

Department of Agriculture and Life Sciences
Tenured Faculty Review April 15, 2015

Barbara Larson, Associate Professor, Kenosha County

Program Responsibilities:

2010-2013: 100% Agriculture (county based)

2013-present: 55-65% Agriculture (county based) and 35-45% Administrative (ANRE liaison)

1. Major Programs Development/Implementation/Teaching/Impacts: (situation, response, outcomes)

UW-Extension Horticulture Supports Kenosha County Government Sustainability (environmental, social, economic) Goals

Situation: A major goal for the Kenosha County Executive and the Director of Public Works and Development Services (PWDS), which includes UW-Extension, is for Kenosha County to be a leader and example for sustainability in its broadest definition. Barbara Larson, and other Kenosha County UW-Extension staff, promote and prioritize providing educational programming and expertise to Kenosha County administration and departments.

Response: Larson in her role as Horticulture Educator focuses on horticultural and environmental expertise for county projects and committees. In 2013 Larson and three other Kenosha County UW-Extension colleagues started a working group to actively and formally advance the County's sustainability initiatives by educating county employees and residents.

Results: In 2010 Larson introduced principles of sustainable landscape design to a Green Ribbon committee tasked with developing a county park, then the following year acted as horticultural advisor to the committee as the park design was developed by outside consultants. In addition, Larson actively participated in a sustainable education working group, which developed educational program ideas for the park.

Larson is involved in a number of Kenosha County landscape, parks and facilities projects with the goal of improving all aspects of sustainability. Larson chaired a committee visioning the landscape use of a large historic county parks property. The Kenosha County Executive requested Larson review and revise a landscape design and plant selections for county courthouse. Larson focused on assuring the landscape complemented the historic building and was lower maintenance to decrease long term costs for the county. In 2012 Larson developed a plant list and multi-year care plan for sustainable landscape in newly constructed highway roundabouts on the request of the county highway director. In April 2015 the Director of DWDS stated "the roundabouts not only look better than any others I've seen but they save the county money because they don't need regular maintenance and mowing."

Larson advised Kenosha County Parks' staff on emerald ash borer assessment and management plans. On the request of the County Executive, Larson worked closely with Parks staff in late 2014 on tree replacement plans specific to each of three county parks and two county golf courses which have significant tree losses.

The large and very high maintenance landscape at the county rehabilitation and long term care facility for a number of years was maintained by one or two master gardener volunteer and county maintenance staff. In addition to maintenance challenges and loss of Master Gardener Volunteer interest, the landscape was not usable for clients and families. In 2012 Larson co-wrote a request and acted as primary contact for a UW-

Madison landscape architecture student capstone project for the concept design for a therapeutic and sustainable landscape at the facility.

Larson's horticultural expertise provides value of \$50 to \$100 per hour to Kenosha County government and citizens based on fees for similar services from commercial horticulture consultants.

Larson's work and UW-Extension have been credited by Kenosha County administration and staff formally in local newspaper interviews and informally to stakeholders.

Master Gardener Volunteer Education

Online course increases volunteer, and staff, activities and confidence in diagnosing plant problems

Situation: As demand for reliable horticulture information becomes stronger and UW-Extension's resources become tighter, well-trained and skilled Master Gardener Volunteers (MGVs), functioning as Plant Health Advisors, are needed to extend the capacity of Cooperative Extension staff by diagnosing basic plant health problems and providing research-based information.

Response: A curriculum was developed in 2009 for an interactive online Plant Health Advisor training course for Master Gardeners and UW-Extension staff, using the expertise of UW-Extension specialists and educators. The course had three stipulations. It should be accessible though out the state, actively engage learners and teach the basics of plant problem diagnosis. With USDA grant funds a curriculum developer and technical experts were hired for the project. Barb Larson, Kenosha County Horticulture Educator, conceived of and guided the development of the course. Subject matter expertise and material review and approval for the curriculum developer was provided by Larson, Dr. Brian Hudelson, UW-Extension plant pathology specialist, and Phil Pellitteri, UW-Extension entomology specialist.

The Plant Health Advisor course consists of interactive eight modules that cover the basics of plant problem diagnosis including using research based resources. The course is entirely online using the UW-Extension Desire2Learn system. Larson is course instructor.

Impact/Evidence: The course has been offered four times beginning in 2009. During this time period, 210 Master Gardener Volunteers and three UW-Extension staff successfully completed the course by passing a final exam. End of course survey indicated 82.8% were "pretty inspired", "very inspired" or "can't wait" to volunteer as a Plant Health Advisor.

