



# ISLAND WILDLIFE C BETWEEN HABITATS AND INHABITANTS

## Welcome

Welcome to the 4-H Wildlife C Project! Please read through this guide carefully, as it contains information and suggestions that are important for your project. **4-H leaders can obtain a Leader Project Guide and other resources from the PEI 4-H Office.** Hopefully you, as a member, will “Learn to do by Doing” through hands-on activities that will encourage learning and enjoyment. If you have any questions, contact your District 4-H Officer or your 4-H project leader.

## 4-H YEAR COMPLETION

You complete a project by:

- completing the project Achievement Day requirements
- completing a communication project
- completing a community project
- completing an agriculture awareness project
- taking part in Achievement Day

You must complete all of the listed aspects in order to show at Fairs and Exhibitions.

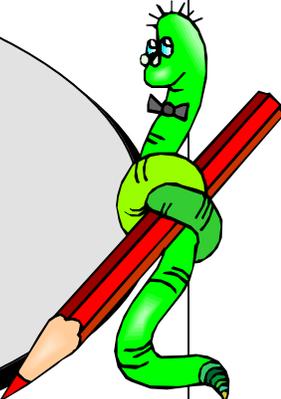


ACHIEVEMENT DAY REQUIREMENTS	
Food Web Mobile	40
Special Project Report (150 words)	30
Coat of Arms for your favorite wildlife species	30
	<b>100 Marks</b>

**EXHIBITION REQUIREMENT**

Exhibit your Food Web Mobile

**In this project ...**you will continue your discovery of the world of Island wildlife, while examining the science of ecology. You will learn about an ecosystem and what its components are before moving into more complex topics such as relationships between organisms and their habitats. You will learn about the methods wildlife managers use to estimate wildlife populations, as well as how an organism’s “vital statistics” affect its lifespan and prosperity.



### Ages for 4-H members as of January 1st of the 4-H year:

- Junior: 9-11 years
- Intermediate: 12-14 years
- Senior: 15-21 years

**Check out the PEI 4-H Web Site**  
[www.pei4h.pe.ca](http://www.pei4h.pe.ca)

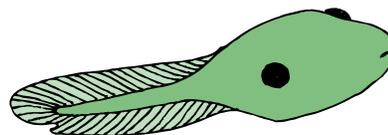
## HELPFUL RESOURCES!

[www.bear-tracker.com](http://www.bear-tracker.com)  
[www.macphailwoods.org](http://www.macphailwoods.org)  
[www.peisland.com/nature](http://www.peisland.com/nature)  
[www.speciesatrisk.gc.ca](http://www.speciesatrisk.gc.ca)  
[www.whc.org](http://www.whc.org)  
[www.ducks.ca/province/pe](http://www.ducks.ca/province/pe)  
[www.naturewatch.ca](http://www.naturewatch.ca)

A variety of books and videos are available at the PEI 4-H Office which can be borrowed for a two week loan period. To book these, call 368-4833 or drop by the PEI 4-H Office at 40 Enman Crescent, Charlottetown.

## BE A GOOD SPORT!

In the spirit of learn to do by doing, all those involved in 4-H are encouraged to practice good sportsmanship, use common sense at all 4-H activities, and the work in any 4-H project should be the member's own work.



## ***SPECIAL PROJECT IDEAS***

### *(Achievement Day Requirement)*

Wildlife members are expected to complete a special project. This can be done on your own or as a group. However, for Achievement Day, each member must do their own display of the special project. The special project display should include a one page write-up telling what you did as your special project, if you enjoyed it, what you learned, etc. Also include any pictures and other supporting materials from your special project. Project ideas include...

