



**ATCP – 160.64 NATURAL SCIENCES –
DEPARTMENT 16**

Judging: Thursday, approx. 11:00 a.m.

(following Dept. 10 – Animal & Veterinary Science)

Exhibition Hall

Adult Superintendents: Peter & Theresa Bernstein

Natural Sciences Rules and Instructions

- a) Exhibitors and their families are responsible for reading and complying with the Junior Fair General Rules & Instructions.
- b) Fair Association is not responsible for exhibits lost or stolen.
- c) All exhibitors are encouraged to be present for judging.
- d) To be eligible, work must have been made since first day after previous fair to exhibit.
- e) Scrapbooks must not contain any commercial photographs or pictures.
- f) Posters must be no larger than 14"x22", and displays must be no larger than 28"x40", unless otherwise stated.
- g) Include Identification Card with age & number of years in the project or written on back of poster.
- h) If graphics/photos/research are not the original work of the exhibitor, the source must be noted on the project. Exhibits that do not cite sources of content that are not exhibitor's original work will be dropped one ribbon placing and not be eligible for awards.

Premiums \$ 2.00 \$ 1.75 \$ 1.50 \$ 1.25

CLASS A – FORESTRY

Lot

1. Individual exhibit of 15 or more leaves of native Wisconsin trees (properly labeled). Can be

- actual leaves, rubbing, or drawings. Include the location where you found the leaves.
2. Poster featuring cross section of tree with rings labeled to show interesting times in a tree's history.
3. Collection of 15 or more kinds of tree seeds, mounted and labeled.
4. Piece of handicraft work (Biltmore stick, firemaker, wastebasket, transport board, etc.)
5. Poster of five or more tree bark rubbings, with tree identified.
6. Display of equipment and explanation of the process of making your own paper from old paper (include sample)
7. Poster of Fire Prevention.
8. Exhibit of any other phase of the project.

CLASS B – BIRDS

Lot

Conference Judging

1. Bird watcher's log of birds observed, summer or winter months.
2. Homemade birdhouse, attach 3"x5" card explaining work/intended use.
3. Homemade winter feeding station, attach 3"x5" card explaining work and intended use.
4. Scrapbook of at least 10 Wisconsin birds – hand drawn explaining nest type, diet, nesting habits, etc.
5. Display and identify the body parts of a bird and their functions.
6. Exhibit of any other phase of the project.

CLASS C – WILDFLOWERS

Lot

1. Centerpiece/Flower arrangement using fresh or dried wildflowers.
2. Poster/Display showing parts of a flower.
3. A photographic collection of local wildflowers.
4. A poster, model, or photo story of the life cycle of a flowering plant.
5. Poster on plant-related careers.
6. Three properly mounted and labeled Wisconsin Wildflowers.
7. Exhibit of any other phase of the project.

CLASS D – RECYCLING

- Lot **Conference Judging**
1. A creative exhibit showing a new product (with a new use) invented from an old product. Include pictures explaining the process.
 2. Poster/Display illustrating 5 recyclable materials and 5 non-recyclable materials.
 3. Poster on benefits of recycling.
 4. Any other recycling project not listed above.

CLASS E – SPORTFISHING

- a) All hooks/sharp objects must be covered.

- Lot **(Grades 3-6)**
1. Poster – Parts of a fish
 2. Poster – Types of fish in your area
 3. Poster – Types of bait
 4. Poster – Types of fishing knots
 5. Poster – Types of fishing tackle
 6. Poster – Tackle box inventory check list
 7. Poster – How to cast accurately
 8. Poster – Differences between bobber and bottom fishing
 9. Poster – Map of favorite fishing spot
 10. Poster – Caring for your catch
 11. Poster – Water cycle
- Lot **(Grades 7-9)**
20. Poster – Selecting the right fishing knot
 21. Poster – How to use a spinning rod and reel
 22. Poster – How to cast a bait
 23. Poster – How to cast a fly
 24. Decorated lure or jig
 25. Fly wallet
 26. Artificial fly
 27. Poster – Wisconsin fishing laws
 28. Poster – Cooking fish
 29. Soda bottle trap
 30. Fish Senses
 31. Exhibit of any other phase of the project
- Lot **(Grades 10 and up)**
40. Poster – Parts of a fishing reel

