$300 per field day x 6	\$1,800
Communications		
Long distance calls	700min/\$25/qtr x 12	\$300
Mailings		
Events promotion	\$.17/piece x 300 x 9, plus	\$465
Just Picked	\$1/piece x 325 x 12	\$3,900
Publication Costs		
Additional Member Brochures	\$1/piece x 1000	\$1000
Speaker/ Grower Fees - seminars	\$250/speaker x 3 speakers x 3	\$2,250
Evaluations data collection	\$ 15/hr x 60 hrs/yr x 3	\$2,700
		<b>\$16,315</b>

**Table 2 Total: \$45,210**

While some of the labor and other costs will continue to be contracted out or done on a volunteer basis, OTFA’s educational programs require a paid staff person to coordinate, promote and evaluate events as well as to prepare materials.

OTFA has worked to make as much information as possible available to growers in the most cost effective formats. The website and list-serve are valuable tools in providing information to growers across the region and beyond. But OTFA does not want to limit access. Some growers prefer print material. The print version of *Just Picked* continues to draw subscribers and is available in-full online. Facts sheets distributed at seminars and field days will provide participants with take-away materials for reference. Membership materials will also be distributed at these events.

**Table 3. Organic Tree Fruit Research Program – Year 1-3**

<b>Budget Summary Table Category</b>	<b>Description</b>	<b>Total Project Expenses Requested</b>
<b>Personnel</b>		
Research Staff		
Create Organic Tree Fruit Research Catalogue	\$20/ hr x 40 hrs/mo x 36 months	\$28,800 <b>\$28,800</b>
<b>Fringe Benefits</b>		0
<b>Equipment</b>		0
<b>Supplies</b>		
Paper - research, reports		\$300
Ink Jet Cartridges		\$90 <b>\$390</b>
<b>Contractual (Survey in Table 1)</b>		0
<b>Other</b>		
Meetings – rent meeting room at organic conferences	\$45/conference x 2/yr x 3	\$270
conference registrations	\$150/conference x 2/yr x 3	\$900
<b>Communications</b>		
Long-distance calls	700min/\$25/qtr x 12	\$300
Conference calls	\$60/ call x 12	\$720 <b>\$2,190</b>

**Table 3 Total: \$31,380**  
**Total Grant Request: \$97,363**

The Organic Tree Fruit Research Catalogue is just the first step in creating a successful Organic Tree Fruit Research Program. But identifying potential collaborators as well as promising research projects is essential to advancing organic tree fruit pest and disease management research in the humid regions of the United States. Research personnel will rely on data gathered from the Grower Survey to identify potential growers. Online research and leads from the OTFA Research Committee will help identify potential projects and researchers. Meetings for scientists and growers interested in on-farm research projects will be held in rented rooms at two organic

conferences per year (such as, the Organic Farming Conference in La Crosse, WI, and/or the Minnesota, Michigan or Iowa state-level conferences). Because growers and researchers in the region are widely dispersed, one of the most cost effective ways to facilitate collaboration is to go to places where people interested in who are organic production have already gathered. Because the costs of travel and lodging are not covered by the grant, OTFA is requesting funds for conference registration. Follow up discussions will take place over email and/or phone.

### **Project Oversight**

The current acting Board of Directors will be replaced by an elected Board of Directors once the Organic Tree Fruit Association is incorporated as a 501c3 organization. However, all current Board members are established organic tree fruit growers who are committed to forwarding the organic tree fruit industry in the region. They will oversee the election process. Some of these Board members will be elected to positions once OTFA is incorporated and will serve on the Membership Committee, Survey Committee, Education Committee or Research Committee. Others may serve in an advisory capacity. Quarterly reports will be presented to the Board to ensure programs are on track to meet their objectives.

The OTFA Research Committee will include current acting President, Harry Hoch, who is the owner and operator of Hoch Orchards in La Crescent, MN. Hoch Orchards will be certified organic at the end of 2009. Hoch is a founding member of the Midwest Organic Tree Fruit Network and has been actively involved both in the Network's past success and in its current transformation into a professional association. He is very knowledgeable about the current state of organic tree fruit research and will provide general direction as well as specific leads for potential research. He also has an extensive background in Integrated Pest Management and is a frequent speaker at organic and tree fruit conferences across the region.

The Organic Tree Fruit Research Catalogue will be created, with input and oversight from the OTFA Research Committee, by Bridget O'Meara, a writer and researcher who has worked on sustainable and organic agriculture projects in both academic and non-profit sectors.

### **Project Commitment (also see attached letters)**

Because of the work that the Midwest Organic Tree Fruit Network has done to disseminate information to growers and others interested in organic tree fruit production, the Organic Tree Fruit Association has an existing relationship with many growers as well as research and education partners in the industry. Through the *Organic Tree Fruit Education and Research Collaborative*, OTFA will not only draw on those relationships but also facilitate new ones in order to further organic tree fruit research and, ultimately, provide vital information that will benefit tree fruit growers in humid regions. The project has the support of many organic tree fruit growers, university researchers, agency representatives and sustainable agriculture organizations. All of these individuals and groups have a stake in the advancement of organic tree fruit production in the Midwest and East—and all are potential collaborators in OTFA projects.