# DEPARTMENT 16 JUNIOR NATURAL SCIENCES (Naturespace)



Superintendent – Dustin Heitkamp

All posters must be 14"x22"

NOTE: An exhibit may not be entered more than one year.

### Premiums:

# 1st \$2.00 2nd \$1.75 3rd \$1.50 4th \$1.25 CLASS A – ENTOMOLOGY – Grade 3-8 CLASS AA – ENTOMOLOGY – Grade 9-13 Item No.

- 1. Homemade insect net
- 2. Display of insect killing equipment, label the jar for the chemical used
- Collect, identify, mount 5 carnivorous insect species and tell what they eat
- Collect, identify and mount 5 insect pollinators and list the plants they pollinate
- Collect and mount at least 1 insect from 7 different insect families, identify the insects and the families
- Collect, identify and mount 10 species from 1 insect order, name the order
- Display and label a collection of 5 insects that spend their larval stage in the water
- Display a collection of 3 or more nest building insects, identify insects and explain how nests are built
- Make a found object insect, give it a name, be sure to include all of its major body parts
- 10. Insect observations records
- 11. Display on types of insect control in the home
- 12. Poster of animals and plants that eat insects
- 13. Insect trap, attach a 3"x5" card explaining how it works
- 14. Booklet on entomology careers
- 15. Poster on insect metamorphosis
- 16. Poster of various types of insect legs
- 17. Insect extractor, attach a 3"x5" card explaining how it works
- 18. Insect separator, attach a 3'x5' card explaining how it works
- 19. Poster on understanding insect pesticide labels
- 20. Report on an insect experiment
- 21. Butterfly garden plans
- 22. Poster of various types of insect mouths
- 23. Spider web display
- 24. Poster of various types of insect wings
- 25. Any other item not listed

# CLASS B – FORESTRY Level 1: FOLLOW THE PATH Item No.

- Collections of at least 5 different types of leaves, identify each
- 2. Booklet on different types of trees
- 3. Poster on different types of roots
- 4. Cross section of a tree labeled with historical perspective
- 5. Poster on types of tree communities
- 6. Model of an effective ecosystem
- 7. Examples of good/bad soil
- 8. Poster on the process of photosynthesis
- Topographic map of your county indicating use and/or features
- Informational display on jobs that require knowledge of trees, forests etc.
- 11. Any other item not listed

# CLASS C – FORESTRY Level 2: REACH FOR THE CANOPY <a href="Item No.">Item No.</a>

- Poster on how water moves from roots to canopy
- 2. Poster on life cycles of a tree
- U.S. map showing forests in each state

- 4. Plants that coexist in a forest
- Display describing the impact of one invasive species on a forest ecosystem
- 6. Poster on different tree diseases
- 7. Brochure of the risks of forest fires
- 8. Importance of forest densities
- Display to show tools/methodology used to measure volume of standing trees
- 10. Informational display on why people need forests
- 11. Informational display on selecting urban tree planting sites
- 12. Any other item not listed

# CLASS D – FORESTRY Level 3: EXPLORE THE DEEP WOODS <a href="tem-No.">tem No.</a>

- 1. Identifying trees using dichotomous tree key
- 2. Field guide of tree bark rubbings
- 3. Compare and contrast types of tree fruits
- 4. Map of forests in your county
- 5. Poster of forest biomes
- 6. Informational display on goods, services provided by forests
- 7. Comparison of renewable & nonrenewable resources
- 8. How-to guide on tree pruning
- 9. Informational display on forestry careers
- 10. Informational display on improving trees genetically
- 11. Any other item not listed

## CLASS E – WILDFLOWERS – Grade 3-8 CLASS EA – WILDFLOWERS – Grade 9-13 Item No.

- Photo collection of at least 7 wildflowers from a prairie habitat. (label)
- Photo collection of at least 7 wildflowers from a wetland habitat (label)
- Photo collection of at least 7 wildflowers from a forest habitat (label)
- Photos or drawings of at least 5 wildflowers from the WI Endangered Species List, identify plant and tell whether it is endangered or threatened
- 5. Poster showing the parts of a plant
- Photos or drawings of at least 3 different carnivorous plants, identify
- Photos or drawings of at least 5 different medicinal plants, identify and explain use
- Explanation of at least 4 different seed dispersal methods and display of seeds representing those methods (label)
- Create a booklet explaining at least 10 examples of how plants were used traditionally by Native Americans, include pictures
- Any other item not listed

## CLASS F – WATER – Grade 3-8 CLASS FA – WATER – Grade 9-13 Item No.

- Terrarium showing the water cycle. Label the different parts of the water cycle
- 2. Map of your watershed
- 3. Diorama of your watershed
- Construct a diorama showing good water quality practices in your school (label)
- Construct a diorama showing good water quality practices in your home (label)
- 6. Construct a diorama showing good water quality practices in your community (label)
- Construct a diorama showing good water quality practices on your farm (label)
- 8. Diorama showing path of your drinking water from its origin, through you house and back to the environment (label)
- Brochure showing environmentally friendly cleaning product alternatives
- Display showing environmentally friendly cleaning product alternatives
- 11. Flyer on project ideas for your community
- 12. Any other item not listed