41. Poster – Fishing reel maintenance
42. Poster – How to make artificial lures and flies
43. Cedar wood lure
44. Refurbished rod and reel
45. Display – Types of insects that fish like
46. Sport fishing skillathon
47. Fishing trip plans or report
48. Field Fishing Journal
49. Water inversion experiment
50. Exhibit of any other phase of the project

CLASS F – SHOOTING SPORTS EDUCATIONAL EXHIBITS

AIR RIFLE, AIR PISTOL, .22 RIFLE AND .22 PISTOL

- Lot **Conference Judging**
1. Poster on the proper care, maintenance and handling of a rifle or pistol
 2. Poster identifying the parts of a rifle or pistol and the purpose of each part (use 14"x22" poster)
 3. Poster illustrating all of the different rifle/pistol sites (14"x22")
 4. Poster illustrating all four (4) rifle firing positions or all four (4) pistol firing positions
 5. Poster/Exhibit showing types of rifle and pistol equipment and accessories
 6. Report or Scrapbook of competitive rifle or pistol experience or clinic outside of 4-H (competition must have been held between last year's fair and this year's fair)
 7. A rifle or pistol shooting journal showing improvement in target progress and explaining the process that you used
 8. Exhibit of any other phase of the rifle or pistol project

SHOTGUN

- Lot **Conference Judging**
10. Poster illustrating and briefly explaining proper sight alignment for a shotgun
 11. Poster identifying the parts of a shotgun and the purpose of each part (poster 14"x22")

12. Poster illustrating the different shotgun sights (poster 14"x22")
13. Homemade shell pouch
14. Poster describing the differences between shooting skeet/trap/clay pigeons (poster 14"x22")
15. Exhibit illustrating "how to" clean and care for your shotgun
16. Exhibit of any other phase of the shotgun project
17. Report or Scrapbook of shotgun competition or clinic outside of 4-H

MUZZLELOADING

Lot

Conference Judging

20. Make your own "possibles" bag or powder horn for muzzleloading.
21. Make your own muzzleloading accessory
22. Poster explaining the proper steps to cleaning a muzzleloader after use. (poster 14"x22")
23. Create a Scrapbook depicting attendance at a "Rendezvous" (i.e. Bloody Lake)
24. Put together a period appropriate costume for a "Rendezvous" event; 1830's fur trading era.
25. Any other phase of the muzzleloading project

ARCHERY

Lot

Conference Judging

30. Poster identifying parts of a bow and purpose of each (14"x22")
31. Exhibit of homemade archery accessory or equipment (example: quiver, arm guard, finger tab, glove, or bow case)
32. Poster illustrating different kinds of arrows (14"x22")
33. Poster illustrating different kinds of bows (14"x22")
34. Exhibit of drawings or pictures showing proper archery shooting techniques
35. Scrapbook explaining a bow hunting or bow fishing experience
36. Homemade bow rack or arrow holder
37. Exhibit of any other phase of archery project

CLASS G – SHOOTING SPORTS TARGET SHOOTING

Target Shooting Rules & Exhibiting Instructions

- a) ***Youth must pre-register for the 4-H Shooting Sports program and meet minimum 4-H sponsored session requirements before they are allowed to shoot in the contests listed below.***
- b) Targets shot at the contest(s) must be stapled on poster board (see specific size of discipline) and brought to Fair check-in on Tuesday to be displayed, in order to collect premium.

