OREI PROPOSAL

PROJECT NARRATIVE:

A. INTRODUCTION AND RATIONALE

Retail sales of organic products have increased 20% each year over the last 5 years. Global retailers such as Wal-Mart are entering the organic marketplace, rapidly increasing market demand for organic products. Demand for organic production information is growing as the organic industry continues to expand. These markets will increasingly go overseas if US farmers are not able to supply the organic marketplace.

Extension has traditionally been a source of reliable, science-based agricultural information for farmers and agricultural professionals. However, many Extension personnel have little direct experience or training in organic agriculture. There is currently little published Extension information on organic agricultural practices (although this is changing rapidly), and it remains difficult for farmers, other practitioners, agricultural professionals, and Extension educators to access these new materials. The growth in organic market opportunities has increased the demand on Extension personnel across the country to supply this clientele with information on all aspects of organic production.

There currently is no reliable data on the number of organic agriculture information requests to Extension and land grant university (LGU) personnel, and/or their ability to provide high quality information to organic farming clientele, but there is data from other organic agriculture info providers. A survey of usage data for ATTRA (National Sustainable Agriculture Information Service; www.attra.org) and www.OrganicAgInfo.org (OAI: an on-line searchable database of organic and biological agriculture resources) demonstrate the demand for reliable, science-based information on organic agriculture. ATTRA receives 2 million website hits monthly, representing 200,000 unique users, and 50,000 PDF publications are downloaded. In addition, ATTRA receives 35,000 phone/email requests for print copy publications, research information and referrals annually. Over 70% of the ATTRA requests are from farmers or agricultural professionals. Six percent are from Extension/LGU personnel; many of these are multiple-copy requests for workshops and seminars, demonstrating that Extension is seeking information sources from outside the LGU system to meet informational needs of its clientele (Jeff Birkby, ATTRA, pers. comm..). OAI reports 30,000 total requests in three years, with 15% of these requests from LGUs (Jonathon Landeck, pers. comm..).

eXtension: a new venue for Cooperative Extension and LGU outreach

eXtension is a new emerging web-based Cooperative Extension resource funded jointly by land-grant universities. eXtension intends to be "an interactive repository of high-quality research-based information" available to the American public 24/7/365, which will "harness the power of land grant universities" to provide best-of-the-best information on the national and regional level while also directing users to local and state Cooperative Extension information, resources, and personnel. As such, it is considered the new venue for Land Grant University and Cooperative Extension outreach to both traditional and non-traditional audiences. Thus far, only two sites have been launched, both in fall 2006, with introductory content and delivery elements (*Horsequest* www.extension.org/horses and *Financial Security for All* www.extension.org/personal+finance).

eXtension content is developed by a *Community of Practice* (CoP) to deliver information to a *Community of Interest* (CoI: clientele of that CoP). A CoP is "a virtual network of subject matter

content providers consisting of faculty, professional and para-professional staff, county educators, industry experts (and practitioners/farmers), clientele and government agency representatives, who share knowledge in a specific area and are willing to work and learn together over a period of time to further develop and share that knowledge". CoPs are multi-institutional, multi-disciplinary, scalable and sustainable over time; CoPs evolve over time and membership is fluid (http://cop.extension.org/wiki/how_to_become_a_community_of_practice).

Land-grant University and Cooperative Extension faculty and staff are expected to participate as CoP members as one of their roles as salaried educators. While people with relevant expertise working outside the LGU and Extension systems are encouraged to become CoP members and participate in content development, there are no funds available to compensate them for their efforts. CoPs may have to raise external funds to compensate these experts, particularly in content areas in which LGU and Extension faculty do not have expertise; for eOrganic, two good examples are certification and organic dairy production.

eXtension content is developed through collaborative tools including a "wiki" where the CoP creates and reviews the site content (http://cop.extension.org/wiki/Main_Page). Elements common to all eXtension sites when first launched include "articles" (e.g. www.extension.org/articles/Financial_Security%3A_Legal_Topics), FAQs (e.g. www.extension.org/faq/index/horses), and interactive Ask-the-Expert sessions (log in to participate). In the future, eXtension will offer decision tools, video streaming of expert presentations, learning modules, and certificate/continuing education courses. eXtension is continually evolving; eOrganic and other "pioneer" CoPs will participate in shaping eXtension.

eOrganic: eXtension for organic agriculture

Eight eXtension Pioneer Communities of Practice were initiated through an rfa process in 2005 and two of these have been launched (Horsequest www.extension.org/horses and Financial Security for All www.extension.org/personal+finance). Ten additional CoPs were initiated through a second rfa process in 2006 (pre- and full proposals); eOrganic, the organic agriculture eXtension CoP, was funded in this second round in August, 2006 (see attached eXtension support letter). OFRF, NAL, ATTRA and SARE staff participated in eOrganic pre- and full proposal development. Ten members of eOrganic's leadership team, including Jeff Birkby, ATTRA Progam Manager, attended an eXtension workshop and training in October 2006. The eOrganic CoP is currently comprised of approximately 100 people representing diverse organic production regions and content areas. They include campus and county extension faculty and research and teaching faculty recognized for their expertise in organic and sustainable agriculture. In addition, the CoP includes experienced organic farmers and agricultural professionals. The eOrganic Community of Interest includes a diverse group of conventional and organic farmers in all US regions producing a wide array of horticultural and agronomic crops, livestock, and other agricultural products. The CoI also includes agricultural professionals such as crop advisors, veterinarians, researchers, federal agencies (such as NRCS employees), processors, certifying agencies, Extension educators, and Extension specialists.

Relationships between eOrganic, ATTRA, OrganicAgInfo, and SARE

The current vision for eOrganic and its development evolved through a participatory process including strong participation by OFRF, NAL, and ATTRA staff members, along with LGU and Extension faculty from Oregon State University, University of Vermont, University of Minnesota, University of Illinois, Penn State University, North Carolina State University, Clemson University, and Ohio State University. As the result, we have and will continue to develop eOrganic as one partner in a national, user-driven, evolving, web-based, organic

agriculture information system. The roles and relationships between the current partners will continue to evolve; below are described the roles and relationships these partners envision today. Representatives from ATTRA, OrganicAgInfo (OAI), National Agriculture Library, SARE, and New Farm will attend the eOrganic visioning workshop in February 2007 to continue discussing the relationships among these partner organic agriculture information providers.

eOrganic

eOrganic will include: 1) searchable content, in small units, for rapid access by internet users, 2) a national compilation of continuously updated and searchable FAQs, 3) interactive Ask-the-Expert, 4) regionally-specific farm case studies, 5) certification tools, and 6) a portal to in-depth information available from eOrganic and partner sites (OAI, ATTRA, SARE) and local and regional Land-grant University and Cooperative Extension resources. In the future, eOrganic will host decision tools (e.g. on-line interactive certification tools), video streaming of expert presentations/conferences, learning modules, and certificate and continuing education courses (e.g. the southern SARE organic IPM curriculum).

eOrganic CoP members and coordinators will identify and evaluate all relevant resources as a first step in developing eOrganic content and these will be archived on the eOrganic wiki as well as on OAI; this should significantly increase OAI content. eOrganic will also encourage farmer CoP and CoI members to submit experiential information to OAI. When appropriate, eOrganic content will reference and link users to ATTRA and OAI information resources.

