



# Agriculture Mechanics

**Online Entries:** August 1<sup>st</sup> – September 22<sup>nd</sup>, 2023  
**Exhibit Check-In:** Monday September 25<sup>th</sup> 8am-8pm  
ALL projects checked in by 8pm  
**Judging:** Tuesday September 26, 2023 10am  
**Exhibit Release:** Thursday September 28<sup>th</sup> 10pm  
**Superintendent** - Matt McLelland

\* All projects must go to livestock entry gates at Southwest Arkansas District Fair grounds for staging purposes prior to Move-In.

## Purpose of the Agricultural Mechanics Project Show

1. To provide an opportunity for 4-H and FFA members to display constructed projects.
2. To promote the development of skills in agricultural mechanics through competition.
3. To recognize individual and group accomplishments in the area of agricultural mechanics.
4. To provide an opportunity for public appreciation of this important phase of 4-H and FFA Youth Programs.

This show is subject to the Southwest Arkansas District Fair General Rules and Regulations and to the special rules of this section. Where special rules conflict with other rules, special rules prevail

## **Special Rules for Agricultural Mechanics Project Show**

1. Entries in this division are limited to Arkansas FFA and 4-H members ELIGIBLE for the Southwest Arkansas District Fair. Projects exhibited must have been constructed by FFA and 4-H members under direct supervision of the County Extension Agent or Agricultural Science Teacher.
2. Projects are to be classified by primary use or function.
3. Ineligible Projects:
  - a. Any project that cannot be placed into one of the stated classes may be disqualified by the Superintendent.
  - b. Towed or hauled projects that exceed typical or legal road and highway widths and cause city traffic flow problems are subject to disqualification and/or may not be allowed to access to Show grounds.

4. All substitutions are subject to Superintendent approval.
5. A project can be exhibited only one time at the Southwest Arkansas District Fair and must have been completed within one calendar year of the exhibition date.
6. Projects may be double decked as long as they are safely displayed and accessible for judging. Due to limited exhibit space, all chapters and clubs are encouraged to plan for double deck exhibition of projects. The Show reserves the right to display the projects as space and quantity of projects allows. It is possible that projects might be displayed at an alternate site. Buildings over 200 square feet will be disqualified.
7. All projects must be painted or properly treated and must be clean and in a presentable condition, even though they may have been used. No touch up painting of any type will be allowed once project is in place. Trailers and other equipment are to be displayed in transport position. Operation of ramps, extensions, and other special features may be demonstrated only as directed by show officials and as space permits. Floor covering is not encouraged.
8. An original plan or drawing, a bill of materials and photographs showing all phases of construction are to be provided with projects. All documentation must be typed. DOT and/or ASABE regulations and specifications must be provided as they apply to individual projects. DOT documentation must include registration and inspection and/or justification of exemption. Display of plans, photos, etc. must be done in such a manner that no additional floor space is required. Stands, podiums, computers, etc. will be permitted only when they can be positioned on or under the project.
9. Appropriate and safe display stands must be provided for gates, panels, and other projects that need support. Sharp edges and points, such as found on self-feeder roofs, bale movers, etc., are to be padded or covered as necessary to prevent injury.
10. All trailers and other equipment that is to be operated and/or transported on public roads are to be equipped with the safety equipment specified by law. All tongue equipment that is pulled on a public highway – for example: trailers, squeeze chutes, hydraulic log splitters, mowers, tillage tools, sprayers, etc. must have approved safety chains. All trailers that are rated at 4,500 pounds GWR or greater must have approved brakes and break-away equipment. This includes bumper pull, as well as gooseneck trailers. All trailers must be equipped with lift jacks for hitching and unhitching. Tie down attachments (minimum of 4) are recommended on all trailers. Any trailer that is over wide (102 inches) must have a signed permit. Trailer widths will be measured from metal to metal, including for example, fenders, wheels, and dust caps. Trailers should follow Federal Safety lighting requirements. Any trailer that does not meet these requirements will be disqualified.
11. All 120 VAC and higher electrical plugs and receptacles are to be the equipment grounding type. All metal components are to be grounded. Ground fault circuit interrupters (GFCI) are mandatory for all 120 VAC receptacles. All 50 VAC and higher connections are to be protected in appropriate indoor or outdoor rated enclosures.
12. Flammable and/or combustible liquids shall not be used, stored, or sprayed inside of any Southwest Arkansas District Livestock Show building at any time. This shall include, but not be limited to: enamel paints, thinners, reducers, gasoline, or any other petroleum-based liquids. All

liquids must be in properly labeled original containers. No compressed gas cylinders are permitted. Decoy cylinders are NOT permitted.

