

# EDUCATIONAL TRUNKS



NDSU | EXTENSION

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## Educational trunks are resources provided by the Center for 4-H. These hands-on lessons include directions and most necessary materials.

With the support of the North Dakota 4-H Foundation, North Dakota 4-H has created several 4-H educational resource trunks for Extension staff, volunteer leaders and 4-H members to check out and use in their 4-H programming efforts.

### Where Trunks Are Housed:

- NDSU Agriculture Communication Distribution Center, Morrill Hall 10, Fargo
  - Contact person – Blaine Erovick, [ndsudistributioncenter@ndsu.edu](mailto:ndsudistributioncenter@ndsu.edu), 701-231-7883
- NDSU Extension | Morton County office, 210 2nd Ave. N.W., Mandan
  - Contact person – Kari Presler, [kari.presler@ndsu.edu](mailto:kari.presler@ndsu.edu), 701-667-3340
- NDSU Extension | Ward County Extension office, Courthouse, Room 101, Minot
  - Contact person – Emily Goff, [emily.goff@ndsu.edu](mailto:emily.goff@ndsu.edu), 701-857-6450

### Checkout Procedure

- 4-H volunteers and members must contact the Extension office in their county to reserve a trunk for their use. Only county Extension staff can make the reservations for these trunks.
- Trunks can be checked out for up to 30 days.
- Check the online trunk calendars to see when trunks are available from Fargo and Mandan
  - To reserve trunks in Ward County, you will need to call the contact person in that county.
- Volunteers and county staff are responsible for completing an inventory of trunk materials and a reporting form sheet found inside the trunk. Complete the inventory before using the trunk and again after it has been used.
- The inventory and reporting forms must be returned with the trunk or faxed to 701-231-8568.

## Rules for the 4-H Educational Trunks

The educational trunks are a great resource for supporting the educational component of the 4-H youth development experience. They include hands-on lessons, directions and the necessary materials to conduct a lesson on topics related to many subject matter areas in 4-H.

Managing these trunks without your help would not be possible. These expectations must be met for counties to continue to use the 4-H trunks:

- The inventory and reporting form must be returned with the trunk or faxed to 701-231-8568.
- If these forms are not returned with the trunk and pieces are missing, counties using the trunk will be charged for the missing items.
- That office will be restricted from reserving future/additional trunks until the bill has been paid.

To prevent your office from being charged for a missing item, you must do an inventory of the trunk when you receive it and when you return it. If something is missing when you receive the trunk, please notify the Center for 4-H immediately.

## Trunk Supplies

- The user should replace all consumable items, such as batteries, before returning the trunk. Exceptions are:
  - Adhesive, 4-H paper and 4-H stickers in the scrapbooking trunk
  - Owl pellets in the raptors trunk
- Please indicate that items are low or depleted on the inventory sheet so they can be replaced.

## Questions?

Email [NDSU.4-H@ndsu.edu](mailto:NDSU.4-H@ndsu.edu)

## Trunks Available from the Distribution Center

(10 Morrill Hall, NDSU, Fargo)



### Agriculture

#### • Crop Seed Cleaning Trunk

This is a resource for youth wanting to clean a grain exhibit. This trunk contains a bottom pan, along with five sieves (12/64-inch round, 5/64-inch triangle, 1/12-inch round, .064- by 3/8-inch oblong, 5/64-inch round), to help participants remove smaller seed and impurities from a sample.

#### • Healthy Soils Trunk

Healthy soil is productive soil. This kit contains lesson plans and supplies to conduct activities on soil water movement, rainfall simulation, water-holding capacity, soil structure and soil aggregate stability. The trunk includes items such as graduated cylinders, funnels, brushes and sieves. The user must provide soil and some of the larger catch containers.

### Animal and Plant Science



#### • Beef Learning Laboratory Trunk

This resource contains material from the Masters of the Learning Laboratory kit, including situation/task statements, charts and diagrams, identification tags and instructions.

#### • Dairy Learning Laboratory Trunk

This resource contains a curriculum guide with the "Critical Points of Quality Assurance and Animal Care" video, charts and diagrams, identification tags, planning calendar and much more.

#### • Dog Learning Laboratory Trunk

This Educators Resource Materials set contains material from the Masters of the Learning Laboratory kit, including situation/task statements, charts and diagrams, identification tags and instructions.

#### • Goat Learning Laboratory Trunk

This resource contains a curriculum guide with the "Critical Points of Quality Assurance and Animal Care" video, hoof trimming poster, digestive track poster and much more.

