**2022 Impact**

Educator Reed Findlay has continued studying the thrips insect pest in alfalfa crops. In 2022 he extended his research by studying the effects thrips feeding has on alfalfa quality in a greenhouse setting. This will enable him to study this insect in a more controlled environment. Findlay is also assisting U of I Agronomist Jared Spackman in studying the effects of various fertilizer regimes on cereal crops. The cereals team has initiated a study to determine the effects of previous crop rotations on soil moisture retention in dryland farming areas. Findlay has also partnered to determine how teff grass responds to herbicides. Findlay has completed the second year of an apple grafting research to study the effect of bud placement on graft viability.

Educator Carmen Willmore’s focus areas were livestock production and best management practices. She assisted in the planning and implementation of the Young Cattle Producers Conference hosted in the Pocatello/Blackfoot area. This conference provides in-person education and networking opportunities for Idaho’s young cattle producers. Willmore continued to support the Sheep and Goat monthly webinar series, an online webinar hosted once a month for sheep and goat producers in Idaho and the West.

Educator Julie Buck partnered with Bingham Healthcare employees Randy Powell and Katie McDonald on an Idaho Project Filter grant. The $15,000 grant led to a 25-minute lesson plan to be taught in Bingham County elementary schools third and fourth grade classrooms. The project reached four school districts and one charter school in nine schools, a total of 700 youth. A folder with a workbook, crayons and bracelet were given to each youth. This program had a positive impact by teaching prevention of using tobacco or vaping products and discussing possible scenarios they may find themselves in.

**4-H in Bingham County**

Buck taught Electric Pressure Cooking to 110 youth in Bingham County schools. 100% of students who completed the survey expressed an increase in knowledge about functions on the electric pressure cooker, the safest way to open the pressure cooker lid, confidence in how to properly operate an electric pressure cooker, how to follow a recipe, are comfortable cooking a meal for family, and are likely to use an electric pressure cooker.

**On the Horizon**

The small grains team will initiate research into the use of annual alfalfa cultivars as a source of nitrogen fertilizer for subsequent cereal crops. This research will help growers manage the increasing costs of fertilizer inputs in a sustainable manner.

Willmore hopes to expand opportunities for livestock education for local community members.

Buck will continue outreach in Bingham County to teach School Pantry Cook-off, Cooking Under Pressure and Welcome to the Real World financial awareness programs to youth. Programming to adults will included Dining with Diabetes, Food Preservation and various meal preparation classes. In 2023 a UI Extension Candy School youth curriculum will be published.