The National Sustainable Agriculture Information Service (ATTRA, www.attra.org)

The ATTRA project (the National Sustainable Agriculture Information Service, www.attra.org) is one of best-known information sources on sustainable agriculture. Since the nonprofit National Center for Appropriate Technology began this project for USDA in 1987, ATTRA has provided more than 200,000 technical responses to farmers, ranchers, and agricultural information providers around the U.S. by mail, e-mail, and phone. The service offers over 250 free publications in electronic or hard copy format. Website visitors downloaded more than 500,000 copies of publications in the past year. ATTRA and Extension have a long history of cooperation; LGU/Extension faculty have historically relied on ATTRA publications to serve the information needs of organic farmers. eOrganic would complement NCAT by distilling/translating LGU research information into easily accessible web-formatted content and linking users to Extension faculty and publications (see ATTRA support letter).

OrganicAgInfo (OAI)

OAI is an on-line searchable database of non-copyrighted resources on organic and biological agriculture, including Organic Farming Research Foundation (OFRF) and other research reports, theses, proceedings, outreach publications, and farmer experiential information. OAI was initiated as part of the OFRF-led Organic Agriculture Consortium project funded by IFAFS. It is now co-coordinated by OFRF and the National Agriculture Library Alternative Farming Systems Information Center (NAL-AFSIC). OAI and eOrganic partner naturally. eOrganic currently has no mechanisms for archiving existing resources for public access or farmer experiential information, and OAI, on the other hand, has experienced difficulty in soliciting submissions. As partners, eOrganic CoP members and coordinators will identify and evaluate all relevant resources as a first step in developing eOrganic content and these will be archived on the wiki (for CoP access) and in OAI (for public access). In addition, eOrganic will encourage farmer CoP/CoI members to submit experiential information. OAI will direct users to eOrganic and vice

versa. OFRF has committed to providing support for OrganicAgInfo in the long term (see attached OAI letter of support).

Sustainable Agriculture Research and Education Program (SARE):

National SARE will house or link national sustainable agriculture curriculum project courses when available. The southern SARE-funded organic IPM project led by Geoff Zehnder, an eOrganic insect pest management content leader, will make available its modules as-is and as resource materials for eOrganic content development (see Zehnder support letter).

Ongoing or recently completed eOrganic activities

Preliminary vision development:

The eOrganic leadership team and partners developed the draft general vision for eOrganic while drafting the eXtension pre-proposal in spring 2006 and the full proposal in summer 2006.

CoP development: The eOrganic leadership team recruited the 80-member (as of August 2006) preliminary CoP while developing the eXtension full proposal in summer 2006. The list is posted on the wiki. Each member with an asterisk by his/her name has formally accepted CoP membership. eOrganic continues to develop the CoP as it continues to articulate its vision, framework, and relationship to other organic agriculture information providers. The active CoP membership will change as eOrganic content development foci change over time. We are continuing to build the CoP; we are now recruiting an economics content area leader.

Vision and framework development: Approximately 35 organic and sustainable agriculture visionaries (eOrganic leadership team and approximately 18 other "visionaries" including representatives from OrganicAgInfo, ATTRA, National and regional SARE, CSREES, certifiers, and farmers) will meet for 2.5 days in late February to "vision" the eOrganic site design, framework, and partnerships with other organic agriculture information providers (funded by eXtension). A draft vision/framework will be sent to all visioning participants for review in March 2007. A draft incorporating all comments (and possibly describing divergent scenarios) will be sent to 10 external reviewers for review in April 2007. A final vision/framework document will be completed by July 2007.

Development of relationships with other organic agriculture information providers: eOrganic leadership team members have engaged NCAT's ATTRA staff (Jeff Birkby), NAL (Mary Gold and Bill Thomas), and OFRF (Jonathon Landeck) staff in all conference calls and electronic communications as the proposals to eXtension and this proposal to CSREES-OREI were developed. Representatives of these organizations were also invited to attend the eXtension workshop in Kentucky in October 2006. NCAT/ATTRA and OrganicAgInfo staff will continue to be partner organizations in the development of eOrganic, so eOrganic will evolve as one provider in a well-coordinated national organic agriculture information system. Representatives from these organizations will attend the eOrganic visioning workshop in February 2007. eOrganic intends to develop relationships over time with organic agriculture information providers in other countries (e.g. Organic ePrints).

Content development:

eOrganic is currently developing introductory content on the fundamentals of organic agriculture (basic content, FAQs, and Ask-the-Expert interactive sessions) through the efforts of the leadership team and CoP members. This effort is coordinated by the part-time coordinator, Lane Selman at Oregon State University, and funded by eXtension. eOrganic will be formally

"launched" in late fall 2007 along with approximately 10 other eXtension sites. While the scope of this introductory material is not yet fully described, there will be at least 200 short "articles", 200 FAQs, and 4 Ask-the-Expert sessions on the site when it is launched.

A group working on organic dairy production has met on a regional level in the Northeast (certifying agencies, farmers, and Extension faculty) to begin developing a content outline. A draft outline will be distributed to dairy CoP members across the nation for review in January 2007. A new draft based on reviewer comments and input from the visioning meeting in late February will be published on the wiki in March 2007. FAQs have been requested of certifying agencies and the dairy industry, and those will be evaluated and reviewed in early 2007. Introductory content areas will be developed and launched by eXtension (along with other eOrganic introductory content) by December 2007. In addition, the organic dairy CoP is working cooperatively with the conventional dairy CoP (DAIReXNET, another new CoP) to develop content relevant to both conventional and organic dairy farmers.

Long-term support and maintenance of eOrganic:

eXtension will not receive sufficient funding to fully support eOrganic (or any other eXtension site) content development and delivery in the long term. However, eXtension provides site technical support, on-line evaluation, and marketing for the short and long term, valued at approximately \$100,000 per year (see letter of support from eXtension). eXtension has a development director on staff. In addition, eXtension has a strong commitment to supporting eXtension technical and evaluation development and maintenance as well as CoP content development and maintenance in the short and long term. eOrganic is currently developing a plan, in cooperation with the eXtension Development Director Betty Johnson, for raising funds from public and private sources to develop, evaluate, and maintain the site over the short and long term. This proposal is just one strategy in this overall plan.

Extension will increasingly rely on eXtension programming for outreach to agricultural audiences. As a result, Extension faculty and educators will increasingly join CoPs and dedicate significant proportions of their salaried time to eXtension content development. In addition, over time, an increasing number of Extension and LGU staff will have more expertise in organic agricultural systems. For this reason, eOrganic will only increase its ability to generate content through the efforts of salaried LGU/Extension personnel, reducing costs for content development.

In this project we intend to 1) develop, evaluate, and articulate a vision, framework and methodology for eOrganic and its partners, 2) develop and launch high quality in-depth content in 3 highly visible content areas: dairy, diversified vegetables, and certification, and 3) generate strong evaluation data to demonstrate and quantify eOrganic's utility to farmers and agricultural professionals. These three outcomes, in addition to the long term support of eXtension backed up by the LGU/Extension systems, should enable us to attract diverse sources of funding for further content development and long term maintenance. The funding requested in this proposal will facilitate long term stability of the site by rapidly generating the three outcomes listed above.

Rationale for developing in-depth content on diversified vegetable production and marketing systems, dairy production and marketing systems, and certification:

Diversified vegetable production and marketing:

Diversified vegetable production and marketing systems have long been the backbone of the organic agriculture movement in the U.S. Because of this, land grant university and extension educators are more knowledgeable about these systems than they are about other kinds of organic systems, e.g. dairy. These types of farms operate in all states so the community of

interest is large and geographically diverse. However, while there is increasing expertise in organic vegetable systems management within the LGU system, this expertise is not readily accessible to most farmers and agricultural professionals.

