

DEPT. 16 – NATURAL SCIENCE  
JUNIOR DIVISION



Superintendent: Mike VanDeurzen 920-336-0520

Christian Wagner

<b>Entries Due:</b>	July 15 <sup>th</sup>	<b>Arrival:</b>	Tuesday, 1:30 – 5:30 p.m. (Div. 143-147 & 149-159)
<b>Judging (Danish):</b>	Division 147 Class 22-23	<b>Release:</b>	Sunday, 6:00 p.m.
<b>Judging (Face-to-face):</b>	Divisions 143-147 & 149-159		Tuesday, 1:30 – 6:00 p.m.

IN ADDITION TO THE RULES LISTED BELOW, PLEASE REFER TO ALL THE RULES AND REGULATIONS LISTED IN THE FRONT SECTION OF THIS BOOK.

**GENERAL RULES:**

1. Exhibitors must be enrolled in the Natural Science Project or Doing Similar Work in another Youth Organization in order to Exhibit/Show.
2. All Posters must be no larger than 14" x 22" and Displays must be no larger than 36" x 36".
3. No Actual Bird Nests.
4. All Entries must be labeled identifying Where Your Study Took Place (i.e. Backyard, Woodland, Park, Wetland, Field, etc...) or Where Specimen Was Found.

<b>PREMIUMS FOR Divisions 143-159:</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>
	\$2.00	\$1.75	\$1.50	\$1.25

**DIVISION 143 – BIRDS**

**CLASS NO.**

1. **Bird Bodies:** Display and Identify the Body Parts of a Bird and their Functions
2. **Bird Display:** Drawings or Cut-Outs of at Least 10 Birds; giving Name, Food Habits, Migratory Habits, Habitat & Nesting Habits of Each.
3. **Bird Foods:** A Display of at Least 6 Food Items for Birds (Commercial Bird Foods or Plants & Shrubs that Provide Food); Identify Each Item & List which Birds Eat Each Type of Food
4. **Bird House:** Bird House which you Constructed; Label Type of Bird Intended For & Reason for the House Design
5. **Compare/Contrast:** Compare and Contrast at Least 4 Different Birds. Show how their Differences are Necessary for How and Where they Live
6. **Nest Photography:** Photographs of 4 or more Bird Nests; identify Type, Place Located & Date Found
7. Any Other Exhibit not Listed Above

**DIVISION 144 – SPORTFISHING**

**CLASS NO.**

1. **Artificial Lures/Flies:** Display of 3 Artificial Lures or Flies you have made
2. **Boat Safety:** Poster on Fishing Boat Safety, Including a Safety Checklist
3. **Bobber/Bottom Fishing:** Poster showing Differences between Bobber & Bottom Fishing
4. **Cooking Fish:** Poster on Cooking Fish
5. **Fish Bodies:** Poster on the Parts of a Fish
6. **Fish Senses Poster:** (Smell, Sight, Taste, Hearing); Compare 4 or more Fish
7. **Fish Types:** Poster or Display of at least 5 types of fish found in Northeast Wisconsin
8. **Fishing Map:** Map of Favorite Fishing Spot
9. **Game:** Create a Fishing-Related Game
10. **Insects:** Poster on at least 4 Types of Insects that Fish Like
11. **Jig display** – Different Head Styles & Materials; at Least 5 Types
12. **Reel Parts:** Poster Identifying Parts of a Fishing Reel
13. **Rod AND Reel Parts:** Poster on Parts of a Rod & Reel
14. **Tackle Box:** Tackle Box with Inventory Checklist
15. Any other item not listed above

## **DIVISION 145 – ENTOMOLOGY**

### **RULES:**

1. Insects must be properly killed, mounted and identified.
2. Identification must include Common Name, Date & Location Insect was Found and the Insect's Stage of Development (Nymph, Egg, Larvae, Adult, etc...)

