

JUNIOR NATURAL SCIENCE - DEPARTMENT 116

JUDGING DAY: FRIDAY of Pre-Fair Judging Week, 12:00 -6:00pm

2023 Walworth County Fair overall Rules & Regulations apply and are at: walworthcountyfairgrounds.com

RULES GOVERNING NATURAL SCIENCE EXHIBITS

1. Champion & Reserve Champion Awards will be given per judges' discretion per department, division, or class.
2. Age classification is based on your age as of January 1, of the current year.
3. All components of a display must be attached such that the display can be transported as a single unit.
4. Collections of specimens in short supply, state or federal protected flowers, endangered or protected species of any kind are not allowed as part of a display or exhibit.
5. For safety purposes, sharp objects are only permitted if they are covered.

PREMIUMS: 1st - \$2.25 2nd - \$2.00 3rd - \$1.75 4th - \$1.50

Division Letter: A. Insects/Entomology

Rules:

1. Insect displays must be covered with a glass or Plexiglas.
2. All collections must have proper mounting pins.
3. Labeled: name, date found, place found.
4. All insects must have been collected this year in the state of Wisconsin, or the United States.

Class

After (1) year in the Project, add 5 more insects for each age group

1. Collection of a minimum of 5-10 Species of insects, Age 8-10
2. Collection of a minimum of 10-15 Species of insects, Age 11 -13
3. Collection of a minimum of 15-20 Species of insects, Age 14 & up
4. Self-determined any project (ex. Identify insect parts/show how insects move/insect metamorphosis/butterfly garden plans)
5. Any other exhibit relating to entomology (spider web display, insect control displays poster of life stages of an insect)

Division Letter: A. Bees and Honey

FREE Honey jars (Queenline or Classic) for honey exhibits are available to all registered WCF Jr Class honey exhibitors. Donated by the WALWORTH COUNTY BEEKEEPERS' ASSOCIATION. All registered WCF Jr Class honey exhibitors may pick up their honey jars at the Walworth County Fair Office M-F, 8a-5p after the official WCF Junior Class registration deadline. Limited quantity, first-come, first-serve.

Honey exhibits are required to include two (2) one-pound Queenline style or Classic style glass jars.

One jar may be opened and tasted during judging.

6. Extracted white honey
7. Extracted amber honey
8. One comb of honey, can be a round or square section or a full frame
9. Artistic beeswax, must be 1lb. minimum weight, 100% beeswax, may be more than one piece but must be firmly joined together, may be cast in a mold or carved.
10. Single Serving of a Food Item Made with Honey (include recipe) exhibitor with picture of when judged.
11. Poster or Display about some Aspect of Beekeeping or Honey
12. Beeswax candles, may be a single candle, a pair, or a set of candles, which may be dipped, molded, or rolled sheets

Division Letter: B. Forestry – All Ages

Class #:

1. Poster or display featuring at least five different species of either coniferous or deciduous trees, including a sample leaf and indication of range and forest type for each.
2. Poster identifying parts of a tree's root system and at least four things that roots do for trees.
3. Poster or display showcasing at least 5 different tree products representing at least two parts of a tree (e.g. bark and trunk, roots and bark, etc.)
4. Poster, display, or picture board showcasing at least five different animals, insect, or bird species that make their home in, on, or near a particular species of tree
5. Poster or display featuring a cross-section of a tree with rings intact and labeled by year. Additionally, note the variety of tree from which the cross section is taken.
6. Poster or display of a tree labeled with locations affected by tree disease and information about the disease itself.
7. Poster or display featuring five signs of harmful insect infestation in trees, invasive species, or habitat disruptions.
8. Binder or display showcasing the leaves of at least 15 different tree species. Include common and Latin names of each species, as well as information about the trees' range.
9. Poster or display of ten or more fruits or seeds labeled with name of tree and categorized as fleshy or dry.
10. Binder or display describing forestry-related businesses or careers.
11. Research project describing conservation practices or forest management principles.
12. Any other forestry exhibit

Division Letter: DD. Maple Syrup, All Ages

Maple syrup exhibits should include 1 clear pint and 1 clear sample jar. The sample jar will be opened and tasted during judging.

