



ND FFA Association

TRACTOR OPERATOR CONTEST

Handbook

Purpose

To promote and encourage safe and skillful farm tractor operation.

Event Rules & Format

There is a Basic Division and an Advanced Division. The contest format will be the same for both divisions except for the tractor, the width of the implement, and the driving time allowed. The contest will be held at the North Dakota State Fair (NDSF) Industrial Parking Lot–North Side (East of Co Rd) on the first day of the NDSF. Contestants are to report to the contest site: Industrial Parking Lot–North Side (East of Co Rd) by 8:00 am for registration and a contest briefing. There will be a practice session the day before the contest from 4:00 to 6:30 pm Industrial Parking Lot–North Side (East of Co Rd). No practice the morning of the contest will be allowed.

Contestant Eligibility

1. To be eligible to participate the student must have completed an agricultural education course and appear on the chapter FFA membership roster.
2. Contestants entered in the Basic Division must have been a seventh grader, eighth grader, or freshmen in the previous school year. State winners of the Basic Division are no longer eligible to compete in the Basic Division and must participate in the Advanced Division.
3. Contestants entered in the Advanced Division must have been a sophomore, junior, or senior in the previous school year or the state winner of the Basic Division in a previous year. Previous state winners of the Advanced Divisions are no longer eligible to compete in the tractor operator contest.
4. District Elimination – Each district may enter four contestants in the Basic Division and four contestants in the Advanced Division at the NDSF contest. Each district shall arrange its own tractor operator event and the determination of the district's representatives shall be left to the discretion of the district; however, a district contest is recommended. Tie-breakers must be decided by the district.

Use of Artificial Intelligence (AI) for North Dakota Programs and Events

Artificial intelligence (AI) refers to computer systems capable of performing complex tasks that historically only a human could do, such as reasoning, making decisions, or solving problems. As AI continues to evolve, it can be a tremendous tool to help companies, organizations and individuals enhance their productivity and work. Therefore, the North Dakota FFA Organization allows the use of AI

tools. FFA members may use AI tools, such as ChatGPT, Gemini, and CoPilot, to assist them in their learning.

Appropriate uses of AI may include:

- generating ideas for any FFA-related assignments, projects, contests and award applications
- checking facts of a phenomenon
- checking for and correcting grammatical errors in a paper written by a member

For more information, please see the Standard Operating Procedures on the Use of Artificial Intelligence (AI) for North Dakota Programs and Events in CDE, LDE, and Activities Policy Manual – General Rules

Team Activities

Not applicable.

Individual Activities

Written Test

The written examination will consist of 30 multiple choice questions on tractor operation, safety, and daily maintenance which the contestant should be able to answer as a tractor operator. A 100 item scantron sheet will be used to record answers.

All scoring for this contest will be on a penalty point system. In other words, the lowest score wins. On the written examination, 10 points will be added for each question missed.

The current issue of the National Safe Tractor and Machinery Operation Program Student Manual ISBN# 9780913163498 will be used as the resource for questions. Copies for purchase are available online at <https://rowman.com/> through the Rowman & Littlefield Publishers website. Enter the ISBN# number in the search engine bar and you will be taken to the page for the manual.

Practicum

A practicum will consist of 20 questions worth 15 points each. A 100 item scantron sheet will be used to record answers. Questions will be related to troubleshooting and use of the operator's manual. Manuals and measuring instruments required to complete this section of the contest will be provided. Contestants will be allowed 20 minutes.

Note to Contestants: The safety scoring and scoring on accuracy of driving, as well as the points for the written test and practicum, are so severe that speed is not an important factor in winning this contest.

Tractor Driving

Each contestant will drive through the North Dakota Tractor Operator and Two-Wheel Course Layout as illustrated on ndffa.org. Scoring will be based on time, safety, and accuracy according to the scorecard. An attempt will be made to obtain three makes of popular, modern farm tractors. Each contest will be designated one of these tractors; the third tractor will be used for the practicum.

Prior to the contest each contestant will be allowed a five-minute practice period on the contest tractor. This practice may be with the tractor only and not on the contest track. Practice must be taken according to the official schedule. (4:00 – 6:30 pm Thursday). No practice on the day of the contest.

Scoring

Each contestant must drive the course according to the North Dakota Tractor Operator and Two-Wheel Course Layout. A four-minute time will be used for the Basic Division and Advanced Division. A penalty of two points per second will be added to the contestant's score for each second over the specified time limit. All contestants will be stopped at the end of five minutes and if the course is not completed, that contestant will be disqualified. Measurements for the course will be based on the widest part of the golf ball holding device (cone, pole, etc.). Measurements from the tractor will be based on the widest part of the tractor or trailer, whichever is wider, to determine the width of the course.

Scoring Summary

Event	Individual Points	Notes
Safe Operation	0 to 1000	Depending on safety violations
Tractor Driving	0 to 1000	Depending on time & accuracy
Written Test	300	Maximum
Practicum	300	Maximum
<i>The lowest score will be the winner</i>		

Awards

Awards will be presented at the awards ceremony to individuals and/or teams based upon their rankings. Awards will be presented the day of the contest. Individuals will be ranked gold, silver, and bronze. Gold individuals will receive medals. The high individual in each division will receive the "baby bison" trophy and a \$250.00 award. In the event of a tie, both individuals will receive a "baby bison" trophy and a \$250.00 award.