- MacPhail Woodlot tour
- Tree planting
- Demonstration woodlot
- Woodsmen competition
- Hiking
- Snowshoeing
- Orienteering
- Camping
- Canoeing
- Bird watching
- Visit a fish farm
- Fly fishing
- Take pictures & do a sound recording of a local marsh
- Make a bat box or nesting box
- Medicinal and Poisonous Plant Field Trip
- Attend a meeting with a conservation organization. Write about what went on at the meeting.
- Explain why conservation is important and what should be done to make conservation possible.
- Tour a local stream improvement site and explain in detail the improvements made, how they were made and the idea behind the project.
- Learn how to duck or goose call
- Find and photograph a beavers' lodge
- Video and provide commentary of a day in the life of a fox, bird, etc.

These are only suggestions, you can work with your leader to come up with other ideas.

## **FOOD WEB MOBILE**

(ACHIEVEMENT DAY AND EXHIBITION REQUIREMENT)

Make a food web mobile. Start with a carnivore that you are interested in, a Great Horned Owl, for example. Find out what it likes to eat. Great Horned Owls are the only natural predators of skunks on PEI so you could use skunks. Then find out what skunks like to eat. Skunks like to eat June bug larvae. There, now you have a food chain with three components. Try to come up with at least three food chains, with three components each. Connect these food chains and create a food web.

Be creative in your construction. For example, you might want to use things like fallen twigs or branches and pieces of recycled baler twine or yarn to connect your pictures together. You may want to include something from the animal's habitat to attach on the mobile between pictures. For example, you might want to include a blue jay's feather if you had a blue jay in your mobile.

You can also use your imagination when creating your pictures. You can use cutouts from old magazines or calendars or if you are artistic, you can draw your own pictures. You might also want to create three dimensional, realistic looking, paper mache animals. Remember that only your originality will distinguish your food web mobile from everyone else's.

## **COAT OF ARMS**

(ACHIEVEMENT DAY AND EXHIBITION REQUIREMENT)

You have learned a lot about wildlife on PEI so far. We discussed life histories in **Go Wild!**, we discussed wildlife habitat in **Home is There the Habitat Is**, and in this unit, **Between Habitats and Inhabitants**, we are learning all about ecology. With all this information, you should be able to present a pretty comprehensive story about a particular wildlife species. Pick your favorite wildlife species that exists on the Island. Think about its habitat, what it eats, what it looks like, its ecology and some of its behavioral quirks (if it has any!). Using as much of this information as possible, develop a coat of arms for your favorite wildlife species. You might also want to create a catchy slogan to go on the bottom of your coat of arms. For example "Everybody Otter Take Care of Our Water" (notice the example given can't be used because otters don't live on the Island). Your coat of arms or crest should be large enough so that all of the components are clearly visible. You might want to use a sheet of poster board. Remember, only your creativity and originality may separate your Coat of Arms from everyone else's!



The Coat of Arms for the Province of Prince Edward Island has been included for an example. The lion across the top of the coat of arms represents the British Monarchy. Underneath the lion are four oak trees, chosen because the red oak is our provincial tree. The oak tree represents the country of Canada and the small oaks represent each of the three counties of Prince Edward Island. The slogan is written in Latin but translated mean "the small under the protection of the great".

# What does it mean?

**Ecology:** the scientific study of organisms, their ecosystems and the interaction between them

**Ecosystem:** a place where all living and non-living things interact.

**Producers:** green plants which use sunlight to make food—for themselves to grow.

**Consumers:** animals that eat (or consume) other plants and/or animals. Can be primary (the first to consume the producer), secondary (animals that consumes the primary consumer), tertiary (animals that consume the secondary consumer) and so on

**Decomposers:** very small plants and animals (insects, slugs, bacteria, fungi) that live in the soil and help break down (or decompose) dead plants and animals

**Food chain:** food energy that is stored in plants is passed to the animals that eat them (plant eaters). These animals are in turn eaten by other animals (meat eaters) and a chain is formed.