## **ADVENTURES Projects**

CLASS G – INTRODUCTION TO ADVENTURES – Grade 3-8
CLASS GA – INTRODUCTION TO ADVENTURES – Grade 9-13

CLASS H – ADVENTURES – WINTER TRAVEL – Grade 3-8
CLASS HA – ADVENTURES – WINTER TRAVEL – Grade 9-13

CLASS I – ADVENTURES - CANOEING – Grade 3-8
CLASS IA – ADVENTURES - CANOEING – Grade 9-13

## Item No.

- 1. Map created during project
- 2. Field notebook
- 3. Collection of camping or day trip recipes
- 4. Display of knots and/or hitches
- 5. Flyer on how to reduce human impact while camping
- 6. First aid kit for project or sport
- Project scrapbook
- 8. Project journal
- 9. Canoe paddle you made
- 10. Homemade backpack
- 11. Any other item not listed

## CLASS J – ADVENTURES - BICYCLING – Grade 3-8 CLASS JA – ADVENTURES - BICYCLING – Grade 9-13 Item No.

- 1. Develop a brochure on how to select a proper bike
- 2. Display on the benefits of bike helmets
- Poster on proper bike safety
- Create a maintenance check list to use before taking a bike trip.
- Environmental journal of all your observations along your favorite bike route
- Create a display on "what to see and experience" along Wisconsin bike routes
- 7. Develop an itinerary for a bicycle day trip you are taking
- 8. Journal about the bicycle day trip you took
- Develop an itinerary for a bicycling camping trip you are taking
- 10. Journal about the bicycling camping trip you took
- 11. Flyer on types of food to take on a bicycle trip
- 12. Any other item not listed

# CLASS K – BACKPACKING & HIKING Level 1: Hiking Trails Item No.

- 1. On a trail map, mark the locations of what you have seen
- List of essentials for a hiking trip, include information on why
- 3. Diagram of the parts of a backpack
- 4. Assemble a first aid kit
- Outline and photograph of a demonstration you gave on "moleskin"
- 6. Foods list for a hiking trip, include why it's a good choice
- 7. Detailed list of hiking adventure etiquette
- 8. Create a treasure hunt using a compass
- 9. Build your own compass
- 10. Photo journal of a weather safety program you organized
- 11. Display of regional animal tracks
- Display of wildlife food samples, include information why not to feed wildlife
- 13. Compare and contrast hiking footwear including socks
- 14. Collection of day hike planning lists
- 15. Display of ways to protect yourself from lightning
- 16. Display of what to look for in a natural shelter
- 17. Journal of your backpacking/hiking experience

# CLASS L – BACKPACKING & HIKING Level 2: Camping Adventures

#### Item No.

- 1. Collection of camping trip planning lists
- 2. Display identifying 6 different types of knots you have tied
- Identify what to look for in a campsite, include a sketch of your ideal campsite
- 4. Photo display of you at different stages of pitching a tent
- Outline and photograph of a demonstration you gave on camping tools
- List of the essential camping gear for a trip lasting 3-7 days, include information on why it's important
- 7. A sample menu for a 3 day 3 meals per day camping trip
- 8. Collection of questions and answers you considered related to food preparation supplies.
- 9. Pros and Cons list of different types of camping stoves
- Informative display on ways to dispose of "gray water" at your campsite
- Compare and contrast different ways to purify water while camping
- 12. Research on micro-organisms in non-purified water
- 13. Create a photo journal on poisonous plants
- 14. Camping trip diary
- Collection of your 15 minute environmental total silence observations
- 16. Information on a letter you wrote to an elected official on an environmental issue you are passionate about include a copy of the letter, a photo of you mailing the letter and any follow up correspondence received.

# CLASS M – BACKPACKING & HIKING Level 3: Backpacking Expeditions

# Item No.

- Examine 3 different kinds of maps, tell about their similarities and differences
- 2. Create an outdoor adventures pyramid game
- 3. Collection of information for planning a backpacking trip
- 4. Compare and contrast different types of backpacks, then explain which one is best for you and why
- Share what things you should consider before purchasing a tent
- 6. Create a tent repair kit
- 7. Compare and contrast non-tent shelters
- Create a photo story of 3 activities that you did at your backpacking campsite
- Research what you can and cannot do in state or national parks
- Outline and photograph of a demonstration you gave on backpacking menu planning
- A sample menu for a 3 day 3 meals per day backpacking trip
- 12. Assemble a book of recipes to cook while on the trail
- Research different environments and their effect on "Leave No Trace" backpacking
- 14. Your train for the trail log book
- Research how to deal with a mechanical situation on a backpacking trip
- 16. Journal of your backpacking/hiking experience

### CLASS N - RECYCLING - Grade 3-8 CLASS NA - RECYCLING - Grade 9-13

## Item No.

- A poster on recycling
- 2. A poster about your club's recycling
- 3. A poster showing items that can be recycled
- Toy made from recycled materials. Attach a card explaining what was recycled
- Decoration made from recycled materials; attach card explaining what was recycled
- Useful household items made from recycled materials. Attach a card explaining what was recycled
- Useful shop item made from recycled materials. Attach a card explaining what was recycled.