Many of the long term studies funded by CSREES IOP and SARE have focused on vegetable systems. Unfortunately, little of that information, (reported in peer-reviewed scientific journals or just emerging from new or medium-term cropping systems and on-farm experiments) is available to farmers and agricultural professionals. One reason for this is that there are few opportunities for the researchers, educators, and farmers involved in those projects to come together to 1) learn from each other's findings and experiences, and 2) work together to translate results into information useful and relevant to farmers and agricultural professionals. This project will specifically work to translate IOP and SARE research results into eOrganic content.

Integration of production and marketing has been widely practiced within diversified organic vegetable production, setting the benchmark for these approaches. Direct channels to consumers such as Community Support Agriculture (CSA), farmers' markets and direct sales to restaurants are among many routinely used. This integration of food production and direct marketing channels is part of local food systems or what Lyson (2004) refers to as "civic agriculture." There is now a burgeoning research literature on marketing methods, consumer preferences for organic food, and local and regional food systems, and how to best use these channels. This project would identify, evaluate, and efficiently deliver this information to farmers and agricultural professionals.

Development of an eOrganic site on diversified vegetable production and marketing systems will serve as a model for the future development of horticultural and agronomic cropping systems (e.g. grains, tree fruits, etc.).

Dairy production and marketing:

Dairy farms across the nation have seen an increase in production costs and a decline in pay price per hundred weight of milk. Many farmers are paid less per hundred weight of milk today than they were 20 years ago. The growing discontent with the federal milk pricing order has prompted many dairy farms to consider organic milk production, as currently organic milk has a supply management system that discourages over production. This system, coupled with an increasing demand for organic dairy products, has led to a stable and fair price paid to the farmer for their product. Today, organic milk pay prices are more than double conventional prices.

As a result of high demand for organic and high organic milk pay prices, dairy has been one of the fastest growing segments of the organic foods industry. Milk cows accounted for >50% of the certified livestock animals nationwide during the period 1997-2003, and during that period the number of US organic dairy cows jumped by more than 450%. Recent growth has been very rapid. In Oregon, organic dairies increased in number by 42% from 2004 to 2005; in Pennsylvania there were 130 organic dairies in 2005 with about 60 more in transition to organic in 2006; in Vermont, organic dairies rose in number from 3 in 1999 to 139 in 2006, with a 49% increase from 2005 to 2006 (www.ers.usda.gov/Data/Organic/; NOFA-VT statistics). Organic Valley (CROPP) grew by 16% in 2005, 30% in 2006, and expects to grow by more than 40% in 2007; the coop now markets milk for approximately 1000 farmer members across the nation (see attached Organic Valley support letter).

The explosive growth in organic dairying has prompted a substantial demand for technical assistance and resources. These farms constantly request information from certifying agencies, organic organizations, agricultural industries, and Extension, but information and technical resources are scarce. NCAT's ATTRA project has seen a significant increase in requests for

dairy information in the past few years, indicative of the national demand for organic dairy production and marketing information. More than 70,000 dairy publications (including cow, sheep, goat, etc) were viewed or downloaded from the ATTRA website in the past 12 months, and more than 100 detailed technical responses were provided to individual dairy owners calling the ATTRA phone line (Jeff Birkby, NCAT, personal communication).

The organic industry has grown faster than its acceptance within the University System and therefore Extension typically cannot meet the needs of this group of farmers. In the past, organic dairy farmers worked with non-LGU organizations (such as ATTRA, certifiers, and state and regional organic agriculture educators such as NOFA-VT) and buyers such as Organic Valley to obtain information, resources, and technical assistance. Today these groups cannot meet the demand (see attached Organic Valley support letter). The development of a high quality national organic dairy website would fill a critical information gap.

Content development for an eXtension organic dairy site will require external funding. As described above, most expertise in organic dairying lies outside the land grant system. CoP members from outside the university cannot generate content for an eXtension website without compensation for their time and expertise. For this reason, we are requesting funds to support their contributions to this national information system.

Development of the eOrganic dairy production systems content will serve as a model for content development in other livestock systems.

Certification

Certification provides access to the lucrative and growing organic market. According to the USDA's National Organic Program regulation, all farm and processing operations that sell over \$5,000/year in organic products must be certified to sell their products as "organic." Many producers, processors, and information providers, especially those new to the organic sector, do not understand organic certification requirements or the certification process.

NOP regulations are relatively complex, and are not set in stone. For example, new substances are occasionally added to the National List of Allowed and Prohibited Substances. Some previously allowed substances are sunsetted and become prohibited. New sectors, such as pet food and aquaculture, may be added. Practice standards, such as provisions for the conversion of dairy herds, or pasture requirements, change over time. Producers and processors must meet additional requirements to sell their products as "organic" in international markets.

Expertise about organic certification does not reside in the LGU system. Most Extension educators are not well versed in the intricacies of organic certification. Expertise on the topic is found within accredited certification agencies, which include non-profit organizations and state governments. This project requires external funding due to the fact that this expertise lies outside the land grant system; these experts cannot generate content for an Extension website without compensation for their time. For this reason, we are requesting funds to support their contributions to this national information system. This project will engage the expertise of members of the Accredited Certifiers Association, the National Association of State Organic Programs, and other organic certification experts to develop and disseminate comprehensive, accurate, and current information on organic certification through eOrganic

Long-term goal:

The long-term goal of this project is to develop eOrganic, in partnership with other organic agriculture information providers, as an effective, national, internet-based, interactive, user-

driven, organic agriculture information system for farmers and agricultural professionals. eOrganic will develop and deliver organic agriculture information that is accessible, reliable, credible, and up-to-date.

Supporting objectives:

Objective 1: Develop and evaluate a vision and framework for eOrganic, including partnerships with ATTRA, National and regional SARE programs, OrganicAgInfo, National Agricultural Library, and other organic agriculture information providers.

Objective 2: Develop in-depth eOrganic content in:

- a. diversified vegetable production and marketing systems
- b. dairy production and marketing systems
- c. certification

Objective 3: Evaluate eOrganic process, content, delivery, and outcomes

Objective 4: Market eOrganic to farmers and agricultural professionals

B. SIGNIFICANCE

Relationship to program priorities:

This project directly addresses three IOP program priorities:

- A) Projects that 'develop content suitable for delivery through eXtension'.
- B) Projects that share or develop 'information on a national or regional level regarding pest mitigation, soil fertility building, best organic cultural practices, production and risk budgeting and planning, best marketing practices, livestock management, and cataloging animal health problems for various species and listing approved health care options and allowed medications'.
- C) Projects that bring 'end-users together with research, education and extension teams that have been funded by the Integrated Organic Program'

Novel ideas and contributions:

This project will convene a national group of organic agriculture and Extension education visionaries to envision a national, internet-based, interactive and user-driven, organic agriculture information system by developing eOrganic in partnership with other US organic and sustainable agriculture information providers. This vision will be summarized and evaluated over a three year period. This process should help facilitate the ongoing development of a strategic, user-driven, nationally coordinated, web-based organic agriculture information system.

This project will systematically work to translate IOP, SARE, and other research results into eOrganic content by identifying and archiving resources, convening synthesis and applications workshops, and synthesizing and adapting research results into practitioner recommendations.

In the short term, eOrganic will contribute novel elements such as searchable introductory content in small units, a portal to more in-depth information from many sources, continuously updated FAQs, interactive Ask-the-Expert sessions, and regionally-specific farm case studies. In the long term, eOrganic will contribute on-line interactive certification documents, video streaming of expert presentations/conferences, and certificate and continuing education courses.

C. APPROACH

A. Project Description

Objective 1: Develop and evaluate a vision and framework for eOrganic, including partnerships with OrganicAgInfo, ATTRA, and other organic agriculture information providers.