Class #:

1. Light Maple Syrup
2. Dark Maple Syrup
3. Single serving of a food item made with maple syrup (include recipe) & picture of exhibitor and food when judged
4. Poster or display about some aspect of maple syrup

Division Letter: E. Birds, All Ages

Class #:

1. Minimum of 10 birds (pictures, drawings, properly labeled)
2. Minimum of 15 birds (listing food, migratory and nesting habits)
3. Homemade bird feeder or house (identify for type of birds, seeds used, where placed on attached label)
4. Minimum of 6 game birds (identify habitats, food, nest areas, and hunting laws)
5. Wisconsin's game bird laws
6. Journal regarding bird observation (minimum of 10, add 3 more each year in the project)
7. Picture or drawing of bird parts
8. Any other bird related project (properly labeled)
9. Photo album of birds (5 to 10 different birds, label)

Division Letter: F. Sport Fishing, All Ages

Class #:

1. Picture or drawing of 8 Wisconsin Fish (include name, weight, habitat, feeding habits, WI laws regarding taking of fish)
2. Fishing equipment (all hooks must be covered)
3. Wisconsin Fishing Laws
4. Display of ice fishing
5. 10 knots for fishing/boating (mounted & labeled)
6. Personal fishing journal (may include lake maps and / or photos)
7. Display of 2 or more handmade lures, jigs, or spinner baits (hooks must be covered)
8. Fish handling (cleaning, preserving, & preparing)
9. Display various fish hooks, lines, and leaders (hooks must be covered)
10. Any other Sports Fishing Exhibit / Water Exhibit (ex. Effects of pollution on habitat of lake)

Division Letter: G. Shooting Sports, All Ages

No real guns or live ammunition allowed as part of exhibits.

Class #:

1. Poster or display illustrating story of proper gun handling
2. Poster or display identifying the parts of a gun with a key to the purpose of each part
3. Poster or display identifying common game animals and birds with notes of identification, feeding habits, reproduction, and state laws regulating hunting of the animal or bird
4. Poster or display of any other subject relating to the sport of hunting
5. Exhibit relating to Archery, arrows must be covered or air pistol
6. Exhibit relating to Air Rifle or Air Pistol or .22 Rifle or .22 Pistol or Muzzleloader
7. Exhibit featuring effective trail cam usage to capture wildlife (songbirds, wild mammals, waterfowl, etc.)
8. Any other exhibit related to shooting or wildlife education
9. Handmade article related to shooting or wildlife education

Division Letter: K. Recycling Education, All Ages

Class #:

1. Show how a recycling company or landfill works.
2. Compare Renewable and non-renewable resources.
3. Show daily, weekly, monthly, or annual amount of water & recycled materials generated by individual or family.
4. Show how to recycle and the importance of it.
5. Farm composting and/or how to compost or Vermiculture (composting with worms)
6. Conserving energy in your home.
7. Air pollution causes and how to reduce.
8. Illustrate reduce, reuse, and recycle.
9. Five recyclable and five non-recyclable materials.
10. Paper-making process.
11. Turn Trash into Cash (poster only)

Division Letter: L. Adventures in Environment, All Ages

Class #:

1. Camping equipment or clothing necessary for a specific environmental adventure (e.g. backpacking, rock climbing, night hiking, orienteering, etc. using drawings and / or photos)
2. Campfire safety and equipment needs, as well as a sample menu for a full day's outing.
3. Knot tying techniques and usage for specific outdoor situations.
4. Safety procedures or first aid kit essentials appropriate for outdoor adventures.
5. Fire prevention in the outdoors.
6. Journal, story, poem, or song created by members about a specific real-life adventure experience.
7. Any other outdoor adventure-based exhibit.

Division Letter: M. Wild Flowers Exhibit, All Ages

Class #:

Flowers must be from Wisconsin

1. Pressed blossom of a flower (all parts properly labeled)
2. 10 wildflower photos, identify each flower and tell where photo was taken.
3. Wildflower arrangement
4. 10 kinds of wildflower seeds
5. Show the creation and maintenance of a wildflower garden or prairie study
6. Any other Wildflower project (ex. Pressed flowers)

Division Letter: N. Water, All Ages

Class #:

1. Water conservation techniques or methods.
2. Local or national water pollution issues.
3. A local water issue.
4. Portfolio discussing a developed and implemented plan for addressing a specific water issue in the environment.
5. Any other water-related exhibit.

Division Letter: O. Geology, All Ages

Class #:

1. Collection of 6-10 rock or mineral specimens with a minimum of 3 minerals represented. Collection may include duplications that show variation. Label collection and note where each component was found.
2. Poster or display documenting the results of hardness and streak tests conducted on at least five different specimen. Label and note where found.
3. Poster or display describing plate tectonics.
4. Poster or display tracing fossil history through the geologic ages.
5. Poster or display featuring rocks or minerals used in the lapidary arts.
6. Any other geology exhibit.