**Food Web:** a number of food chains that are dependant on or related to each other

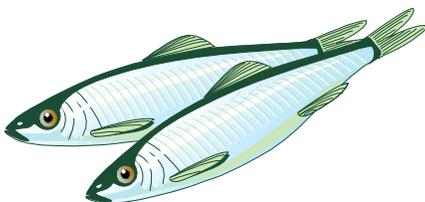
**Pollinators:** animals that collect pollen from plants and in the process aid in the fertilization of plants

**Carrying capacity:** the ability of a habitat to support a variety of plants and animals

**KCC:** the ecological carrying capacity is the natural balance between herbivores and their food supply

**ICC:** the economic carrying capacity is the balance attained through human intervention

**Limiting factors:** influences in the life history of any animal, population of animals, or species which prevent an increase in population. Limiting factors can be natural or human activities



**Abundance:** the wildlife management term used to express the number of or trends in (or sometimes both) a wildlife population

**Population density:** the number of individuals of a species in relation to the space where they occur. Population density is expressed as the number of individuals per hectare (or any other unity of area).

**Index:** provides an estimate of relative abundance of a species rather than the actual population size.

**Transect:** to divide directly across. In wildlife management, transect refers to a linear division, which may be of different widths, of a habitat type.

**Birth Rate:** the number of births within a certain population during a specified time (usually a year)

**Buffer species:** a prey species that reduces the impact of predation on another prey species.

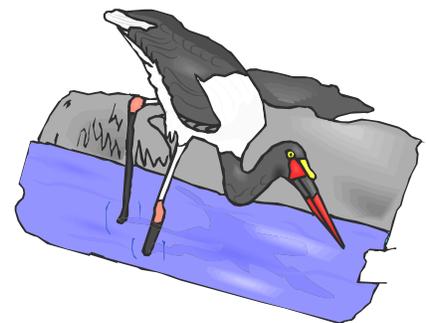
**Fecundity:** a population's birth rate which is measured at the number of live births per female in a given period of time (usually one year)

**Death rate:** the number of deaths in a population in a given period of time (usually one year)

**Density-dependant mortality:** mortality factors which are usually intensified due to an increase in population. Some examples include disease and starvation

**Monogamous:** having only one mate

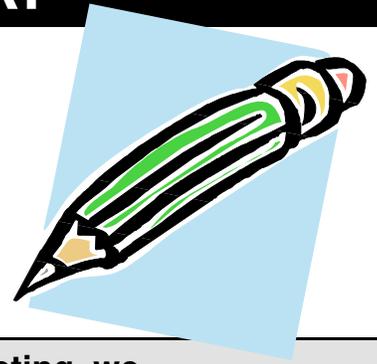
**Polgymous:** having more than one mate





# PROJECT MEETINGS DIARY

*Most projects will require at least six to eight project meetings to complete the project.*



Meeting Date	Location	Time	At this meeting, we...

# Community and Agriculture Awareness Projects

## COMMUNITY PROJECT

Each year you are encouraged to provide a service to your community as a 4-H member. This introduces you to the responsibilities of citizenship. You must participate in your club's plan for a community project and you should have a role to play. Describe your involvement with your club's community project this year.



*Our Community Project was* \_\_\_\_\_

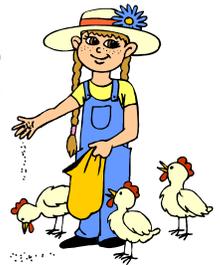
*I helped by* \_\_\_\_\_

*It was beneficial because* \_\_\_\_\_

*I learned* \_\_\_\_\_

## AGRICULTURE AWARENESS PROJECT

Agriculture is one of PEI's main industries. You are expected to participate with your club to complete a project (or provide a service) which helps your club or others become aware of the importance of agriculture in our lives. As in the community project, you should actively participate.



*Our Agricultural Awareness Project was* \_\_\_\_\_

*I helped by* \_\_\_\_\_

*It was beneficial because* \_\_\_\_\_

*I learned* \_\_\_\_\_