

DIVISION 15: NATURAL RESOURCES

Section #1: Entomology

Note: Entomology Workbook required. Entomology is the study of insects. Insects have three body regions, three pairs of legs and one pair of antennae, wings in adult stage, typically two pair. Spiders are Arachnida which have four pair of legs, two body regions and no antennae.

Exhibits in Entomology are limited to insect specimens only.

1. Older members may start with Unit 2.
2. Each year 4-H members build on their collection by adding new insects as required for that particular unit. Refer to the exhibit requirements for the number of insects to collect for that unit.

Acceptable sizes of handmade Entomology Display Boxes taken from the manual and kit:

- 12" W x 16" L x 3" Deep
- 12" W x 18" L x 3 1/2" Deep
- 18" W x 24" L x 3 1/2" Deep

Glass tops on entomology display cases should slide to the top or side of the case to prevent them from slipping out and breaking when placed on display. Commercially available display cases are acceptable.

UNIT 1: Let's Learn About Insects

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. A completed e-Record and Entomology workbook presented in a sturdy binder/notebook.
- B. Insect Collection display no fewer than 10 and no more than 35 adult insects in at least 3 different correctly labeled orders. Boxes for display should be approximately 12" x 16" x 3". Regular insect pins are required.
- C. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).

UNIT 2: Learn More About Insects

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. A completed e-Record and Entomology workbook presented in a sturdy binder/notebook.
- B. Insect Collections- display no fewer than 25 and no more than 75 adult insects in at least 6 different labeled orders. Standard sized display boxes with removable glass covers are required. Regular insect pins are required.
- C. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).

UNIT 3: Insect Habits and Controls

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. A completed e-Record and Entomology workbook presented in a sturdy binder/notebook.
- B. Insect Collection display no fewer than 75 and no more than 150 adult insects in at least 9 different orders (one order developed in water,) correctly labeled. Include a special collection of 8 different insects, as stated in Unit 3 Workbook. Standard sized display boxes with removable glass covers are required. Regular insect pins are required.
- C. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).

UNIT 4: Insect Identification and Community Projects

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. A completed e-Record and Entomology workbook presented in a sturdy binder/notebook.
- B. Insect Collections- display no fewer than 100 and no more than 250 insects in at least 6 different labeled orders. Standard sized display boxes with removable glass covers are required. Regular insect pins are required.
- C. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).

UNIT 5: Immature Insects and Life Stages

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. Completed e-Record and Entomology workbook presented in a sturdy binder/ notebook.
- B. Display your regular insect collection.
- C. Display a collection of at least 10 larvae or immature insects in vials of rubbing alcohol, or similar preservation.
- D. Display a special collection that is different from the one in Unit 3, including at least 10 insects.

- E. Project may be evaluated on the quality of the information completed in the e-record (25 percent) and the quality of the exhibit (75 percent).

UNIT 6: Exploring With Insects

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. Completed e-Record and Entomology workbook presented in a sturdy binder/ notebook.
- B. Report at least three special activities and include them in your e-record before the story
- C. Display a collection of no fewer than 50 insects from a single insect order with no more than 3 specimens of the same insect. Standard sized display boxes with removable glass covers are required. Regular insect pins are required.
- D. Project may be evaluated on the quality of the information completed in the e-record (25 percent) and the quality of the exhibit (75 percent).

UNIT 7: Exploring with Insects (Advanced)

Jr. / Int. / Sr.

Exhibit will consist of the following:

- A. Completed e-Record with emphasis on your accomplishments in your story, presented in a sturdy binder/notebook.
- B. A display board representing some phase of special project work. This could include a chart or special equipment used or developed. The standardized display board size of 4ft. x 3ft. is to be used with 4-H projects. No additional items may be included in front of display board.
- C. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).

Section #2: Outdoor Adventures

Note: List the day, month, and year for the date of completed activities on page 4.

UNIT 1: Hiking Trails

Jr. / Int. / Sr.

UNIT 2: Camping Adventures

Jr. / Int. / Sr.

UNIT 3: Backpacking Adventures

Jr. / Int. / Sr.

All Exhibits will consist of the following:

- A. A completed manual (at least 6 chapter activities and at least 6 Reach the Pike activities completed each year) and e-Record presented in a sturdy binder/notebook including these items: appropriate sections in manual completed, e-Record and other items or attachments related to the activities in the manual.
- B. A display board illustrating a topic investigated during the project year. You may use diagrams, drawings, charts and photographs. Label and use captions to make your display as educational as possible. The standardized display board size of 4ft. x 3ft. is to be used with 4-H projects. No additional items may be included in front of the display board.
- C. Project will be evaluated on the quality of the information completed in the e-Record *25 percent) and quality of the exhibit (75 percent).