#### • Hippology Trunk

Hippology is the study of horses. By using the trunk, 4-H youth can study and learn about horses without owning a horse. This trunk covers all aspects of horses and prepares youth for the 4-H hippology contest by providing stations, tests and team problems for study purposes.

#### • Horse Learning Laboratory Trunk

This kit contains an animal skeleton structure poster, feed and seed samples, an injection sites poster, a DVD on ground-handling horses safely and much more.

#### • Livestock Skill-a-thon Trunk

This resource contains laminated pictures of livestock equipment, feed samples, quizzes, individual and team quality assurance exercises, breeding exercises, feeding exercises, livestock calculations for skill-a-thon contests, interpreting forage quality reports and judging performance classes.

### • Plant Identification Learning Laboratory Trunk

Its purpose is to introduce students to the basic concepts and terminology used in the identification of deciduous trees and shrubs.

### • Poultry Learning Laboratory Trunk

This kit contains a bird medication product label and insert posters, bird comb identification poster, egg quality image color cards and much more.

### • Sheep Learning Laboratory Trunk

This kit contains an animal parts identification poster, wholesale meat cut poster, disease matching cards and much more.

### • Swine Learning Laboratory Trunk

This kit contains an educators curriculum guide, animal skeleton structure poster, ear notches, color loin prints, meat science CD-ROM and much more.

## Energy



Energy makes change. It produces a change of some kind; it does things for us. Scientists define energy as the ability to do work. Energy is found in many different forms, such as light, heat, sound and motion. Each specific trunk focuses on a particular form of energy.

### • Science of Energy Trunk (for ages 9 to 18)

This trunk includes instructions for hands-on experiments that youth can use to teach themselves and others about forms of energy and energy transformation. This trunk includes a teachers guide for grades four to eight and another for grades nine to 12, plus most supplies to conduct the experiments.

The teachers guides also include correlations to national science content standards.

## Expressive Arts



### • Advanced Leathercraft Trunk

This trunk includes alphabet stamps, sponges, dye, and an assortment of stamps and tools. This trunk also includes several disposable leather pieces.

### • Beginner Leathercraft Trunk

This trunk includes alphabet, picture and number stamps. This trunk also includes some dye and several disposable leather pieces.

### • Cake Decorating Trunk

Cake decorating is one of the sugar arts that use icing or frosting and other edible decorative elements to make plain cakes more visually interesting. This trunk has assembled assorted tips, molds and decorating tools to help youth learn simple decorating procedures as well as more intricate techniques. Youth can start with the basics of making a consistent buttercream, then advance to working with stencils and molds, and learning fun fondant techniques and how to make nail flowers. The resource binder includes beginner lesson plans, the 4-H Cake Decorating Curriculum and additional cake decorating resources.

### • Jewelry Making Trunk

The purpose of this trunk is to introduce young people to jewelry making as a hobby and perhaps a future entrepreneurial endeavor. The lessons provided with the trunk are two Cloverbud-level lessons and three regular club member age (Leader Learn About) lessons, although older 4-H'ers may enjoy working with Cloverbuds

in the two lessons designed for our younger 4-H'ers. The lessons are an introduction to basic jewelry making skills, for a total of five different lessons.

The trunk contains tools and equipment for 12 people to make polymer clay beads, 12 people to make a fiber and bead wristband, and 12 people to make rings or wire and bead dangles that can be made into earrings, bracelets or necklaces. The trunk is designed to serve 36 participants and support three different sessions being held at the same time period, such as a Youth Activity Day.

### • Scrapbooking Trunk

This trunk is designed to encourage youth to record and preserve their memories and/or heritage using photographs, journaling, memorabilia and embellishments.



## Family Consumer Science

### • Sewing Trunk

This trunk includes five sewing machines, basic sewing supplies and lesson materials needed to complete a beginner quilt for approximately five participants.

## Leadership Trunks

### • The Big Box of Leadership and Team Building Trunk

This trunk features the books "The Big Book of Humorous Training Games," "The Big Book of Team Motivating Games" and "The Big Book of Leadership Games." This leadership trunk works well with teams who are short term or whose members are just getting to know each other. The activities work well with people who are not wanting to be very active, yet still want to go beyond sitting and listening.

### • The Leadership Challenge Trunk

This trunk features the books "Building Everyday Leadership In All Teens" (Mariam MacGregor), "Building Everyday Leadership In All Kids" (Mariam MacGregor) and "The Leadership Challenge Activities Book" (Kouzes and Posner). This trunk works well with groups who are going to be working together for a long period of time. All of these books feature activities that build off each other or can be used independently.