AIR RIFLE Target Shooting

- Air Rifle Target Shooting Contest held May 12, 2018 at the Green County Rifle Range, Monroe.
- Air Rifle Targets stapled to 14"x22" poster board

Lot

1. Air Rifle Target Shooting Contest (Grades 3-5)
2. Air Rifle Target Shooting Contest (Grades 6-8)
3. Air Rifle Target Shooting Contest (Grades 9 and up)

AIR PISTOL Target Shooting

- Air pistol Target Shooting Contest held May 19, 2018 at the Green County Rifle Range, Monroe.
- Air pistol targets stapled to 11"x14" poster board

Lot

5. Air pistol Target Shooting Contest (Grades 3-5)
6. Air pistol Target Shooting Contest (Grades 6-8)
7. Air pistol Target Shooting Contest (Grades 9 and up)

.22 RIFLE Target Shooting

- .22 Rifle Target Shooting Contest held April 28, 2018 at the Green County Rifle Range, Monroe.
- .22 Rifle Targets stapled to 11"x14" poster board

Lot

10. .22 Rifle Target Shooting Contest, Iron Sights, Gr. 6-8
11. .22 Rifle Target Shooting Contest, Iron Sights, Gr. 9 and up
12. .22 Rifle Target Shooting Contest, Scope Sights, Gr. 6-8
13. .22 Rifle Target Shooting Contest, Scope Sights, Grades 9 and up

.22 PISTOL Target Shooting

- .22 Pistol Target Shooting Contest held June 2, 2018 at the Green County Rifle Range, Monroe.
- .22 Pistol Targets stapled to 11"x14" poster board

Lot

15. .22 Pistol Target Shooting Contest, Iron Sights, Gr. 6-8
16. .22 Pistol Target Shooting Contest, Iron Sights, Gr. 9 and up
17. .22 Pistol Target Shooting Contest, Scope Sights, Gr. 6-8
18. .22 Pistol Target Shooting Contest, Scope Sights, Grades 9 and up

SHOTGUN Target Shooting

- Shotgun Target Shooting Contest held May 18, 2018 at the Blackhawk Sportsman's Range.
- Shotgun Targets stapled to 11"x14" poster board

Lot

20. Shotgun Target Shooting Contest, Grades 6-8
21. Shotgun Target Shooting Contest, Grades 9 and up

MUZZLELOADING Target Shooting

- Muzzleloading Target Shooting Contest held April 21, 2018 at the Green County Rifle Range, Monroe.
- Muzzleloading Targets stapled to 22"x28" poster board

Lot

25. Muzzleloading Target Shooting Contest, (Grades 6-8)
26. Muzzleloading Target Shooting Contest, (Grades 9 & up)

ARCHERY Target Shooting

- Archery Target Shooting Contest held April 22, 2018 at the SCWA, 1724 10th St., Monroe.
- Archery Targets stapled to 22"x28" poster board
- Please write exhibitor name, grade in school (as of Jan. 1), class and lot on the FRONT of the archery target.
- **Archery Bare Bow:** Youth will shoot long bows, re-curves, or compound bows without the aid of mechanical releases or sighting devices. (Sight brackets must be removed from bow, no peep or other string sights may be used. Must be shot with fingers.)
- **Shooting Aid:** Allowing the use of non-optical sights and stabilizers, no mechanical releases, must use fingers.
- **Archery Freestyle:** Allowing any use of sights, any type of stabilizer, and any type of release can be used.
- **Arrows:** Only target or field points are to be used. No hunting points.

Lot

30. Target Shooting Contest, Archery Bare Bow, Grades 3-5
31. Target Shooting Contest, Archery Bare Bow, Grades 6-8
32. Target Shooting Contest, Archery Bare Bow, Grades 9 and up
33. Target Shooting Contest, Archery, 1 Aid, Grades 3-5
34. Target Shooting Contest, Archery, 1 Aid, Grades 6-8

35. Target Shooting Contest, Archery, 1 Aid, Grades 9 and up
36. Target Shooting Contest, Archery, Freestyle, Grades 3-5
37. Target Shooting Contest, Archery, Freestyle, Grades 6-8
38. Target Shooting Contest, Archery, Freestyle, Grades 9 and up