During the aforementioned eOrganic visioning meeting the leadership team and over 20 "visionaries" will develop the eOrganic site design, framework, and partnerships with other organic agriculture information providers. Participants will address issues including: eOrganic mission, values and goals; roles and responsibilities of CoP members within and without LGUs and Extension; content framework; mechanisms for prioritization of content development; methodologies for cropping system-specific content development and delivery, editorial policies; delivery elements; partnerships and information flow amongst eOrganic and other eXtension sites; partnerships and information flow amongst eOrganic and ATTRA, OAI, and other agricultural information providers; and fundraising (short/long term; private/public sources).

A draft vision/framework will be sent to all participants for review in March 2007. A revision incorporating comments (and possibly describing divergent scenarios) will be sent to 10 external reviewers for review in April 2007. A final vision/framework document will be completed by July 2007. This document will be reviewed and revised each winter during the annual eOrganic review and evaluation. The document will undergo an external review by 6 farmers (2 livestock, 2 horticultural, and 2 agronomic crops), 6 agricultural professionals (2 Extension, 2 crop consultants, and 2 agency personnel) and representatives from eXtension, DAIReXNET, OrganicAgInfo, NAL, ATTRA, SARE, and New Farm, in late winter 2010, resulting in a formal publication by September 2010. Drafts and final document will be made available on the wiki.

Objective 2: Develop in-depth eOrganic content in:

- a) diversified vegetable production systems (VERT)
- b) dairy production systems (DERT)
- c) certification (CERT)

a) Diversified Vegetable Extension and Resource Team (VERT)

VERT will develop electronic resources to provide diversified vegetable farmers with the information they need to produce and market high quality vegetable crops. VERT will work with LGU initiatives such as NEON (Cornell, northeast), Ospud (Oregon State, NW), Partnering to cultivate organic agriculture (Michigan State, mid-west), and the Organic IPM Project (Clemson, south); non-government organizations such as Appropriate Technology Transfer to Rural Areas (ATTRA); producer organizations such as the Northwest Farmer to Farmer Exchange, the Northeast Organic Farming Association (NOFA); Midwest Organic and Sustainable Education Services (MOSES), the Carolina Farm Stewardship Association (CFSA), organic and interested conventional farmers, and other subject matter experts.

VERT will develop/deliver content in areas including soil and nutrient management; insect pest, disease, and weed management; cropping systems management; certification; marketing; community food systems; and economics. VERT content and delivery elements will be developed and evaluated by regional CoI groups (experienced organic farmers, conventional farmers interested in organic production, and agricultural professionals). Development of the eOrganic diversified vegetable production systems content will serve as a model for content development in other horticultural and agronomic cropping systems.

VERT management

The VERT is led by Alex Stone from Oregon State (disease and soils management, OSU Ospud project supported by SARE). The team currently includes Michelle Wander (soil management

content leader), Leslie Cooperband (soil management, community food systems and marketing), Deborah Cavanaugh-Grant (general vegetable production), and John Masiunas (weed management content leader) from University of Illinois (all with UIUC WORT systems trial supported by IOP); Garry Stephenson (marketing and community food systems content leader) from Oregon State; Debbie Roos (general organic vegetable production) and Nancy Creamer (general vegetable production, reduced-till) from North Carolina State (CEFS systems trial supported by IOP and SARE); Mary Barbercheck (insect pest management content leader; soil ecology) from Penn State (organic transition project at Russell E. Larson Agricultural Research Center supported by IOP); Sally Miller (disease management content leader) from Ohio State (Vegetable Crops Organic Transition Experiment supported by IOP), Craig Cogger (soil management) from Washington State (Long-term Organic Systems Experiment at WSU Puyallup supported by SARE), and Geoff Zehnder (insect pest management content leader) from Clemson University. This list will expand as eOrganic moves forward with content development (the CoP list is at http://cop.extension.org/wiki/eOrganic_Community). We are actively recruiting an economics content area leader. VERT will be coordinated by two part-time project coordinators housed at University of Illinois (0.5 FTE) and Oregon State University (0.5 FTE). The VERT leadership will meet in-person for 2.5 days in year one and will phone or Breeze conference monthly thereafter.

b) Dairy Extension Resource Team (DERT)

The DERT team will develop electronic resources to provide dairy farmers tools so they can successfully produce and market high quality organic milk. Best management practices will be highlighted to help producers approach and overcome obstacles often associated with organic milk production. DERT will work with Land Grant and other Universities; non-government organizations, (including NCAT/ATTRA, the National Sustainable Agriculture Information Service); producer organizations such as the such as the Northeast Organic Farming Association (NOFA); Maine Organic Farm and Garden Association (MOFGA); Midwest Organic and Sustainable Education Services (MOSES), Carolina Farm Stewardship Association (CFSA), and Northeast Organic Dairy Producers Association (NODPA); organic dairy producers; and other subject matter experts. DERT will collaborate with DAIReXNET, the conventional dairy eXtension CoP, to develop content relevant to organic and conventional farmers and to ensure that DERT and DAIReXNET users are aware of relevant content on both sites. DERT will develop organic-specific content such as certification, cropping systems management, pasture management, animal breeds, nutrition, milk quality, herd health, marketing, and economics. DERT management

The DERT team is led by Heather Darby from University of Vermont (cropping systems and soil management). The DERT leadership team and expertise currently includes Lisa McCrory, NOFA-VT (herd health and grazing); Linda Tikofsky, Cornell University (milk quality and animal health); Geoff Benson, North Carolina State (DairyeXNET and economics); Rick Kersbergen, University of Maine (animal nutrition), Mike Gamroth (animal nutrition and health), Oregon State; and Harriet Behar, MOSES (certification, farmer). DERT will be coordinated by 2 part-time project coordinators housed at University of Vermont (0.8 FTE) and Oregon State University (0.25 FTE). DERT will contract with organic dairy experts outside the LGU/Extension systems (Lisa McCrory, NOFA-VT, Harriet Behar, MOSES; Jim Pierce, Organic Valley) to develop content in areas outside the expertise of LGU/Extension faculty (e.g. herd health, grazing). The DERT leadership group will meet in-person for 2.5 days in year one and will phone or Breeze conference monthly.

c) Certification Extension Resource Team (CERT)

The eOrganic Certification Extension Resource Team (CERT) will work within the larger eOrganic project to develop content to assist farmers and ranchers in achieving and maintaining organic certification so that they can readily access organic markets. The CERT will also assist other eOrganic teams by reviewing to assure that all recommended practices and inputs comply with USDA organic certification requirements.

CERT will work with Land Grant and other Universities; non-government organizations, such as NCAT/ATTRA, the National Sustainable Agriculture Information Service);); producer organizations such as the Midwest Organic and Sustainable Education Services (MOSES), the Carolina Farm Stewardship Association (CFSA), and the Northeast Organic Dairy Producers Association (NODPA); State Departments of Agriculture who belong to the National Association of State Organic Programs (NASOP); USDA-accredited organic certification agencies, as represented by the Accredited Certifiers Association (ACA); members of the Independent Organic Inspectors Association (IOIA); and other subject matter experts.

Content articles and FAQs will include information on certification issues such as sourcing organic seeds, approved feed supplements for organic livestock, maintaining buffer zones, and equipment cleanout protocols for split operations. In addition to article and FAQ development, certification tools will be developed such as crop-specific organic system plan templates (e.g. greenhouses, wild crops, poultry, dairy, other livestock, and handling operations); recordkeeping forms for various types of operations and situations; and inspection report forms, all designed to assess compliance with NOP and other international organic standards. CERT will develop content on US organic certification of crops and livestock, including dairy and poultry; in year 3, international organic certification requirement content will be developed.