## Nutrition and Wellness



### • Eat Smart! Play Hard! Trunk

Are you looking for something to help your 4-H club be recognized as a Healthy 4-H Club? Are you looking for fun nutrition and physical activity ideas to incorporate into your club meetings and/or county activities? Check out the Eat Smart! Play Hard! 4-H trunk. The trunk is filled with games and equipment to emphasize healthful eating and physical activity. Items include a Glo-germ kit, 12-foot parachute, MyPlate food bingo, MyPlate activity mat and Dairy Council food models. The resource binder includes additional ideas and snack recipes.

## Outdoor Education



### • Air Quality Trunk

These experiments will guide youth through four ways of monitoring air quality. Some airborne particles are large enough to be seen with the naked eye or under low-power magnification of a microscope. These dust particles are transported by the wind and also are affected by gravity. Youth will collect these wind-blown particles with the following five monitoring procedures: dust particle collecting, deterioration of nylon, fabric fading, smoke

monitoring and pollutants dissolved in rainwater. Each method will take a commitment to monitoring the effects of the local air quality on each of the materials that will be used for the monitoring exercise. The instructor is responsible for choosing activities that are age-appropriate; completing all the monitoring activities with all ages is not necessary. The last exercise (Pollution Dissolved in Rainwater) is designed for older youth in junior high to high school. This also would be an excellent activity to do in a school chemistry (10th grade) or environment class.

### • Bird Study Trunk

*(The Bird Watching Trunk has been combined with the Bird Study Trunk)*

This kit includes binoculars, field identification books, an electronic bird song identifier, replica bird eggs and other resources to get youth and adults started in bird watching. Also included in the kit is the “Bird Watching in North Dakota” guide developed by Floramay Miller and Dean Aakre.

### • Dutch Oven Cooking Trunk

Contains cast iron Dutch ovens, instructions and recipes.

### • Entomology: Cloverbud Trunk

This is a trunk with very basic equipment and activities. It is intended to develop the understanding of the definition of an insect and insect parts, and ways to identify common insects. The kit contains reference models for insect development, three activity guides, some basic collecting equipment, two microscopes, reference slides and clay for modeling.

### • Entomology Level 1 Insect Trunk

This trunk is based on insect collection and identification. The trunk contains activity guides, reference guides, collection equipment and two microscopes with reference slides. An example of an insect trap is included. Insect surveys and activities offered online at Butterfly: WINGS, Pollinator: LIVE and Lost Ladybug Project can be completed as part of this trunk.

### • In-line Spinners Trunk

This trunk is designed around the sport fishing curriculum helpers guide. Activities are designed to teach youth and adults about fish habits and preferences based on bait presentation methods. The trunk contains materials to create in-line Mepps-type spinners.

### • Raptors Trunk (Hawks and Owls)

Explore the life of raptors by dissecting bowel pellets and identifying the remains of prey animals in the owl’s diet. This trunk includes replica parts and resource books.

### • Upland Game Bird Identification Trunk

This trunk contains lessons plans, upland game bird wings and quiz sheet, upland game bird identification resources, educational resources emphasizing fun and learning, and discussion questions.

### • Whistling Dakota Style Trunk

This trunk contains wood forms and instructions for making your own wooden whistles. Do not freeze.

### • Wildlife Call Trunk

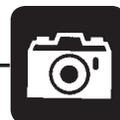
– **Predator Calling:** This section includes a number of calls for calling predators, along with written and taped instructions on how to use the calls and short written instructions on when and where to do predator calling.

- **Big-game Animals:** This section includes a number of calls used in calling big-game animals, along with information on when and where to call.
- **Turkey Calling:** This part includes a number of different types of turkey calls, along with written and taped instructions on how and when to use the calls.
- **History of Animal Calls:** This is a short written session on who uses calls, and when and why we use them during hunting.

### • Wildlife Tracks Trunk

This kit contains rubber tracks and rubber scat (feces) for common North Dakota animals, such as beaver, skunk, bobcat, coyote, raccoon, mink, muskrat and deer. Other materials, such as wildlife identification books and lesson plans, are included in the box.

## Science and Technology



### • Astronomy Trunk

This trunk includes two Celestron telescopes, star finders and books with activities.

### • Electronic Snap Kits Trunk

This trunk contains eight kits and is designed to be used with ages 8 and older. The instruction book contains a definition of electrical terms and 100 projects for students to complete. Students will learn electrical terms and how to build circuits utilizing different electrical components. The project booklet has complete, simple diagrams of each project, and parts are color-coded.

We recommend leaders do not use more than 90 minutes for the activity, and the youth should take a break halfway through the activity. This project is useful for more than one session.

### • Geocaching Trunk

This trunk includes six Garmin eTrex GPS units, geocaching instructions and books on geocaching.