13. There is to be no more than two gallons of fuel in any fuel tank. The fuel tank cap is to be in place and sealed with tape. The battery is to be disconnected. This applies to all engines in the exhibit area.

14. All projects are to be identified with standard club exhibitor cards. No "For Sale" or sponsorship signs will be permitted.

15. Southwest Arkansas District Fair, officials or committee members will NOT be responsible for any loss or damage to projects.

16. Judging System:

Projects will be judged on:

<u>Criteria</u>	<u>Points</u>
a. Workmanship .....	30
b. Design and Materials Used .....	20
c. Practicality.....	20
d. Degree of Difficulty .....	10
e. General Appearance and Finish.....	10
f. Documentation and Presentation .....	10

17. Ribbons will be given as follows: Blue, Red and White. Projects receiving a red or white ribbon will not be placed as class winners.

18. Judges will select exhibitors (by entry number) to receive recognition for showmanship awards based on the following criteria:

Exhibitor showmanship will be judged on:

<u>Criteria</u>	<u>Points</u>
a. Display and presentation of projects.....	20
b. Housekeeping around projects.....	20
d. Exhibitor's dress and professionalism.....	20
e. Conduct, attitude and participation of exhibitors.....	20
f. Knowledge of fabrication and processes.....	20

20. Exhibitors are not to interfere with judging. It is recommended they be with their projects as they are judged to answer questions and demonstrate operations as requested by the judges. Agricultural Science Teachers/County Extension Agents or adult leaders are not to participate in judging activities.

## **DIVISIONS**

### **1) AGRICULTURAL MACHINERY AND EQUIPMENT CLASSES**

- 1-1. Hay Handling Equipment
- 1-2. Spraying Equipment
- 1-3. Mounted Tractor Equipment
- 1-4. Shop Tables
- 1-5. Shop Equipment
- 1-6. Truck and Tractor Accessories
- 1-7. Other Agricultural Equipment

## **2) LIVESTOCK EQUIPMENT CLASSES**

- 2-1. Entry Gates
- 2-2. Livestock Restraining and Handling Equipment
- 2-3. Livestock Show Equipment
- 2-4. Feeders (domesticated livestock only)
- 2-5. Other Livestock Equipment

## **3) BUMPER PULL TRAILER CLASSES**

- 3-1. Small Utility Trailers – 10 ft. and under in length (length of cargo space)
- 3-2. Medium Utility Trailers – More than 10ft. up to 16 ft. in length (length of cargo space)
- 3-3. Large Utility Trailers – More than 16ft. and over in length (length of cargo space)
- 3-4. Modified Utility and Implement Trailers – all lengths
- 3-5. Welding Trailers
- 3-6. Special Purpose and Other Trailers (livestock, multi-bale hay hauler, dump, etc.)

## **4) GOOSENECK TRAILER CLASSES**

- 4-1. Gooseneck Flatbed and Dovetail Trailers
- 4-2. Gooseneck Stock Trailers
- 4-3. Gooseneck Lowboy and Utility Implement Trailers
- 4-4. Other Gooseneck Trailers

## **5) HUNTING AND SPORTING EQUIPMENT**

- 5-1. Hunting Stands and Blinds
- 5-2. Wildlife Feeders
- 5-3. Wildlife Traps
- 5-4. All other Wildlife Hunting or Sport Equipment

## **6) FURNITURE**

- 6-1. Chairs/ Stools
- 6-2. Tables and Bars
- 6-3. Beds and Headboards
- 6-4. Entertainment Centers and Cabinets
- 6-5. All other Furniture

## **7) GRILLING AND COOKING**

- 7-1. Smokers, Grills, and Cookers (free standing)
- 7-2. Smokers, Grills, and Cookers (trailer mounted)
- 7-3. All other cooking projects

## **8) FIRE PITTS**

## **9) MECHANIZED ART**

- 9-1. CNC

## **10) LASER**

## **11) ANY OTHER PROJECTS**

A thorough and unique description should be utilized to describe projects. Brand names should not be used. Please utilize the example of names below....

