

# Department 116 – Natural Sciences

## Exploring Your Environment

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

### Entry Information

- 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.

### Exhibit Information

- 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**

20. Exhibit on Wisconsin fish (10 species for grades 3-5 – 15 species for grades 6-8 – 20 species for grades 9-13)
21. One homemade popper for fishing
22. One homemade jig for fishing
23. One homemade fly for fishing
24. Any other type of lure
25. Collection of at least 3 different homemade lures
26. Educational exhibit on proper fishing techniques
27. Educational exhibit on fishing equipment with description of use
28. Educational exhibit of ice fishing equipment with description of use
29. Educational exhibit describing how to care for, clean, transport, and store fish after being caught
30. Educational exhibit on parts of a fish with explanations
31. One fish plaster mold
32. Exhibit on fishing safety
33. Exhibit of at least 5 different types of bait
34. Exhibit identifying the parts of a rod and reel
35. Homemade fishing equipment
36. Fishing journal of at least 5 fishing trips – include pictures, story, location, weather, date, time, etc.
37. Any other exhibit related to fishing
38. Any other exhibit related to fishing



### **CLASS C – Entomology**

Lot numbers

41. Educational exhibit identifying the parts of an insect
42. Educational exhibit emphasizing the value of insects
43. 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
44. Educational exhibit explaining the life cycle of insects
45. 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)

46. Educational exhibit of 4 insect damaged plants properly mounted – explain how to control damage
47. Display of 4 cocoons or chrysalises and merging moths and butterflies properly labeled
48. Artistic arrangement of the wings of insects – take old mounted insects, cut off wings, and arrange in a design
49. Exhibit relating to entomology careers
50. Jar of honey from member's apiary
51. Comb of honey
52. Educational display relating to beekeeping
53. Any other exhibit relating to entomology
54. Any other exhibit relating to entomology

#### **CLASS D – Forestry**

60. Grades 3-5 ONLY – potted seedling – must be rooted and have age listed (such as 1 year)
61. Educational exhibit showing the process of photosynthesis
62. Educational exhibit showing proper tree planting methods
63. Exhibit of leaf prints – labeled according to species (10 for grades 3-5 – 15 for grades 6-8 – 20 for grades 9 and up)
64. Exhibit of labeled and mounted tree seeds (10 for grades 3-5 – 15 for grades 6-8 – 20 for grades 9 and up)
65. Educational exhibit explaining the differences between a coniferous and deciduous tree
66. Educational exhibit emphasizing the value of trees
67. Educational exhibit showing the leaves of one of the tree families (example: oak – red, white, burr, etc.)
68. Educational exhibit showing the annual life history of a tree
69. Educational exhibit on tree disease
70. Educational exhibit showing a forest harvesting method
71. Educational exhibit showing the proper pruning of a tree
72. 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
73. 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
74. 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

75. Maple syrup that you made – in sealed glass pint jar – bring a small sample for tasting
76. Any other exhibit related to forestry
77. Any other exhibit related to forestry



#### **CLASS E – Wildflowers**

Lot numbers

80. 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)
81. Educational exhibit of parts of a wildflower
82. Educational exhibit showing the life cycle of a wildflower
83. 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)
84. Educational display of 5 native fern species properly pressed, mounted, and labeled
85. 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)
86. Display of the plan of your wildflower garden
87. Artistic arrangement of pressed wildflowers
88. 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 9-13)
89. Any other exhibit relating to wildflowers
90. Any other exhibit relating to wildflowers

#### **CLASS F – Recycling**

Lot numbers

100. Educational exhibit on the benefits of recycling
101. Educational exhibit on how to recycle
102. Educational exhibit on a product or products made from recycled materials
103. Homemade newspaper crate for bundling papers for recycling
104. Homemade cloth bag to be used as a substitute for grocery bags
105. Any other homemade item to aid in recycling
106. other educational exhibit relating to recycling
107. Any other educational exhibit relating to recycling

#### **CLASS G – Any other Natural Sciences topic**

Examples: astronomy, water, etc.

110. Any educational exhibit relating to Natural Sciences
111. Any educational exhibit relating to Natural Sciences
112. Any educational exhibit relating to Natural Sciences
113. Any educational exhibit relating to Natural Sciences

## **CLASS H – Adventures**

### **Entry Information**

- Open to youth enrolled in the 4-H adventures project or youth of other groups doing equivalent work.
- No more than 15 entries per exhibitor in Class H. 1 per lot

### **Exhibit Information**

- Face-to-face judging Tuesday Noon – 6 PM
- 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

### **Camping**

201. Educational exhibit on how to select basic camping equipment
202. Educational exhibit on planning a camping trip
203. Exhibit on your camping adventures
204. First aid kit made by exhibitor for camping adventures
205. Any other exhibit relating to camping
206. Any other exhibit relating to camping

### **Canoeing and Kayaking**

207. Educational exhibit on paddling/oaring techniques
208. Educational exhibit on proper canoeing or kayaking equipment
209. Educational exhibit on planning a canoeing or kayaking trip
210. Exhibit on your canoeing or kayaking adventures
211. Any other exhibit relating to canoeing or kayaking
212. Any other exhibit relating to canoeing or kayaking