Section #3: Shooting Sports

Project Exhibit Rules:

1. Be sure to include the log for the discipline that you are exhibiting.
2. There is one e-Record that contains the inventory sheet and the discipline log records for all the disciplines that are required for this project.
3. Display should illustrate a chosen aspect of skill areas. This is separate from the State 4-H Shooting Sports Championships (<http://www.co4hshooting.org/>). (The standardized display board is size of 4ft. x 3ft. is to be used with 4-H projects. No additional items may be included on or in the front of display board.) No wooden display cases.
4. Counties may enter only one exhibit per class. Members may have entries in both the display board classes and the stand-alone classes.
5. No live ammo, tipped arrows (including field points, broadheads), knives, functional or nonfunctional firearms or bows will be allowed as an exhibit. Cardboard, paper cutouts or décor resembling firearms or bows are allowed for display purposes in the display or stand-alone classes.

6. Do not use the word weapon when creating your display. Make sure that there are no safety violations in your display. (Example: no earplugs, no safety glasses on a photo of a youth firing his/her gun.) Do not use pictures of primarily tactical in design firearms in your display, i.e. AR platform or military type firearm.
7. The display boards topics should stay in close relationship with our discipline. Please do not use topics outside the scope of your 4-H project. (Example: .22 Rifle Project- should not use the topic of different types of military machine guns.)
8. Stand- alone items are items that are made to enhance the discipline, such as a quiver, gun case, gun stand, etc. No display boards are allowed in the Stand-Alone Classes.
9. For those items that will be displayed on the floor there will be a maximum size of 3 feet in width and depth of 7ft in height, because of limited floor space. The item must be stable when standing to be displayed. If an exhibit is larger than this, a notebook can be used as an exhibit showing how and what was made.
10. For those members who are exhibiting both a display board and a stand-alone, they may copy their e-record. Each exhibit must have an e-record. Be sure to highlight what you are exhibiting in your e-record.
11. No stand- alone items that are an exhibit at the time of the contests will be allowed to be removed from the building to be used at the contests.

Note: Members may have entries in both the display board classes and the stand-alone classes

DISPLAY BOARD CLASSES

CLASS #1: Archery	Junior
CLASS #2: Archery	Intermediate
CLASS #3: Archery	Senior
CLASS #4: Air Rifle	Junior
CLASS #5: Air Rifle	Intermediate
CLASS #6: Air Rifle	Senior
CLASS #7: Shotgun	Junior
CLASS #8: Shotgun	Intermediate
CLASS #9: Shotgun	Senior
CLASS #10: .22 Rifle	Junior
CLASS #11: .22 Rifle	Intermediate
CLASS #12: .22 Rifle	Senior
CLASS #13: .22 Pistol	Junior
CLASS #14: .22 Pistol	Intermediate
CLASS #15: .22 Pistol	Senior
CLASS #16: Black Powder Muzzleloading	Junior
CLASS #17: Black Powder Muzzleloading	Intermediate
CLASS #18: Black Powder Muzzleloading	Senior
CLASS #19: Air Pistol	Junior
CLASS #20: Air Pistol	Intermediate
CLASS #21: Air Pistol	Senior
CLASS #22: Western Heritage	Junior
CLASS #23: Western Heritage	Intermediate
CLASS #24: Western Heritage	Senior
CLASS #25: Outdoor Skills	Junior
CLASS #26: Outdoor Skills	Intermediate
CLASS #27: Outdoor Skills	Senior

STAND-ALONE CLASSES

These classes are for stand-alone items only. No display boards are allowed in the Stand-alone classes. Please check out rule no. 8. No live ammo, broad heads (ex. Arrowheads), knives, functional or nonfunctional firearms or bows will be allowed to be displayed.

CLASS #28: Archery	Junior
CLASS #29: Archery	Intermediate
CLASS #30: Archery	Senior

CLASS #31: Air Rifle	Junior
CLASS #32: Air Rifle	Intermediate
CLASS #33: Air Rifle	Senior
CLASS #34: Shotgun	Junior
CLASS #35: Shotgun	Intermediate
CLASS #36: Shotgun	Senior
CLASS #37: Air Pistol	Junior
CLASS #38: Air Pistol	Intermediate
CLASS #39: Air Pistol	Senior
CLASS #40: .22 Rifle	Junior
CLASS #41: .22 Rifle	Intermediate
CLASS #42: .22 Rifle	Senior
CLASS #43: .22 Pistol	Junior
CLASS #44: .22 Pistol	Intermediate
CLASS #45: .22 Pistol	Senior
CLASS #46: Western Heritage	Junior
CLASS #47: Western Heritage	Intermediate
CLASS #48: Western Heritage	Senior
CLASS #49: Outdoor Skills	Junior
CLASS #50: Outdoor Skills	Intermediate
CLASS #51: Outdoor Skills	Senior
CLASS #52: Black Powder Muzzleloading	Junior
CLASS #53: Black Powder Muzzleloading	Intermediate
CLASS #54: Black Powder Muzzleloading	Senior

All exhibits will consist of the following:

- A. Completed e-Record for the discipline exhibited presented in a sturdy binder/notebook.
- B. **Specific discipline e-Record is required. It can be found at**
http://www.colorado4h.org/project_resources/erecords/index.php
- C. **A discipline Record Log sheet is required. It can be found at**
http://www.colorado4h.org/project_resources/erecords/index/php
- D. **Display Exhibit:** One Display board illustrating something learned in the project this year. The standardized display board size of 4ft. x 3ft. is to be use in 4-H projects. No additional items may be included in front of display board.
Stand-Alone Exhibits: One article which you have made as a part of the project this year. (Examples: gun stocks, decoys, quivers, but not limited to just these.) No live ammo, broadheads (ex. Arrowheads), knives, functional or nonfunctional firearms or bows will be allowed to be displayed.
- E. Project will be evaluated on the quality of the information completed in the e-Record (25 percent) and quality of the exhibit (75 percent).