In July 2011 long term impact of the course was assessed using a Zoomerang survey. An email was sent to 283 Master Gardener Volunteers and UW-Extension staff that enrolled in the course, regardless of course completion, asking for their feedback. Eighty people responded for response rate of 28.3%.

Respondents indicated they were more confident in their ability to diagnose plant problems when asked about their level of confidence in their ability to answer plant health issues before and after the course. Before the course 62% felt "not at all confident" or "slightly confident", after the course this dropped to 8%. Before the course 38% were "moderately confident" or "very confident", after completing the course this increased to 91%.

Fifty-nine percent reported increasing in their plant diagnostic activities after taking the course. Ninety percent of respondents used what they learned in their role of Master Gardener Volunteer or UW-Extension staff member. Plant diagnostic skills were used answering questions for UW-Extension county offices, at community events, in community and demonstration gardens and more. Eleven percent used their knowledge in another

professional capacity. One person started a diagnostic service for homeowners at the garden center where he/she worked.

At the end of the long term impact survey, respondents were invited to add comments on the course. "When I took the course I had worked at UWEX for 12 years and had been answering horticulture related questions for at least 10 of those years. I learned a great deal from the course and would recommend it to anyone. I will definitely sign our summer horticulture assistants up for this every year." "Very well done -- I found it challenging for even the more experienced gardener!"

Horticulture therapy courses motivate Master Gardener Volunteers

Situation: UWEX colleagues and master gardener volunteers (MGVs) increasingly find opportunities and demand for horticulture-type programming for non-traditionally served audiences. These audiences include senior citizens, the incarcerated, and people with disabilities.

Response: Horticulture Therapy (HT) is an emerging scientific field utilizing the therapeutic effects of gardening and natural environments. HT is recognized as a practical and viable treatment with wide-ranging benefits for people in therapeutic, vocational, and wellness programs.

Barb Larson, Kenosha County horticulture educator, and Mike Maddox, Rock County horticulture educator, created and coordinated a regional master gardener specialized training course, held in the fall of 2010, on horticulture therapy and its associated principles at four sites in southeastern Wisconsin. In addition, Larson taught one of the three-hour classes. At the four locations a total of 178 MGVs were trained in connecting garden activities to personal wellness, adaptive techniques for the gardener and the garden, HT programs on working with young adults with cognitive disabilities, and selection of plant materials for HT gardens. After completing the 12 hours of training, over seventy-five percent of participants reported gaining an awareness and appreciation for the therapeutic benefits of horticulture. In addition, many stated they would apply what they learned in the course in their volunteer work and personally.

In 2012 Larson collaborated with Maddox and other master gardener curriculum team members to adapt and expand the original training into a statewide offering using distance technology. Larson again taught the class on adaptable gardening techniques. Comments from participants on the class included: "A lot of neat tools and ideas. I didn't think this was going to be very interesting, but was pleasantly surprised and came out with a list of tools to look for." "A lot of ideas to think about and adopt."

"Great topic and presentation. A good refresher and expansion of information and ideas of the regional Hort Therapy presentations a couple years back." "What a great topic with fairly easy-to-do projects to help provide gardening opportunities for advanced aged, physically disabled, visually impaired, and even cognitively impaired. The ideas for blind folds and use of ones non-dominant hand will be great training tools for care givers in my assisted living. I now see the importance of an appropriate width for raised beds as it is very important to be able to reach the middle (for all of us). Raised bed design in this segment is right on and encourages me to create more wheelchair accessible gardens. Very enjoyable and educational – Thank You!" "I was most inspired by your comment that gardening can improve self-esteem in girls. It's a good thought too that if you garden in your front yard, your neighbors have a chance to stop and chat, so you can improve social ties in your block." "Our occupational therapy program at the River Falls Hospital just mentioned last week that they were interested in something like this — can you say volunteer hours with this great, new information?"

Commercial Landscape Horticulture Programming

Outreach increased to Spanish speaking landscape professionals

Situation: According to the U.S. Department of Labor Bureau of Labor Statistics 39.6% of grounds maintenance workers and 22.2% of grounds maintenance supervisors nationally are Hispanic. In Kenosha County Spanish is spoken in 6.8% of homes.

Response: For over forty years Landscape and Grounds Maintenance Short Course has provided research-based programs to grounds maintenance professionals in Kenosha, Racine and surrounding counties in Wisconsin and Illinois. In response to the increasing number of Hispanics in the landscape industry, Larson made simultaneous Spanish language interpretation available on request beginning in 2009. Availability of interpretation was promoted on the course brochure which was mailed to over 500 landscape maintenance companies and individuals in Southeast Wisconsin. Spanish interpretation was also publicized in Wisconsin Green Industry newsletter and e-news.

