

Black Bear Ecology

Life Systems – Interactions Within Ecosystems
A Guide for Grade 7 Teachers





Introduction

Welcome to *Black Bear Ecology, Life Systems – Interactions Within Ecosystems, a Guide for Grade 7 Teachers.*

With a focus on the fascinating world of black bears, this program provides teachers with a classroom ready resource. Linked to the current Science and Technology curriculum (Life Systems strand), the *Black Bear Ecology* Guide for teachers includes:

- background readings on habitats, ecosystems and the species within; food chains and food webs; ecosystem change; black bear habitat needs and ecology and bear-human interactions;
- unit at a glance;
- four lesson plans and suggested activities;
- resources including a glossary; list of books and web sites and information sheets about black bears.

At the back of this booklet, you will find a compact disk. It includes in Portable Document Format (PDF) the English and French versions of this Grade 7 unit; the Grades 2 and 4 units; the information sheets and the *Are You Bear Wise?* eBook (2005).

This program aims to generate awareness about black bears – their biological needs; their behaviour and how human action influences bears. It is an initiative of the Ontario Ministry of Natural Resources.



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Also available online at: ontario.ca/bearwise

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Cette publication est également disponible en français.



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Black Bear Ecology Background Readings:

The following background information will help teachers to prepare for and deliver lessons one to four of the Black Bear Ecology education program.

Habitats, Ecosystems and the Species within:

(Reading to assist with delivering lesson 1)

Simply put, a habitat is the area in which a species lives. It is where an animal or plant lives – its home. It is a place in which organisms, including humans, find everything they need to survive. Habitat must include four very important things: food/energy, living space, shelter and water. These are all necessary for organisms to live and reproduce.

Different life forms have different habitat needs and those needs can be very different from species to species. For example, plants need sunlight for their energy, while animals need food. Some organisms like fish need lots of water to survive, whereas others like birds and black bears need significantly smaller amounts. An organism's needs may also differ at various stages of their lives and during different times of the year. For example, a bear cub's needs are very different than those of its mother. The cub's main needs are shelter and protection. The mother's most important need is food.

All organisms need their own space. These spaces (habitats) can be very small, very large, or anywhere between. For instance, plants generally need little space. Comparatively animals like wolves need a lot of space. Their habitat is therefore huge.

Wild animals and plants need shelter to protect them from the weather and from other animals. Humans have homes to protect them from the elements. The types of shelter needed by living beings can be very different. Some species may need only one tree, while others might need an

entire forest. Some creatures like the beaver even make their own shelter out of materials they find in their habitat. Another habitat need is that of reproduction. To reproduce, a species needs other members of its kind in its habitat.

Since different animals need different things to survive, they have different habitats. For instance fish live in the water or in what is known as an aquatic habitat. Fish find everything they need to survive in the water: food, shelter, space, and of course water. Species that live in aquatic environments are adapted for living under water. They have fins, scaled skin and gills.

Terrestrial animals find everything they need on the land. Bears and wolves, for instance, find their food, shelter, space and water on land.

Other species, like ducks and beavers, live at the edge of the terrestrial and aquatic environments. They use both environments to meet all of their habitat needs.

Not all living things have different habitat needs. In fact most species actually share many of their specific needs with other species. Habitats can overlap. Many different species may find most of the things they need to survive in one place. For example plants and animals in a forest all share the same habitat because the forest is providing them with all their habitat needs.

Abiotic (non-living) elements of an ecosystem interact with biotic (living) elements on many different levels. Plants are called producers; they use the energy from the sun and convert that into energy that can be used by animals. Plants receive everything they need from abiotic elements of the ecosystem: sun light, soil and water. Animals are called consumers; they cannot



use abiotic elements to make energy. Therefore, they must eat other organisms to get the energy they need. However, oxygen and water are required by all animals and are supplied by the physical environment. Animals also need abiotic elements to serve as shelters. Examples of abiotic shelters include dens dug into the soil, caves or ponds and lakes. Living space is a combination of abiotic and biotic elements of an ecosystem.

Biotic elements of ecosystems also interact with one another in many different ways. Many organisms serve as food for others. Some may provide shelter or protection, and some even provide living space.

There are two main types of consumers, herbivores and carnivores. Herbivores eat plants and carnivores prey on other animals. A third type of consumer is the omnivore; they eat both plants and animals to get energy.

Many plants also serve as shelter and living space for animals in an ecosystem. Grass protects small rodents like mice from predators since it hides them from view. Trees provide shelter or protection for many different species. Song birds use them to hide their nests and protect them from the wind. Bear cubs also use trees as protection. They will often climb the nearest tree when scared and stay there until their mother returns. Biotic parts of an ecosystem are returned back to the physical environment when they decompose or rot.

Food Chains and Food Webs: Transfer of Energy Across an Ecosystem (Reading to assist with delivering lesson 2)

One of the most common ways species interact within an ecosystem is through the transfer of energy. When a plant or animal is eaten, the energy from that animal or plant becomes energy for the consumer.

The passing of energy from plant to herbivore to carnivore or omnivore is called a food chain.

Food chains are the transfer of energy between at least two organisms. Two examples of foods chains are a black bear eating blueberries and a black bear eating a moose which has eaten grass.

Most animals and plants are eaten by more than one predator and most animals eat more than one type of food; therefore, a few species can make many different food chains. When all the different food chains in an ecosystem are put together, this forms a food web. Food webs can show how two species, that do not even eat one another, interact with each other.

Decomposition is the transfer of energy from the biotic environment (plants and animals) back to the physical environment.

Decomposition occurs with the help of microorganisms (also microbes). Microbes are microscopic plants and animals that feed off dead plants and animals. They help to convert some of the energy from plants and animals back into soil. Microbes are also very important in decomposing waste from plants and animals. Fallen leaves and animal droppings are consumed by microbes and returned back to the physical environment. Microorganisms also provide food and other benefits for many different animals.

Ecosystem Change and How it Affects Those Species That Live Within

(Reading to assist with delivering lessons 2 and 3)

Ecosystems are always changing, even those in their most pristine form. Changes can be natural or, as is occurring more and more frequently, human induced. Natural changes to ecosystems can include forest fires, drought, flooding and the spread of disease. Some examples of human-induced changes that can also make big changes to how an ecosystem functions include agriculture, urbanization and forestry. No matter what the cause of the change, changes to an ecosystem can have



both negative and positive effects on the species that live in the ecosystem. Here are a few examples of ecosystem changes and how they can influence black bears.

Forest Fires

- At first forest fires result in a loss of habitat for black bears.
- Soon after a fire, new vegetation such as grasses and berry bushes start to grow. These plants are the food of choice for bears.
- Forest fires also keep forests open and encourage the growth of food species for bears.

Clear Cutting

- Initially, the increased presence of humans and loss of cover results in a loss of habitat for black bears.
- Once a clear-cut is replanted or allowed to grow up, it provides lots of food for bears. A clear-cut's pattern of disruption and renewal are very similar to that created by forest fires.

Drought

- Black bears prefer foods that are most abundant in the forest. Some examples include berries, acorns and beech nuts. Berry crop failure may occur as a result of a late spring frost that kills blossoms (usually in early June), or a summer drought that causes the berries to shrivel (generally in July or August).

Urbanization

- Black bears are attracted to accessible, high energy and easily digested food. Often, human practices (like feeding birds and other wildlife, cooking outdoors and storing or disposing of garbage) attract bears. These alternate food sources are common (and easily accessible) in urban areas. See the Resources Section for more information.
- Urbanization removes natural bear habitat, causing significant habitat loss and fragmentation.

Black Bear Habitat Needs and Ecology

(Reading to assist with delivering lesson 3)

Included with this kit are a number of additional resources on Black Bears. This information is included in the Resources Section of this document. The Are You Bear Wise? eBook also gives an in-depth look at bear ecology and behaviour. It is included in this kit on a Compact Disk. You can also download it from ontario.ca/bearwise.

Bear-Human Interactions

(Reading to assist with Lessons 3 and 4)

Each animal or plant is suited for its specific habitat. An adaptation is a certain feature, behaviour or appearance an animal or plant has that helps them to survive a certain biome or its habitat.

The black bear's natural foods are only available in the late spring, summer and early fall. Black bears hibernate from the late fall through to early spring.

Bears are adapted to find and eat a wide variety of high energy, easily digested food. They have a very powerful sense of smell. They are curious and smart. They are able to travel long distances. They have powerful claws and they use them to climb trees and to tear food. From year to year, bears go to the same food sources, and teach their young where to find food. Even if food disappears, bears will return to investigate. Their natural preference is to find lots of food that will help them fatten up fast. Their preference is for grasses, leaves, berries and nuts as they become available. They will also eat carrion (dead animals), livestock, and moose or deer calves. Black bears are omnivorous; however they depend mostly on foods that come from plants.

