



Agricultural Science Fair

CONTEST DATE: Saturday, September 25, 2021



BE BOLD. Shape the Future.
College of Agricultural, Consumer
and Environmental Sciences

Contest Registration Due: Saturday, September 1, 2021

Contest Registration Email: nmyouth@nmsu.edu

Contest Start Time, Location, and full prize list announcement: September 1, 2021

Contest Coordinator: Dr. Frannie Miller, franniem@nmsu.edu; (575) 646-1162

New Mexico State University, Department of Agricultural Economics and Agricultural Business

This contest is subject to the Southern New Mexico State Fair (SNMSF) General Rules and Regulations and to the Special Rules of this section. Where Special Rules conflict with other rules, Special Rules prevail. The contestant is restricted to participants who reside in the counties of Dona Ana, Hidalgo, Luna, Otero, Catron, Grant, Valencia, Bernalillo, Socorro, and Sierra Counties of New Mexico and El Paso County, Texas.

Special Rules for Agricultural Science Fair

- 1. Entry Fee:** An entry fee of \$20 made payable to Southern New Mexico State Fair will be charged.
- 2. Entries MUST** be submitted by email to nmyouth@nmsu.edu by 11:59 pm of the deadline. **Received entries will receive an email indicating receipt.** If no receipt email is received, it is the contestants responsibility to contact the contest coordinator on the following day to make alternate submission arrangements. Sent email with time stamp may be required for proof of submission by deadline.
- 3. Eligibility:** This contest is open to New Mexico students, ages 8 (in addition to being in 3rd grade) to 18 years of age as of January 1, 2021 and are enrolled in, and attending, public or private elementary or secondary schools in New Mexico (including home school). Each contestant must be a member of 4-H, FFA, or meet all other SNMSF Junior Show Rules and Requirements. A one-time exception to 4H/FFA enrollment will be permitted. Contestants must be passing all subjects for the semester or grading period immediately preceding the contest, as certified by the school or extension official on the entry form.
- 4. The age divisions are as follows, with age as of January 1 2021:**
 - **Novice Division:** 8 year olds in the 3rd grade, 9 year olds, 10 year olds, 11 year olds in the 5th grade
 - **Junior Division:** 11 year olds in the 6th grade; 12 year olds; 13 year olds in the 7th grade
 - **Senior Division:** 13 year olds in the 8th grade; 14-18 year olds.
- 5. Entry Limitation:** Contestants are limited to one (1) individual entry. An entry must be the result of a student's own effort and ability. Team entries are **NOT** allowed. However, it is permissible for students to work on related projects as long as the effort in their project is distinct and represents their own work. There is no limit to the number of entries a chapter or club may submit.
- 6. Project Exhibition:** The project must have been researched and developed within one (1)

calendar year of the exhibition date. If the project is a continuation of a multi-year study, the student's focus for research, display and presentation must center on the most recent year's data. A successive year project must indicate change or growth in the project from the previous year(s) in the log book.

7. **Judging Criteria:** Judging is similar to the criteria set forth in the National FFA Association Agriscience Fair Rules. See <https://www.ffa.org/participate/awards/agriscience-fair/>
8. **Documentation:** Each contestant must complete the following items in advance to be eligible for competition. The forms below are to ensure participant safety and ethical treatment of any non-human vertebrates involved in the research. The completion of these forms, including signature, must precede the conduct of any experiments conducted.
 - a. Documentation to accompany the online entry worksheet must be submitted by the Science Teacher or Cooperative Extension Agent, deadline for online entry is September 1, if mailed, paperwork and forms must be postmarked by August 20th.
 - i. Hazardous Materials Waiver Form (if applicable)
 - ii. Non-Human Vertebrate Endorsement (if applicable)
 - iii. Adult Sponsor Safety Assessment Form
 - iv. Release of Liability and Indemnity
 - b. **Contestants are required to upload the following documentation as one pdf file and submit it by email to nmyouth@nmsu.edu by September 1, 2021. The documentation can be submitted online by the exhibitor, parent/legal guardian, or Science/Agriculture Teacher or Cooperative Extension Agent.**
 - c. Participant work should be saved as a pdf. **Students failing to submit the required documentation by the deadline of September 1, 2021 are ineligible to compete.** Documents submitted will be checked for originality and any incidence of plagiarism using Turnitin™ software. Any submission with an alert of 30% similarity will be evaluated and may be disqualified.
 - i. Abstract
 - ii. Written Manuscript
 - iii. Log listing dates of each research element. Any experiments conducted should occur after the signature date of documentation listed in 8.a.
 - iv. List of References in APA format

If the contestant does not follow the guidelines outlined above, point deductions will be taken at the discretion of the Contest Coordinator, Show Management, and Judges.

