

impact

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

Adapting to the needs of Idaho pesticide applicators using a hybrid teaching method

AT A GLANCE

University of Idaho Extension provides pre-license pesticide safety education in preparation for applicator exams. Due to time and travel constraints a hybrid teaching method was implemented.

The Situation

Pesticides are classified by federal and state law as general use and restricted use. Restricted use pesticides (RUP) are pesticide products that have a higher degree of human and/or environmental hazard. Pesticide safety education and certification and licensing is critical to ensure that these RUP products are properly used and handled to protect the handler, worker, the general public and the environment. Therefore, private applicators who apply RUPs, chemigate, and/or apply soil fumigants must have an Idaho pesticide applicator license with the appropriate categories. They must also attend continuing education recertification training classes to keep their licenses current.

Idaho professional applicators are required to have a professional pesticide license for the pesticide type they apply. Professional applicators are those applicators that apply pesticides as a business practice and are required to be licensed regardless of the pesticide classification.

All Idaho pesticide applicators must meet the requirements of federal and state pesticide laws and rules, and pass examinations that cover core knowledge on integrated pest management, pesticide use and safety. These exams and the subsequent certification and



WELCOME
TO THE IDAHO PESTICIDE APPLICATOR CORE
ONLINE TRAINING PROGRAM



<https://campus.extension.org/course/view.php?id=1589>

Idaho Pesticide Applicator Core Online Training Program at <https://campus.extension.org/course/view.php?id=1589>.

licensing is administered by the Idaho State Department of Agriculture.

Each year private applicators and pesticide application businesses are faced with travel and time restrictions for attending the training classes. Additionally, there has been an ongoing request for online education and training manuals for easier access to educational materials.

Our Response

The University of Idaho Extension Pesticide Safety Education Program (PSEP) develops and delivers pesticide safety education for individuals preparing for the state exams. Annually, multiple, three-day pre-licensing courses are delivered around the state, including, Boise, Canyon County, Magic Valley, eastern Idaho

and northern Idaho. In 2020, the PSEP program tested a new class format during the Canyon County program. We utilized new online educational modules developed by the UI Extension PSEP. These eight modules provide asynchronous education for the private applicator exam preparation and the Law and Safety category for professional applicators. We provided free access to these eight modules, housed on the University of Idaho eXtension Campus, several weeks before the class was convened. Students were asked to work, independently, through the eight modules before class began. During the class time, we reviewed some of the key material in the modules, in order to reinforce an increase in knowledge for core pesticide safety concepts. Since the detailed material was provided online and we only spent time reviewing the core concepts, we saved one full day of class time for the participants. Additionally, we were able to spend more time teaching pesticide math and calibration concepts. Students were provided with “hands-on” math problems to work on during class time, with instructor assistance. A Chemigation online module was added to the University of Idaho eXtension Campus. This allows those who want to test for the Chemigation category the flexibility of learning independently on their home computers.

The second day of the class was devoted to professional applicators. More time was provided for insect and disease management, and hands-on weed identification and control. We also split the professional applicators into two groups: agricultural and ornamental for more job specific training.

Overall, the two-day class, reduced from three days, was more focused and hands-on. Freeing up time, by using the asynchronous safety modules ahead of class time, allowed for a slower paced class. We had more time to spend working through math problems and the key pest management issues important to the specific applicators attending the class.

FOR MORE INFORMATION

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The asynchronous pesticide safety education contains eight modules:

1. Laws and Regulations
2. Pesticide Labels
3. Pesticide Safety and PPE
4. Pesticide Formulations
5. Environmental Fate of Pesticides
6. Pest Management
7. Transportation, Storage and Spills
8. Making Pesticide Applications

Program Outcomes

This was the first year for testing this new format using the asynchronous teaching along with in-person class time. Positive feedback from class attendees indicated that the online modules were easy to follow and understand and helped them learn the material. They believed the method provided them more time to study and learn the concepts at their own pace, reinforcing new knowledge for practical job-based tasks and skills. Class participants overwhelmingly appreciated the additional time spent on pesticide math and calibration. All attendees felt it helped them gain more confidence with this part of their job. The full day devoted to professional applicators, divided by application type (agricultural, ornamental) resulted in increased knowledge of the 30 common weeds necessary for the Ag Herbicide and Ornamental Herbicide exams.

Exam sessions are no longer provided at the end of the class, and we do not have access to exam scores for our specific students. However, based on preliminary survey data, 66% of students accessed the asynchronous safety modules prior to class. With the written student comments from our Canyon County test class, we believe this hybrid approach to teaching future pesticide applicators will continue to be successful.