Bears will eat human generated garbage, and have learned to associate humans with other sources of food. These sources are not natural, and need to be controlled by humans if we are to be safe, and keep black bears wild and in the forest.



For more information, please refer to the Resources Section of this kit.

Bear-Human Interactions

(Reading to assist with delivering Lesson 4)

When you are at the cottage, at home, camping, or out for a walk and you see a bear, you might feel as though the bear has entered your habitat. It is important to remember that bears and humans often share habitats. People like the forest, being near or on water and in places where there are fewer people. So do bears.

A bear's survival is strongly linked to its ability to find and consume great quantities of natural foods (like berries, acorns and beech nuts) in a short period of time. These foods are typically found in forested areas.

More and more humans are camping, fishing and hiking. Humans undertake work activities like farming, mining and forestry. Humans are also building homes, cottages and developing areas that are in or near prime bear habitat.

Humans share their environment with all other living things like bears. We all rely on our habitat to meet our basic needs. It is important to keep in mind that human action can either positively or negatively affect habitat and everything that lives in it.

This is especially true when it comes to black bears. They have a biological need to consume great quantities of food in relatively little time. Their survival and ability to have and raise young depends on it. The availability of their natural food varies from abundant, to normal, to poor. When natural food sources are poor, black bears will travel long distances to find another food

source. Though they prefer natural foods, they will eat just about anything people will eat to survive.

Bears' need for food is so great, that they will investigate smells like grease and food residue left on a barbecue. Bird food, garbage, pet food and agricultural crops all provide an easy meal for bears. Bears will eat garbage. This is neither natural nor desirable. However, their biological instinct to survive drives bears to these human-caused unnatural food sources, especially in years when their natural foods are poor. This results in human-bear conflicts. In one way or another, human-bear conflicts are the result of human action or inaction.

People can change. Bears cannot. Therefore, it is people who must take responsible action to make sure that unnatural food sources are not accessible to bears. The safety of people and the lives of bears depend on it.

Please refer to the Bear Resources Section of this document for more information about black bears, how to prevent human-bear interactions and what to do during a bear encounter.



Black Bear Ecology Unit – Grade 7

Unit at a glance

Lesson 1	Lesson 2	Lesson 3	Lesson 4
<p>Topic: Abiotic versus Biotic and Ecosystem Function</p> <p>Duration: 1-2 periods</p> <p>B: Discussion: basic definitions.</p> <p>M: Predator Prey Game</p> <p>C: Reflections on outcome of game</p> <p>Materials: Outdoor play area, activity 1A, construction paper, stop watch, three rolled up socks, coloured T-shirts, survival cards, coloured markers, coin.</p>	<p>Topic: Food Chains and Food Webs: Transfer of energy through an ecosystem</p> <p>Duration: 2-3 periods</p> <p>B: Demonstration: Food Web Follies</p> <p>M: Ecosystem Member Research</p> <p>C: Presentation of Research</p> <p>Materials: Ball of yarn, materials to make tags/necklaces, computer time, resources about Canadian species.</p>	<p>Topic: Case Study</p> <p>Duration: 3-5 periods</p> <p>B: Discussion: Black Bears</p> <p>M: Research</p> <p>C: Student presentations</p> <p>Materials: Chart paper and markers, computer access with internet, Bear Wise resources, and other black bear literature/resources.</p>	<p>Topic: Living with Black Bears – Bear Safety</p> <p>Duration: 1-2 periods</p> <p>B: Discussion: Why do black bears come into urban and rural areas?</p> <p>M: Role Play – Bear Safety</p> <p>C: Presentations of black bear role plays</p> <p>Materials: Space to act out skits, potential to provide props.</p>



Black Bear Ecology

Lesson: One

Duration: One to two periods

Lesson Topic: Abiotic vs Biotic and Ecosystem Function

Background Reading: Habitats, Ecosystems and the Species Within

Expectations:

■ **Enduring Understanding:**

- What do organisms within an ecosystem need to survive?
- What are the biotic and abiotic aspects of an ecosystem?
- How do biotic and abiotic elements interact to form an ecosystem?

■ **Curricular Expectations:**

- Identify populations of organisms within an ecosystem and the factors that contribute to their survival in that ecosystem.
- Identify living (biotic) and non-living (abiotic) elements in an ecosystem.

Learning Materials:

- a large outdoor area to play in
- 3 rolled up socks
- survival cards
- construction paper
- coloured t-shirts
- coloured markers
- Activity Sheet 1A
- stop watch
- coin

Lesson Sequence:

■ **Beginning:**

Discussion – Basic definitions

- Teacher led discussion about what elements of an ecosystem are living and non-living. Discussion will include how the presence of abiotic and biotic elements helps in the survival of organisms within an ecosystem. This will focus on how different organisms meet their needs by utilizing different elements of an ecosystem.
- Definitions and examples should include:

■ ecosystem	■ prey	■ abiotic	■ herbivore
■ biotic	■ carnivore	■ habitat	■ omnivore
■ community	■ microbe	■ predator	

■ **Middle:**

Predator-Prey Game

- See Predator-Prey Game for instructions (Activity 1A)

■ **Closure:**

Reflect on the results of the game

- Return to the classroom to discuss how different strategies worked in the game (carnivore vs omnivore). Also, how did the presence of humans in the game influence the outcome?
- Why did humans sometimes help out certain species by providing food, but, other times, humans had a negative impact on the animals? Have students think of real world examples of this scenario.



■ Checks for understanding:

- Did students follow directions and maintain their appropriate roles throughout the game?
- Were students able to critically reflect on the outcome of the game and develop ideas for why certain outcomes occurred?
- Were students able to apply new definitions in their reflection of the game?

Evaluation of Learning:

The reflections of students as well as their ability to use proper terms will be evaluated. Participation in brainstorming and discussion exercises may also be evaluated.

Teacher Reflections:



Activity 1A

Predator-Prey Game

In the Predator-Prey Game, the food web is created by dividing the players into three types of animals: herbivores, omnivores, and carnivores. Each category is given a certain number of lives: herbivores receive nine lives; omnivores receive six lives and carnivores three lives. Lives are represented by tags that the players carry with them.

In a large field or woods, set up the habitat needs stations: vegetation, water, and shelter (there should be several vegetation stations and only one or two shelter and water stations, depending on the size of the play area). The stations should be somewhat hidden and consist of a coloured marker. Students will check off the station on their survival cards. Once the card is filled, students must return the completed card to the biologist (teacher). The students then receive a new survival card to complete. Each animal type has a slightly different card:

Herbivores: 5 vegetations (each a different colour), 2 waters, 1 shelter

Omnivore: 4 vegetations (each a different colour), 1 herbivore life, 2 waters and 1 shelter.

Carnivore: 3 herbivore lives, 2 water and 1 shelter

In the game, the carnivores chase and consume lives from herbivores, the omnivores can eat herbivores but must also find vegetation and herbivores are constantly trying to avoid carnivores and omnivores, but still have to find vegetation stations for food. All three animal groups must acquire water and shelter. When a student is caught by an animal from a higher trophic level, they must give the higher animal one of their life tags. Each student remains in the game until all their lives have been exhausted.

To make the ecosystem more realistic, disease, natural disaster and human induced changes are also present in the ecosystem. These three characters affect the animals in the ecosystem by hitting them with a soft ball or rolled up sock. When disease infects an animal, it takes one life, when natural disaster catches an animal it removes two lives. When human-induced change catches an animal, however, they can do two things; they can either complete the animal's survival card or remove four lives from the animal. For example: if a herbivore has five lives remaining and needs three vegetation checks to complete their card, the human can give the herbivore three vegetation checks or remove all but one the herbivores lives. The decision is made with the flip of a coin.

To distinguish between the different members of the ecosystem, the players must have specific coloured shirts. Herbivores wear green, omnivores wear blue and carnivores wear red. Disease and natural disasters wear black and human-induced change wears any other colour. When a student is caught by a predator they must give up the required number of lives. The predator must wait at least 30 seconds before they can catch any other prey.

To begin the game, every player needs a survival card, the appropriate coloured shirt and the correct number of lives. The herbivores enter the field first, followed by the omnivores and carnivores 30 seconds later. Disease and natural disaster follow one minute later and human induced change doesn't enter the ecosystem until five minutes after the start of the game. The winner of the game is not necessarily the last remaining animal; it's the animal which completes the most survival cards.



