

# Department 116 – Natural Sciences

## Exploring Your Environment

Face-to-Face Judging on Tuesday Noon – 6 PM

- Open to youth enrolled in the 4-H Exploring your Environment project or youth of other groups doing equivalent work.
- No more than 25 entries per exhibitor (Classes A – G). 1 per lot.
- See Poster rules.
- Display size not to exceed 36" x 48" – exhibitor is allowed 1 entry to exceed the maximum size.
- Exhibitors must bring a device to play any video, power point, music, or computer entries that need to be played for the judge.

Premiums: \$2.50 - \$2.25 - \$2.00 - \$1.75

### **CLASS A – Birds**

Lot Numbers

1. Exhibit or species of birds – pictures or drawings of birds seen and identified by member (10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
2. Compare and Contrast – show how differences are necessary for where and how they live (4 different birds for grades 3-5 – 6 birds for grades 6-8 – 8 birds for grades 9 and up)
3. Exhibit of pictures or drawings and explanation of the different kinds of one of the following bird parts: beak, feet, feathers, or other bird part
4. Written journal of bird watching activities covering at least 5 expeditions
5. Exhibit showing the parts of a bird with explanations
6. One bird house of your own construction (include information regarding the bird it was built for)
7. One bird feeder of your own construction
8. Exhibit of photographs of 4 or more bird nests -- identify type, location and date found
9. Scrapbook of drawings/pictures of local birds describing feeding, nesting, and migration (10 birds for grades 3-5 – 15 birds for grades 6-8 – 20 birds for grades 9 and up)
10. Exhibit on how to attract birds to your backyard in summer of winter
11. Exhibit on career opportunities working with birds
12. Any other exhibit related to birds
13. Any other exhibit related to birds



### **CLASS B - Fishing**

14. Exhibit on Wisconsin fish (10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
15. One homemade popper for fishing
16. One homemade jig for fishing
17. One homemade fly for fishing
18. Any other type of lure
19. Collection of at least 3 different homemade lures
20. Educational exhibit on proper fishing techniques
21. Educational exhibit on fishing equipment with description of use
22. Educational exhibit on ice fishing equipment with description of use
23. Educational exhibit describing how to care for, clean, transport, and store fish after being caught
24. Educational exhibit on parts of a fish with explanations
25. One fish plaster mold
26. Exhibit on fishing safety
27. Exhibit of at least 5 different types of bait
28. Exhibit identifying the parts of a rod and reel
29. Homemade fishing equipment
30. Fishing journal of at least 5 fishing trips – include pictures, story, location, weather, date, time, etc.
31. Any other exhibit related to fishing
32. Any other exhibit related to fishing



### **CLASS C – Entomology**

Lot numbers

33. Educational exhibit identifying the parts of an insect
34. Educational exhibit emphasizing the value of insects
35. Collection of insects mounted and labeled
  - ✓ 20 or more species for grades 3-5 – 30 or more for grades 6-8 – 40 or more for grades 9 and up
  - ✓ At least 10 insects must be new from previous year
  - ✓ Use standard insect box and insect pins
  - ✓ Labels for insects must contain: Common name, scientific name, date and location of capture, and initials of collector
36. Educational exhibit explaining the life cycle of insects
37. Scrapbook of insects – photo or drawing of each, describe habitat and environment, eating habits and food (10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
38. Educational exhibit of 4 insect damaged plants properly mounted – explain how to control damage
39. Display of 4 cocoons or chrysalises and emerging moths and butterflies properly labeled
40. Artistic arrangement of the wings of insects – take old mounted insects, cut off wings, and arrange in a design
41. Exhibit relating to entomology careers
42. Jar of honey from member's apiary
43. Comb of honey
44. Educational display relating to beekeeping
45. Any other exhibit relating to entomology
46. Any other exhibit relating to entomology



### **CLASS D – Forestry**

Lot numbers

47. Grades 3-5 ONLY – potted seedling – must be rooted and have age listed (such as 1 year)
48. Educational exhibit showing the process of photosynthesis
49. Educational exhibit showing proper tree planting methods
50. Exhibit of leaf prints – labeled according to species (10 for grades 3-5 – 15 for grades 6-8 – 20 for grades 9 and up)
51. Exhibit of labeled and mounted tree seeds (10 for grades 3-5 – 15 for grades 6-8 – 20 for grades 9 and up)
52. Educational exhibit explaining the differences between a coniferous and deciduous tree
53. Educational exhibit emphasizing the value of trees
54. Educational exhibit showing the leaves of one of the tree families (example: oak – red, white, burr, etc.)
55. Educational exhibit showing the annual life history of a tree
56. Educational exhibit on tree disease
57. Educational exhibit showing a forest harvesting method
58. Educational exhibit showing the proper pruning of a tree
59. Diagram of a tree and of a cross-section of a tree
  - ✓ Label the tree parts and zones in the cross-section
  - ✓ Describe how a tree grows with reference to diagrams
60. Branch mount of 15 or more species of trees
  - ✓ Must be labeled
  - ✓ Approx. 1" in diameter and 3" in length with one end cut on a diagonal
61. Series of photographs of at least 5 species of trees
  - ✓ Each series should include 3-4 photos to show general growth habits, leaves, fruit, and bark of species
  - ✓ Each portrait should be mounted and labeled
62. Maple syrup that you made – in sealed glass pint jar – bring a small sample for tasting
63. Any other exhibit related to forestry
64. Any other exhibit related to forestry