### **CLASS NO.**

1. **Cocoon/Chrysalis**: A Collection, Diagram or Photograph of 4 or More Different Kinds of Cocoons or Chrysalises and the Emerged Moths or Butterflies
2. **Entomology Careers**: Poster or Display on Entomology Careers
3. **Insect Control**: Poster or Display of an Insect Control Activity
4. **Insect Life Cycle**: Poster or Display Explaining the Life Cycles of an Insect
5. **Insect Parts Poster**: Poster or Display Identifying the Parts of an Insect
6. **Specimens**: 10 or More Specimens of Insects (See Mounting and Identification Guidelines Above)
7. **Species Scrapbook**: Scrapbook of 10 or More Species of Insects; (Photograph or Drawing of Each, Properly Identified); Describe Habitat & Environment, Eating Habits & Food
8. **Tree/Plant Injury**: A Collection of Trees or Plant Parts Showing 4 or More Different Types of Injury which Insects have Caused & a Report on the Insects Causing the Damage
9. **Value of Insects Poster**: Poster or Display Explaining the Value of Insects
10. Any Other Exhibit not Listed Above

## **DIVISION 146 – FORESTRY**

### **CLASS NO.**

1. **"Damaged Wood" Samples**: Collection of at Least 4 Wood Samples Showing Results Wrought by Disease, Insects, etc. (Labeled and Explained)
2. **Forest Harvesting**: Poster or Display Showing a Forest Harvesting Method
3. **Leaves**: Exhibit of 15 or more Kinds of Leaves from Trees Grown in Wisconsin, (Properly Labeled)
4. **Plant Press**: Plant Press made BY Exhibitor
5. **Scrapbook**: Scrapbook showing Map of Woodlot, Planting Plans, Pictures, etc...
6. **Tree Lifespan Poster**: Poster or Display Tracing the Life of a Tree from Seed to Finished Product
7. **Tree Poster**: Poster or Display Showing one of the following: A) Proper Tree Planting Methods; B) Methods of Seed Dispersal; C) Uses of Different Types of Wood; D) Types of Tree Shapes; E) Parts of a Tree, Including Cross-Section of Trunk - Label Zones in Cross-Section
8. **Tree Seeds**: Collection of Tree Seeds from at Least 15 Trees, Properly Labeled
9. **Wood Samples**: Collection of at least 6 Wood Samples, Properly Labeled
10. Any Other Exhibit not Listed Above

## **DIVISION 147 – SHOOTING SPORTS – Displays & Exhibits**

\*\*\*\*\*Bows, arrows, firearms, air guns, and live ammunition are NOT permitted as part of the exhibit. Please use a poster or display with photos for these items\*\*\*\*\*