Black Bear Ecology

Lesson: Two

Duration: Two to three periods

Lesson Topic: Food Chains and Food Webs: The Transfer of Energy through an ecosystem

Background Reading: Food Chains and Food Webs: Transfer of Energy Across an ecosystem and Ecosystem Change and How it Affects Those Species That Live Within

Expectations:

■ **Enduring Understanding:**

- What are the differences between food chains and food webs?
- How do organisms interact in an ecosystem?
- How do changes in an ecosystem affect individuals in the ecosystem?
- What roles do microbes and other invertebrates play in the ecosystem?

■ **Curricular Expectations:**

- Identify and explain the role of producers, consumers and decomposers in food chains and their effects on the environment.
- Explain the importance of microorganisms in recycling organic matter.
- Interpret food webs that show the transfer of energy among several food chains and evaluate the effects of the elimination or weakening of any part of the food web.
- Investigate ways in which natural communities within an ecosystem can change, and explain how such changes can affect animal and plant populations.

Learning Materials:

- space to form a large circle
- material to create name tags/necklace
- computer time
- ball of yarn
- resources about Canadian species

Lesson Sequence:

■ **Beginning:**

Demonstration – Food Web Follies

- Select a group of 12 volunteers and have students stand in a circle. Students will be assigned a name tag with the name of one of the following organisms on it:

<i>Producer (Plants)</i>	<i>Consumer (Herbivore)</i>	<i>Consumer (Carnivore/Omnivore)</i>	<i>Decomposers</i>
Blueberry Bush	Snowshoe Hare	Black Bear	Earthworm
Grasses	Ruffed Grouse	Wolf	Soil Microbes
Alders	Red Squirrel	Lynx	
Grasses	Moose	Wolf	Soil Microbes



- Some students will be producers; others will be consumers (herbivore, carnivore, omnivore).
- Starting with a producer species (ex: alder) have students pass a ball of yarn across the circle to an herbivore. The herbivore then passes the yarn to a carnivore.
- At this point the game should be stopped to demonstrate what a food chain looks like.
- Once the yarn reaches a top carnivore, the yarn is passed to a decomposer, representing the death of the top predator and the breakdown of its body for use by decomposers. Decomposers then pass the yarn to producers. The yarn should be cycled in this manner until all organisms are part of the food web at least once.
- At any point, any organism can pass the yarn to one of the decomposers; it doesn't necessarily need to be a top predator or omnivore.
- Omnivores can receive the yarn from plants or herbivores.
- Students should be encouraged to make as many different food chains as possible in order to complete the food web.
- Upon completion of the food web, students in the audience should be asked to identify individual food chains from the complex food web in front of them.
- The following terms should be introduced during the demonstration:
 - producer
 - secondary consumer
 - nutrients
 - primary consumer
 - decomposer
 - trophic level

■ **Middle:**

Ecosystem Member Research

- Students, in groups of two or three, will select a Canadian species of their choice and research the role of that species in its ecosystem.
- Information should include: Species' habitat, habitat needs, role within food webs as well as how that species would be affected by changes in the ecosystem (ie. Forest fire, flood, clear cutting, introduction of new species to the system, urbanization, etc.)

■ **Closure:**

Presentation of Research

- Students, voluntarily or chosen randomly, will present their research to the class.
- Following each presentation, other students will be encouraged to ask questions or add to the points presented.
- Students will submit their research for evaluation.

■ **Checks for understanding:**

- Ability of students to decipher food chains from food webs.
- Students are able to think critically about how changes in an ecosystem affect the organisms that make up the ecosystem.
- Students can ask questions and have discussions using new vocabulary in the correct context.



Black Bear Ecology

Lesson: Three

Duration: Three to five periods

Lesson Topic: Case Study – Black Bears

Background Reading: Black Bear Habitat Needs and Ecology and Ecosystem Change and How it Affects Those Species That Live Within

Expectations:

■ **Enduring Understanding:**

- How does black bear biology change through the year?
- How do different populations of black bears differ from one another?
- What survival challenges do black bears face?

■ **Curricular Expectations:**

- Identify populations of organisms within an ecosystem and the factors that contribute to their survival in that ecosystem.
- Investigate ways in which natural communities within an ecosystem can change, and explain how such changes can affect animal and plant populations.

Learning Materials:

- chart paper and markers
- computer access with internet
- Bear Wise literature
- black bear literature from library

Lesson Sequence:

■ **Beginning:**

Black Bear Discussion

- Students will brainstorm about what they already know about black bears. The information gathered during the brainstorming activity should be recorded on chart paper for future reference.

Introduce Project

- Groups of four or five will research and present different topics in Black Bear Ecology. Topics include:
 - 1) Black Bear Habitat and Range: How does habitat affect the distribution, location, diet and home range of black bears? Compare and contrast habitat available to bears in central Ontario to habitat available to bears in northeastern Ontario.
 - 2) Black Bear Nutrition: Compare and contrast food habits of the Great Lakes black bear population and the Boreal Forest black bear population
 - 3) Black Bear Nutrition: How do black bear food habits change throughout the year?
 - 4) Black Bear Reproduction and Growth: Outline a year in the life of a female black bear with a cub.
 - 5) Changes in the Environment: How do natural and human induced changes in the environment affect black bears? Do some changes have positive effects on black bears? Do others have negative effects?

**■ Middle:****Research**

- Students will research their topic using resources from the library, internet or those provided in the Resources Section of this kit.

■ Closure:**Student Presentations**

- In a 5 to 10 minute presentation to the class, the students will present the information they have gathered. The presentations will be followed by a short question and answer period.

Review brainstorming activity.

- As a result of the presentations, were any myths that students had about black bears that were proven false? If so, students should cross out the incorrect information and replace it with correct information. Also, any new information can be added to the posters. Posters can be displayed for the remainder of the unit.

■ Checks for understanding:

- Students should present information using what they have learned thus far in the unit.
- Students should be able to ask and respond to questions in a manner where they expand upon what they've learned in the research and during the presentation.
- Dispelling myths about black bears with accurate information gathered from the presentations will demonstrate to students that they should always think critically about information that they receive.

Evaluation of Learning:

- Students can be observed during group research and evaluated on how well they work in a group.
- Group participation during the presentation as well as how thoroughly and accurately the information was presented should also be evaluated.
- Individuals may also be evaluated on the basis of participation during the question and answer period following each presentation.
- Students could be assigned an individual mark based on group participation in addition to a group mark for the quality of the presentation.



Black Bear Ecology

Lesson: Four

Duration: One to two periods

Lesson Topic: Living with Black Bears – Bear Safety

Background Reading: Bear-Human Interactions

Expectations:

■ *Enduring Understanding:*

- What causes black bears to become a problem to humans?
- How can we prevent black bear problems?
- What do you do if a black bear encounter cannot be avoided?

■ *Curricular Expectations: (Art/drama)*

- Write in role in various forms, showing their understanding of the complexity of a dramatic situation, and using appropriate vocabulary, tone, and voice for the character portrayed.
- Identify ways of sustaining concentration in drama and dance (remaining in role when playing a character).

Learning Materials:

- room to act out skits
- potential to provide props for skits

Lesson Sequence:

■ *Beginning:*

Why do black bears come into urban and rural areas?

- A teacher-led discussion about human-bear conflict in our shared habitat. Students may be asked questions to encourage discussion. The following questions could be raised:
 - 1) What are some true causes of bear problems? (All bear problems are directly linked to the availability of their natural foods; humans generate many attractants; humans are expanding and recreating in areas that have once been the sole domain of bears; people are not seeing themselves as part of the bigger picture.)
 - 2) Why do you find black bears at garbage dumps? Do you think this is good for bears? (Bears are drawn by smells; they are always looking for food sources; they will not turn down an easy meal; garbage is not healthy for bears; human-habituation is also not healthy for bears.)
 - 3) How can we change this ongoing problem? (Taking preventative action, education and understanding the true causes of bear problems are all factors in resolving human-bear conflict. Trapping and relocating bears are old and ineffective ways of dealing with the problem. It is expensive; bears come back, if they don't other bears move in. By changing our behaviors we can prevent bear problems. Other jurisdictions in North America are using a similar approach. This approach has been used in National Parks with success.)



■ **Middle:**

Role Play – Bear Safety

- Divide the class into four to five groups
- Each group will create its own mini-play, complete with a written script, and demonstrating what to do during a bear encounter. Students can refer to the Bear Wise materials included in the Resources Section of this kit, for correct responses in different situations. Plays should include information on the different types of encounters, how to handle different encounters and how to prevent an encounter or problem.