**CLASS E – Wildflowers**

Lot numbers

65. Educational exhibit of wildflower species properly pressed, mounted, and labeled  
(10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
66. Educational exhibit of parts of a wildflower
67. Educational exhibit showing the life cycle of a wildflower
68. Display of seeds from wildflowers and describe how each species is dispersed  
(10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
69. Educational display of 5 native fern species properly pressed, mounted, and labeled
70. Educational display of wildflowers seen and identified by exhibitor  
(10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
71. Display of the plan of your wildflower garden
72. Artistic arrangement of pressed wildflowers
73. Exhibit of color photographs taken by member of identified wildflowers  
(10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9 and up)
74. Any other exhibit relating to wildflowers
75. Any other exhibit relating to wildflowers



**CLASS F – Recycling**

Lot numbers

76. Educational exhibit on the benefits of recycling
77. Educational exhibit on how to recycle
78. Educational exhibit on a product or products made from recycled materials
79. Homemade newspaper crate for bundling papers for recycling
80. Homemade cloth bag to be used as a substitute for grocery bags
81. Any other homemade item to aid in recycling
82. Any other educational exhibit relating to recycling
83. Any other educational exhibit relating to recycling



**CLASS G – Exhibits relating to any other Natural Sciences topic**

Examples: astronomy, water, etc.

Lot numbers

84. Any educational exhibit relating to Natural Sciences
85. Any educational exhibit relating to Natural Sciences
86. Any educational exhibit relating to Natural Sciences
87. Any educational exhibit relating to Natural Sciences

**Posters - ALL Departments**

Rules:

- Posters must be designed on or affixed to standard poster board
- Size - 14" x 22" or 22" x 28"
- Poster may use any medium: watercolor, ink, crayon, acrylic, charcoal, oils, computer generated, collage, etc.
- Staple entry tag to the front of the poster in the top right-hand corner
- Posters should be dated on back with current fair year

**CLASS H – Adventures**

- Open to youth enrolled in the 4-H adventures project or youth of other groups doing equivalent work.
- Face-to-face judging Tuesday Noon – 6 PM
- No more than 15 entries per exhibitor in Class H. 1 per lot
- See Poster rules.
- Display size not to exceed 36" x 48" – exhibitor is allowed 1 entry to exceed the maximum size.
- Exhibitors must bring a device to play any video, power point, music, or computer entries that need to be played for the judge.

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Lot numbers related to **Camping**

101. Educational exhibit on how to select basic camping equipment
102. Educational exhibit on planning a camping trip
103. Exhibit on your camping adventures
104. First aid kit made by exhibitor for camping adventures
105. Any other exhibit relating to camping
106. Any other exhibit relating to camping



Lot numbers related to **Canoeing and Kayaking**

107. Educational exhibit on paddling/oaring techniques
108. Educational exhibit on proper canoeing or kayaking equipment
109. Educational exhibit on planning a canoeing or kayaking trip
110. Exhibit on your canoeing or kayaking adventures
111. Any other exhibit relating to canoeing or kayaking
112. Any other exhibit relating to canoeing or kayaking



Lot numbers related to **Winter Travel** (cross-country skiing and/or snowshoeing)

113. Educational exhibit on selecting the proper equipment for winter travel
114. Educational exhibit on winter travel safety
115. Educational exhibit showing proper techniques for cross-country skiing or snowshoeing
116. Exhibit on your winter travel adventure
117. Any other exhibit relating to winter travel
118. Any other exhibit relating to winter travel



Lot numbers related to **Bicycling**

119. Educational exhibit on selecting bicycling equipment (bicycle, helmet, etc.)
120. Educational exhibit on bicycle safety
121. Educational exhibit on planning a bicycling adventure
122. Exhibit on your bicycling adventures
123. Any other exhibit relating to bicycling
124. Any other exhibit relating to bicycling



Lot numbers related to **Backpacking and Hiking**

125. Educational exhibit on selecting the proper backpacking/hiking equipment
126. Educational exhibit on how to pack for a backpacking/hiking adventure
127. Educational exhibit on planning a backpacking/hiking adventure
128. Exhibit on your backpacking and hiking adventures
129. Any other exhibit relating to backpacking and hiking
130. Any other exhibit relating to backpacking and hiking



### **Shooting Sports**

- Open to youth enrolled in the 4-H Shooting Sports projects or youth of other groups doing equivalent work.
- Face-to-face judging Tuesday Noon – 6 PM
- No more than 15 entries per exhibitor in Class I - K. 1 per lot
- See Poster rules.
- Display size not to exceed 36" x 48" – exhibitor is allowed 1 entry to exceed the maximum size.
- Exhibitors must bring a device to play any video, power point, music, or computer entries that need to be played for the judge.