### **CLASS NO.**

1. **Archery Equipment Poster:** Educational Poster or Display on Archery Equipment
2. **Bow & Arrow Poster:** Educational Poster on the Parts of a Bow & Arrow
3. **“Competition Experience” Exhibit:** Exhibit or Report of Competition Experience (Competition to have been Experienced Between the Interim of the Previous Fair & the Current County Fair)
4. **Firearm Parts Poster:** Poster Identifying the Parts of a rifle, shotgun or air pistol
5. **Gun Maintenance Poster:** Poster on the Proper Care and Maintenance of a Gun
6. **Homemade Armguard, Finger Tab or Glove**
7. **Homemade Arrow**
8. **Homemade Bow Case (Fabric or Wood)**
9. **Homemade Ground Quiver**
10. **Homemade Gun Case (Fabric or Wood)**
11. **Homemade Hip or Belt Quiver**
12. **Homemade Kneeling Roll**
13. **Homemade Pellet Block or Stand**
14. **Homemade Rifle Sling**
15. **Homemade Shell Pouch**
16. **Homemade Shooting Bench**
17. **Hunter’s Essay or Diary:** Scrapbook or Essay on a Hunter’s Diary of his/her own Hunt (Hunt to have been Experienced between the Interim of the Previous Fair and the Current County Fair)
18. **Shooting Sports Progress:** Enter 2 targets YOU shot, 1 from an early practice and 1 from a later practice. Write up and explanation of what you have learned.
19. **Sight Alignment Poster:** Poster or Display Illustrating and Briefly Explaining Proper Sight Alignment for (Select One): Archery, Air Rifle, Air Pistol, 0.22 cal. Rifle, or Shotgun Trap Gun
20. **Survival Kit:** Homemade Survival Kit Assembled by Member with a Brief Explanation of each Item’s Potential Use ~ Must Include 8 Items. Display should be in a Container (Example: Shoe Box or Ice Cream Bucket)
21. **Target holder:** Made from PVC Pipe or From Wood
22. **Archery Target:** shoot from short practice distance—Enter 1 scored archery target you shot at a practice (Must be shot between the interim of previous Fair and the Current County Fair and must be signed by a coach). Ribbons will be assigned at the end of the entry day after all exhibits have been entered.
23. **Archery Target:** shoot from middle practice distance—Enter 1 scored archery target you shot at a practice (Must be shot between the interim of previous fair and the current fair and must be signed by a coach. Ribbons will be assigned at the end of the entry day after all exhibits have been entered.
24. **Archery Target** – shoot from long practice distance – Enter 1 scored archery target you shot at a practice (Must be shot between the interim of previous Fair and the current County Fair and must be signed by a coach). Ribbons will be assigned at the end of the entry day after al exhibits have been entered.
25. **Air rifle targets** – plinker (black gun at practice). Enter a set of prone, kneeling and standing air rifle targets you shot at a practice (Must be shot between the interim of previous fair and the current County Fair and must be signed by a coach). Ribbons will be assigned at the end of the entry day after all exhibits have been entered.
26. **Air rifle targets** – sporter (red, white, and blue gun at practice). Enter a set of prone, kneeling and standing air rifle targets you shot at a practice (Must be shot between the interim of previous fair and the current County fair and must be signed by a coach). Ribbons will be assigned at the end of the entry day after all exhibits have been entered.
27. **Competition Essay/Scrapbook** – Scrapbook or Essay on a shooting competition you participated in (Competition must have occurred between the interim of the previous fair and the current county fair)
28. Any other exhibit not listed above

## **DIVISION 149 – INTRO TO NATURE SPACE**

### **RULES:**

1. All Entries must be Labeled Identifying Where your Study Took Place (i.e. Backyard, Woodland, Park, Wetland, Field, etc...)

## **CLASS NO.**

1. **Animals/Plants:** A Poster of at least 4 Animals and/or Plants Found within the Nature Space
2. **Food Chains:** A Poster or Exhibit showing the Food Chains found in Nature Space (be sure to use only the plants and animals that were actually observed in the nature space)
3. **Map & Inventory:** A Map and Inventory of the Plants and Animals found in Nature Space, the Inventory can be Done Creatively using Drawings, Snapshots, Listings, etc...
4. **Seasonal Weather Changes:** An Exhibit showing the Seasonal Weather Changes in Nature Space.
5. **Specimens:** Any Display or Collection of at least 4 Specimens found within Nature Space; all Specimens must be Properly Mounted and Labeled including Common Names, Date & Location of Collection
6. Any Other Exhibit not Listed Above.