■ **Closure:**

Each group presents its play

Summary of steps to avoid black bear encounters.

- As a group, the entire class will discuss and review types of encounters, appropriate ways to deal with each encounter type and measures students can take to prevent bear encounters.
- The discussion can be led by asking students questions such as: What is the difference between seeing a bear in the distance, seeing a bear walking away with a bag of garbage, and unexpectedly meeting a bear on a trail? How are people responsible for attracting bears? What must you do to keep black bears away from your home, cottage, camp, or camping site? What would you do if you were out at recess and spotted a bear in the schoolyard?

■ **Checks for understanding:**

- Following each dramatization, students can be asked why they took the actions they did.
- Following the presentations, students can be asked how they would react in variations of the scenarios prevented. Example: What would you do if you were walking down a nature trail one afternoon and spotted a bear on the trail? This will require the students to use the information they've gathered from the presentations in order to make decision on how best to handle the situation.

Evaluation of Learning:

- The presentations can be evaluated in two manners. First, students should be evaluated on the accuracy of the information they provide to the class. If information is not accurate, then the teacher should correct the mistake in order to ensure students get the right message. Students could also be graded on their ability to stay in character and participate in the presentations.

Black Bear Ecology Resources





GRADE 7 Resources

Supplementary Internet Resources:

Bear Wise, Ministry of Natural Resources Ontario
<http://ontario.ca/bearwise>

Get Bear Smart Society, British Columbia –
<http://www.bearsmart.com/>

CyberHunt Kids: Bears in North America
<http://teacher.scholastic.com/products/instructor/bears.htm>

North American Bear Centre
<http://www.bear.org/>

USFS/IGCB – Black Bear
<http://www.fs.fed.us/rl/wildlife/igbc/cwi/blackbear.htm>

MountainNature.com – Black Bears
<http://www.mountainnature.com/wildlife/animalslatinnameresult.asp?ID=43>

EnchantedLearning.com
<http://www.enchantedlearning.com/subjects/mammals/bear/Amblackcoloring.shtml>

Living With Wildlife in Bear Country
<http://wildlife.state.co.us/Education/StudentActivities/KidsPage/BlackBearChallenge.htm>

Animal Diversity Web
http://animaldiversity.ummz.umich.edu/site/accounts/information/Ursus_americanus.html

BBC – Science and Nature
<http://www.bbc.co.uk/nature/wildlfacts/factfiles/9.shtml>

Adirondack Black Bear
<http://www.esf.edu/PUBPROG/brochure/bears/bears.htm>

Juneau Alaska – Bears
<http://www.juneau.org/bears/index.php>

Bears and People – Parks Canada
http://www.pc.gc.ca/pnnp/ab/banff/visit/visit12_E.asp

Alberta – bears
<http://srd.alberta.ca/fishwildlife/livingwith/bearfacts/default.aspx>



Glossary – Black Bear Ecology

Biotic: refers to the living components of the environment (such as plants, animals and micro organisms) that affect ecological functions

Carnivore: an animal (or sometimes plant) that feeds on animals

Community: a characteristic group of plants and animals living and interacting with one another in a specific region under similar environmental conditions

Consumer: organisms that feed on other organisms

Decomposer: an organism such as bacteria and fungi that breaks down dead organisms and their wastes

Ecology: the study of the relationship between organisms and their environment

Ecosystem: a community of plants, animals and microorganisms that are linked by energy and nutrient flows and that interact with each other and with the physical environment

Food Chain: a series of organisms linked together in the order that they feed on each other

Food Web: all of the interlinked food chains in a community or an ecosystem

Habitat: the area in which an animal, plant or microorganism lives and finds the nutrients, water, sunlight, shelter, living space and other essentials it needs to survive

Herbivore: animals that only eat plants

Omnivore: an organism that feeds on plants and other animals

Organism: a living member of an ecosystem

Predator: an animal that hunts and kills animals for food

Prey: an animal that is hunted by another animals, a predator

Producers: any organism that uses the sun's energy to survive. All plants are producers

Species: a group of organisms that have a unique set of characteristics (like body shape and behaviour) that distinguishes them from other organisms

Tropic Level: each level in a food chain

Nuisance Black Bears and What to do With Them

by L.J. Landriault, M.E. Obbard and W.J. Rettie

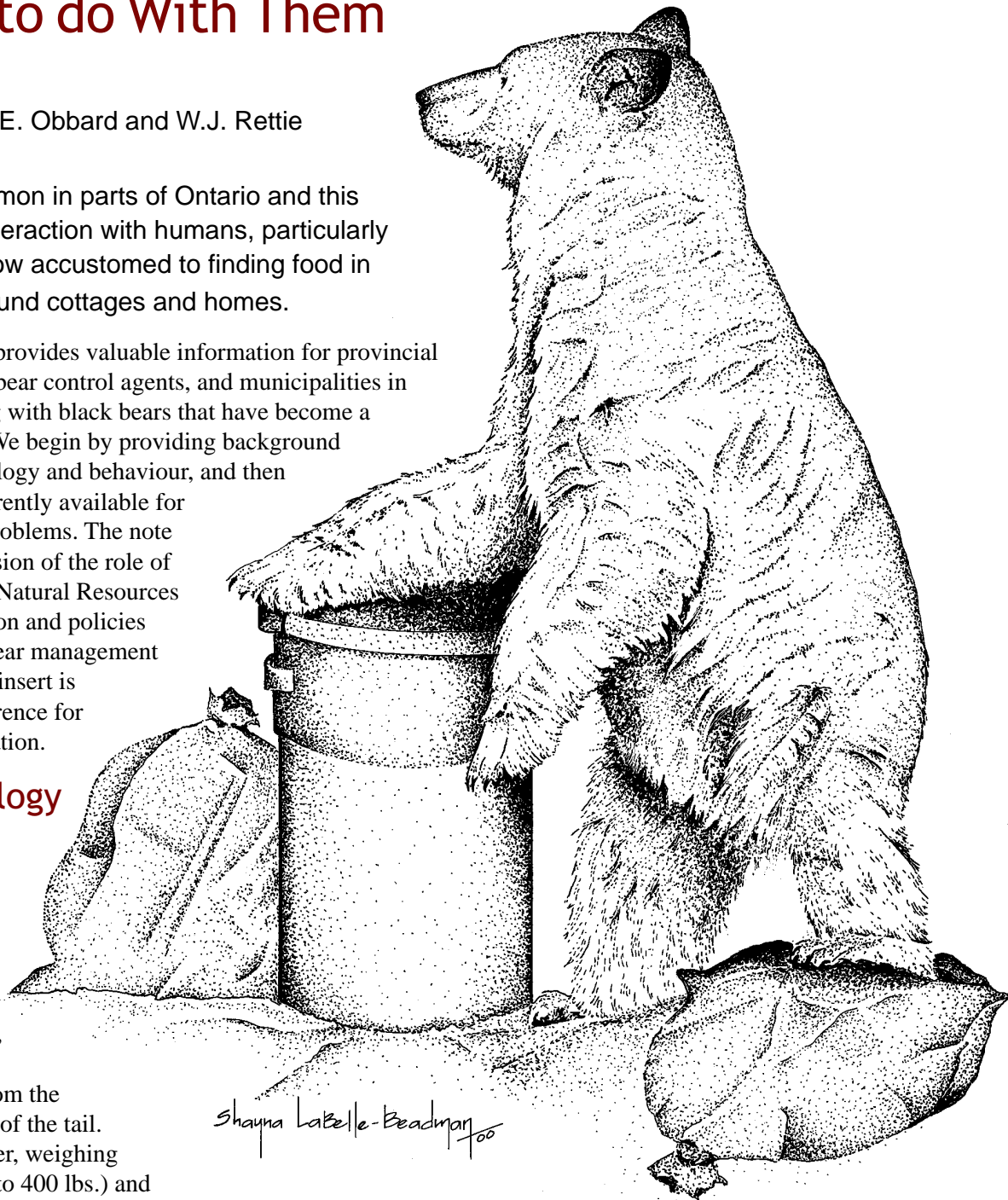
Black bears are common in parts of Ontario and this invariably leads to interaction with humans, particularly when the animals grow accustomed to finding food in populated areas, around cottages and homes.

This technical note provides valuable information for provincial and local police forces, bear control agents, and municipalities in planning for and dealing with black bears that have become a nuisance to the public. We begin by providing background information on bear ecology and behaviour, and then discuss the methods currently available for solving nuisance bear problems. The note concludes with a discussion of the role of the Ontario Ministry of Natural Resources (MNR) and the legislation and policies that apply to nuisance bear management in Ontario. A laminated insert is included as a quick reference for some of the key information.