CERT management

CERT will be led and coordinated (0.5 FTE) by Jim Riddle (University of Minnesota). The CERT team will largely include experts outside of the LGU/Extension system, such as Pat Kane and Leslie Zuck, Accredited Certifiers Association; Miles McEvoy, National Association of State Organic Programs; Faye Jones, Midwest Organic and Sustainable Education Service; Ed Maltby, Northeast Organic Dairy Producers Association; Margaret Scoles, Independent Organic Inspectors Association; Jim Pierce, Organic Valley; Emily Brown Rosen, Organic Research Associates, and George Kuepper, ATTRA (see letters of support). These contributors will be compensated for their contributions to eOrganic. CERT will meet in-person for 2.5 days each year and will phone or Breeze conference monthly.

General methodology for eOrganic content development:

CoP development: Teams will 1) identify and recruit existing CoP members from relevant content areas, 2) identify gaps and weaknesses in content expertise, and 3) recruit new CoP members to fill gaps. Members will be appointed with specific assignments such as resource review, development of article or FAQ content, or editing.

CoI focus group development: Teams will develop CoI focus groups for in-depth site development and evaluation. These groups will be comprised of farmers (experienced organic farmers and interested conventional farmers, including farmers that do and do not currently use the internet as an information resource) and agricultural professionals (LGU Extension and researchers, crop consultants, certification staff, governmental agency staff). We will work with existing farmer groups such as the NW Farmer-to-Farmer Exchange (Oregon and Washington) and the UIUC WORT vegetable advisory group (Illinois) whenever possible.

Content outline development: Each team will draft a content outline that will be reviewed by 1) the Team's CoP and 2) the Team's CoI focus group members. The draft will be revised, published on the wiki, used as a template for content development, and reviewed and revised by the Team's leadership annually.

FAQ development: Each team will collect available FAQs from certifiers, ATTRA, Extension and other sources. FAQs will be reviewed for relevance and content. New FAQs will be developed as content is evaluated by the CoI and questions are submitted to the site.

Crop-specific content development (articles, FAQs, learning modules, and case studies): Teams will develop content from these information sources:

Content source 1: existing information derived primarily from conventional production and marketing systems [e.g. peer-reviewed information on diagnostics, cultural and biological management strategies, marketing and consumer research; and LGU outreach resources (e.g. bulletins and websites)] relevant to organic systems, with appropriate caveats for translating conventionally derived recommendations to organic systems. Team members will identify, review and archive (in the wiki and OrganicAgInfo) relevant peer-reviewed research and extension resources and rework information from these resources into content.

Content source 2: resources from non-LGU entities such as ATTRA, NRCS, and EPA. Team members will identify, review and archive (in the wiki and OrganicAgInfo) relevant resources and rework information from these resources into curriculum articles and FAQs.

Content source 3: existing or newly emerging management information derived from published and ongoing organic systems research which has not yet been interpreted for on-farm application (as available from organic systems trials and on-farm research projects). Teams will recruit and engage scientists involved in IOP and SARE-funded and other projects investigating agroecological processes to develop articles translating ecological theory into practical application. Prioritization of agroecological content development will be guided by 1) FAQs, 2) information gaps, 3) strong findings from organic systems research, and 4) areas in which conventional extension recommendations are particularly inapplicable.

Content source 3 methodology will be developed using diversified vegetable production systems as a model cropping system, as described below.

A. As a first step, we will recruit content resources from vegetable systems research projects. All relevant non-copyrighted materials (e.g. reports, theses and dissertations, proceedings, powerpoint presentations) will be archived on the wiki and OrganicAgInfo.

VERT will seek information from IOP-funded projects including: Optimizing biological nitrogen fixation in organic cropping systems for sustainable nutrient management (Drinkwater, Cornell), Optimizing biological nitrogen fixation in organic cropping systems for sustainable nutrient management (Chase, University of Florida), Transition strategies that control perennial weeds and build soil (Cardina, Ohio State University), Integration of organic production systems for summer production of tomato and pepper in Alabama (Kloepper, Auburn University), Partnering to cultivate organic agriculture in Michigan and the midwest (Snapp, Michigan State University), The activity and suppression of soil-borne pathogens and pests in organic vs. conventional plots with conservation vs. conventional tillage (Epstein, Univ. of CA Davis), Nutrient dynamics, soil biota and functional biodiversity at an organic farm (Jackson, Univ. of CA Davis), Improving fertility and pest management strategies for organic crop production and strengthening researcher/grower networks (Gliessman, Univ. of CA Santa Cruz), Building on the

best: a systems research and education partnership for increased competitiveness of organic grain and vegetable farms (Mohler, Cornell University), The organic seed partnership (Jahn, Cornell and Univ. of WI), Cropping intensity and organic amendments in transitional farming systems: effects on soil fertility, weeds, diseases, and insects (Eastman, Univ. of IL), Biological buffering and pest management in organic farming systems: the central role of organic matter (Stinner, Ohio State), Organic weed management: balancing pest management and soil quality in a transitional system (Barbercheck, Penn State), Integrating no-tillage with farmscaping and crop rotations to improve pest management and soil quality in organic vegetable production (Morse, Virginia Tech), Paths of transition: strategies for peri-urban organic farmers (Kleinhenz, Ohio State), Identification and characterization of potato clones for organic production systems (Rouse, Univ. of WI), Grower-directed research and outreach on integrated weed management for vegetable production (Mcgiffen, Univ. of CA Riverside), Integrated organic weed management systems for limited resource and family farms (Delate, Iowa State).

VERT will also solicit information from non-IOP funded vegetable systems research projects such as the Center for Ecological Farming Systems at North Carolina State University, the Longterm Organic Systems Experiment at Washington State University Puyallup, the Muscatine Island Research and Demonstration Project in Iowa, the Long Term Research on Agricultural Systems in Davis CA, the West Virginia University Organic Research Farming project, the Ecological/Organic Production in Small- and Medium-Scale Farming Systems project at Santa Cruz, the Cornell NEON project, and the Oregon State University Ospud project.

B. As a second step, researchers and farmers representing the projects listed above will be invited to participate in a synthesis and applications workshop to synthesize and adapt research results to recommendations for practitioners. Ten to twelve scientists and 3-5 vegetable farmer cooperators, representing research/extension groups from the projects listed below, will be convened in year two. Before the meeting, participants will compile basic information and summarize findings on their projects using the format developed by the International Scientific Congress on Organic Agricultural Research for summary of studies (http://www.isofar.org/Publications-ISOFRAScientificSeries-Longtermexperiments.html). These reports will be archived on the wiki and OAI. This information will then be organized into a draft publication by content area leaders before the workshop, enabling workshop participants to read all reports beforehand. At the workshop, participants will discuss and distill research findings, and then at the meeting, and in post-workshop breeze conferences and collaborative wiki content development, translate these findings into information useful to farmers and agricultural professionals. This effort will address the more advanced ecological and systems level questions not currently addressed by resources available from Extension, ATTRA, or other agricultural information sources. The workshop process and format for the content output will be generated with input from farmers, agricultural professionals, and field extension staff.

