



Applying knowledge to improve water quality

Fall 2005
PNWWATER 074

Pacific Northwest

Regional Water Program

A Partnership of USDA NIFA
& Land Grant Colleges and Universities

Master Gardener Program Protects Water Quality in the PNW

The Master Gardener Volunteer Program began in 1973 as a pilot to train volunteers in horticultural science and diagnosis of plant problems. In return, volunteers would share this information with community residents. From a modest beginning of 200 volunteers working to answer questions during the garden season in the urban counties of King, Pierce, Snohomish, and Spokane, the program has grown into a year-round volunteer effort in nearly all U.S. states, three Canadian Provinces, as well as Europe and Great Britain.

Dr. David Gibby and Bill Sheer, area agents in King and Pierce counties, developed the program modeled after the professional "Gartenmeister Program" in Germany, which trains young professional horticulturists. Gibby's task of developing educational programs to transfer science based knowledge to horticultural and pest management professionals and residents was daunting. Migrants from rural farms were unfamiliar with city soils and climate. They turned to their traditional source of information, Washington State University (WSU) Extension. It wasn't unusual for Gibby to receive 100-150 calls a week making educational programming nearly impossible. As Gibby has said, "The program was born out of desperation."

The first year of the program, the bamboo throughout the area flowered, and then died. For weeks, the phones rang incessantly with calls from people and the news media. It was a typical day at Extension, but now there were 200 volunteers with training and support from WSU to meet that demand for information. Plant clinics, fair booths, and phone clinics, all provided science based education to solve community problems.



Left to right, back row: Dr. David Gibby and Bill Scheer (King-Pierce County Area Agents). Left to right, front row: Sharon Collman, King County Agent, Dr. Arlen Davison, WSU Plant Pathologist, and Sharon Wesenberg representing her late husband, Dr. Bernie Wesenberg, WSU Horticulturist. They were honored on Founders Day for their role in creating and managing the early success of the program.



Oregon State
UNIVERSITY



University of Idaho
A LEGACY OF LEADING



Pacific Northwest Regional Water Quality Coordination Project Partners

Land Grant Universities

Alaska

Cooperative Extension Service
Contact Fred Sorensen:
907-786-6311

<http://www.uaf.edu/ces/water/>

University Publications:

<http://www.alaska.edu/uaf/ces/publications/>

Idaho

University of Idaho
Cooperative Extension System
Contact Bob Mahler: 208-885-7025

<http://www.uidaho.edu/wq/wqhome.html>

University Publications:

<http://info.ag.uidaho.edu/Catalog/catalog.htm>

Oregon

Oregon State University
Extension Service
Contact Mike Gamroth: 541-737-3316

<http://extension.oregonstate.edu/>

University Publications:

<http://extension.oregonstate.edu/catalog/>

Washington

Washington State University
WSU Extension

Contact Bob Simmons:
360-427-9670 ext. 690

<http://wawater.wsu.edu/>

University Publications:

<http://pubs.wsu.edu/>

Northwest Indian College
Contact Charlotte Clausing:
360-392-4319

cclausing@nwic.edu or

<http://www.nwic.edu/>

Water Resource Research Institutes

Water and Environmental Research
Center (Alaska)

<http://www.uaf.edu/water/>

Idaho Water Resources
Research Institute
<http://www.boise.uidaho.edu/>

Institute for Water and
Watersheds (Oregon)
<http://water.oregonstate.edu/>

State of Washington
Water Research Center
<http://www.swwrc.wsu.edu/>

Environmental Protection Agency

EPA, Region 10
The Pacific Northwest
<http://www.epa.gov/r10earth/>

Office of Research and Development,
Corvallis Laboratory
<http://www.epa.gov/wed/>

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The Project

Land Grant Universities, Water Research Institutes, and EPA Region 10 have formed a partnership to provide research and education to communities about protecting or restoring the quality of water resources. This partnership is being supported in part by the USDA's National Institute of Food and Agriculture (NIFA).

Our Goal and Approach

The goal of this Project is to provide leadership for water resources research, education, and outreach to help people, industry, and governments to prevent and solve current and emerging water quality and quantity problems. The approach to achieving this goal is for the Partners to develop a coordinated water quality effort based on, and strengthening, individual state programs.

Our Strengths

The Project promotes regional collaboration by acknowledging existing programs and successful efforts; assisting program gaps; identifying potential issues for cross-agency and private sector collaboration; and developing a clearinghouse of expertise and programs. In addition, the Project establishes or enhances partnerships with federal, state, and local environmental and water resource management agencies, such as by placing a University Liaison within the offices of EPA Region 10.

No one dreamed how successful the program would become. Not only were the volunteers willing to serve their 40 community hours, many exceeded the required hours and returned year after year; (many have served for over 25 years). This created a growing reservoir of plant knowledge and volunteers. The veteran volunteers began to mentor new recruits and provided training to others in their communities through news columns, school garden curricula, and presentations to civic groups. Some even enrolled in college courses.

The program was readily adopted in other counties in Washington and in other PNW states. Currently, over 7,500 Master Gardeners are actively teaching in Washington, Idaho, Oregon, and Alaska. In Oregon in 2004, nearly 2,500 Oregon State University Master Gardeners™ served 151,700 people and donated 147,500 hours, the equivalent of 71 employees and \$2.4 million in services. In addition, some Master Gardeners have become well-known garden writers and TV/radio personalities.

The Master Gardener Volunteers were among the first to address water quality issues, watershed restoration, and native plant salvage programs. They have been building capacity, enhancing quality of life, encouraging water conservation, diagnosing plant problems, and teaching new ways of managing pests for over thirty years. Furthermore the program has served as a model for other Extension volunteer programs such as Livestock Masters, Bay Watchers, Beach Watchers, and Watershed Stewards. The Master Gardener programs that address water quality issues will be featured in a future Water Quality Update.

National Water Quality Program Areas

The four land grant universities in the Pacific Northwest have aligned our water resource Extension and research efforts with eight themes of the USDA's National Institute of Food and Agriculture.

1. Animal Waste Management
2. Drinking Water and Human Health
3. Environmental Restoration
4. Nutrient and Pesticide Management
5. Pollution Assessment and Prevention
6. Watershed Management
7. Water Conservation and Management
8. Water Policy and Economics

*This material is based upon work supported by the
National Institute of Food and Agriculture, U.S. Department of Agriculture,
under Agreement No. 2008-51130-04734.*