### • GPS Trunk – Garmin eTrex Legend

This trunk is designed to teach the basics of geospatial positioning. This trunk includes 10 hand-held Garmin eTrex Legend GPS units, a leaders resource binder, GPS basic PowerPoint, instruction books, PC interface cables to connect the GPS units to the computer and 10 laminated instruction sheets on how to facilitate an elementary scavenger hunt.

### • Lawn and Garden Equipment Learning Laboratory Trunk

This resource contains material from the masters of the learning laboratory kit, including situation/task statements, charts and diagrams, identification tags and instructions.

### • Lego Crazy Action Contraption Trunk

This trunk is for youth ages 7 and older who love to build and invent. It comes with step-by-step instructions and supplies to build 10 contraptions, including a rubber band racer, spinning tops, a balloon-powered rocket car, automatic field goal kicker, pingpong popper and candy machine.

### • Lego Mindstorms Robotics Trunk

The NXT is an intelligent computer-controlled Lego brick and the brain of this MINDSTORMS robot. With this trunk, you will find four NXT Robotics sets, extra pieces, instructions and resources to build and program several different robots. This trunk is designed for ages 12 and older.

## • Lego WeDo Robotics Trunk

The LEGO Education WeDo Robotics Trunk is an easy-to-use robotics construction set that introduces youth ages 7 and older to building models featuring motors and sensors, programming their models and exploring a series of activities. This trunk includes six WeDo construction sets, four activity packs and software. You will need laptops or desktop computer to program the robot creations.

## • Mouse Mischief Trunk

Mouse Mischief is a PowerPoint add-in that allows you to create and play interactive, multiple-mouse presentations. The presenters must have PowerPoint on their computer to have this work. This trunk contains 12 wireless mice with receivers and a binder with instructions and resources for using the trunk.

## • Orienteering Trunk

This trunk includes five compasses, one package of dry-erase markers, three topographic maps and a guide book.

# Trunks Available in Western North Dakota

*(Housed at Extension's Morton County office, Mandan, unless otherwise noted)*

## Animal Science



### • Beef Learning Laboratory Trunk

This resource contains material from the Masters of the Learning Laboratory kit, including situation/task statements, charts and diagrams, identification tags and instructions.

### • Hippology Trunk

Hippology is the study of horses. By using the trunk, 4-H youth can study and learn about horses without owning a horse. This trunk covers all aspects of horses and prepares youth for the 4-H hippology contest by providing stations, tests and team problems for study purposes.

### • Horse Learning Laboratory Trunk

This kit contains an animal skeleton structure poster, feed and seed samples, an injection sites poster, a video on ground-handling horses safely and much more.

### • Sheep Learning Laboratory Trunk

This kit contains an animal parts identification poster, wholesale meat cut poster, disease matching cards and much more.

### • Swine Learning Laboratory Trunk

This kit contains an educators curriculum guide, animal skeleton structure poster, ear notches, color loin prints, meat science CD-ROM and much more.

## Energy



### • Science of Energy Trunk (for ages 9 to 18)

This trunk includes instructions for hands-on experiments that youth can use to teach themselves and others about forms of energy and energy transformation. This trunk includes a teachers guide for grades four to eight and another for grades nine to 12, plus most supplies to conduct the experiments. The teachers guides also include correlations to national science content standards.

## Expressive Arts



### • Leathercraft Trunk

This trunk includes alphabet stamps, sponges, dye, mallets boards, an assortment of stamps and tools. The trunk also contains several disposable leather pieces.

### • Scrapbooking Trunk

This trunk is designed to encourage youth to record and preserve their memories and/or heritage using photographs, journaling, memorabilia and embellishments. This trunk includes a resource binder, cutting tools, a limited amount of paper, stickers, adhesives, markers/pens and scissors.



## Family Consumer Science

### • Quilting for Fun Trunk

This trunk includes five sewing machines, basic sewing supplies and lesson materials needed to complete a beginner quilt for approximately five participants.

## Leadership Trunk

### • Livestock Skill-a-thon Trunk

This resource contains laminated pictures of livestock, equipment, feed samples, quizzes, individual and team quality assurance exercises, breeding exercises, feeding exercises, livestock calculations for skill-a-thon contests, interpreting forage quality reports and judging performance classes.

### • Rabbit Learning Laboratory Kit

This resource contains Masters of Learning Laboratory kit contents: situation/task statements, charts and diagrams, identification tags and instructions. Posters, charters and prints are laminated. The kit includes an animal parts identification poster; ailments and disorders poster; safe animal handling/caging activity mat (hutch aerial view); structural correctness poster focusing on ears, hips, legs and tail; reading tattoos activity components; tattooing set; rabbit ear template; hutch diagram poster; faults and disqualification charts; sanitation and health activity components; rabbit sex determination activity components; rabbit genetics/selection poster, chart and image cards; and color breed identification prints with name tags and trait descriptions.

