

## Youth increase animal science knowledge through experiential learning

### AT A GLANCE

With the increasing average age of Idaho farmers and ranchers, it is imperative to generate interest in the next generation through exposure to animal science and the livestock industry.

### The Situation

Following the 2022 and 2023 UI/WSU Youth Livestock Field Days, participants indicated they wanted more hands-on activities for youth to be physically engaged while learning. During a UI Extension Listening Session, a request was verbalized for new livestock education activities to be available for 4-H leaders in the area to use at club meetings. Similar requests have been made at county leader meetings, as well as recommendations from county fair judges to strengthen youth's livestock knowledge.

### Our Response

At the 2024 Youth Livestock Field Days, afternoon sessions were replaced with six to eight hands-on stations to build on the four morning sessions (training at home, nutrition, veterinary care and selection). Youth rotated after 10 minutes at each station.

Beef — halter making, equipment and breeds, meat cuts, cookery, ear tagging and brands, dairy products, organ dissection, flight zone.

Sheep/Goat — halter making, equipment and breeds, cuts and cookery, wool judging, dairy products, hoof trimming, flight zone.



Youth palpate and inflate calf lungs to learn about the respiratory system at Youth Swine Field Day. Photo by Klæe O'Brien.

Swine — equipment and breeds, meat cuts, cookery, ear notching, heart dissection, lung dissection, biosecurity.

Youth were provided with a “passport” to record responses for the checklist questions at each station. The passport also included a checklist of questions from the morning sessions.

### Program Outcomes

Participants gained the knowledge to complete the following items on the 4-H Animal Science Checklist:

- Describe animal identification options. (beef, swine); What is the difference between bill of sale, receipt and brand inspection? (beef)

- Identify at least five breeds. (beef, sheep/goat, swine); What is crossbreeding and why would it be used? (swine)
- How does temperature and air flow affect your animal? (beef, swine); What is the average heart rate of a resting beef animal? (beef, swine); Describe biosecurity. (swine)
- Describe hoof trimming, castration, dehorning and docking. (sheep/goat); List some of the steps in halter breaking. (beef, sheep/goat); How can you use the flight zone to stay safe when working with your animal? (beef, sheep/goat)
- Describe five carcass terms. (beef); Why is it important to know where our food comes from? (beef, sheep/goat, swine); What is the difference between wholesale and retail cuts? (sheep/goat, swine); Describe your sampling experience to a potential buyer or friend. (sheep/goat)

Following the rotations, youth were asked to select their favorite station(s). Youth especially appreciated being able to take home a halter they had made on the beef and sheep/goat days and enjoyed stations that involved food sampling (dairy, cookery). The station(s) that included organ dissections also were rated among the top stations at beef and swine field days.

Table 1. Top five stations at each livestock field day.

Beef (n=124)	Sheep/Goat (n=100)	Swine (n=82)
Halter Making, 25	Halter Making, 18	Heart, 17
Dairy, 22	Hoof Trimming, 17	Lung, 16
Cookery, 15	Cuts & Cookery, 15	Cookery, 14
Organ Dissection, 14	Flight Zone, 15	Ear Notching, 11
Tagging/Brands, 14	Dairy, 14	Breeds/Equip., 10

In addition to the development of animal science knowledge in the youth, this program allowed the opportunity to develop presentation skills and confidence with leaders (five) and educators (five).

### FOR MORE INFORMATION

**Jessie Van Buren**, Extension Educator • University of Idaho Extension, Latah County • 208-883-2267 • jvanburen@uidaho.edu  
**Audra Cochran**, Extension Educator • University of Idaho Extension, Clearwater County • 208-476-4434 • audrac@uidaho.edu

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College students (11) also gained experience teaching youth and sharing their educational experiences.

Lastly, as part of an evaluation of career interests, youth were asked to indicate their “dream job.” Top responses included: veterinarian, livestock judge, NFL, lawyer and doctor. Several were ag or animal related.

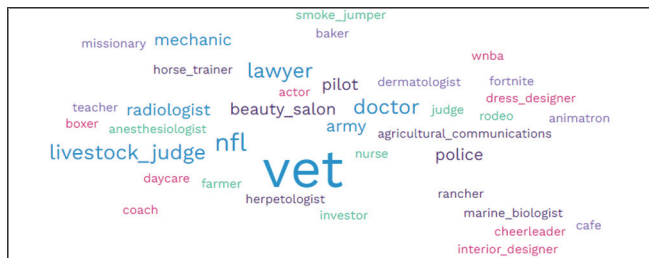


Figure 1: Youth “dream job” responses (larger size indicates response given multiple times).

### The Future

Materials purchased/developed for the stations will continue to be available for additional Extension programs (afterschool programs, day camps, train-the-trainer workshops) and 4-H club meetings throughout Latah, Clearwater, Nez Perce, Lewis and Idaho counties.

Meat science activities have been presented to other Extension educators and 4-H coordinators across the country and have gained interest in becoming part of a curriculum for a meat science 4-H project.

### Cooperators and Co-Sponsors

Thank you to the Extension educators, 4-H leaders and UI/WSU college students who led the stations.

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