Division Letter: P. Canoeing Exhibit, All Ages

Class #:

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| 1. Canoe Safety, maintenance and equipment | 3. Canoe Trip |
| 2. Homemade canoe paddles or canoe | 4. Any other canoeing exhibit |

Division Letter: R. Wildlife, All Ages

Class #:

1. Six wildlife species native to Walworth County or the state of Wisconsin. This may include different species of the same type of animal. This should not include insects.
2. Defense strategies used by four wildlife species.
3. Wildlife reproduction and care of young.
4. Endangered Species.
5. Winged mammals.
6. Attracting wildlife to your home yard.
7. Wisconsin wildlife food chains.
8. Taxidermy.
9. Game management practices and organizations.
10. 6-12 photos taken by exhibitor. Wildlife photos must be captioned and displayed to tell a story or facts about the wildlife picture.
11. Any other wildlife exhibit.

Division Letter: RR. Wildlife Calls, All Ages

Class #:

1. **Wildlife Calls Performance.** This is a performance class which exhibitors will attend judging to perform their own duck or goose call using their voice. Exhibitors must provide an audio recording of the call they are mimicking. Exhibitor must bring whatever is needed to play the recording, no equipment will be provided. There is no other exhibit to prepare for this class.

Division Letter: S. Exploring Your Environment, All Ages

Class #:

1. Wisconsin state symbols or native trees.
2. Wisconsin hunting and fishing laws.
3. Wisconsin habitat and its inhabitants.
4. Factors contributing to pollution in Wisconsin.
5. Stars, constellations, and planets observable in the skies above Wisconsin during a particular time period.
6. Differences between two or more Wisconsin habitats.
7. Tracks from six or more Wisconsin wildlife species.
8. The pollination process.
9. Origins of groundwater and how it is impacted by humans and the environment
10. Factors or implications of biotechnology use in our environment.
11. Biodiversity of a specific habitat or Wisconsin region.
12. Climatology and connection to habitats in Wisconsin or beyond.
13. Weather and its connection to environmental studies.
14. Plant successions in Wisconsin habitats.
15. Any other environmental exhibit.

Division Letter: V. Backpacking & Hiking, All Ages

Class #:

1. Detailed explanation of plans for a day hike, include schedule, needed supplies, & meals.
2. Appropriate hiking apparel for two different types of hiking adventures. Specify season and terrain.
3. The value and use of a compass while hiking.
4. Detailed explanation of plans for a multi-day camping trip (2 or more nights) include information about travel plans, the camping site, anticipated activities, meals, & all supplies needed.
5. Steps to be taken on camping trips to honor the "Leave No Trace" principles
6. Detailed explanation of plans for a multi-day group backpacking adventure, including gear & supplies to be taken, planned shelter, meals, and a description of the anticipated campsite.
7. Detailed design of a non-tent backpacking shelter, include a list of supplies needed to make it ready to sleep in.
8. Detailed plans for a personal conditioning program designed to prepare you for challenging backpacking adventures.
9. Explanation of map orientation and use of triangulation while hiking/camping.
10. Any other backpacking/hiking exhibit.

Division Letter: Y. Renewable Energy, All Ages

Class #:

1. Exhibit describing how wind or solar energy is collected and/or converted for human use
2. Exhibit describing the benefits of one or more renewable energy sources
3. Exhibit comparing a renewable energy source to a non-renewable energy source
4. Exhibit showcasing one or more careers in a renewable energy field
5. Exhibit focused on usage of renewable energy sources in WI or throughout the U.S.
6. Any other renewable energy exhibit.

JUNIOR GEOSPATIAL

REGULATIONS:

1. Exhibitors must bring their own laptops for demonstration purposes during judging. Internet connections are not guaranteed. Displays are limited to a size of 20" x 22". Posters are limited to a size of 14" x 22".

Division Letter: AA. Geocaching, All Ages

Class #:

1. Exhibit comparing sizes and/or types of geocaches
2. Exhibit describing helpful items individuals should take with them when looking for caches
3. Exhibit documenting your personal adventure locating 3-5 geocaches
4. Exhibit showcasing your efforts to create and hide your own cache for others to find
5. Exhibit showcasing your efforts to teach others about some aspect of geocaching
6. Any other geocaching exhibit

Division Letter: BB. Geospatial, All Ages

Class #:

1. Make an exhibit explaining what GIS is and how it is used in the world today
2. Design an exhibit describing GIS-related careers
3. Develop a tourist guide for a specific geographical area that features a map of 4-6 sites to be toured, along with positional data for the sites, info about the sites, and geo tools used to create the map. (Even businesses, churches, parks or historical sites in your local community are worthy tourist locations.)
4. Make an exhibit comparing different types of maps or mapping apps
5. Any other geospatial exhibit