## Nutrition and Wellness



### • Eat Smart! Play Hard! Trunk

Are you looking for something to help your 4-H club be recognized as a Healthy 4-H Club? Are you looking for fun nutrition and physical activity ideas to incorporate into your club meetings and/or county activities? Check out the Eat Smart! Play Hard! 4-H trunk. The trunk is filled with games and equipment to emphasize healthful eating and physical activity. Items include a Glo-germ kit, 12-foot parachute, MyPlate food bingo, MyPlate activity mat and Dairy Council food models. The resource binder includes additional ideas and snack recipes.

## Science and Technology



### • GPS Trunk – Garmin eTrex

This trunk is designed to teach the basics of geospatial positioning. This trunk includes 10 hand-held Garmin eTrex GPS units, a leaders resource binder, GPS basic PowerPoint, instruction books, PC interface cables to connect the GPS units to the computer and 10 laminated instruction sheets on how to facilitate an elementary scavenger hunt.

- **Geocaching Trunk**

This trunk includes six Garmin eTrex GPS units, geocaching instructions and books on geocaching.

- **Lego Crazy Action Contraption Trunk**

This trunk is for youth ages 7 and older who love to build and invent. It comes with step-by-step instructions and supplies to build 10 contraptions, including a rubber band racer, spinning tops, a balloon-powered rocket car, automatic field goal kicker, pingpong popper and candy machine.

- **Lego Mindstorms NXT Robotics Trunk**

This trunk contains four Lego Mindstorms NXT robotics kits, a resource binder and books to help you build and program robots.

- **Orienteering Trunk**

This trunk includes five compasses, one package of dry-erase markers, three topographical maps and a guide book.

- **WeDo Robotics Trunk**

The LEGO Education WeDo Robotics Trunk is an easy-to-use robotics construction set that introduces youth ages 7 and older to building models featuring motors and sensors, programming their models and exploring a series of activities. This trunk includes six WeDo construction sets, four activity packs and software. You will need laptops or desktop computers to program the robot creations.



## Outdoor Education

- **Bird Watching Trunk**

This kit contains binoculars, field identification books, an electronic bird song identifier, replica bird eggs and other resources to get youth and adults started in bird watching. The kit contains different sizes and types of binoculars so users can try out different styles to determine which is best suited to their needs. Also included in the kit is the "Bird Watching in North Dakota" guide developed by Floramay Miller and Dean Aakre.

- **Fly Tying Educational Trunk**

Youth learn about fly fishing and fly tying. The trunk contains 10 fly rods with reels, 10 sets of fly-tying equipment, an educational video and CD, and a three-ring binder with hands-on activities. Request the trunk well in advance and specify the approximate number of youth to be involved in the activity so adequate supplies can be included. Users will be charged for the fly-tying supplies used.

## Trunks Available in North-central North Dakota

(Housed in Extension's Ward County office, Minot)

### Animal Science



- **Hippology**

Hippology is the study of horses. 4-H youth can study and learn about horses without owning a horse. This trunk covers all aspects of horses and prepares youth for the 4-H hippology contest by providing stations, tests and team problems for study purposes.

### Science and Technology



- **Flip Video Pocket Camera Trunk**

Youth can use this trunk to learn about filmmaking. The trunk includes several pocket video cameras and resources to learn how to create a video.

- **Garmin eTrex Venture HC GPS Trunk**

This trunk is designed to teach the basics of geospatial positioning. This trunk includes 10 hand-held Garmin eTrex Venture HC units, a leaders resource binder, GPS basic PowerPoint, instruction books, PC interface cables to connect the GPS units to the computer and 10 laminated instruction sheets on how to facilitate an elementary scavenger hunt.

- **WeDo Robotics Trunk**

The LEGO Education WeDo Robotics Trunk is an easy-to-use robotics construction set that introduces youth ages 7 and older to building models featuring motors and sensors, programming their models and exploring a series of activities. This trunk includes six WeDo construction sets, four activity packs and software. You will need laptops or desktops to program the robot creations.

*NDSU Extension does not endorse commercial products or companies even though reference may be made to trade names, trademarks or service names.*

## Visit North Dakota 4-H on line at [www.ndsu.edu/4h](http://www.ndsu.edu/4h)

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County commissions, North Dakota State University and U.S. Department of Agriculture cooperating.

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This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881.