DERT will work using a process similar to that described above for VERT – first identifying, evaluating and archiving resources, and then engaging participants from high quality, relevant projects in discussing, distilling and translating findings into eOrganic content. DERT will seek information from IOP-funded projects including: Reducing off-farm grain inputs on northeast organic dairy farms (Reberg-Horton, Univ. of Maine), Strengthening the scientific foundation of organic standards on animal health and welfare (Lockeretz, Tufts University), The transitioning dairy: identifying and addressing challenges and opportunities in milk quality and safety (Tikofsky, Cornell University), and Profitability and transitional analysis of northeast organic

dairy farms (Parson and Darby, Univ. of VT). DERT will also seek information from SARE funded projects such as Dairy stewardship alliance: On-farm assessment for sustainable practices (Matthews and Darby, Univ of VT), Focus on organic dairy (Zuck, Pennsylvania), Evaluation of health benefits of conjugated linoleic acid (CLA)-enriched dairy and beef foods (Rubner, Iowa), An analysis of environmental management approaches with six midwestern dairy farms: informing progress toward a sustainable agriculture (Bland, Univ. of WI), and others. Ten to twelve scientists and 3-5 dairy cooperators, representing research/extension groups from the projects listed below, will be invited to participate in a synthesis and applications workshop in year two.

Content source 4: farm case studies (as sources of experiential and systems-level information). Teams will draw on relevant existing case studies when possible. Prioritization of new case study development will be guided by 1) FAQs, 2) areas in which experiential information can fill information gaps, 3) areas in which conventional Extension recommendations are particularly inapplicable.

Certification content development:

Certification content will be sourced from the USDA National Organic Program (NOP), Universities, State Departments of Agriculture, ATTRA, IOIA, certification agencies, non-government organizations, and producer groups. When appropriate, available resources will be archived on the wiki and OrganicAgInfo. High quality available resources will be adapted for eOrganic article and FAQ formats, as well as into certification tools as described above. New content will be developed if none exists. Domestic and foreign organic certification requirements will be monitored continuously and content on new requirements will be developed as needed.

Internal content evaluation: Existing resources from all sources will be reviewed as part of the resource gathering process for each new content area; relevant, high quality materials will be archived on the wiki and OrganicAgInfo and reworked for the eXtension format. New materials will be developed if no appropriate high quality content is available. Content areas will be reviewed and updated every three years. All content will be peer-reviewed by CoP members through the eXtension peer-review process.

VERT TIMELINE

Year 1: October 1, 2007 – September 30, 2008

- 1. Convene and train VERT leadership team (approximately 15 people)
- 2. Develop, review and revise content outline and procedures for VERT content development
- 3. Identify expertise gaps and recruit CoP members to fill gaps
- 4. Catalogue and archive (on wiki and OAI) existing relevant resources in all content areas
- 5. Develop, review (CoP and CoI), revise and publish general content articles based on existing resource sources 1 and 2
- 6. Develop, review and revise FAQs based on resource sources 1 and 2
- 7. Develop, review, and revise Ask-the-Expert based on resource sources 1 and 2
- 8. Begin to collect available resources from IOP and SARE funded organic systems research projects and archive on wiki and OAI

Year 2: October 1, 2008 – September 30, 2009

- 1. Convene 3 VERT farmer/ag professional focus groups to evaluate VERT
- 2. Demonstrate, market VERT at organic/conventional farmer/ag prof meetings
- 3. Evaluate VERT via on-line surveys and use tracking (with eXtension)

- 4. Invite participants of organic systems research projects to workshop
- 5. Analyze and report evaluation results to eOrganic, eXtension, and IOP
- 6. Revise existing content and delivery in response to evaluations
- 7. Convene synthesis and applications workshop and summarize results
- 8. Begin the process of generating, reviewing, revising and publishing new content (articles, FAQs and other elements) in response to evaluations via Breeze conferences and collaborative wiki content development.
- 9. Begin the process of generating, reviewing, revising and publishing (articles, FAQs and other elements) based on organic systems and on-farm research, through Breeze conferences and collaborative content development on the wiki.

Year 3: October 1, 2009 – September 30, 2010

- 1. Continue generating, reviewing, revising and publishing new content (articles, FAQs and other elements) in response to evaluations
- 2. Continue generating, reviewing, revising and publishing content (articles, FAQs and other elements) based on organic systems research
- 3. Catalogue and archive (on wiki and OAI) existing case studies
- 4. Develop, review (CoP and CoI), revise and publish new case studies
- 5. Send follow-up evaluation to VERT farmer/ag professional focus group participants
- 6. Demonstrate and market VERT at organic and conventional farmer/ag professional meetings
- 7. Evaluate VERT via on-line surveys and use tracking (with eXtension)
- 8. Revise existing content and delivery in response to evaluations
- 9. Analyze and report evaluation results to eOrganic, eXtension and IOP

DERT TIMELINE

Year 1: June 1, 2007 – June 1, 2008

- 1. Convene eOrganic Organic Dairy Team
- 2. Catalogue existing organic dairy educational materials, archive on wiki and OAI
- 3. Develop content for introduction to organic dairy, dairy cropping systems, and livestock
- 4. Peer review and edit general content materials
- 5. Post general content material to eOrganic website
- 6. Develop FAQs for introduction to organic dairy, dairy cropping systems, and livestock
- 7. Collect available resources from organic dairy research projects, archive on wiki and OAI
- 8. Evaluate VERT via on-line surveys and use tracking (with eXtension)
- 9. Evaluate DERT via focus group interviews in New England and Pacific NW

Year 2: June 1, 2008 – June 1, 2009

- 1. Develop remaining general content material (as proposed in outline) for certification, marketing, and economics
- 2. Peer review, edit, and post general content materials
- 3. Develop and post organic dairy FAQs for certification, marketing, and economics
- 4. Develop and post "Ask the Expert" learning modules for mastitis management
- 5. Catalogue and post resources and links for each general content category area
- 6. Invite participants of organic dairy research projects to workshop
- 7. Send follow-up evaluation to DERT focus group participants
- 8. Convene synthesis and applications workshop, summarize results
- 9. Analyze evaluation data and report results to eXtension and eOrganic

Year 3: June 1, 2009 – June 1, 2010

- 1. Develop and post "Ask the Expert" learning modules for parasite management
- 2. Develop and post "Ask the Expert" learning modules for management intensive grazing
- 3. Catalogue and post current organic approved herd health treatments
- 4. Generate, review, revise and publish articles, FAQs from research, through Breeze conferences and collaborative wiki content development
- 5. Catalogue and post current organic approved land treatments
- 6. Develop case studies for dairy cropping systems and livestock
- 7. Send follow-up evaluation to DERT focus group participants
- 8. Analyze evaluation data and report results to eXtension and eOrganic

CERT TIMELINE

Year 1: October 1, 2007 – September 30, 2008

- 1. Convene eOrganic Certification and Extension Resource Team
- 2. Catalogue and archive on wiki and OAI existing resources relevant to NOP certification
- 3. Develop general organic certification tools
- 4. Post general organic certification tools to eOrganic website
- 5. Develop and post general organic certification FAQs
- 6. Review content developed by other eOrganic teams to assure that all recommended practices and inputs meet organic certification requirements
- 7. Evaluate CERT via focus group interviews

Year 2: October 1, 2008 – September 30, 2009

- 1. Develop and post organic dairy certification tools
- 2. Develop and post organic dairy certification FAQs
- 3. Develop and post "Ask the Expert" learning modules for organic certification
- 4. Catalogue existing sector-specific organic certification tools (horticultural crops, greenhouses, mushrooms, livestock, poultry, etc.)
- 5. Monitor organic certification requirements and modify posted tools, as needed
- 6. Review content developed by other eOrganic teams to assure that all recommended practices and inputs meet organic certification requirements
- 7. Send follow-up evaluation to CERT focus group participants
- 8. Analyze evaluation data and report results to eXtension and eOrganic

Year 3: October 1, 2009 – September 30, 2010

- 1. Develop and post sector-specific organic certification tools (horticultural crops, greenhouses, mushrooms, livestock, poultry, etc.).
- 2. Develop and post organic certification FAQs for specific sectors.
- 3. Catalogue international organic certification requirements
- 4. Develop and post international organic certification tools.
- 5. Develop and post international organic certification FAQs.
- 6. Send follow-up evaluation to CERT focus group participant
- 7. Monitor organic certification requirements and modify posted tools, as needed.
- 8. Review content developed by other eOrganic teams to assure that all recommended practices and inputs meet organic certification requirements.
- 9. Analyze evaluation data and report results to eXtension, eOrganic, and IOP

Objective 3: Evaluate eOrganic process, content, delivery, utility, and outcomes

Evaluation is an integral part of this project. The evaluation process will be both formative, to improve the website, and summative, to document the value of the website. The evaluation will

follow a utilization-focused approach to ensure the results are used by the project team (Patton, 1997). An important step is the establishment of a clear action framework that formalizes a plan for using the evaluation to improve the project. This ongoing processing is a part of supporting the CoP as a learning organization.