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#### **CLASS I – Archery**

Lot numbers

201. Educational exhibit on archery safety
202. Educational exhibit on proper shooting stance
203. Homemade ground quiver
204. Homemade side quiver
205. Homemade target
206. Any other homemade archery equipment (arm guard, finger tabs, bow case, etc.)
207. Educational exhibit on archery care and maintenance
208. Educational exhibit on parts of a bow and arrow with a purpose for each
209. Educational exhibit on Wisconsin archery laws
210. Exhibit on your archery hunting experiences
211. Three targets shot by exhibitor with explanation – include date
212. Scrapbook of activities in your archery project – include photos
213. Educational exhibit on a species of animal you would hunt with a bow – include the habitat
214. Any other exhibit relating to archery
215. Any other exhibit relating to archery
216. Any other exhibit relating to archery



#### **CLASS J – Firearms**

Lot numbers

217. Educational exhibit on gun safety
218. Exhibit on proper shooting stance
219. Educational exhibit on gun care and maintenance
220. Educational exhibit on parts of a gun with a purpose for each
221. Back stop for pellet shooting
222. Rifle – three targets shot by exhibitor with explanation – include ammo used and date
223. Pistol – three targets shot by exhibitor with explanation – include ammo used and date
224. Shot Gun – three targets shot by exhibitor with explanation – include ammo used and date
225. Muzzle loader – three targets shot by exhibitor with explanation – include ammo used and date
226. Accessory item made by exhibitor (shell bag, shooting vest, etc.)
227. Rifle – scrapbook of activities in your rifle project – include photos
228. Pistol – scrapbook of activities in your pistol project – include photos
229. Shot Gun – scrapbook of activities in your shot gun project – include photos
230. Shot Gun – report from trap league – include photos and scores
231. Muzzle loader – scrapbook of activities in your muzzle loader project – include photos
232. Educational exhibit on a species of animal that you would hunt with a firearm – include the habitat
233. Any other item relating to firearms
234. Any other item relating to firearms
235. Any other item relating to firearms
236. Any other item relating to firearms



## **CLASS K – Hunting and Trapping**

### Lot numbers relating to **Hunting**

400. Animal silhouette target
401. Educational exhibit of 10 waterfowl – information on feeding habits, reproduction, and habitat
402. Educational exhibit of 5 different game birds – information on feeding habits, reproduction, and habitat
403. Educational exhibit of 7 different game animals – information on feeding habits, reproduction, and habitat
404. Educational exhibit on hunting safety
405. Educational exhibit on the principles of game management
406. Educational exhibit on tracks of game birds and animals (maximum of 6)
407. Educational exhibit on types of guns and ammunition for hunting
408. Educational exhibit relating to WI hunting laws
409. Educational exhibit showing identification characteristics of an animal species
410. Hunting decoy made by exhibitor (duck, goose, turkey, etc.)
411. Item made by exhibitor for use in hunting
412. Photo display of wild animals taken with a hand-held camera – minimum of 4 photos
413. Photo journal of scrapbook of hunting trips – trips must occur between the previous county fair and the current fair (grades 3-5 minimum of 1 trip – grades 6-8 minimum of 2 trips – grades 9 and up minimum of 3 trips)
414. Plaster cast of a wild animal's tracks
415. Survival kit assembled by exhibitor with a brief explanation of item's potential use (minimum 8 items)
416. Taxidermy item exhibitor has shot and has completed with taxidermy
417. Any other exhibit relating to hunting
418. Any other exhibit relating to hunting
419. Any other exhibit relating to hunting



# HUNTING & TRAPPING

### Lot numbers relating to **Trapping**

420. Beaver hoop made by exhibitor
421. Educational exhibit of 10 fur-bearing animals – information on habitats, economic value, and tracks
422. Educational exhibit on the 3 main types of traps: foot hold, body gripper, and live trap
423. Educational exhibit promoting trapping
424. Educational exhibit showing equipment and tools used for dry land trapping
425. Educational exhibit showing equipment and tools used for water trapping
426. Educational exhibit showing identification characteristics of a specific furbearer – include tracks
427. Educational exhibit showing the parts of a trap
428. Item made by exhibitor to be used for trapping
429. Muskrat hoop made by exhibitor
430. Scrapbook of prior year's trapping season – include photos, any incidentals or missed traps, and what you have learned to improve for next season
431. Any other exhibit relating to trapping
432. Any other exhibit relating to trapping
433. Any other exhibit relating to trapping