9. **Contest Format:**
 - a. **Divisions:** Contestants will compete in either the Novice, Junior, or Senior Division. However, projects will **NOT** be judged by topic.
 - b. **Display:**
 - i. All exhibits must have the following information attached to the project display:
 1. Name of student
 2. Chapter/Club/School name
 3. Division entered (i.e. junior or senior)
 - ii. Personal electronic devices (such as iPads, tablets, computers and other WiFi devices) can only be used as part of a contestant's project with the prior approval of the Contest Coordinator.
 - iii. The maximum size for a project display is 48" wide by 30" deep by 108" high (from floor to top of display, including table). Tables will be provided by NMSU.

- iv. Wall mountings are prohibited. All displays must stand on or lie flat on a table. Failure to meet these requirements can result in disqualification.
- v. Displays requiring electricity should have an internal power supply (i.e. batteries, etc.). Electricity will **NOT** be provided by the SNMSF or NMSU. All prescribed safety regulations of the NMSF will be followed.
- c. **Rounds:** If there are more than 10 entries in an age category, the judging will be split into two rounds, a preliminary round and a final round.
 - i. Preliminary judging will be done by groups. Projects will be assigned into a judging group. Contestants **MUST** compete in their assigned groups. Changes may only be approved by the Contest Coordinator or Show Management. The top scoring projects in each group will advance to the final round, so that the final round includes ten finalists. Upon arrival, contestants will be randomly assigned to a specific group.
- d. **Time allotted:** Each project display will be allocated a maximum of 15 minutes for judging. This time shall include approximately 3 to 5 minutes for the student presentation and 10 minutes for judges' questions.
- e. **Waiting area:** Contestants will wait in designated area during judging until called in for the judges interview during preliminary round to explain their research project and address questions from judges. Exceptions may be approved by contest officials.
- f. **Attire:** Contestants should be in presentable attire. Business attire or official 4-H, FFA attire is recommended.

10. Presentation Schedule Conflict: Students with conflicts due to participation in other SNMSF events held on the same day of the contest will need to notify the Contest Coordinator during project set-up to arrange a presentation time. Once the contest begins, it is the responsibility of each contestant to notify the Contest Coordinator should a conflict arise with their assigned presentation time.

11. Presentation Area: The contest location will be held on the NMSU campus. The exact location will be announced by September 10, 2021. If necessary to move the contest, participants will be notified using the cell phone on the contestant entry form or through a designated communication app.

12. Public Viewing:

- a. Only contest officials, judges, and participants are allowed in the project presentation area during the preliminary round of project judging.
- b. During the final round judging, the general public will be allowed in the judging area and seated in a designated location. The public is NOT allowed to ask questions or comment during the final judging round.
- c. After judging, a public reception will occur. Participants should be available by their boards to answer questions about their research project from interested members of the public. This will be followed by the awards ceremony.
- d. Winners will be invited to display their boards during the SNMSF. While efforts will be made to keep the projects safe, neither SNMSF nor NMSU are liable for damages to projects during display.

13. Awards:

- a. The award ceremony will follow the judging. Winners are required to be present to receive awards. Awards will not be mailed. Alternative arrangements can be made with approval from the Contest Coordinator.
- b. The following prizes will be awarded in both the Junior and Senior Divisions:

<i>Place</i>	<i>Award</i>
1st Place	Cash prize; NMSU ACES Scholarship; Buckle
2nd Place	Cash prize; NMSU ACES Scholarship; Buckle

*Prize amounts will be determined by donations.

- c. The following prizes will be awarded in the Novice Division:

<i>Place</i>	<i>Award</i>
1st Place	Cash prize; Buckle
2nd Place	Cash prize; Buckle

*Prize amounts will be determined by donations.