Section #3: Sportfishing

Project Exhibit Rules:

1. Exhibits may include stand-alone items such as hand-wrapped rods or handmade lures.
2. Exhibit of record kept during the year and display illustrating a chosen aspect of skill area is required. (the standardized display board size of 4ft. x 3ft. is to be used with 4-H projects. No additional items may be included in front of display board.)
3. Members may have entries in both the display board classes and the stand-alone classes.
4. **For those members who are exhibiting both a display board and a stand-alone they may copy their e-record. Be sure to highlight what you are exhibiting in your e-record.**
5. Stand-alone items may not exceed 3 ft. in width and depth and 7ft in height. The item must be stable when standing to be displayed. If an exhibit is larger than these dimensions you may use a notebook as the exhibit and explain how and what was made.

Members may have entries in both the display board classes and the stand-alone class

Sportfishing Display Board Classes

CLASS #1:	UNIT 1: Take the Bait	Jr. / Int. / Sr.
CLASS #2:	UNIT 2: Reel In the Fun	Jr. / Int. / Sr.
CLASS #3:	UNIT 3: Cast Into the Future	Jr. / Int. / Sr.

Sportfishing Stand-Alone Classes

CLASS #4:	UNIT 1: Take the Bait	Jr. / Int. / Sr.
CLASS #5:	UNIT 2: Reel In the Fun	Jr. / Int. / Sr.
CLASS #6:	UNIT 3: Cast Into the Future	Jr. / Int. / Sr.

All exhibits will consist of the following:

- A. Completed Sportfishing e-Record presented in a sturdy binder/notebook.
- B. Include the following information on the project information page.
 - 1. Record each fishing experience:
 - a. Date
 - b. Location
 - c. Type (pond, lake, reservoir, stream, river, or other)
 - d. Name of body of water
 - e. If you catch fish (if no, what do you think the reason was for not catching fish)
 - f. If yes, include the following information about the day: time of day, air temperature, water temperature, cloud cover and other information about the weather.
 - 2. Complete a Catch and Release Fish for your five best fish, caught and released or your five best fish kept, depending on legal limits.
 - a. Species, length (nose to tail)
 - b. Girth (around middle)
 - c. Approximate weight
 - 3. Complete a Fishing Journal for each trip (whether you caught fish or not):
 - a. Rod and reel used
 - b. Types of rig/bait/lure used
 - c. Technique used
 - d. Types of structure fished
 - e. Other things you want to remember about this trip.
- C. Exhibits may include a display board or a stand-alone item such as hand-wrapped rods or hand-made lures. A display board is to be a specific skill level area related to the exhibit. When using a display board, it is strongly recommended to use photos, drawings or other illustrations rather than actual items (i.e. rods, reels, other tackle or accessories). Educational materials shall not extend beyond the edges of display boards. The standardized display board size of 4ft. x 3ft. is to be used with 4-H projects. No additional items may be included in front of display board. Hooks must be removed from lures and jigs when these items are used in an exhibit. The exceptions are artificial flies, which may be exhibited with functional hooks, but the hook points must be imbedded in material (i.e. rubber, dense cork, etc.) that will secure flies and offer safety to the judges and other show officials. **Be sure to remove barbs and any other sharp points.**
- D. No knives to be displayed.
- E. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).

Section #4: Wildlife

For those members who are exhibiting both a display board and a stand-alone they may copy their e-record. Be sure to highlight what you are exhibiting in your e-record.

CLASS #1:	UNIT 1: Wildlife Conservation- The Worth of Wild Roots	Jr. / Int. /Sr.
CLASS #2:	UNIT 2: Wildlife Conservation - Living Wild in an Ecosystem	Jr. / Int. / Sr.
CLASS #3:	UNIT 3: Wildlife Conservation –Managing in a World with You and Me	Jr. / Int. / Sr.
CLASS #4:	Stand-Alone Items (All Units)	Jr. / Int. / Sr.

All exhibits will consist of the following:

- A. Completed Wildlife e-Record presented in a sturdy binder/notebook.
- B. Include the following information on the wildlife page. Show what you did and learned. Show evidence of your personal field experiences, study or observations.
- C. A display board showing educational information about a topic of interest related to wildlife. **Follow the standardized display board size of 4ft. x 3ft.** No additional items may be included in front of display board. Possible topics could include but not restricted to: species found in Colorado, wildlife habitats, role of predators, types of bird feed, or urban wildlife changes.
- D. **Or**, instead of a display board, exhibit may be a stand-alone item, such as wildlife information, pictures and news, a bird feeder or bath, or wildlife track molds. Display items should illustrate something learned in the project this year.
- E. Project will be evaluated on the quality of the information completed in the e-record (25 percent) and quality of the exhibit (75 percent).