



Department 16 -- Natural Resources and Environmental Education

Project Numbers 60001,60002,60003, 60005, 60006, 60051, 60052, 60053, 60101, 60102, 60103, 60104, 60105, 60121, 60122, 60123, 60201,60202,60203, 60311, 60321, 60331, 60341, 60351, 60361,60371, 60511, 60451, 60471, 60801, 60802, 60803

Superintendents: Judy Alford, Rose McMahon

Entry/Judging Day – 1 p.m. – 8 p.m. Wednesday before entry day of the fair

Entry/Judging Time – 1 p.m.-8 p.m., face to face judging only

Location – Exhibit Building

Check Out- Begins at 4:00 p.m. on Sunday with loading of Steers from Sale of Champions to be leaving before all other animals. All animals must be removed by 6:30 p.m. except for the Swine that leave Monday morning.

ADDITIONAL RULES OF ENTRY

- Youth eligible to exhibit in this department are those enrolled in a 4-H Natural Science project or other youth groups carrying a similar program as their supervised program.
- Collections – requirements
 - Must be mounted on 14" x 22" sized stiff backing material such as cardboard, tag board, plywood, hardboard, and other similar material.
 - Collection must be titled and dated.
 - Specimens in collection should be labeled with name, where collected, and date of collection. This includes collections of photographs.
- Poster – requirements
 - Must be 14" x 22" in size.
 - Posters must be titled, labeled, and contain descriptive information as necessary to convey the desired message.
- Scrapbook— requirements
 - Must be 8 ½" x 11" or 12" x 12" in size.
 - Should describe the work done in the project. Photos, pictures and sketches are encouraged.
- Exhibit of specimen's state or federally protected or endangered plant species, and bird nests are not allowed.

PREMIUMS	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
ALL CLASSES	2.50	2.25	2.00	1.75

CLASS A - EXPLORING YOUR ENVIRONMENT – PROJECT CODES-- 60001-60003

Lot Numbers

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|---|--|
| 1. Bean seed experiment notebook | 12. Types of animal camouflage |
| 2. Ecosystem, poster or display | 13. Predator strategies and devices |
| 3. Air pollution collector | 14. Habitat and niches of various animals and plants |
| 4. Food chain and food web poster | 15. Life in a sidewalk crack |
| 5. Weather measurement instruments | 16. Line transect survey map of an outdoor area |
| 6. Weather log | 17. Map of a watershed |
| 7. Cycles found in nature | 18. Model of a watershed |
| 8. How to compost | 19. Soil profiles |
| 9. Sources of pollution | 20. Parts of a flower |
| 10. Environmental impacts of oil spills | 21. How pollination works |
| 11. Mammal parts and characteristics | 22. Identification key |

23. Life cycle of a product or food
24. How to reduce or prevent pollution
25. Water cycle
26. Effects of acid rain on plants
27. How to reduce, reuse and recycle solid waste materials.
28. Home energy survey
29. Pest control methods pros and cons
30. Plant galls
31. Drawings of plants to show their adaptations
32. Methods of seed dispersal
33. Bird characteristics
34. Record of bird's sightings and migration patterns
35. Collection of plaster of Paris molds of different animal tracks

36. Habitat needs of an animal
37. Sketch of ideal wildlife habitat
38. Berlese funnel to collect insect decomposers
39. Major biomes of the world.
40. Water quality testing equipment
41. Interactions in an ecosystem
42. Pyramid of energy
43. Global climate change
44. Methods to control soil erosion
45. Impacts of different transportation choices
46. Journal of observations and reflections from my special natural spot
47. Wetland characteristics
48. Any other ecological exhibit

CLASS B - WILDFLOWERS – PROJECT CODE 60005

ADDITIONAL ENTRY REQUIREMENTS:

- Wildflower collections may be continuing collections; at least 50% of the specimens should be from the current year.
- Wildflower specimens should always be properly pressed, mounted and labeled with one specimen per page. Roots should be included only if they are needed to identify the flowers.
- Wildflowers should be identified by scientific name, if possible, and labeled with date of collection, location, name of collector.
- Purple loosestrife is a serious threat to Wisconsin's wetlands and waterways. It may not be exhibited as part of a wildflower collection.