Black Bear Ecology

Description

Black bears are large, heavily boned mammals. Adult males weigh from 120 kg to 300 kg (250 to 650 lbs.), and are 130 to 190 cm (4 to 6 feet) in length from the tip of the nose to the tip of the tail. Adult females are smaller, weighing from 45 to 180 kg (100 to 400 lbs.) and measuring 110 to 170 cm (3½ to 5½ feet) in length. Adult females reach maximum height and length at about five years of age. Adult males reach their maximum height and length when they are seven or eight years old.



Body weights of adult bears vary dramatically throughout the year, and from one year to the next, depending on food availability. In Ontario, adult bears lose weight from the time they enter the den in the fall until

well after they emerge from the den in spring. In early July, berries and other soft fruits start to become available and adult bears begin to gain weight. When food is abundant, bears can gain up to 1 kg per day and can double their weight by fall.

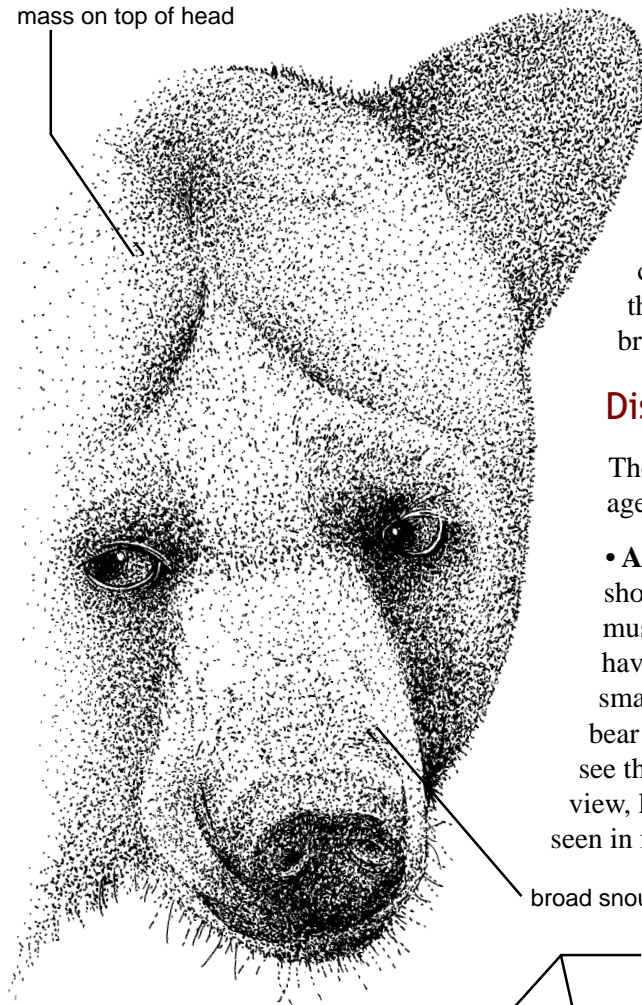
Most black bears in Ontario have a black coat colour though a small proportion (probably less than five percent) are dark brown to light brown.

Distinguishing Age and Sex Classes

The following are general descriptions of bear age and sex classes:

- **Adult male** bears have heavily muscled necks, shoulders and forelimbs, and have well developed muscle masses on top of their heads. Males also have broad snouts and their ears appear to be small because of the size of the head. If a male bear stands up and faces you, it is generally easy to see the penis. If you observe a male bear in a side view, long hairs hanging down from the penis can be seen in front of his thigh as he walks.

well-developed muscle mass on top of head



broad snout

well-muscled neck and shoulders

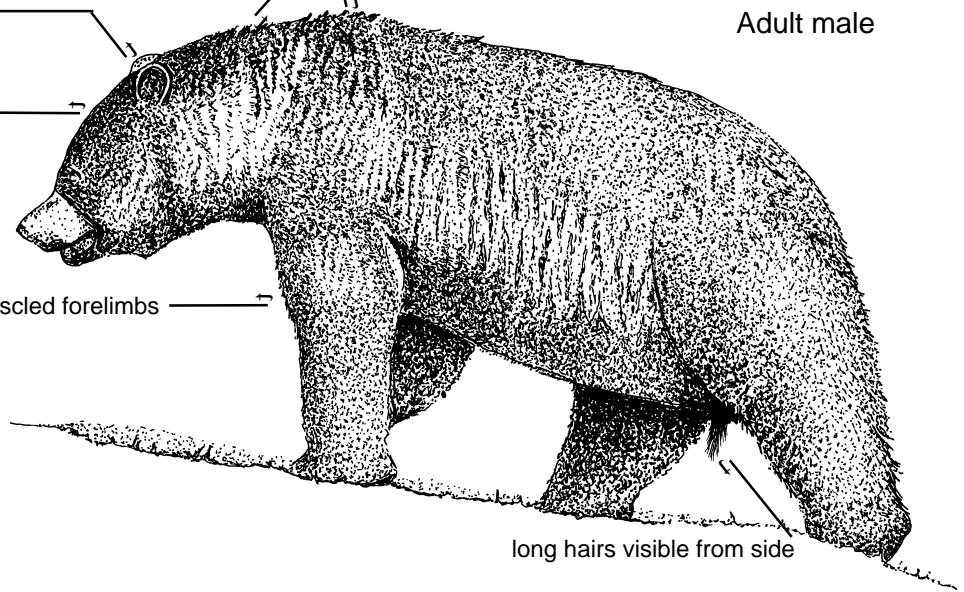
ears appear smaller

Adult male

well-developed muscle mass on top of head

well-muscled forelimbs

long hairs visible from side



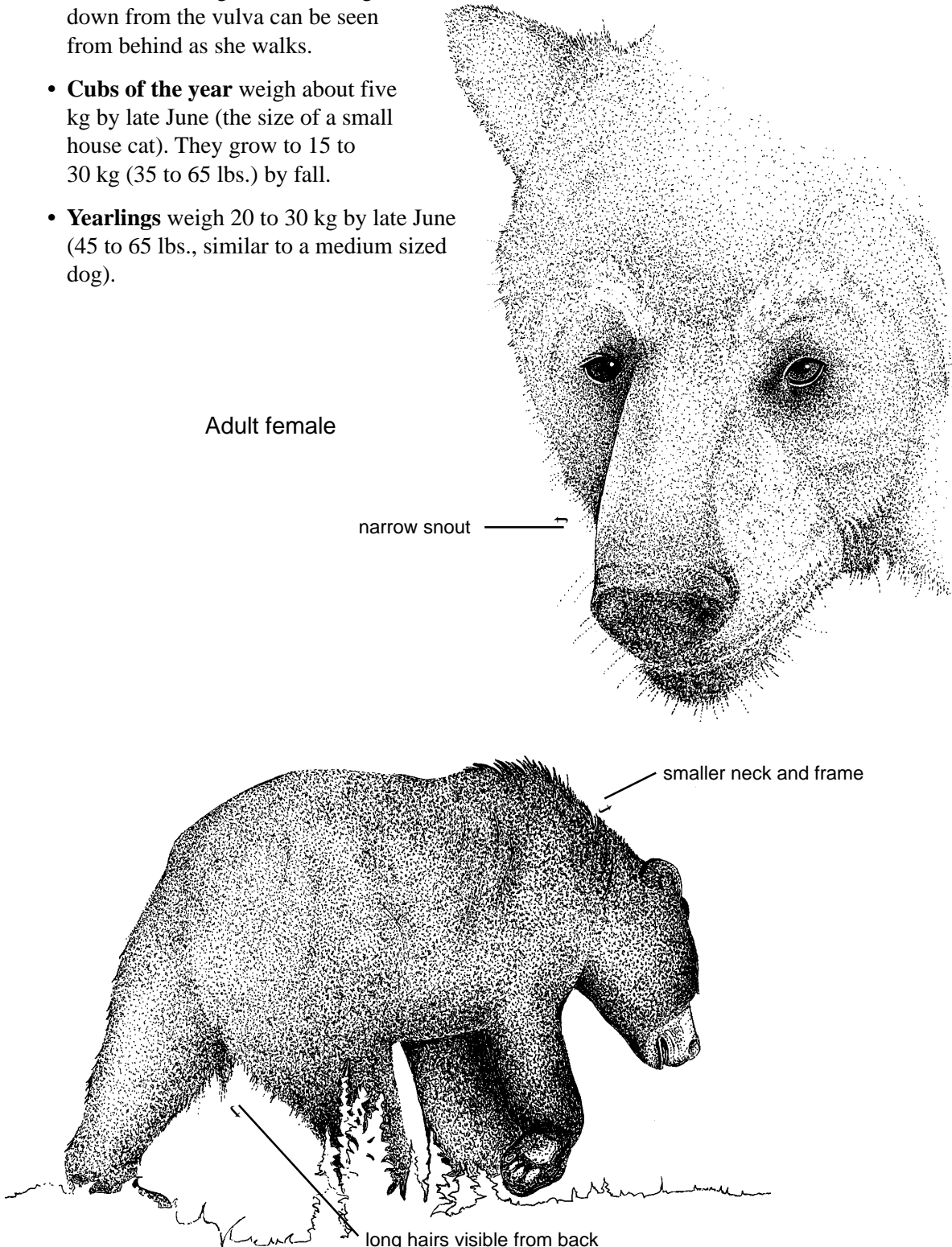
- **Adult females** are more slightly built than adult males; they have small necks and have smaller frames. If a female bear stands up and faces you, it is generally easy to see the nipples. In females, the long hairs that hang down from the vulva can be seen from behind as she walks.
- **Cubs of the year** weigh about five kg by late June (the size of a small house cat). They grow to 15 to 30 kg (35 to 65 lbs.) by fall.
- **Yearlings** weigh 20 to 30 kg by late June (45 to 65 lbs., similar to a medium sized dog).