- 8. Display a small example of compost bin with glass or plastic side which would show the stages of the composition
- Miniature solar dryer made of easily found materials from around the house
- Display of at least 3 commonly recycled materials and an example of a product that it is recycled into (examples: milk jugs, pop bottles, newspapers, etc.)
- Any other exhibit with card attached explaining what was recycled.

## **SPORTSFISHING Projects**

# CLASS O – SPORTFISHING Level 1: TAKE THE BAIT Item No.

- 1. Poster identifying parts of a fish
- ID booklet of fish in your area, include name, picture and where each can be found
- 3. Create a fish print
- 4. Display of types of bait
- 5. Display of the types of fishing knots
- 6. Display of the types of fishing tackle
- 7. Create a tackle box with an inventory check list
- 8. Report explaining proper tackle maintenance
- Scrapbook showing proper casting techniques, include descriptive headings with pictures
- Report explaining the differences between bobber and bottom fishing
- 11. Map of favorite fishing spot
- 12. Report on caring for your catch
- 13. Any other item not listed

# CLASS P – SPORTFISHING Level 2: REEL IN THE FUN <a href="Item No.">Item No.</a>

- 1. Brochure on selecting the right fishing knot
- 2. Guide on how to use a spinning rod and reel
- 3. Poster on how to cast a bait
- 4. Poster on how to cast a fly
- 5. Create a decorated lure or jig
- 6. Create a fly wallet
- 7. Create an artificial fly
- 8. Report on the Wisconsin fishing laws
- 9. Poster on how to cook fish
- 10. Report on cleaning a shoreline
- 11. Report on a watershed study
- 12. Create a soda bottle trap
- 13. Poster on fish senses
- 14. Report on fish adaptations
- 15. Any other item not listed

# CLASS Q -SPORTFISHING Level 3: CAST INTO THE FUTURE Item No.

- 1. Poster on parts of a fishing reel
- 2. Poster on fishing reel maintenance
- 3. Report on how to make artificial lures and flies
- 4. Poster on how to debarb and sharpen hooks
- 5. Create a lure design plan
- 6. Create a cedar wood lure
- 7. Display of a refurbished rod and reel
- 8. Display of customized tackle
- 9. Poster on types of insects fish consume
- 10. Create a fishing-related game
- 11. Create a sportfishing skillathon
- 12. Report of fishing trip plans
- 13. A fishing field journal
- 14. Develop a boat safety checklist
- 15. Report on angling ethics
- 16. Report on sportsfishing-related careers
- 17. Any other item not listed

## CLASS R – SHOOTING SPORTS – Grade 3-8 CLASS RA – SHOOTING SPORTS – Grade 9-13 Item No.

- 1. Poster identifying parts of a gun
- 2. Poster about cleaning a gun
- 3. Poster emphasizing gun safety
- 4. Display of 5 (only) empty shell casings, mounted and identified
- Display of 10 or more empty shell casings, mounted and identified
- 6. Poster about archery safety
- 7. Poster about archery equipment
- Plaster casts of tracks from 3 game animals, mounted and identified
- 9. Poster identifying 3 common game birds
- 10. Poster identifying 3 common game animals
- 11. Poster on preparing game (skinning, plucking, drawing etc.)
- 12. Poster of a shell reloading process
- 13. Poster about trapshooting, skeet and/or sporting clays
- 14. Poster / diagram of shotgun shell or rifle cartridge
- 15. Tree stand for bow hunting (homemade)
- 16. Homemade archery accessory
- 17. Any other item not listed

## **4-H ARCHERY TOURNAMENT**

Superintendent – La Crosse County 4-H Shooting Sports Committee Sunday, Starts at NOON, Farm Progress Building.

All entrants must be enrolled in 4-H Archery Project. All entrants must have attended at least 2 La Crosse County 4-H Archery sessions during the current project year. Juniors, Intermediates and Seniors will shoot in mixed groups until everyone has completed. Trophies & Ribbons will be awarded at the end of the Tournament.

You may enter only ONE class (S or T).

# CLASS S – BARE BOW Item No.

- 1. Junior archery tournament, grades 3-5
- Intermediate archery tournament, grades 6-8
- Senior archery tournament, grades 9-13

# CLASS T – SIGHT BOW and/or RELEASE Item No.

- 1. Junior archery tournament, grades 3-5
- Intermediate archery tournament, grades 6-8
- 3. Senior archery tournament, grades 9-13

## **CLASS U – AIR RIFLE TOURNAMENT**

Class U is a Pre-Fair activity with results from the Air Rifle Tournament in March. Targets from the tournament will be displayed in the Youth Building.

## Item No.

- 1. Junior air rifle tournament, grades 3-5
- Intermediate air rifle tournament, grades 6-8
- 3. Senior air rifle tournament, grades 9-13