Lot Numbers:

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| <ol style="list-style-type: none"> 1. Homemade plant press 2. Scrapbook of your wildflower project activities 3. Photographs of at least 10 wildflowers labeled with common and scientific names 4. Photographs of 15 or more wildflowers, labeled with common and scientific names. 5. 1st year collection of 15 different wildflowers—pressed, mounted, and properly labeled | <ol style="list-style-type: none"> 6. 2nd year collection-- add 15 more species of wildflowers to your collection 7. 3rd year and above – add 15 more species of wildflowers to your collection each year 8. Collection of seeds of 15 different wildflowers, mounted and properly labeled 9. Scrapbook on your wildflower project activities 10. Any other item not listed above. |
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CLASS C - BIRDS – PROJECT CODE – 60006

Lot Numbers

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| <ol style="list-style-type: none"> 1. Birdhouse made from any material, with description of kind of bird it was designed for and use 2. Scrapbook on 10 species of birds of Wisconsin. Include pictures, habitat, foods and life cycle 3. Scrapbook on your bird study project activities | <ol style="list-style-type: none"> 4. Bird feeder made from any material, with a description of types of feed used and birds attracted 5. Collection of twig, leaf, and fruit specimens from trees or shrubs that provide food for birds 6. Scrapbook on your bird study project activities 7. Any other item not listed above |
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CLASS D - FORESTRY – PROJECT CODE-- 60051, 60052, 60053

ADDITIONAL ENTRY REQUIREMENTS:

- All specimens must be properly identified to species (by scientific name) and mounted (one specimen per page), with date of collection, location, and name of collector.

Lot Numbers

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| <ol style="list-style-type: none"> 1. Poster with leaves of 10 or more native trees – dried and pressed 2. Poster showing 10 or more different native trees 3. Labeled chart or diagram showing the annual life cycle of a deciduous tree 4. Diagram of a tree with parts labeled | <ol style="list-style-type: none"> 5. Diagram of the cross section of a tree trunk with the parts labeled 6. Photos of 10 trees and listing of uses for each individual tree 7. Collection of lumber samples from 10 important Wisconsin forest trees |
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| <ol style="list-style-type: none"> 8. Scrapbook of leaf prints from 15 species of Wisconsin trees, labeled 9. Collection of seeds of 15 species of Wisconsin forest trees, labeled 10. Diagram of types of tree communities 11. Model of an effective ecosystem 12. Examples of good/bad soil 13. Poster showing the process of photosynthesis 14. Jobs that require knowledge of trees, forests 15. Life cycles of a tree | <ol style="list-style-type: none"> 16. Impacts of invasive species on forest 17. Different tree diseases 18. Measuring volume of standing trees 19. Identifying trees using dichotomous tree key 20. Identifying trees by rubbing the bark 21. Identifying types of tree fruits 22. Map of forests in your county 23. Forest biomes 24. Pruning a tree branch |
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CLASS E - MAPLE SYRUP – PROJECT CODE—60054

Lot Numbers

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| <ol style="list-style-type: none"> 1. Poster or diagram describing procedure for tapping trees, labelled 2. Scrapbook on your maple products project 3. Plate of 5 pieces of maple sugar or candy made by exhibitor | <ol style="list-style-type: none"> 4. One pint of maple syrup produced in your project. Must be in a glass mason jar, capped and with ring. May be opened and tested. 5. Eight photos of "syrup making in our woods" |
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CLASS F --ADVENTURES- CAMPING, WINTER TRAVEL, CANOEING PROJECT CODE 60101, 60102, 60103, 60105

Lot Numbers

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| <ol style="list-style-type: none"> 1. Poster, display or scrapbook on safety for outdoor adventure activity Poster on selecting basic equipment 2. Poster, chart, display or scrapbook on care and maintenance of adventure equipment 3. Scrapbook on your outdoor adventure project activities | <ol style="list-style-type: none"> 4. Poster showing parts of adventure equipment with proper labels 5. Poster on proper clothing and equipment 6. Other poster, chart, display or scrapbook on the adventure project |
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CLASS G – BACKPACKING AND HIKING – PROJECT CODE -- 60121, 60122, 60123