Adult female

narrow snout

smaller neck and frame

long hairs visible from back





Distribution and Habitat

Black bears are found throughout most of Ontario, from close to Lake Ontario in the south to the Hudson Bay coast in the north, though they are more sparsely distributed in the far north. Throughout most of this range, the bears have free access to neighbouring areas, however the bears on the Bruce Peninsula seem to be isolated from the black bears found east of Georgian Bay.

The highest densities of bears in Ontario (more than 60 bears for every 100 square km of land) are found in areas such as the Chapleau Crown Game Preserve and Algonquin Provincial Park, where bears are protected from hunting. By comparison, in parts of the province where bears are hunted, the highest densities recorded are closer to 40 bears per 100 square km. The highest potential population growth rates are reached in the Great Lakes-St. Lawrence forest zone of central Ontario where bears have access to hard mast (acorns and beechnuts) in fall.



Black bear range

Unlike brown bears (grizzly bears) and polar bears, black bears are primarily inhabitants of forested areas where they are best able to meet their needs for cover, food, and security from predators (including other bears).

Black bears have well developed navigational abilities, though the specific mechanisms that they use are unknown. Bears use their navigational skills in summer and fall when they may migrate more than 100 km to blueberry patches, or to oak and beech stands. Apart from seasonal migrations, home ranges of adult female bears average 15 to 25 square km. Home ranges of adult males can be 10 times the size of female home ranges. Neither sex is believed to be territorial, and the home ranges of many bears can overlap.

Foods Eaten

Bears have a keen sense of smell that enables them to locate food sources, including many that are not obvious to humans. Black bears are omnivores (they eat both plants and animals), but the bulk of their diet is plant material.

Generally, bears are opportunists. Their preferred foods are most abundant in uneven-aged mixed coniferous/deciduous forests that contain numerous shrub species. They consume a variety of food items as they become available throughout the year.

- **In spring**, bears feed on willow catkins, grasses, dandelions, clover, and aspen leaves. Leaves and flowers are preferred when they are highest in protein content (shortly after leaf burst or flowering), before the cell walls build up lignin and cellulose and become more difficult to digest. Important sources of protein in the spring may include newborn moose calves or deer fawns, or spawning suckers.
- **In summer**, ant colonies provide major protein sources, as do nests of bumblebees and wasps that are excavated and eaten. Berries and other soft fruits are eaten as they become available throughout the summer. These include fruits of various currants, wild sarsaparilla, dogwoods, strawberries, raspberries, pin and chokecherries, blueberries, and bristly sarsaparilla.
- **In fall**, hazelnuts, mountain ash, acorns and beechnuts are favoured foods.

Food Availability

Items eaten in spring are generally predictable in timing of availability and do not vary greatly in abundance from one year to another. Nevertheless, many bears lose weight while feeding on these foods. At best, bears will maintain their weight in the spring.

Summer and fall food items vary greatly in timing of availability and in abundance from one year to another. For example, blueberries can vary from less than 10 kg per hectare to more than 1000 kg per hectare. Bears can double their body weight in years when fruits are abundant. It is the abundance of summer and fall foods that has the greatest effect on survival and on the proportion of adult females that reproduce successfully.

The potential for nuisance bear activity increases in years when berry crops fail and the animals search for alternate food sources. The behaviour may also be apparent the following spring when animals emerge from their dens in poor condition. Survival of the current year's cubs can be low following berry crop failure, and few females will produce cubs the following year.





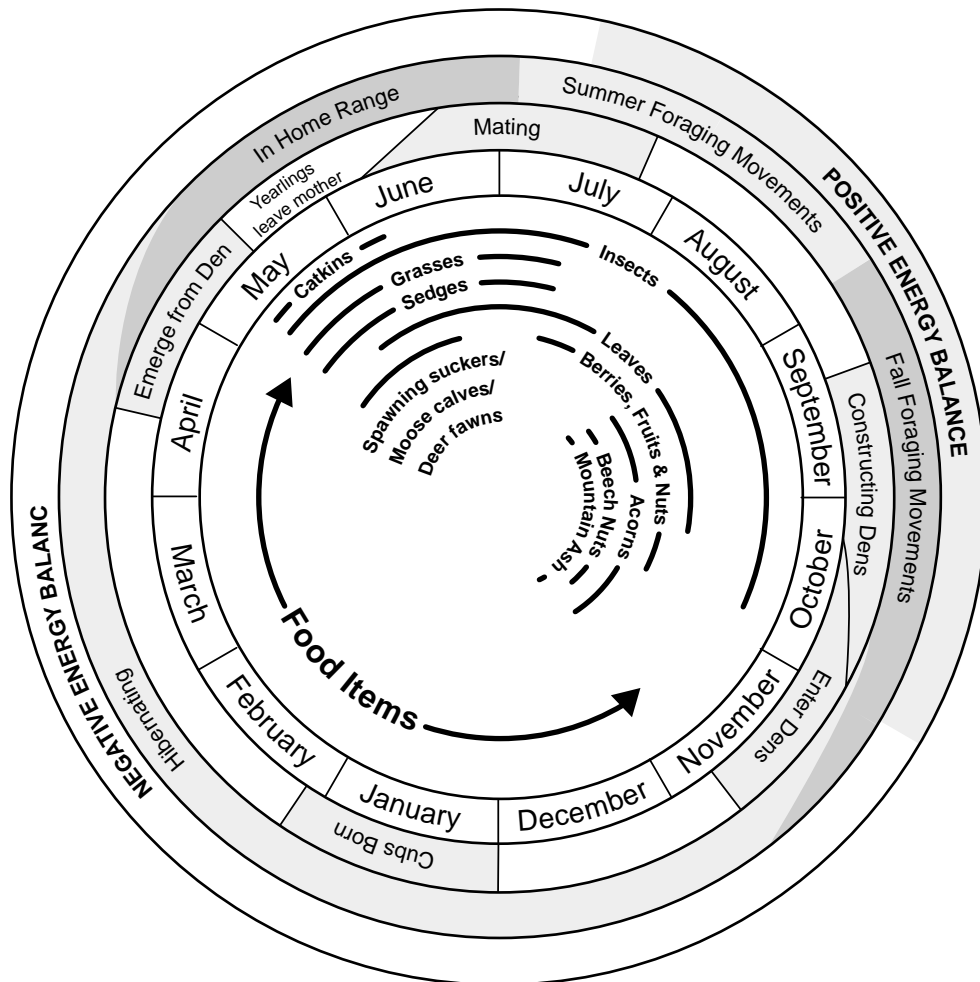
Berry crop failure may occur as a result of a late spring frost that kills blossoms (usually in early June), or a summer drought that causes the berries to shrivel (generally in July or August).

Life History

Mating

Mating generally occurs in June and July. After mating, fertilized eggs do not implant in the wall of the uterus immediately. The fertilized egg undergoes a few cell divisions and development stops until the female is ready to enter her den (typically mid to late October).

At that time, if the female has attained a body weight of at least 70 kg then implantation occurs and the active gestation of about 60 days begins. If pregnant females do not gain enough weight in summer and fall then implantation does not occur and the female's body absorbs the fertilized eggs. Because there is a long delay between conception and active fetal development (known as delayed implantation), the mating season is not focused in a short time period as it is for other wildlife such as moose.