Results: Although demographic participant surveys in 2009 and 2010 showed one Hispanic attended the course each year, interpretation was not requested or desired. In 2011 simultaneous Spanish language interpretation was requested by one company for two men who attended all four weekly sessions of the course. Those men returned for the full course in 2012 and were joined by two other men who own a landscape maintenance business. In addition, a large company requested interpretation for sixteen men. UW-Extension publications, on Larson's request, translated into Spanish two new factsheets on lawn care. A pruning handout and the course evaluation were translated locally. Larson communicated with speakers about working with interpreters. Beginning in 2013 a Spanish and English versions of the course brochure was distributed together. Simultaneous interpretation was provided for four participants.

Evidence: In 2011 horticulture educators observed participants taking headphones on and off during presentations. When asked participants stated they could understand part of the English but interpretation was especially useful during technical parts of classes. During 2012 course the four attendees who attended the entire course used interpretation off and on. Observations of participants using interpretation in succeeding courses showed similar behavior in usage. Results from Spanish language evaluations in 2012 and subsequent years indicated participants believed their subject matter knowledge increased after the classes. Participants said simultaneous Spanish interpretation worked well and helped them learn.

Landscape and Grounds Maintenance Short Course education extends far beyond attendees

Situation: For more than forty years the Landscape and Grounds Maintenance Short Course has provided practical science-based information for landscape professionals in southeastern Wisconsin and northeastern Illinois. Larson is part of the team of four horticulture and agriculture educators/agents who plan and offer the course, which is held at three locations Kenosha, Waukesha and Sheboygan Counties. The short course offers CEUs for International Society of Arboriculture (ISA) arborists and beginning in 2013 Larson has obtained CEUs for PLANET certified landscape professionals. Written evaluations are collected at the end of the four sessions and at course completion. Perceived knowledge gain had been evaluated from many years. In 2013 participant satisfaction, course value and multiplier effect were added to the evaluation.

Results/Evidence: 2013 course evaluation results showed a high degree of satisfaction among respondents with their experience in this short course. Ninety-five percent of participants said they are likely to attend future horticultural workshops offered by UW-Extension, and largest proportion (69 percent) said they are "very" likely to do so. Eighty-six percent of respondents attended the short course at least once previously.

Seventy-seven percent of attendees at the Bristol location rated the value of this short course higher or much higher than other landscape and grounds maintenance educational programs.

In addition to assessing perceived knowledge gain and course satisfaction, in 2013 and 2014 attendees were asked if they would share the information they learned with other horticulturists and co-workers. One hundred twenty-six landscape professionals from Kenosha, Racine, Walworth, Jefferson and Milwaukee Counties and Lake County, Illinois attended at least one session at the Kenosha County location. When asked "how many other horticulturists/co-workers will you share this information with?" 83% of week 1; 80% of week 2; 89% in week 3; and 93% in week 4 respondents - for an average of 86.25% - would share with at least one other co-worker. An average of 15.6% (weekly: 12.5%, 15%, 19%, 16%) indicated they would share with at least six additional horticulturists/co-workers.

2. Examples of Teamwork – Within UWEX and with External Partners:

"Barb is an excellent collaborator and seeks to access the strengths of multiple partners," comment from 360 survey in 2013.

Within UW-Extension

The Racine horticulture educator and I collaborate extensively on the Master Gardener Volunteer program, commercial horticulture, environmental and therapeutic horticulture programs. I also work with and support the Kenosha/Racine UWEX agriculture educator, especially programs related to local foods, horticultural crops, and environment issues and the Kenosha County UWEX community and economic development educator on environmental issues.

Beginning in 2011 I participated in the teams developing and revising statewide Master Gardener Volunteer Training curricula and supporting materials.

Many of my programs, consumer and commercial, are in partnership with horticulture and agriculture educators, agents and specialists. Most of these were in southeast Wisconsin, like Plant Health Field Day, Landscape and Grounds Maintenance Short Course, UW-Extension Horticulture Education Center at Boerner Botanical Garden, Wisconsin Nurseryman's Association Field Day and regional Plant Health Advisor training for MGVs. I actively support statewide UW-Extension horticulture educational efforts including Wisconsin horticulture team website, Wisconsin Horticulture Facebook page, Wisconsin Public Television Garden Expo, Wisconsin Master Gardener Level 1 & 2 Training, Farm Technology Days horticulture booth.