## **1) AGRICULTURAL MACHINERY AND EQUIPMENT CLASSES**

1-1. Hay handling equipment – Examples of names and descriptions to use: 3-pt. hay fork, 3-pt. hay spear, front loader hay fork, bucket mounted hay spear, hay accumulator, pull-type single bale hay fork, hay conveyor, hay grapple, single bale hauler, etc.

1-2. Spraying Equipment -- Examples of names and descriptions to use: 500-gallon nurse tank, 40' boom type pasture sprayer, 40' broad jet pasture sprayer, 5-gallon hand sprayer, etc.

1-3. Mounted Tractor Equipment -- Examples of names and descriptions to use: 8' arena drag, 2 cubic yard scraper, 32' crust buster, 3-pt. carryall, front end loader, 7' rotary cutter, 15' flex-wing rotary cutter, 8' box blade, 14' pasture aerator, 8'-disc harrow, manure spreader, etc.

1-4. Shop Tables– Examples of names and descriptions to use: 12ft. metal shop table with vice, 6ft Shop Table with drawers.

1-5. Shop Equipment -- Examples of names and descriptions to use: shop table, jack stands, A frame, saw horses, cut-off saw table, tire storage rack, barrel rack, welding table, cutting table, engine stand, cherry picker, oxy-fuel cylinder cart, A-frame hoist, electrical outlet stand, parts cleaner, electric over hydraulic floor press, electric over hydraulic pipe bender, sheet metal roller, trailer light tester, pipe roller, cut-off saw, bio-diesel machine, etc.

1-6. Truck and Tractor Accessories – Examples of names and descriptions to use: pickup headache rack, pickup brush guard, front and/or rear pickup bumper, tractor grille guard, tractor brush guard, 3-pt. trailer coupler, pickup grille guard, truck tool box, receiver hitch carrier, ATV rack, fuel tank, welder bed for truck, air flow tailgate, custom truck bed, etc.

1-7. Other Agricultural Equipment – items that are Agricultural Machinery or equipment that do not fit into classes 1-6.

## **2) LIVESTOCK EQUIPMENT CLASSES**

*(Domesticated Livestock Equipment Only)*

2-1. Entry Gates – Examples of names and descriptions to use: 10' entrance gate, 10' pasture gate, 10' livestock panel, 24' double entrance gate with arch way, cattle guard, etc.

2-2. Livestock Restraining and Handling Equipment– Examples of names and descriptions to use: Hydraulic squeeze chute, hoof trimming table, squeeze chute with crowding pen or panels, squeeze chute, calf tilt table, farrowing crates, stalls, roping chutes, horse walker, portable alley way.

2-3. Livestock Show Equipment – Examples of names and descriptions to use: cattle trim chute, sheep trimming stand, goat trimming stand, hog clipping stand, small animal crate for pickup, hog weighing station, animal scale, show box, grooming light stand, grooming stand with lights and outlets, livestock show display, lamb treadmill, chicken brooder, clipper blade sharpener, livestock blower, horse walker, etc.

2-4. Feeders – Examples of names and descriptions to use: wind-vane mineral feeder, 8' open feed trough, 6' x 4' mineral and salt feeder, hanging hay feeder for horse stall, 12' hay/grain feeder, 1-ton self-feeder, 8' creep feeder, 12' trailer mounted self-feeder, 10' combination self-feeder/creep feeder, etc. No Wildlife feeders such as timed-tripod feeders, mineral feeders, etc.

2-5. Other Livestock Equipment – Examples of names and descriptions to use: saddle rack, feed dolly, sales ring, auction stand, storage buildings (less than 200 sq. ft. ONLY). No wildlife projects such as deer stands (blinds), observation towers, hog traps, cages or hunting equipment.