Black bear annual cycle

Although the mating season may span two months, an individual female is in estrus (ready to ovulate, receptive to males, and able to become pregnant) for fewer than five days. During that five day period a male will consort with her and the pair may mate several times. The male will also attempt to keep other males away from the female.

During the two-month mating season, male black bears travel extensively searching for receptive females and often fight vigorously for mating opportunities. After the breeding season ends, most large males have recent wounds and scars on their heads and elsewhere on the body.

Genetic research conducted as part of the MNR's studies near Chapleau showed that cubs from the same litter may have different fathers, and that males may father cubs in more than one litter in a single year. It is likely that larger, older males are more successful in obtaining mating opportunities.

Birth

Cubs are born while their mother is in her den, generally in early January but occasionally as late as early February. The timing of birth depends upon when the female enters the den. If the female enters the den late (perhaps in response to abundant fall foods) then the cubs are born later.

Newborn cubs weigh 200 to 300 grams, which is less than 1/300th of the mother's weight. In contrast, newborn humans weigh about 1/15th of the mother's weight.

Cubs grow rapidly on milk that has higher fat and protein contents than human or cow's milk. By six weeks of age, cubs weigh 2 to 3 kg (4 to 7 lbs.). By the time the family leaves the den in late April or early May, the cubs weigh 4 to 5 kg (about 10 lbs.).

Litter size varies from one to four cubs in Ontario, with most litters having either two or three cubs (average litter size is 2.4).

Reproductive Output and Offspring Survival

Female black bears in Ontario may produce their first litter when they are five years old, but the average age of first reproduction is about six in central Ontario and seven in northern Ontario.

Cubs stay with their mother throughout the year of birth and den with her the following fall. Females with cubs of the year may become nuisances in late June when the nutritional demands of milk production peak and the berry crop is not yet ripe.

The family group breaks up the following May or June when the cubs (now yearlings) are 17 to 18 months old.

The time at which a female parts from her 18 month-old offspring is the point in her reproductive cycle at which she is in the poorest condition. Her need to gain enough weight to reproduce successfully may make her more likely to become a nuisance at this point.

Following family break-up, a new breeding cycle begins as the adult female prepares to ovulate, and becomes receptive to males again. Therefore, female black bears cannot breed successfully more than once every two years.





In the Great Lakes-St. Lawrence forest zone, most females are able to produce litters every second year. However, in the Boreal forest where food is less abundant and food failure events are more common, most females cannot produce cubs every second year. In this region, the interval between litters is often three or four years.



In central Ontario about 75 percent of cubs survive their first year, and about 75 percent of yearlings survive to two years. By comparison, in northern Ontario only about 50 percent of cubs survive to one year old, and about 50 percent of yearlings survive to two years.

Seasonal Patterns



- **Emergence from den:** In most years black bears emerge from their winter dens from mid to late-April in central Ontario and between mid-April and early May in northern Ontario, though they may emerge sooner in early springs.

Typically, adult males are the first to emerge, followed by sub-adult males and females, females accompanied by yearlings, and finally, females with cubs of the year.



Adult males often wander considerably at this time and will feed on winter-killed moose and deer.

Family groups, especially females with cubs of the year, often spend a week or longer in the immediate vicinity of the den after emerging in the spring.



In the fall, pregnant females often plan for the following spring by choosing den sites that have large trees (more than 25 cm diameter) within 30 m of the den. These large trees are referred to as 'sanctuary trees' and are typically white pines in central Ontario and white spruce or cedars in northern Ontario. Sanctuary trees function as escape cover for the young cubs in the period after the family emerges from the den, and adult females will cache their cubs in such trees while foraging.



- **In early spring,** black bears frequent openings in the forest and road edges where new green vegetation first appears. Later they may travel to streams to feed on spawning white suckers. Bears are also frequently found along roadsides where they bend down young trees to strip the new leaves from the branches. After aspen leaves emerge, black bears may be found high in mature trees feeding on the new leaves.



- **Early summer:** From den emergence to early July adult female black bears have a home range of about 20 to 25 square km. In spring and summer, black bears are generally active from about an hour before sunrise to about an hour after sunset. On hot afternoons bears are often found near water bodies.



- **Summer/Early Fall:** In northern Ontario, the timing of seasonal movements by black bears is closely linked to the availability of blueberries. If fruits are available early the bears leave their home ranges early and, if fruits ripen late, the bears delay their foraging trips.

Black bears appear to sample the blueberries available in their home range and then move to patches with more berries when fruits are mature. In most years bears begin to leave their spring range in early July and travel in search of blueberry patches. Blueberry patches are often found in regenerating jack pine plantations. Old burns are also visited. Bears studied near Chapleau travelled an average of about 50 km to good blueberry patches, though some females travelled as far as 100 km.



In central Ontario and parts of northwestern Ontario foraging trips by black bears are linked to the availability of acorns or beechnuts. Thus, seasonal movements in central Ontario are more likely to occur in fall than in summer. In years when major food crops fail, black bears wander more widely and can remain away from their spring ranges for three to four months.

- **By early September** most bears in northern Ontario return to the home range used in spring and early summer and begin to search for a suitable den site. They feed on hazelnuts and mountain ash fruits if available, but also frequent road edges where they feed on fall growth of grasses and clovers.
- **By mid-October** most bears will have selected a site and be in the process of constructing a den, though they will continue to forage as long as food is available. As the days shorten, their daily cycle of activity slows and they are often not active until mid-morning.

Pregnant females are the first bears to enter their dens, followed by females accompanied by cubs of the year, subadults, and finally adult males.

In most years all bears, except perhaps for adult males, will be in their dens by early November and will not leave their dens until the following spring. Actual timing of entry into dens appears to be influenced by a variety of environmental cues including availability of food, change in day length, and snow cover. Of these, the most important cue is food availability and in years when mountain ash fruit is available in northern Ontario, bears will enter their dens two to three weeks later than in other years.

Interactions with Humans

Interactions between humans and black bears are most likely to occur near what a bear identifies as a food source. The frequency of such encounters depends on a number of factors:

- how much natural food is currently available to bears
- how much natural food was available to bears in the previous summer and fall
- the proportion of the bear population that consists of yearling and two-year-old bears (which will peak one or two years following highly successful reproductive years). Yearlings and two-year-olds wander widely as they disperse from the area where they were born. They are often unwary and naive and are more likely to come into contact with humans.
- whether bears have ready access to human garbage
- availability of agricultural and horticultural crops
- seasonal human behaviour that brings people into contact with bears (e.g. encounters will increase when people begin to arrive at cottages and campgrounds).

In the majority of situations, black bears pose no threat to humans, but there are several factors that may affect perceived or real dangers in those situations.





At dumps: Many people encounter bears at local dumps or landfills where bears congregate around the high energy food source. In such situations, bears have well developed dominance hierarchies and have few aggressive encounters among themselves other than noisy displays. Bears at dumps seldom pose any threat to humans unless people attempt to feed bears by hand, or approach too closely while trying to photograph animals.



Along Roadsides: Bears encountered along roadsides may quickly become ‘panhandlers’ if they are fed by passing motorists. In these cases the bears may lose their fear of humans, and people have been bitten or scratched while attempting to feed panhandling bears.



Wilderness situations: People may also encounter bears along trails or in other wilderness situations, but close encounters are most likely to occur near potential food sources.

When a Bear Becomes a Nuisance

Not all black bears encountered by humans are nuisances. We consider a nuisance bear to be one that poses an immediate threat to human safety or one that has developed a pattern of behaviour that makes it a long term risk to safety or property.



In all situations where bears are perceived as a nuisance, the objectives should be to first eliminate risks to human safety and then to minimize the risks to the animal(s). The following section is intended to assist in the decision making process and in the development of response plans.



Responses to Nuisance Bears

Some nuisance bear complaints require direct action and some do not.

No Action Required



Complaints that do not require direct intervention generally include simple sightings, and reports of bears raiding garbage, bird feeders, compost, barbecues, and livestock forage. In these cases, always review the situation, ensure there is no danger to humans, caution the complainant to avoid contact with the animal, and provide advice on how to avoid recurrence of the problem.



Taking no direct action is a viable option for some nuisance bear complaints, particularly those that are simply reported sightings or that are related to a specific attractant (e.g. garbage) in a specific location. In such cases personnel should be prepared to provide an assessment of the situation and to put forward suggestions to assist in remedying the problem. Once an attractant is removed, bears will generally return a couple of times searching for food and will then likely exclude the area from their foraging excursions. Municipalities, businesses, and rural inhabitants that use bear-proof garbage bins will greatly reduce the number of nuisance bear problems, as will urban inhabitants who keep their garbage indoors until scheduled garbage collection.





