

Natural Resources Conservation Service

Soil and Plant Science Division

Soil Survey Region 5



Buffalo, Wyoming, MLRA Soil Survey Office

Third-Graders Become Scientists at Buffalo Ag Day

Purpose

Soil scientists from the Buffalo, Wyoming, MLRA Soil Survey Office supported soil conservation and environmental quality at the 3rd grade Ag Day event held at the Johnson County Fairgrounds. This event is held by the Johnson County Cattlewomen with support from the local chapter of the Future Farmers of America (FFA).

The event included a wide variety of activities:

- First Lady of Wyoming Jenny Gordon demonstrated low-stress cattle handling.
- Clear Creek Conservation District members presented on soil genesis and plant pollination.
- Dr. Teresa Bessler of the Buffalo Veterinary Clinic demonstrated how cattle are born and how veterinarian care works.
- Stingers Honey demonstrated how honey is produced and explained the importance of bees as pollinators.
- Quint Gonzales and the farrier students from Sheridan College explained horseshoeing.
- Johnson County Weed and Pest taught students how to recognize noxious weeds and the importance thereof.
- Karen Hostetler from Mountain Meadow Wool demonstrated how yarn is made from wool.
- Nutritionist Bonnie Ellenwood explained how cattle provide nutritious food and give us many other useful products, such as Jello.
- Marilyn Novothy from a local ranch family brought her sheep wagon and discussed the value of vaccinations and the proper methods to perform them.

The hands-down favorite with the 3rd graders was the Stream Table, which was staffed by Wyoming Game and Fish. The students experimented with scaled-down versions of hydrologic practices and components to see how they affected the downstream movement of soil particles. The close second-favorite was the sheepdog demonstration by Range Conservationist Kassie Camino's husband Kirby.

District Conservationist Allison McKenzie explained the concepts of environmental quality with the *Enviroscape*, which demonstrates how pollutants and fertilizers move across and through the landscape. Range Conservationist Kassie Camino explained conservation planning, the concept of Animal Unit Month (proper stocking rates), and stockwater development as related to rangeland production. Soil Scientist Mike Leno demonstrated soil sieving and particle-size analysis.

Soil Scientist Joe Dyer demonstrated the scientific method, infiltration, and erosion. He asked the kids to predict where the rainfall would land in the rain simulator. Having made these predictions, he then explained to them they have *made a hypothesis* and they were all now scientists. He taught them that it does not matter who hypothesized correctly; it matters what we learn from the results of our experiment.



Key Outcomes

This amazing confluence of so many agricultural businesses with Federal and State natural resource professionals provided a rich educational experience to the 3rd graders; one they might not otherwise have received. A good time was had by all! Helping children understand the land includes showing that our food comes *through* the grocery store, not *from* it.



NRCS Soil Scientist Joe Dyer demonstrates infiltration to a group of third-grade students and cow enthusiasts at the Ag Day in Buffalo, Wyoming.