Lot Numbers

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| <ol style="list-style-type: none"> 1. Member-created trail map 2. Essentials for a hiking trip 3. Camping trip diary 4. First aid kit 5. CPR/First Aid steps 6. Foods list for a hiking trip 7. Hiking adventures 8. Treasure hunt using a compass 9. Building your own compass 10. Weather safety program 11. Camping tips 12. How to purify water 13. Winter survival plan 14. Dutch oven cooking | <ol style="list-style-type: none"> 15. Knot tying 16. Campfire designs 17. Lighting a safe fire 18. Filtering water 19. Micro-organisms in non-purified water 20. Poisonous plants (no live samples) 21. Member-created topographic, road or street map 22. Backpacking trip plan 23. Camping adventures video 24. Tent repair kit 25. Backpacking food recipes 26. Camp layout 27. Any other item |
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CLASS H – BICYCLING - PROJECT CODE – 60104

Lot Numbers

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|---|--|
| <ol style="list-style-type: none"> 1. Poster, chart, or display on types of bicycles, past and present 2. Poster, chart, or display on bicycle parts 3. Poster, chart, display on steps in care and maintenance of bicycle | <ol style="list-style-type: none"> 4. Poster, chart, display or scrapbook on bicycling safety 5. Poster, chart, display or scrapbook on bicycling equipment 6. Other poster, chart, display or scrapbook on the bicycling project |
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CLASS I - ENTOMOLOGY - PROJECT CODE-- 60201,60202,60203

ADDITIONAL ENTRY REQUIREMENTS:

- Insects must be properly killed, mounted, labeled, and identified.
- Labels must contain the following: Date of capture, Location, Name or initials of Collector.

- Insects should be identified at least to scientific order.
- Insects may be a continuing collection. However, at least 50% of the collection should be from this project year.

Lot Numbers

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|---|---|
| 1. Display of insect body parts | 15. Display of insect leg parts |
| 2. Pitfall or other insect trap | 16. Display of various types of insect legs |
| 3. Observation or Insect collection records | 17. Insect extractor |
| 4. Model of an insect's eye | 18. Insect separator |
| 5. Display on types of insect control in the home | 19. Poster on understanding insect pesticide labels |
| 6. 1 st year collection -- 15 species of insects | 20. Report on an insect experiment |
| 7. 2 nd year collection-- add 15 more species of insects to your collection | 21. Insect key |
| 8. 3 rd year and above – add 15 more species of insects to your collection each year | 22. Butterfly garden plans |
| 9. Poster on how insects use color for defense | 23. Display of insect mouth parts |
| 10. Insect collection or observation records | 24. Display of various types of insect mouths |
| 11. Display on entomology careers | 25. Mosquito rearing/observation chamber |
| 12. Poster on proper insect pinning techniques | 26. Spider web display |
| 13. Report on insect experiment | 27. Display of insect wings, parts |
| 14. Poster on insect metamorphosis | 28. Display of various types of insect wings |
| | 29. Insect journal |
| | 30. Any other not listed above |

SHOOTING SPORTS – PROJECT CODES -- 60311, 60321, 60331, 60341, 60351, 60361, 60371, 60511

ADDITIONAL ENTRY REQUIREMENTS:

- Open to members enrolled in Shooting Sports for the current year.
- No live ammunition, gunpowder, primers, bows or firearms allowed.
- All posters must be 14" x 22".