External Partners

- Kenosha County administration and department directors
- Kenosha County Green Ribbon Committee and education subcommittee
- Kenosha Achievement Center (non-profit for adults and youth with disabilities)
- Wisconsin Emerald Ash Borer operations group
- Village of Pleasant Prairie Parks Department
- Wisconsin Nursery and Landscape Association - Southeast
- Kenosha Public Library System
- Kemper Center
- Root/Pike WIN (non-profit for water quality in Root & Pike rivers watersheds)
- Sustainable Edible Economic Development (local foods development organization)
- University of Wisconsin-Parkside

3. Contributions to the Profession/University:

University

- UW-Extension Cooperative Extension (CES)

- Translation and Interpretation Implementation working group, member, 2014 – present
- Cooperative Extension Service (CES) working group on defining roles and responsibilities of volunteers, member, 2013 - 2014
- CES All Colleague Conference, member planning committee and plenary sub-committee, 2009 - 2010
- Structuring Agriculture Natural Resources Extension Program Area (ANRE) work group, member, 2014 – present
- ANRE working group on staffing, member, 2011
- Department of Agriculture and Life Sciences (DALs)
 - Systemwide Extension Council, DALs & CES representative, 2012 – present
 - Faculty Senate, DALs representative, 2011-2014
 - Faculty Senate ad hoc committee “Preparing an electronic tenure portfolio” online class, member, 2013
 - DALs, primary mentor, 2005-2010
- Wisconsin Association County Agriculture Agents (WACAA)
 - horticulture/turfgrass state contact, 2012-present
 - secretary, 2008-2011
- Horticulture Team
 - team coach, 2014-present
 - co-leader, 2012
 - member, 2004-present
- Quad Counties resource management committee, member, 2010-2011
- Wisconsin State Master Gardener Advisory Committee, UWEX staff representative, 2010 – present

Profession

- ANRE Conference “Feeling Safe – Tips for Farm and Field Visits”, coordinator & discussion facilitator, 2013
- UWEX Technology Conference “What we have learned from using multiple technologies in distance master gardener training”, co-presenter, 2012
- Wisconsin Joint Conference of Extension Professionals (JCEP) “Online Plant Health Advisor Course Increases Volunteer Confidence and Activities”, poster presentation, 2012
- ANRE Conference “Long term evaluation results for online plant diagnostic training for master gardener volunteers”, scholarship presenter, 2011
- National Association of County Agriculture Agents (NACAA) Annual Meeting and Professional Improvement Conference (AMPIC), Overland Park, Kansas “Interactive Online Plant Health Advisor Course Teaches Master Gardeners Plant Diagnostics”, presenter, 2011
- Wisconsin JCEP, “Using interactive online training to teach master gardener volunteers”, 2010

4. Applied Research/Publications/Major Presentations:

- Publications
 - A4055 UW-Extension Master Gardener Manual: Foundations in Horticulture, author of woody plants fertilization section, and reviewer, 2014
 - Kenosha News, weekly column, 2004-present
 - Prime Magazine (southeast Wisconsin distribution) twice-yearly article, 2009-2014
- Presentations used regionally, statewide and/or by other educators/agents
 - “Basics of Tree Identification” online class, Master Gardener Training Level 2: Branching Out, 2014

- “Basic Steps for Diagnosing Plant Problems”, Responding to Horticulture Inquires, for UWEX staff and MGVs, 2011-2013
- “Wisconsin Plant Communities” MGV regional advanced training PowerPoint, 2011, expanded to online class in 2012 for Master Gardener Training Level 2: Ecology, Culture and Use of Wisconsin Native Plants
- “Greening Up Your Yard: sustainable lawn and landscape cared” PowerPoint, 1 hour class and 3 hour class with activities, 2011
- “Biology of Trees and Shrubs”, Wisconsin State Advanced Master Training, 2010
- Applied Research
 - Landscape and Grounds Maintenance Short Course multiplier effect
 - Master Gardener Volunteer motivation and retention, in progress

5. Administrative Responsibilities and/or Research Programs:

- ANRE liaison, 45% February 2014 - present, 35% March 2013 - February 2014. Primary role is mentoring new ANRE county-based faculty and academic staff. At this time I’m supporting 12 faculty and 9 academic staff.
- ANRE Team Coach – Horticulture Team and Small Farms Team, March 2014 - present
- Supervise Kenosha County part-time consumer horticulture educator (backfill for my county time), 2013 – present.
- Kenosha and Racine Master Gardener Volunteers, local program administration and Racine/Kenosha Master Gardener Association, co-advisor, 2004 – present.
- Supervise part-time horticulture program coordinator who helps with Landscape and Grounds Maintenance Short Course and Spring into Gardening seminar, 2011 – present.
- Supervised University of Minnesota horticulture undergraduate student summer internship, 2012.
- Supervised, at request of Kenosha County administration, University of Wisconsin-Parkside undergraduate intern working on environmental project for county parks, 2011.
- Designed project and advised two University of Wisconsin-Parkside students for service learning, 2011
- Co-supervised horticulture resource coordinator for UWEX Education Center at Boerner, 2007 - 2011.

