

**Washington Grain Commission**  
**Wheat and Barley Research Annual Progress Reports and Final Reports**

**Project #:** 4150-1222

**Progress Report Year:** 3 of 3

**Title:** Extension Education for Wheat and Barley Growers

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**Executive summary:** This project resulted in the development and launch of the Wheat and Small Grains website by the Extension Dryland Cropping Systems Team in January of 2014. This website consolidates WSU Extension information on wheat and barley production and marketing. The project also supported the development of several decision support tools and calculators that help growers make more informed production and marketing decisions. Some noteworthy new content for the Wheat and Small Grains website in 2015 included the Soil Acidification Implications for Management page, the Grain Growing Degree Calculator, the Wheat and Barley Insect Pest Surveys, an updated Marketing and Economics page with interactive market tools, and a Facebook page.

In addition to the website, the project supplemented registration fees to support the inaugural 2014 and 2015 Wheat Academies. In very short order, the Wheat Academy has become the educational event that Washington wheat and barley growers and crop consultants want to attend. The Wheat Academy was held on the WSU Pullman Campus on December 15 and 16. Attendance was limited to 75 people, up from 60 people in 2014, in order to keep class size small enough to allow for good hands-on activities. Within three weeks of opening registration on September 1, the Academy was full. These and other educational activities will be ongoing and will continue in some fashion, partially dependent on extramural funding, into the future.

**Impact:** For the six months ending September 30, 2015 the Wheat and Small Grains website had 8,672 sessions with 5,022 unique users. They viewed 19,199 pages and had an average session length of 2 minutes and 12 seconds. This is nearly a two-fold increase from the same time period from the previous year, which saw 4,481 sessions with 2,355 unique users. Additionally, the inaugural Wheat Academy was held on the WSU Pullman Campus in December, 2014. Attendance was limited to 60 people in order to keep class size small enough to allow for good hands-on activities. In August of 2015, a survey was sent to people who had attended the Inaugural Wheat Academy in December of 2014 to determine if they had increased their knowledge in the various topic areas addressed and if they had applied this new knowledge during the 2015 growing season. Those indicating that they agreed or strongly agreed to an increase in knowledge ranged from a low of 77% to a high of 100%, depending on the topic. Those indicating that they had used the knowledge gained in a topic during the 2015 growing season ranged from a low of 50% for on-farm testing to a high of 95% for soil/herbicide interactions.

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Project PI(s): Drew Lyon,

Project initiation date: July 1, 2013

Project year: 3 of 3

Objective	Deliverable	Progress	Timeline	Communication
Form Dryland Cropping Systems Extension Team	An active team focused on developing educational programming for dryland cropping systems in eastern Washington.	The team has been formed, meets regularly, and is actively planning educational programs.	The team was formed and began active planning in the summer of 2013.	Team members continue to provide educational programming as they have in the past, but are now delivering major programs under the banner of "Wheat Academy".
Develop dynamic, research-based decision support tools	Decision support tools.	Six tools are currently available on the Small Grains Website: 1) Variety Selection Tool, 2) Nitrogen Application Calculator, 3) Post-Harvest Nitrogen Calculator, 4) Spring Wheat Yield Calculator, 5) Interactive Market Tools, and 6) Grain Growing Degree Calculator. New tools proposed for development in 2016 include herbicide efficacy tables, a spray water quality tool, and an ag lime calculator.	The six identified decision support tools are currently available for public use from the Small Grains Website. We plan to have two to four new tools available on the website by the end of 2016.	The currently available decision support tools are being promoted at Extension meetings and field days, as well as through news releases and in Wheat Life magazine.
Develop enhanced, dynamic (video, audio, etc.) forms of information delivery	Enhanced dynamic information delivery	Timely Topics are regularly posted to the Small Grains Website and cover topics of current interest. Ten short videos were created at the Crop Diagnostic Clinic in July and these are available at the website. A series of three 5-minute videos on soil acidification are under development and should be available on the website in 2016.	We plan to develop quizzes, forums, additional videos, and possibly voiced-over Power Point presentations in 2016.	New dynamic products will be announced via Timely Topics on the website as well as at various Extension meetings and through news releases.
Develop in-depth virtual and live educational programs under the banner of "Wheat Academy"	In-depth educational programs.	The Wheat Academy was held in December of 2014 and 2015 in the Vogel Plant Biosciences Building on the WSU campus. The event has quickly become the premier educational event for growers and crop consultants.	We are considering ways to make this educational event available to more people in the future without lowering the quality of the educational experience. This very successful event will continue into the foreseeable future.	The Small Grains Website will be mentioned at most Extension meetings. The Crop Diagnostic Clinic, when held, and the Wheat Academy School will be advertised and discussed on the Small Grains Website, in news releases, at field days and tours, through mailers, and in Wheat Life magazine.