The evaluator will provide focus to this process ensuring that the information gathered leads to improved team productivity and satisfaction; improved site content, delivery, and utility; and improved user satisfaction. The evaluator will be a member of the leadership team and attend the annual leadership meetings. To maintain consistent progress on the evaluation plan the evaluator will participate in Breeze sessions or conference calls with CERT, DERT and VERT coordinators and other team members interested in evaluation. eXtension will contribute to the evaluation activities at no cost to eOrganic. Michael Lambur, the eXtension evaluation specialist, will work with Mary Staben, the eOrganic evaluation specialist, and CoP members to craft appropriate surveys for the site.

Some key evaluation questions:

- 1. Who are the users or potential users of the site?
- 2. To what extent does the content on the website meet user needs?
- 3. To what extent do the design and delivery elements of the website contribute to meeting user needs?
- 4. Are there differences in the on-line information needs of organic farmers, transitional farmers, conventional farmers, and agricultural professionals?
- 5. Do the users of this site also access other organic agriculture information providers? If so, what specific information needs does eOrganic fill in relation to information needs filled elsewhere? Does eOrganic help users find information from other information providers?
- 6. What impact does the website have on user decisions, actions or communications? How are these impacts articulated in improved production and marketing practices for farmers and improved communications for agriculture professionals?

To gain a comprehensive evaluation of eOrganic, specific assessments will target 1) the CoP and 2) the CoI. All evaluations will be conducted under the guidance and approval of the Institutional Review Board for Protection of Human Subjects at Oregon State University.

1. Evaluation of project process and content development methodology by CoP members

Leadership team and other CoP members will be surveyed by email at the end of each project year to evaluate 1) project process and 2) eOrganic procedures and methodologies for content development. CoP members will be asked questions to determine 1) the value to them of participating in eOrganic, and 2) the effectiveness of the process and procedures for content development. If they do not find value in participating, or think that the processes/procedures are ineffective, we will ask them what changes should be implemented to keep them involved and to improve the process and procedures. The goal of this is to learn from CoP member experiences as a means of enhancing CoP development and stability. Mary Staben will develop the questionnaire, conduct the survey and report the findings to the CoP and eXtension.

2. Evaluation of content and delivery by CoI

In depth eOrganic website evaluations will be conducted to ensure the efficient delivery of high quality and priority information, and to assess changes in farmer and agricultural professional attitudes, behaviors, and practices. The evaluation results that have implications for Extension faculty and other information users will be published in the Journal of Extension.

This evaluation will include both long-term and short-term data collection. The four main components of the evaluation will be a) web usage statistics, b) regional focus group interviews, c) focus group follow-up surveys, and d) user evaluations.

2a. Website Usage:

Usage of eOrganic will be documented through system generated usage statistics by eXtension (at no cost to eOrganic). These will include: total and average number of visits to the site per day, total and average number of page views per day, and most frequently accessed pages in the site. Analysis of these statistics will offer an estimate of the size of the CoI and indicate potential areas of the site to enhance or discontinue.

2b. Farmer and agricultural professional focus groups:

To capture a large quantity of detailed information we will conduct focus group interviews in the major project content areas. Another benefit of this form of evaluation is that it allows for unexpected information to be more easily uncovered. The interview process supports the development of relationships with interviewees that will enable the project to gather longitudinal data to document project impacts.

VERT, DERT, and CERT will conduct three, two and one focus group interview sessions, respectively. Crop-specific certification content and delivery will also be evaluated in CERT and DERT evaluations. VERT will conduct focus groups in Oregon (Stone, Stephenson), Illinois (Wander, Cooperband, Masiunas, Cavanaugh-Grant) and North Carolina (Roos, Creamer); DERT will conduct focus groups in Oregon (Gamroth) and New England (Darby) with organic, transitional, and conventional farmers and agricultural professionals. Mary Staben will develop the focus group interview process and materials in cooperation with Michael Lambur, and these will be reviewed by appropriate CoP members. Mary Staben will train CoP members to conduct focus group interviews via Breeze workshops.

Focus group interviews will consist of approximately 12 people per site and will include organic farmers, conventional farmers interested in transitioning to organic production, and ag professionals. The purpose of having a mixed group is to provide an opportunity for interaction among the participants thus allowing for new insights and a greater depth of data and new (Russ-Eft and Preskill, 2001). Interviewers (project team members) will be trained to provide a consistently neutral and nonjudgmental process across the sites. To identify and eliminate confusing questions a focus group pilot will be considered using selected CoP members interviewed by one of the trained focus group interviewers via Breeze sessions. The interview length is estimated to be between two and three hours. Note takers will capture participant responses. Mary Staben will attend and evaluate one of the first focus groups to identify and correct problems, thereby improving future focus group process and outcomes.

2c. Focus group follow-up evaluations:

Approximately 1 and 2 years after each DERT and CERT focus group, and 1 year after VERT focus groups, a follow-up evaluation will be conducted with focus group members. This will be conducted using a mail survey, unless the participants prefer a different method of delivery. Mary Staben will design and conduct this survey in cooperation with CERT and DERT.

The objective of the follow-up evaluation with the focus group members is to 1) determine the value and use of the different components of the website, 2) identify user reasons for using (or not using) the site, and 3) document changes in user attitude, intentions, and behavior over time. The longitudinal data will help the project team to better understand how the three main categories of users are benefiting from the site. In addition, we want to know how the site can be modified to increase impact. For example, we want to know whether or not each CoI group is

easily able to easily find critical information, and if that information changes their intentions, attitudes and/or behaviors; if not, how could the site be modified (content or delivery) to better serve these groups?

The Tailored Design Method (Dillman, 2000) will be used to ensure a high rate of participation. This approach includes a series of communications with the potential respondents. Dillman (2000) recommends sending a pre-letter to potential participants informing them of the upcoming survey. The second step includes sending a cover letter and the survey. Approximately a week after the survey is delivered, a thank you/reminder is sent. During the fourth week an additional letter and the survey are sent out to those that have not responded and, if needed, on the seventh week a final survey is sent.