## **DIVISION 150 – MAPLE SYRUP**

### **CLASS NO.**

1. **Equipment:** Poster or display that explains the equipment used for making maple syrup
2. **Syrup-Making:** Poster or display with pictures that explains the various steps to making maple syrup
3. **1 Pint of Maple Syrup:** (Jars will be opened for tasting, then refrigerated or photographed and taken home). Jars may contain the packaging label of the producer.
4. Any other exhibit not listed above

## **DIVISION 151 – CROSS-COUNTRY SKIING, DOWNHILL SKIING & DOG SLEDDING**

### **CLASS NO.**

1. **Activities:** Scrapbook Showing your Activities in Cross-Country Skiing, Downhill Skiing or Dog Sledding
2. **Animal Selection/Care:** Poster or Display Relating to Animal Selection and/or Care of Animals for Dog Sledding
3. **Equipment Care:** Poster or Display on Proper Care of Equipment; such as Waxing, Storage, Repairing, etc...
4. **Equipment Selection:** Poster or Display on Equipment Selection
5. **Safety Rules:** Poster or Display on Techniques or Safety Rules
6. Any other exhibit not listed above

## **DIVISION 152 – WILDFLOWERS**

### **CLASS NO.**

1. **Native Ferns:** Collection of 4 Native Ferns; Properly Pressed, Mounted & Labeled
2. **Garden Plan:** Plan of your Wild Flower Garden or Preserve
3. **Plant Life Cycle:** Chart or Diagram showing the Life Cycle of a Plant; use Pressed Specimens to show each Stage of Development
4. **Pressed Flower:** Exhibit of a Picture or Actual Pressed Blossom of a Flower with all Flower Parts Properly Labeled
5. **Wild Flower Seeds:** Collection of 6 Kinds of Wild Flower Seeds Mounted, Showing Various Adaptations to Dispersal by Wind, Water, Birds & Mammals
6. **Wild Flowers:** Collection of 6 Wild Flowers- Properly Pressed, Mounted and Labeled
7. Any other exhibit not listed above

## **DIVISION 153 – WILDLIFE**

### **CLASS NO.**

1. **10 Wildlife Tracks:** Poster of 10 Wildlife Tracks, labeled. Tracks can be pictures, stamps, drawings, etc.
2. **Animal Tracks:** Plaster Casts of 4 Different Animal Tracks; mounted on a firm surface
3. **Camera Hunt:** Photo Display of Wild Animals taken during a "Camera Hunt" (minimum of 4 photos)
4. **Camouflage:** Exhibit of Camouflage Examples in Nature
5. **Fur-Bearing Mammals:** Poster or Display consisting of a Chart of Pictures of 6 Fur-Bearing Mammals with a write-up for each, including Habits
6. **Game Animals:** Poster or Display showing 6 Game Animals found with Notes on their Feeding Habits & Habitat Requirements
7. **Sportsmanship/Hunting Ethics:** Poster or Display of any Phase of Sportsmanship or Hunting Ethics

8. **Taxidermy:** Any Finished, Clean Taxidermy Article made by member
9. Any other exhibit not listed above

## **DIVISION 154 – OTHER NATURAL SCIENCES**

### **CLASS NO.**

1. Any Original Display related to Other Areas in the Natural Sciences
2. Any Original Display relating to Weather
3. Any other exhibit not listed above

## **DIVISION 155 – RECYCLING**

### **CLASS NO.**

1. **Animal Bedding:** Poster or Display showing how to make Animal Bedding from Scrap Paper OR the Pros and Cons of Animal Bedding made from Paper
2. **Benefits:** Poster or Display on Benefits of Recycling
3. **Composting:** Poster or Display on Composting
4. **Decomposers:** A Labeled Display of Nature's Recyclers (Decomposers) using Drawings, Pictures or Photographs
5. **Documenting:** A Poster, Series of Labeled Photographs, Scrapbook, or Journal Documenting your Recycling, Waste Reduction or Recycling Education Efforts
6. **Farm/Home Recycling:** A Farm or Home Recycling Exhibit
7. **Landfill/Incinerator:** A Model Landfill or incinerator with an Explanation of how it Works
8. **Natural Cycles A:** Poster or Display showing how Recycling fits into Natural Cycles
9. **Natural Cycles B:** Poster or Display showing Natural Cycles (Water Nutrients, etc...)
10. **New Products:** Poster or Display showing New Products that are Currently being made from Recycle Material; show the Initial Product, Intermediate Steps & New Product
11. **New/Old Products:** A Creative Exhibit showing a New Product (with a new use) invented from an old Product
12. **Paper Making:** Display of Equipment and Explanation of the Process of Making your own Paper from Old Paper; including Sample of the Paper you Made
13. **Pros/Cons:** Poster or Display showing the Pros & Cons of Land Filling, Incineration, and Recycling
14. **Radio:** Written Radio Script or Commercial on Recycling
15. **Recycling:** Poster or Display on Recycling of Products
16. **Resources:** Poster or Display showing Renewable & Nonrenewable Resources
17. **Smart Shopping:** Poster or Display Showing Environmentally Smart Shopping
18. **Soil Building:** Display of Soil Building with a Description of How it Works (use Aquarium, Terrarium or Large Glass Jar)
19. **Waste Generation:** Poster or Display Showing Daily, Weekly or Annual Amount of Waste Generated by an Individual, Family, Club, State or County
20. Any other exhibit not listed above