- d. **Tie Breaker:** In the event of a tie, the winner will be determined based on the score of the written project report. If a tie still exists, the tie will be broken on scores received from the student presentation/project display.
- e. Winners of the event are requested to attend the livestock sale for recognition and to help promote the contest in future years.

14. Topic Areas: Contestant projects must fit within one of the topic areas listed below: The topic area will not influence scoring, but are suggested to help participants focus their work in line with the mission of the contest.

- a. Sustainable Bioeconomy:
 - i. Studies related to production of renewable biological resources and the use of normally wasted byproducts as value added products. Students interested in this topic may find additional information and resources at sbar.arizona.edu, which hosts a grant NMSU is collaborating on.

Examples:

- Development of new uses for pecan hulls
- Evaluation of what encourages farmers to plant cover crops to increase soil health

- b. Animal Systems:

- i. A project in this category could include any life processes, such as health, nutrition, genetics, management and processing, as related to the study of small animals, aquaculture, livestock, dairy, horses and/or poultry.

Examples:

- Livestock nutritional advances
- Disease control strategies
- Comparison of livestock breeding synchronization

c. Environmental and Natural Resource Systems:

- i. The study of systems, instruments and technology used in natural resource management; the study of the management of soil, water, wildlife, forests and air as natural resources, or the study of wastes or pollutants, and their influence on the environment.

Examples:

- Comparison of water delivery efficiency for different acequia maintenance levels
- Comparison of farming systems that make use of locally available resources
- Development and adoption of water treatment for produced water
- Innovative practices to promote soil health
- Comparison of water movements through different soil types

d. Food Products and Processing Systems:

- i. The study of product development, quality assurance, food safety, production, sales and service, regulation and government compliance, and food service delivery technologies within the food science industry.

Examples:

- Assessment of emerging microbial contaminants and foodborne hazards
- The role of value-trait marketing of food products
- Enhancing food safety through improved processing technologies
- Development of food products with increased health benefits

e. Plant Systems:

- i. The study of plant life cycles, classifications, functions, structures, reproduction, media and nutrients, as well as growth and development practices, through the study of crops, turf grass, trees and shrubs, and/or ornamental plants.

Examples:

- Enhancing water and nutrition efficiency of crop species
- Issues and challenges related to implementing cover crops
- Comparison of genetically-modified and conventional seed/plant growth under various conditions
- Advances in weed management practices
- Comparison of plant growth of hydroponics and conventional methods

f. Power, Structural and Technical Systems:

- i. The study of agricultural equipment, power systems, alternative fuel sources and precision technology, as well as woodworking, metalworking, welding and project planning for agricultural structures.

Examples:

- Assessing processes that allow for more efficient conversion of cellulose and hemicellulose to fuel
- Comparing properties of various alternative insulation products
- Investigation of light/wind/water energy sources
- Adoption of precision agriculture using nanotechnology-based applications

g. Social Systems:

- i. The study of human behavior and the interaction of individuals in and to society, including agricultural education, agribusiness management, agricultural communication, agricultural leadership and other social science applications in agriculture, food and natural resources.

Examples:

- Investigating perceptions of community members towards alternative agricultural practices
- Determining the impact of local/state/national safety programs upon accident rates in agriculture/natural resource occupations
- Determining the economic impacts of local/state/national legislation and regulatory requirements upon agricultural production and natural resource utilization
- Enhancing economic security of sustainable farming systems
- Comparison of farming practices for improving sustainability and community economic security

15. Eligibility of Previous Winners: Winners of the Agriscience Fair at New Mexico State Fair are still eligible to present at SNMSF.

16. Resources: Participants are encouraged to use their Extension Agents, FFA Teachers, agricultural and natural resources professionals and New Mexico State University faculty as resources. While all work and research must be the student's own, they are encouraged to network and learn from people who work in the area they are researching. For additional insight regarding project development or manuscript writing, visit:

<https://www.ffa.org/participate/awards/agriscience-fair/>

http://www.nmffa.org/uploads/4/1/0/7/41075673/agriscience_fair_tips_from_the_pros.pdf