CLASS J - BASIC ARCHERY

CLASS K - BASIC PISTOL

CLASS L - BASIC RIFLE (includes Air Rifle)

CLASS M - BASIC HUNTING

CLASS N - BASIC SHOTGUN

CLASS O - BASIC MUZZLELOADING

CLASS P - WILDLIFE

Lot Numbers

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|---|---|
| 1. Educational poster on general gun or firearm safety | 8. Educational poster on the parts of a bow and arrow equipment |
| 2. Education poster on various types of gun or firearm ammunition | 9. Educational poster or display on bow and arrow equipment |
| 3. Educational poster on the proper care and maintenance of a gun | 10. Educational poster on bow and arrow safety |
| 4. Educational poster on the parts of a gun | 11. Any other educational display relating to shooting sports not listed above such as bow string, quivers, shooting glove, targets, etc. |
| 5. Educational poster on the various types of guns or firearms | 12. Carved decoy or animal, any material |
| 6. Educational poster relating to Wisconsin hunting laws | 13. Any other item related to wildlife, not listed above. |
| 7. Educational poster on the principles of game management | |

CLASS Q - RECYCLE -- PROJECT CODE-- 60451

Lot Numbers

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| 1. Display nature's recycler--labeled drawings, pictures, or photographs | 5. Display or poster showing how to recycle or the importance of recycling |
| 2. Exhibit renewable and nonrenewable resources | 6. Display or exhibit on how to compost |
| 3. Exhibit daily, weekly, or annual amount of waste generated by an individual | 7. A poster, series of labeled photos, scrapbook, journal or video documenting your recycling, waste reduction, or recycling education efforts |
| 4. Display on recycling of products | |

CLASS R - WATER - PROJECT CODE – 60471

Lot Numbers

1. Poster, display, or scrapbook on identifying water conservation and pollution issues in your community, such as, parks, playgrounds, community centers and waterways
2. Poster, display, or scrapbook on identifying water conservation and pollution issues on farms, such as, home wells, livestock waste, soil conservation and stream bank management
3. Poster, display, or scrapbook on identifying water conservation and pollution issues in homes, such as, lawn and garden maintenance, water usage and conservation and hazardous waste disposal
4. Poster, display, or scrapbook on identifying water conservation and pollution issues in schools, such as, water usage and conservation

CLASS S – FISHING – PROJECT CODE – 60801, 60802, 60803

ADDITIONAL ENTRY REQUIREMENTS:

- Tips of hooks on exhibit must be covered with either Styrofoam, putty, a drop of glue, etc., for safety.

Lot numbers

1. Poster identifying 6 types of live bait – list fish most likely to be attracted to bait.
2. Poster identifying 6 types of artificial bait or lures – list fish most likely to be attracted to bait.
3. Poster identifying 6 different species of Wisconsin game fish.
4. Poster on outdoor safety tips for fishing and boating.
5. Poster illustrating four different types of reels.
6. Poster illustrating different equipment used for ice fishing.
7. Poster identifying parts of a fish hook.
8. Homemade ice fishing tip-up.
9. Homemade ice fishing jig-pole.
10. Homemade worm box.
11. Fish print with ink.
12. Plaster cast of fish.
13. Story of a fishing experience this year. Photos may be included.
14. Poster of external fish anatomy.
15. Poster identifying and displaying by size, 10 difference fish hooks.
16. Homemade fish scaler.
17. Styrofoam or cardboard easel (8 ½" x 11") identifying and displaying 8 homemade tied flies– explain materials used for each.
18. Poster identifying parts of a row boat.
19. Scrapbook incorporating member's record book pictures and story related to Fishing Project.

CLASS T – NATURAL AND ENVIRONMENTAL SCIENCES SELF-DETERMINED - Project Code 191

Self-determined project exhibits are records of projects not listed in the premium list or an expansion of a traditional project beyond limits of the project or in greater depth than the project outlines.

- Posters MUST be 14" x 22".
- Scrapbooks MUST be 8 ½"x 11" or 12" x 12".

PREMIUMS

<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
2.50	2.25	2.00	1.75

Lot Numbers:

1. A poster promoting your self-determined project
2. An article made during current year with a 3 x 5-inch card attached identifying resources. The article should be of reasonable size to exhibit in the Expo building
3. A collection made during current year with a 3 x 5-inch card identifying work done
4. A scrapbook with story or essay, drawings, and photos of project work done during the current enrollment year.
5. Any other self-determined project not listed above.