## **DIVISION 156 – CANOEING AND BOATING**

### **CLASS NO.**

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| <ol style="list-style-type: none"> <li>1. <b>Equipment Maintenance:</b> Poster or Display on Care &amp; Maintenance of Equipment</li> <li>2. <b>Homemade Paddles / Oars</b></li> <li>3. <b>Techniques:</b> Poster or Display on Paddling/Oaring Techniques</li> </ol> | <ol style="list-style-type: none"> <li>4. <b>Trip:</b> Poster or Display of a Trip</li> <li>5. <b>Water Conditions:</b> Poster or Display on Water Conditions</li> <li>6. <b>Water Safety:</b> Poster or Display on Water Safety</li> <li>7. Any other exhibit not listed above</li> </ol> |
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## **DIVISION 157 – BEEKEEPING**

### **CLASS NO.**

1. **Beeswax:** One Cake of Beeswax Containing Not Less than ¼ Lb, must be Solid and Contain No Cracks
2. **Candle:** Beeswax Candle
3. **Honey:** Extracted Honey; 1 Lb Jar
4. **Project:** Poster or Display of a Beekeeping Project
5. Any other exhibit not listed above

## **DIVISION 158 – BACKPACKING, HIKING, BIKING AND CAMPING**

### **CLASS NO.**

1. **Basics:** Poster, Display or Scrapbook on how to Select Basic Backpacking, Hiking, Biking or Camping Equipment
2. **Campsite Selection:** Poster or Display Showing Selection of a Suitable Campsite
3. **Environment Preservation:** Poster or Display that shows Ways to Preserve the Environment during a Trip
4. **Fire Building:** Poster, Display or Scrapbook on Fire Building Fire Safety/Types of Fire & Uses/How to Start Fire/ Fire Ingredients, etc...)
5. **Food:** Poster or Display of Food to Pack for a Backpacking, Hiking, Biking, or Camping Trip
6. **Planning:** Poster or Display that Describes how to plan for a Safe & Fun Backpacking/Hiking/Biking/Camping Trip
7. **Proper Clothing:** Poster or Display of Proper Clothing for a Backpacking, Hiking, Biking, or Camping Trip
8. **Safety Equipment:** Poster or Display of Safety Equipment to Bring on a Trip
9. **Scrapbook:** Scrapbook of your Backpacking, Hiking, Biking, or Camping Trip
10. Any other exhibit not listed above

## **DIVISION 159 – ASTRONOMY**

### **CLASS NO.**

1. **Astronomy:** Poster of display of the history of astronomy
2. **Navigation:** Poster or display of early navigation methods using object in the sky
3. **Solar Item**
4. **Star Charts:** Poster or display of one or more star charts
5. **Telescope:** Poster or display of the parts of a telescope
6. **The Sky:** Poster or display of planets, stars, comets, etc. in the sky
7. Any other exhibit not listed above