6. Professional Growth & Development (past five years):

- Wisconsin Horticulture Updates, UWEX Horticulture Team, weekly wislines, 2010-2014
- Wisconsin Joint Conference of Extension Professionals (JCEP), various locations, 2010 – 2014
- ANRE Conference, Wisconsin Dells, WI, 2011-2014
- East Metro Regional Conference, various locations, 2013-2015
- Leadership Conference, UWEX, various locations, 2013 & 2014
- Emotional Intelligence and Diversity Workshop, UWEX, Madison, WI, 2014
- Difficult Conversations, UWEX, distance learning, 2014
- Breaking the Bias, UWEX, distance learning, 2014
- Wisconsin Mandated Reporter Training, UW-Madison, distance learning, 2013
- UWEX Google+ and Mobile Collaboration Network, Horticulture Team, Arlington, WI, 2013
- Tree Problems: Update for Arborists, UWEX and Wisconsin DNR, Mukwanago, WI, 2013
- Agrecol LLC tour, UWEX Horticulture Team, Brodhead, WI, 2013
- Scholarship Forum, UWEX, Madison, WI, 2013
- NACAA Annual Meeting and Professional Improvement Conference, Charleston, S.C., 2012, Overland Park, KS, 2011
- Wisconsin Turfgrass Field Day, UWEX, O.J. Noer Research Station, Verona, WI, 2010 – 2012
- Garden Writers Field Day, Midwest Groundcovers, Geneva, IL, 2010 - 2012

- Using Styles for online content, UWEX, Burlington, WI, 2012
- Using Blackboard Elluminate, UWEX, 2011
- 2011 UWEX Sharepoint training
- WinterGreen conference, Gateway Technical College, Kenosha, WI, 2011
- CES All Colleague Conference, UWEX, Madison, WI, 2010
- American Horticulture Therapy National Conference, Glencoe, IL, 2010
- American Conifer Society Central Region Conference, Pewaukee, WI, 2010
- Wisconsin Apple Grower Field Day UWEX specialists' tours/talks, Burlington, WI, 2010
- Wholesale nurseries tour, UWEX Quad County Hort Team, 2010
- Using Turning Point audience polling technology, Turning Point Co., distance learning, 2010

7. Future Plans for Professional Improvements (separate sheet)

8. Additional Programs, Awards or Information to share:

2011 NACAA Communication Regional Award – Learning Module

Media is a significant method for my educational outreach.

The following is in addition to my columns and articles listed in #4.

- Associated Press writer interview in 2011 on extending the gardening season (articles nationally published).
- Wisconsin Public Radio Garden Talk, guest expert, 3-4 times per year. The program is live on radio and streamed online, repeated one time, and available as a podcast.
- Kenosha News – regular interviews by reporters on gardening and environmental topics.
- Wisconsin Gardening Facebook page – In 2014 fourteen of my newspaper columns were posted with over 2600 views, 19 likes, and 12 shares.
- My professional Facebook page has followers and regular responses but doesn't track views.
- Kenosha County UW-Extension website – My weekly garden Q&A column is posted weekly.
- Kenosha News podcasts – five videocasts on vegetable gardening, 2011

Selected outcomes of media work:

When horticulture expertise was needed by Kenosha County Sheriff's Deputies, they "found" me by googling Kenosha horticulturist. Aercia Bjurstrom, UW-Extension agriculture agent, stated she included my hydrangea pruning article in her newsletter after finding it on Wisconsin Gardening Facebook page. Patti Nagai, horticulture educator, stated when seeking information on the internet about heirloom plants when she found a "well written" article on the topic that she wanted to use as reference. After reading the article she discovered it was written by me. "I made posts on our county website and Facebook regarding your seed starting articles and directed people to your sites. Just wanted to you to know that I appreciate the great information you posted on this topic." Ann Weid, Horticulture Educator, Waukesha County UWEX.

Comments from 360 Survey in 2013:

"Barb's greatest strength is in her ability to establish herself as an authority and build trust. If she tell you something informational you can be sure of it because you trust her as a reliable source."

"I am always impressed by Barb Larson's ability to take a very complex subject and bio it down to a clear, concise, easy to understand explanation."