See the Awards section of the Career and Leadership Development Events and Activities Policies and Procedure for additional award guidelines.

References & Resources

1. ndffa.org for the North Dakota Tractor Operator and Two-Wheel Course Layout.
2. ndffa.org for the Safe Operation Score Card and Two-Wheel Driving Scoring Card.
3. National Safe Tractor and Machinery Operation Program Student Manual ISBN# 978091316349



SAFE OPERATION SCORE CARD

Contestant's Name _____ Chapter _____

Procedure:

One judge will score the contestant on safety while driving the course. This judge will stop and disqualify the contestant any time the tractor operation endangers the operator and/or spectators. This judge, at his/her discretion, may require any contestant to change direction of he/she gets into a cramped position which may cause damage to contest equipment.

The tractor and implement will be parked in position at the starting line with the engine shut off. The contestant will get on the tractor, **CHECK TO ENSURE THE PARK BRAKE IS SET, APPLY THE BRAKE/CLUTCH PEDAL, SHIFT TO NEUTRAL, START THE ENGINE**, and notify the starting judge when ready to start.

The contestant will then shift into gear, release the brakes, and start driving the course. The time will start at this point. The contestant must follow the course outline. Tractor operator must drive the tractor/trailer through all of the stakes according to the course layout

When finished driving, the operator will **DEPRESS THE BRAKE/CLUTCH PEDAL, SET THE PARK BRAKE, SHIFT TO NEUTRAL OR PARK POSITION, AND SHUT THE ENGINE OFF**. The time will be stopped when the engine is shut off.

Starting Safety

	<u>No. of Times</u>	<u>Points Added</u>
1. Failure to check neutral position	X 25	_____
2. Failure to depress clutch/brake while starting the engine	X 25	_____

Driving Safety:

1. Failure to release clutch/brake gently	X 25	_____
2. Failure to depress brake/clutch pedal when shifting gears.	X 25	_____
3. Skidding or spinning wheels	X 100	_____
4. Turning too short or fouling implement	X 50	_____
5. Moving tractor with park brake set	X 10	_____
6. Any turn which causes rear wheels to leave the ground	Disqualifies the contestant	

Mounting and Dismounting Safety:

1. Failure to set park brake and/or shift to park position before dismounting	X 50	_____
2. Failure to bring tractor to complete stop before dismounting	X 50	_____
3. Failure to use seatbelt	Disqualifies the contestant	
4. Failure to safely dismount the tractor backwards, using three points of contact.	X 50	_____

Other Safety Violations:

- List and explain _____

TOTAL POINTS _____

NOTE TO CONTESTANTS: The safety scoring and scoring on accuracy of driving are so severe that speed is not an important factor in winning this contest.



FFA SCORE CARD FOR TWO-WHEEL DRIVING EVENT

Contestant's Name _____ Chapter _____

Procedure:

Two judges will be available for timing, recording, measuring, and observing this part of the contest. Their decisions are final and any interference with the judges will disqualify the operator.

The tractor and implement will be parked in position at the starting line with the engine shut off. The contestant will get on the tractor, **CHECK TO ENSURE THE PARK BRAKE IS SET, APPLY THE BRAKE/CLUTCH PEDAL, SHIFT TO NEUTRAL, START THE ENGINE**, and notify the starting judge when ready to start.

The contestant will then shift into gear, release the brakes, and start driving the course. The time will start at this point. The contestant must follow the course outline. Tractor operator must drive the tractor/trailer through all of the stakes according to the course layout.

When finished driving, the operator will **DEPRESS THE BRAKE/CLUTCH PEDAL, SET THE PARK BRAKE, SHIFT TO NEUTRAL OR PARK POSITION, AND SHUT THE ENGINE OFF**. The time will be stopped when the engine is shut off.

	<u>No. of Times</u>	<u>Points Added</u>
1. Hitting stakes, golf ball dislodged	_____ X 50	_____
2. Stakes knocked out of line so that ball will not stay on top (add) 50 points	_____ X 50	_____
3. Tractor engine stalled	_____ X 10	_____
4. Grinding gears	_____ X 10	_____
5. Riding the clutch/brake (max 100 points)	_____ X 10	_____
<u>Measurement</u>		
6. Measuring. The trailer should be centered in the shed when finished driving.		
A. Inches off center of front	_____ X 10	_____
B. Inches off center of rear	_____ X 10	_____
C. Inches in excess of two from the rear stake (two inches is perfect)	_____ X 10	_____
7. Time: _____ (time to complete course) Basic/Advanced: Max time of four minutes		
• Penalty for not completing the course in the allotted time	_____ (seconds over) X 2	_____

A penalty of two points per second will be added to the contestant's score for each second over the specified time limit. All contestants will be stopped at the end of five minutes and if the course is not completed, that contestant will be disqualified.

TOTAL POINTS _____

