

impact

University of Idaho Extension programs that are making a difference in Idaho.

Growing a high-altitude master gardener program through collaboration

AT A GLANCE

Piloted in Blaine, Teton and Valley counties, the adoption of web conferencing technology enabled educators to offer the first high-altitude short season master gardener course in Idaho.

The Situation

Extension community education programs have a strong tradition of providing in-person classes. While this remains the preferred method of learning for Idaho residents (according to the 2023 statewide listening session), 40% of learners indicated they are very interested in hybrid classroom learning environments.

Since 2014, Extension has been implementing a virtual hybrid distributed conference and classroom model. The hybrid delivery of Extension programs has been successful in reaching larger rural audiences, using fewer staff and resources while providing specialist and horticultural knowledge to rural communities across the nation. Prior to the COVID-19 pandemic, a local facilitator was required to coordinate the technology needed for a distributed conference model. However, post-pandemic, familiarity with web conferencing technology has become widespread among the public. This cultural shift enabled the first-ever statewide coordinated effort to offer a hybrid master gardener learning experience focused on the high-altitude regions of Idaho.



Master gardeners celebrating their graduation after completing the coursework and 30 hours of volunteer service.

Our Response

In 2024, under the leadership of Ron Patterson and Lena Allen in Bonneville County, the Idaho Master Gardener Program launched a statewide effort to standardize the foundational content of the program through the development of an online class on the Canvas learning platform. This course created consistent and convenient learning experiences for rural Idaho participants, which can be implemented by any University of Idaho Extension educator. Educators in Blaine, Teton and Valley counties used this online course to create a customized hybrid course tailored to the specific needs of high-altitude regions with short growing seasons.

Students could access the virtual classroom asynchronously, following the foundational content in Canvas at their own pace. The high-altitude Idaho Master Gardener Program course also included 13 remote synchronous "lunch and learn" weekly meetings, offering peer-to-peer participant learning via Zoom. Each county was responsible for planning and hosting in-person classes with local stakeholders throughout the course. Idaho master gardeners are required to contribute volunteer hours to their communities, with local volunteer opportunities coordinated during the summer and fall.

Program Outcomes

The overall experience of participating in the hybrid Idaho Master Gardener Program course was measured through a pilot pre- and post-course survey. Of the participants, 69% rated the class as excellent, 23% as good and 8% as average. The primary outcomes of intended behavior change indicated that 92% of participants planned to manage invasive and noxious weeds and grow their gardens in raised beds. Additionally, 85% of participants planned to implement mulching, landscape planning, vegetable gardening and establish season-extension infrastructure in their gardens.

There was a 77% increase in knowledge about the role of Cooperative Extension in their communities and the various programs available through University of Idaho Extension.

The mean score comparisons of the pre- and post-class surveys indicated that learning increased more in some areas than in others. The topics with the most significant increases in knowledge included pesticides, diagnosing plant problems, turf management, season extension, pathology and growing in micro-climates.

Percentage increase in knowledge gained:

- 76% Pesticides
- 77% Diagnosing plant problems
- 85% Turf management
- 85% Season extension
- 89% Pathology
- 99% Growing in micro-climates

In October 2024, these findings were presented at the American Association for Adult and Continuing Education Virtual Conference.

The Future

The high-altitude educators aim to formalize their pilot survey tool for a statewide audience. Working in collaboration with Ron Patterson and Lena Allen for access to statewide data via the Canvas e-learning course, further research will explore the impacts of the Idaho Master Gardener Program statewide. Institutional Review Board approval for a paired t-test quantitative analysis will be pursued through partnership and collaboration in 2026.

Cooperators and Co-Sponsors

The high-altitude short-season Idaho Master Gardener Program would not have been possible without the hard work and dedication of Bonneville County master gardener staff and Erin Doty, the director of Extension publishing and Extension online education. Working together, they established the online Idaho Master Gardener Program course on Canvas, laying a firm foundation for program quality, accessibility and increased capacity for the Idaho Master Gardener Program statewide.

FOR MORE INFORMATION

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13-25-mhamilton-high-altitude • 4/25