CLASS O – DISCOVERING THE WORLD OF INSECTS

Lot

1. Display of at least 10 kinds of insects from 6 Orders (more than 10 are allowed) open to Grades 3-5
2. Display of at least 20 kinds of insects from 9 Orders (properly identified), (more than 20 are allowed) open to Grades 3-8
3. Display of at least 30 kind of insects from 9 Orders (properly identified), (more than 30 are allowed) open to Grades 9 and up
4. Poster/display on life cycle of two insects
5. Poster identifying parts of an insect
6. Exhibit on proper labeling of insects
7. Scrapbook of 10 Wisconsin insects, hand-drawn and properly labeled
8. One jar or one cake of honeycomb to be between ½ to 1 lb. – NOTE: This lot will be judged **Thursday at approx. 10:00 am.**
9. Exhibit of any other phase of the project

CLASS P – ADVENTURES

Lot Adventures Rules and Instructions

- a) Open to members enrolled in Adventure project. Limit of 2 entries.

Open to Members Grades 3-6

Premiums \$ 2.00 \$ 1.75 \$ 1.50 \$ 1.25

Lot

1. A simple day pack from plans or a kit
2. A scrapbook of activities involved with a backpacking trip or hike
3. Any piece of handmade backpacking equipment made by the exhibitor
4. Any other display exhibit related to this project (Grades 3-6)

Open to Members Grades 7-9

Premiums \$ 2.50 \$ 2.25 \$ 2.00 \$ 1.75

Lot

10. Poster based on library research that shows the calories needed to sustain a person of a given weight when hiking with a pack
11. A menu for a day's hike
12. Poster showing guidelines for selecting a backpack or a sleeping bag
13. Poster illustrating how to pack a canoe so it is waterproof in a rainstorm
14. A display of camping gear items made by exhibitor (Grades 7-9)
15. Any other display related to this project (Grades 7-9)

Open to Members Grades 10 and up

Premiums \$ 3.00 \$ 2.75 \$ 2.50 \$ 2.25

Lot

21. A reflector oven made by exhibitor
22. A display of dehydrated camping foods and their calorie content
23. A display of orienting and map reading skills
24. A display of items of camping gear the member has made (Grades 10 & up)
25. Any other display related to this project (Grades 10 & up)

CLASS Q – HUNTING/TRAPPING/WILDLIFE ECOLOGY

Lot

1. Booklet (8 ½ x 11") identifying game birds and/or animals and/or furbearers, including habitat, feeding habits and hunting/trapping regulations. Grades 3-5: Minimum = 3; Grades 6-8: Minimum = 5; Grades 9+: Minimum = 7.
2. Hunting/Trapping conservation poster (14"x22")
3. Poster identifying an animal you would hunt with a bow and its habitat (14"x22")
4. Poster identifying 5 birds of prey including descriptions of their habitats and feeding habits (14"x22")
5. Scrapbook identifying 5 of Wisconsin's Endangered and threatened Species. Include their habitat, feeding, and reproduction, and how their habitat, food, reproduction, disease or circumstances have contributed to their decline.
6. Camera Hunt of 10 wildlife photos mounted on 14"x22" poster board
7. Any piece of wildlife art or clothing or tools made from wildlife.
8. Make your own "possibles" bag or powder horn for muzzle loading.
9. Make a board displaying different types of traps and/or cable devices. Label the parts and explain what species each might be used for and reasons you might use one trap vs. another. Board MUST be able to be hung on wall.
10. Taxidermy or home tanned hide completed by participant. Include photos of project and process. Bring project on day of fair judging.
11. Scrapbook of hunting experience, including preparations, license/permissions needed. Prey's habitat, technique used and general location (state and county).
12. Any other phase of the project.

CLASS R – GEOLOGY

Lot

Conference Judging

1. Poster/Display of geologist tools and uses
2. Poster/Display of mineral/fossil collection, labeled with proper name and common name, chemical formula, location of find and date of find
3. Poster/Display of mineral types, uses and problems
4. Poster/Display of a mapped road cut – identify formation, era, period, type of rocks, and any mineral distinct from the parent material
5. Poster/Display on the Moh's Scale of Hardness and how it is used in mineral identification
6. Poster/Display on various ways to identify minerals