2d. User evaluation:

Utilizing email lists of registered eOrganic users, surveys will be conducted to assess long-term impacts. These surveys will use the Tailored Design Method as outlined above. Using electronic means users will be directed to a secure on-line survey questionnaire. These surveys will determine how useful the content is and whether the use of the content influenced changes in behavior. User survey questions will be linked to the focus group evaluation above and could include:

- 1. How did you discover the site?
- 2. What are the strengths and weaknesses of the site? How can eOrganic improve the site?
- 3. How do often do you use the site and what features are valuable to you?
- 4. What other sources of organic agriculture information do you access? How does this site compare to other sources of information on organic agriculture?
- 5. Have you changed your attitude, knowledge, skills, and/or behaviors as a result of using information from this site?
- 6. Relevant background/demographic information

Year 1 (Oct. 07-Sept. 08)

- 1. Develop evaluation plan including an action framework for use of evaluation results
- 2. Develop focus group interview process for DERT/CERT/VERT
- 3. Train DERT VERT and DERT leadership/interviewers in focus group interview process
- 4. Develop and conduct 2 DERT and 1 CERT focus groups
- 5. Develop and initiate online evaluation (registered users) w/eXtension (Michael Lambur)
- 6. Develop focus group follow-up evaluation questionnaire and process
- 7. Collect and analyze on-line and focus group evaluation data and report findings to CoP for use in planning Year 2 efforts
- 8. Evaluate on-line and focus group evaluation processes and refine for Year 2
- 9. Evaluation of the project process, efficacy, and value by CoP members

Year 2 (Oct. 08-Sept. 09)

- 1. Conduct follow-up evaluation with website users and DERT/CERT focus group members
- 2. Develop and convene 3 VERT focus groups (OR, IL, NC)
- 3. Continue online evaluation with registered users
- 4. Revise evaluation process and tools as needed
- 5. Collect and analyze online, focus group, and follow-up evaluation data and report findings to CoP and eXtension for use in planning Year 3 efforts
- 6. Evaluate on-line, focus group, and follow-up evaluation processes and refine

7. Evaluation of the project process, efficacy, and value by CoP members

Year 3 (Oct. 09-Sept. 10)

- 1. Conduct follow-up evaluation with DERT/CERT and VERT focus group members
- 2. Continue online evaluation with registered users
- 3. Collect and analyze on-line, focus group, and follow-up evaluation data and report findings to CoP for use in planning future efforts
- 4. Evaluation of the project process, efficacy, and value by CoP members
- 5. Summarize all project evaluation processes and results for eOrganic, eXtension, and CSREES IOP

Publications will be developed describing 1) refined processes and methods for eXtension Community of Practice development/collaboration and content development/delivery; 2) web-based content and delivery needs of organic farmers, conventional farmers, and agricultural professionals, and 3) methodologies for translating systems research results into practitioner recommendations.

Objective 4: Market eOrganic

eOrganic will be marketed through presentations at national and regional grower, agricultural professional, educator, and researcher meetings across the US, press releases to agricultural media, and mailings to CoI members (farmers, agricultural professionals and Extension educators). eOrganic CoP members and project coordinators will work closely with Terry Meisenbach, eXtension's Communications & Marketing Leader in these efforts. The site will also be linked and marketed from the ATTRA, OFRF, New Farm, certifying agency, and relevant Extension websites.

At-event demonstrations:

eOrganic CoP members will conduct in-person demonstrations of the site with potential users at conferences for organic and conventional farmers and agricultural professionals. Demonstrating and assessing user reaction to site content and delivery elements will be the focus of these demonstrations.

Mary Staben will develop demonstration survey instruments in cooperation with Michael Lambur, and these will be reviewed by appropriate CoP members. Mary will train CoP members to conduct at-event demonstrations using the demonstration surveys via Breeze workshops (provided at no charge to eOrganic by eXtension). Demonstrations will take place at 1) workstations located at booths at conference trade shows, 2) workshops before, after, or during conferences, 3) other locations where farmers and agricultural professionals gather. Venues may include: Pacific Northwest Vegetable Association Conference & Trade Show, the New England Vegetable and Fruit Conference, various NOFA annual conferences, MN Organic Farming Conference, MOSES – Upper Midwest Organic Farming Conference, Eco-farm conference -California, WA Tilth Producers, National Organic Dairy Conference in CA, NODPA (NE organic dairy), Western Organic Dairy producers Alliance, NW Farmer to Farmer Exchange, the Southern Dairy Conference, and IA Organic Conference. Small incentives will be offered at these programs to increase participation, such as hats or t-shirts with the eOrganic logo, gift certificates, or a drawing for prize. Deborah Cavanaugh Grant and the leadership team will identify locations for demonstrations at their annual meetings. Team members and project coordinators will conduct all at-event demonstrations. Mary Staben will participate in at least one at-event demonstration per year to identify and correct problems with demonstration methodologies to thereby improve process and outcomes of future demonstrations.

Overall project management: Alex Stone will provide overall project leadership. Heather Darby (DERT leader), Jim Riddle (CERT leader), Michelle Wander (VERT soils content leader), Garry Stephenson (VERT marketing and community food systems content leader), Mary Barbercheck (VERT insect pest content leader), John Masiunas (VERT weed content leader) Mike Gamroth (DERT leader), Mary Staben (evaluator), Deborah Cavanaugh-Grant (VERT, wiki training leader, marketing coordinator), Debbie Roos (VERT), and Geoff Zhender (VERT insect pest content leader) will make up the leadership team. This team, as well as others as needed, will phone or Breeze conference monthly and meet in-person for 2.5 days annually.

EXPECTED OUTCOMES:

The visioning process will generate new ideas on, and a firm foundation for, the collaborative development and evolution of eOrganic and its organic information partners. In the long term, a more efficient, accessible, and effective information support system for organic farmers will evolve, thereby improving the competitiveness and sustainability of US organic farmers. VERT, CERT and DERT will deliver critical, high quality, in-depth information to farmers and agricultural professionals in every state in the nation, resulting in enhanced sustainability of organic farms. In addition, these visible, high quality sites will generate confidence in eOrganic, facilitating long term funding and support. eOrganic will systematically translate organic systems research results into eOrganic content, dramatically increasing the impact of federal research dollars. Evaluation will document farmer and agricultural professional needs, use, satisfaction, and changes in intentions and practices; these findings will improve content and delivery quality and effectiveness, and improve the potential for eOrganic to serve user needs and impact user intentions, attitudes, knowledge, and practices. In addition, these data will aid eOrganic's efforts to generate long-term support and funding from public and private sources. Evaluation of CoP needs, satisfaction, and ideas for process and methodology improvement will improve CoP productivity and sustainability. The project will generate 3 high quality eOrganic sites as well as publications describing 1) refined processes and methods for eXtension Community of Practice development/collaboration and content development/delivery; 2) web-based content and delivery needs of organic farmers, conventional farmers, and agricultural professionals, and 3) methodologies for translating systems research results into practitioner recommendations. Findings with implications for Extension faculty and other outreach providers will be published in the Journal of Extension. Marketing eOrganic to farmers and agricultural professionals will increase their awareness and active use of eOrganic, resulting in higher likelihood of long term use, impact, and support from public and private funders.

PITFALLS AND LIMITATIONS

This project is large and national in scope. eXtension and eOrganic are new and evolving. LGU/Extension is asking its faculty and educators to work in a new way. It will be a challenge to bring together and coordinate all of these people and activities. These factors will help eOrganic overcome these issues: 1) organic LGU outreach is timely and necessary and enthusiasm and support for this project is very strong, 2) eXtension is new and full of ideas and enthusiasm, and eXtension provides eOrganic with support and structure for content development as well as all website development and maintenance, 3) each team will have a paid coordinator to keep track of team activities and progress, 4) the leadership team has developed and worked together over 8 months and is very talented and committed, 5) the budget includes sufficient travel funds to bring people together - this will build CoP energy and commitment, 6) the strong evaluation component will help eOrganic maintain a strong, enthusiastic CoP and develop high quality and effective content and delivery to farmers and agricultural professionals.