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

213. Educational exhibit on selecting the proper equipment for winter travel
214. Educational exhibit on winter travel safety
215. Educational exhibit showing proper techniques for cross-country skiing or snowshoeing
216. Exhibit on your winter travel adventure
217. Any other exhibit relating to winter travel
218. Any other exhibit relating to winter travel

## **Bicycling**

219. Educational exhibit on selecting bicycling equipment (bicycle, helmet, etc.)
220. Educational exhibit on bicycle safety
221. Educational exhibit on planning a bicycling adventure
222. Exhibit on your bicycling adventures
223. Any other exhibit relating to bicycling
224. Any other exhibit relating to bicycling

### **Backpacking and Hiking**

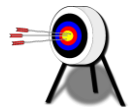
225. Educational exhibit on selecting the proper backpacking/hiking equipment
226. Educational exhibit on how to pack for a backpacking/hiking adventure
227. Educational exhibit on planning a backpacking/hiking adventure
228. Exhibit on your backpacking and hiking adventures
229. Any other exhibit relating to backpacking and hiking
230. 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.
- Premiums: \$2.50 - \$2.25 - \$2.00 - \$1.75

## **CLASS I – Archery**

301. Educational exhibit on archery safety
302. Educational exhibit on proper shooting stance
303. Homemade ground quiver
304. Homemade side quiver
305. Homemade target
306. Any other homemade archery equipment (arm guard, finger tabs, bow case, etc.)
307. Educational exhibit on archery care and maintenance
308. Educational exhibit on parts of a bow and arrow with a purpose for each
309. Educational exhibit on Wisconsin archery laws
310. Exhibit on your archery hunting experiences



311. Three targets shot by exhibitor with explanation and photos (date, what was learned, adjustments made, etc.)
312. Scrapbook of activities in your archery project – include photos
313. Educational exhibit on a species of animal you would hunt with a bow – include the habitat
314. Any other exhibit relating to archery
315. Any other exhibit relating to archery
316. Any other exhibit relating to archery

### **CLASS J – Firearms**

401. Educational exhibit on gun safety
402. Exhibit on proper shooting stance
403. Educational exhibit on gun care and maintenance
404. Educational exhibit on parts of a gun with a purpose for each
405. Back stop for pellet shooting

#### **Lots 406-409**

- Three targets shot by Exhibitor
- Must include explanation (date, what was learned, adjustments made, etc.)
- Must include photos and list ammo used

Lot 406. Rifle

Lot 407. Pistol

Lot 408. Shot Gun

Lot 409. Muzzle loader



410. Accessory item made by exhibitor (shell bag, shooting vest, etc.)
411. Rifle – scrapbook of activities in your rifle project – include photos
412. Pistol – scrapbook of activities in your pistol project – include photos
413. Shot Gun – scrapbook of activities in your shot gun project – include photos
414. Shot Gun – report from trap league – include photos and scores
415. Muzzle loader – scrapbook of activities in your muzzle loader project – include photos
416. Educational exhibit on a species of animal that you would hunt with a firearm – include the habitat
417. Any other item relating to firearms
418. Any other item relating to firearms
419. Any other item relating to firearms
420. Any other item relating to firearms

### **CLASS K – Hunting and Trapping**

500. Animal silhouette target
501. Educational exhibit of 10 waterfowl – info on feeding habits, reproduction, and habitat
502. Educational exhibit of 5 different game birds – info on feeding habits, reproduction, and habitat
503. Educational exhibit of 7 different game animals – info on feeding habits, reproduction, and habitat
504. Educational exhibit on hunting safety
505. Educational exhibit on the principles of game management
506. Educational exhibit on tracks of game birds and animals (maximum of 6)
507. Educational exhibit on types of guns and ammunition for hunting
508. Educational exhibit relating to WI hunting laws
509. Educational exhibit showing identification characteristics of an animal species
510. Hunting decoy made by exhibitor (duck, goose, turkey, etc.)
511. Item made by exhibitor for use in hunting
512. Photo display of wild animals taken with a hand-held camera – minimum of 4 photos
513. 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 9-13 minimum of 3)
514. Plaster cast of a wild animal's tracks
515. Survival kit assembled by exhibitor with a brief explanation of item's potential use (min. 8 items)
516. Taxidermy item exhibitor has shot and has completed with taxidermy
517. Any other exhibit relating to hunting
518. Any other exhibit relating to hunting
519. Beaver or muskrat hoop made by exhibitor
520. Educational exhibit of 10 fur-bearing animals – information on habitats, economic value, and tracks
521. Educational exhibit on the 3 main types of traps: foot hold, body gripper, and live trap
522. Educational exhibit promoting trapping
523. Educational exhibit showing equipment and tools used for dry land trapping
524. Educational exhibit showing equipment and tools used for water trapping
525. Educational exhibit showing identification characteristics of a specific furbearer – include tracks
526. Educational exhibit showing the parts of a trap
527. Item made by exhibitor to be used for trapping
528. Scrapbook of prior year's trapping season – include photos, any incidentals or missed traps, and what you have learned to improve for next season
529. Any other exhibit relating to trapping
530. Any other exhibit relating to trapping