

Agricultural Adventure



for Youth at ARDEC

A Standards-Based Event
Developed and Presented
for
Third-Grade students in Northern Colorado
by
students of
Colorado State University
College of Agricultural Sciences



On September 25, 2002, students from the College of Agricultural Sciences at Colorado State University hosted 36 elementary third grade classrooms for the second annual ***Agriculture Adventure for Youth at ARDEC***. Elementary students were brought to the CSU Agricultural Research, Development and Education Center (ARDEC), a biological field facility for conducting integrated agricultural research, instruction and outreach programs in soil, plant, water, animal, and food sciences, located about 10 miles northeast of Fort Collins, to learn about agriculture.

Objective

The objective of Agricultural Adventure is to empower students at Colorado State University to educate elementary students about the impact of agriculture in their daily lives and the relationship of elementary curriculum to agriculture.

Structure

Agricultural Adventure provides elementary students with focused, hands-on activities that leverage the ARDEC facility to teach about a wide range of agricultural enterprises and products. CSU students have developed and deliver six different Learning Centers, each addressing a different facet of agriculture. So that all elementary students have an opportunity to experience all of the activities available, the entire event is tightly coordinated so that each classroom spends about 20 minutes engaged in several activities at each Learning Center.



Personnel

A significant number of people are necessary to provide support for all aspects of planning and delivering an event of this magnitude. Three distinct groups play vital roles in the success of Agricultural Adventure.

Leadership team

A core team of six to eight upperclassmen provides the planning of the central event including coordination of curriculum development, contact with the elementary classrooms, arranging facilities, fund raising, publicity, and many other unseen but important activities.

College Clubs/Student Organizations

By design, the development and delivery of the content for each of the Learning Centers are delegated as the responsibility of selected clubs and organizations within the College. Each club is invited to submit proposals for content that are consistent with the objective of the event and provide breadth to the number of areas addressed.



Freshmen

Nearly 200 freshmen who are enrolled in the College's Freshman Seminar course participate in the event as a service-learning opportunity and to gain exposure to the diversity of elementary student understanding. They have the opportunity to work closely with upperclassmen in delivering the curricula at Learning Centers and to facilitate smoother and quicker transition between stations. The involvement of these students allows elementary-to-college-student ratios of four-to-one or less at each Learning Center.



Standards-Based Curriculum

To assure valuable educational content, the curriculum for each Learning Center was developed by CSU students in collaboration with elementary teachers and district administrators. Care was taken to match activities with state and district standards as outlined on the back of this brochure.

Benefits of Agricultural Adventure:

Third Grade Students learn how agriculture affects their daily lives and see their curriculum applied in tangible ways.

Third Grade Teachers are aided in teaching elementary students across the curricula for which they are responsible and are provided additional materials that should be useful in the classroom.

CSU Freshmen are teamed with upperclassmen, entrusted with responsibility, exposed to viewpoints of a non-agricultural public, and introduced to additional CSU facilities and personnel.

CSU Upperclassmen build life-long skills and gain considerable marketable experience from planning, coordinating, and delivering all aspects of this event.

The Agricultural Community gains by exposing more of the general public (future citizens, their parents, and teachers) to the realities of agricultural production—e.g. milk doesn't "come from the grocery store".

Society as a Whole gains as students are provided additional means to master the curriculum and as its citizens better understand agricultural processes.

For more information about Agricultural Adventure, contact:

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Third Grade Curriculum Standards Addressed by each Learning Center

Sheep & Wool

Science

- 2 (Physical Science): How wool changes through production process
- 3 (Life Science): Wool production process
- 5 (Science, Technology, & Human Activity): Explore how sheep have helped up survive & other cultures that still use them today



Dairy

Science

- 1 (Scientific Investigation): Pose questions & state predictions of dairy
- 3 (Life Science): Investigate basic needs for plants & animals
- 4 (Earth Science): Recognize importance & use of water in dairy output

Math

- 5 (Measurement): Estimate and measure capacity of feed and milk

Crops & Crop Production

Science

- 3 (Life Science): Describe food chains; plant consumption by humans
- 5 (Science, Technology, & Human Activity): Recognize diversity of resources involved nationwide & worldwide in crop production

Math

- 5 (Measurement): Measure volume and weight of seed and grain

Geography

- 1 (People, Places, and Environments): Use map legends and symbols
- 2 (Regional Characteristics): Compare/contrast agricultural production throughout the US & world
- 3 (Earth): Explain how plants & animals adapt to the physical environment



Soil & Water

Science

- 3 (Life Science): Investigate invertebrates interaction with habitat; investigate basic needs for plants & animals
- 4 (Earth Science): Explore water properties & experimentation (water cycle)

Math

- 3 (Statistics and Probability): Read & interpret table, charts, & bar graphs
- 5 (Measurement): Measure volume and weight of soil and water samples

Geography

- 3 (Earth): Identify causes and impact of soil erosion

Mobile "Transit" Stations (aka "Hayrack Rides")

Geography

- 1 (People, Places, and Environments): On-site map reading and interp.

Math

- 5 (Measurement): Estimate and measure weight and distance