### **3) BUMPER PULL TRAILER CLASSES**

3-1. Small Utility Trailers – 10ft. and under in length – Examples of names and descriptions to use: 8' utility trailer, 10' tilt-bed utility trailer, 10' tandem axle utility trailer, etc.

3-2. Medium Utility Trailers – More than 10ft. up to 16 ft. in length – Examples of names and descriptions to use: 12' utility trailer, 12' tilt-bed utility trailer, 15' utility trailer, etc.

3-3. Large Utility Trailers – Over 16 ft. in length – Examples of names and descriptions to use: 18' tilt-bed utility trailer, 18' utility trailer, etc.

3-4. Modified Utility and Implement Trailers – Note: Drop-bed trailers, trailers without side rails, landscape trailers, and other special purpose trailers that do not fit into the traditional trailer classes are to be entered in this class. Examples of names and descriptions to use: 14' flatbed equipment trailer, 16' landscape trailer, 10' drop-bed utility trailer, etc.

3-5. Welding Trailers – Examples of names and descriptions to use: 14' welding trailer, 18' welding trailer with cutting torch, etc.

3-6. Special Purpose and Other Trailers – Examples of names and descriptions to use: multi bale hay hauler, livestock, dump bed trailer, etc.

### **4) GOOSENECK TRAILER CLASSES**

4-1. Gooseneck Flatbed and Dovetail Trailers – Examples of names and descriptions to use: 32' gooseneck float, 32' gooseneck dovetail float, etc.

4-2. Gooseneck Stock Trailers – Examples of names and descriptions to use: 24' gooseneck stock trailer, 24' porta-frame gooseneck stock trailer, etc.

4-3. Gooseneck Lowboy and Utility Implement Trailers – Examples of names and descriptions to use: 24' gooseneck lowboy, 20' gooseneck lowboy with ramps, 28' gooseneck combines hauler, etc.

4-4. Other Gooseneck Trailers – Examples of names and descriptions to use: 14' welder trailer, 12' hydraulic dump bed trailer, etc.

### **5) HUNTING AND SPORTING EQUIPMENT**

5-1. Hunting Stands and Blinds – Examples of names and descriptions to use: 10' tri-pod deer stand, 14' floating duck blind, 20' portable break-over deer stand, and 15' telescoping deer stand

5-2. Wildlife Feeders - Examples of names and descriptions to use: timer-controlled feeder, manual feeder, animal triggered feeder, continuous feeder, timed-tripod feeders, mineral feeders

5-3. Wildlife Traps - Examples of names and descriptions to use: live trap, spring trap, automated catchment trap, animal triggered catchment trap, portable trap

5-4. Other Wildlife Hunting or Sport Equipment -- All other Wildlife Hunting or Sport Equipment

## **6) FURNITURE**

6-1. Chairs/ Stools - Examples of names and descriptions to use: Adirondack chair, straight back chair, rocking chair, outdoor bar stool

6-2. Tables and Bars - Examples of names and descriptions to use: oak dining table, cedar outdoor table, picnic table, hexagon picnic table

6-3. Beds and Headboards - Examples of names and descriptions to use: twin, full, queen, king size bed or headboard

6-4. Entertainment Centers and Cabinets - Examples of names and descriptions to use: modular entertainment center, media cabinet, TV console

6-5. Other Furniture -- All Other Furniture

## **7) GRILLING AND COOKING**

7-1. Smokers, Grills, and Cookers (free standing) - Examples of names and descriptions to use: portable charcoal/wood grill, non- portable charcoal/wood grill, charcoal/ wood smoker, grill & smoker combination

7-2. Smokers, Grills, and Cookers (trailer mounted) - Examples of names and descriptions to use: trailer mounted charcoal/wood grill, trailer mounted wood/charcoal/gas cooking station

7-3. Other cooking projects -- All other cooking projects

## **8) FIRE PITS**

## **9) MECHANIZED ART**

9-1. CNC

## **10) LASER**

## **11) ANY OTHER PROJECTS**