Bears travel *far for food.*

Bears are highly intelligent. They easily learn where food sources can be found and use their keen sense of smell to seek them out. Bears will travel more than 100 kilometres to a known food source like a berry patch or a stand of beech trees and they will return to these same locations year after year. Bears are always looking for new food sources, including your garbage or the contents of your cooler. Once they determine that food can be found at your house or campsite, they will revisit again and again.

**BEARS CAN
BE DANGEROUS**



In an immediate emergency,
call your local police or 911.
To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our
website:

ontario.ca/bearwise

Some things to remember about Ontario's black bears:

- When food crops fail, the potential for human-bear conflicts increases as bears search for alternate food sources
- Bears lose their natural fear of humans through repeated exposure to people in areas where food is intentionally or unintentionally provided. In such cases, conflict with humans is inevitable. Bears may even become destructive or dangerous
- Such bears are often destroyed because they have become "nuisances" or are perceived as a threat to human safety. They also have a greater risk of getting injured or killed in collisions with vehicles. That is why you should never intentionally feed bears or place food to attract other wildlife (including birds) to your yard for viewing
- Bears quickly learn to associate human residences and campsites with a readily available food source. In fact, most bear problems occur as the result of improperly stored household garbage
- Bears are also attracted to pet food that is left outdoors, bird feeders, grease and food residue left on barbecue grills, composters, fruit trees, sweet corn and grain fields
- Garbage dumps provide a concentration of readily available food that often attracts bears. Bears that feed on garbage in landfills risk physical injury. They also become conditioned to eating garbage at landfills

To learn more about bear encounters, see our Fact Sheets "What to do if you encounter a bear" and "Be safe in bear country".

There's more ...
see over!





Bears are part of *our natural heritage.*

Black bears are an important part of our ecosystem. They are highly intelligent, powerful and potentially dangerous. Usually, bears avoid and fear humans. They are opportunistic omnivores. In other words, they will eat just about anything people will eat. They will also eat food waste created by humans. Here are some facts to help you better understand how black bears behave, both in the wild and around human habitation.

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A quick look at black bears:

- Black bears live primarily in forested areas and throughout most of Ontario
- They are large, powerful animals. Adult males can weigh between 120-270 kilograms (250-600 pounds). Adult females can weigh between 45-180 kilograms (100-400 pounds)
- Female bears have their first cubs when they are between five and seven years old. Mother bears do not produce cubs every year, they stay with their cubs throughout their year of birth and until the following spring

Hibernation:

- Black bears hibernate for about six months. In this time, they do not eat or drink
- Most black bears in northern Ontario move into their winter dens by mid-October. In central Ontario, bears usually enter their dens by early November
- In most years black bears in northern Ontario emerge from their dens between mid-April and early May. Bears in central Ontario leave their dens from mid to late April

Food:

- Bears feed from mid-April to late fall
- From the time bears come out of hibernation until berry crops are available, bears live off their stored fat and the limited energy provided by fresh spring greens
- Black bears eat a variety of foods. They get most of their food energy by feeding on summer berry crops such as blueberries, strawberries and raspberries, as well as hazel nuts, mountain ash, acorns and beech nuts in the fall
- In late summer and early fall some bears actively feed for 20 hours a day, ingesting as much as 20,000 calories
- Black bears are selective feeders and prefer foods that are accessible, high in energy and easy to digest. They eat both plants and animals, but the bulk of their diet is plant material
- Bears need to fatten up so they can survive winter hibernation and in the case of females, produce and feed young. Bears are instinctively driven to feed. Bears typically double their body weight during the summer and fall

Human-bear conflict:

- If natural foods are not readily available, bears will look for other food sources – primarily your garbage
- Once bears learn where to find and get a non-natural food source, they will return again and again

To learn more about bear encounters, see our Fact Sheets "What to do if you encounter a bear" and "Be safe in bear country".

*There's more ...
see over!*





Bears in your schoolyard.

What you can do.

1 If you see a bear on or around school property:

- GO INSIDE the school right away
- TELL the first adult you see

If you are walking home, or just getting off the school bus and you see a bear:

- Get to the nearest house
- Tell the first adult you see

3 If the bear MOVES TOWARD you:

- SLOWLY BACK AWAY toward the school while MAKING NOISE
- REMOVE and drop your backpack if it contains food
- YELL at the bear to GO AWAY!
- If the bear continues to move toward you, stop and keep shouting at the bear. Keep moving slowly toward the school whenever the bear stops
- DO NOT "play dead"
- DO NOT turn and run
- GET INSIDE the school as soon as you can, without running
- TELL the first adult you see

2 If the bear sees YOU:

- DON'T APPROACH the bear
- SLOWLY BACK AWAY toward the school or house while watching the bear
- DO NOT TURN AND RUN
- TELL the first adult you see



BEARS CAN BE DANGEROUS

To report bear problems call:

1 866 514-2327 (1 866 514-BEAR)

4 Help keep bears away:

- Keep your lunch inside the school
- Do not leave food, wrappings or lunch bags in the schoolyard. Take them inside the school to throw away
- Tell your teacher if you see food or garbage left in open bins or in the schoolyard
- Encourage your school to purchase bear-resistant garbage containers
- Encourage nearby residents to be Bear Wise

For more information, visit our website:

ontario.ca/bearwise

There's more ... see over!



Bear Basics

- Black bears are not like friendly cartoon bears. They are smart, curious, powerful and potentially dangerous.
- Adult males can weigh between 120-270 kilograms (250-600 pounds).
- Adult females can weigh between 45-180 kilograms (100-400 pounds).
- Most black bears in Ontario have black fur, but a few can be dark brown to light brown.
- In Ontario, black bears live in forests from Lake Ontario in the south to Hudson Bay in the north.
- Black bears are omnivores. They eat plants, animals and human foods that are easy to get at.
- Black bears feed from the middle of April until late fall.
- In the fall, black bears eat for up to 20 hours a day!
- Black bears eat a variety of foods. They get most of their food energy by feeding on summer berry crops like blueberries, strawberries and raspberries, as well as hazel nuts, mountain ash, acorns and beech nuts in the fall.



Artist: Shayna LaBelle-Beadman ©OMNR

- Black bears will travel more than 100 kilometres (km) to find food. If black bears cannot find natural foods, they will travel to find other food, including garbage.
- They can double their body weight during summer and fall getting ready for winter.
- By early November, most black bears move into their dens for the winter.
- Black bears are an important part of our ecosystem.

Black bears are not usually dangerous animals. Admire them. Respect them. But please, don't feed them.

To report bear problems call:

1 866 514-2327

(1 866 514-BEAR) TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise



**BEARS CAN
BE DANGEROUS**

Illustrations by Shayna LaBelle-Beadman from *Nuisance black bears and what to do with them*, Ontario Ministry of Natural Resources, Northeast Sciences & Technology. TN-017, 2000 Queen's Printer for Ontario.

*There's more ...
see over!*



Artist: Shayna LaBelle-Beadman ©OMNR



Be safe in bear country.

Black bears live in most parts of Ontario. Chances are wherever you live, visit or spend your leisure time, you will be near bears or bear habitat. For your own personal safety, and for the well being of bears, it is important that you learn about bears and their behaviour. Know how to prevent and handle potential encounters with bears. Be safe, be responsible, be Bear Wise.



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For more information, visit our website:

ontario.ca/bearwise

Every encounter with a black bear is unique. Experts recommend the following tips and advice. There is no guarantee that what works in one instance will work in another.

Avoid encounters:

- Make noise as you move through wooded areas – especially in areas where visibility is restricted or where background noise is high, such as near streams and waterfalls. Singing, whistling or talking will alert bears to your presence, giving them a chance to avoid you
- While outdoors, keep your eyes and ears open:
 - Do not wear music headphones
 - Watch for signs of bear activity, like tracks, claw marks on trees, flipped-over rocks or fresh bear droppings
 - If you are out with a dog, leash it. Uncontrolled, untrained dogs may actually lead a bear to you
 - Pay attention, especially if you are undertaking activities like working, gardening or berry picking. Occasionally scan your surroundings to check for bears. Rise slowly from your crouched position so you don't startle any nearby bears. They may not recognize you as a human when you are in a crouched position

Think about safety:

- Carry and have readily accessible a whistle or an air horn
- Learn how to carry and use bear pepper spray. Know its limitations
- If you are in "back country" consider carrying a long-handled axe

Whenever you spot or encounter a black bear:

- Stop. Do not panic. Remain calm
- Do not try to get closer to the bear for a better look or picture. Never feed a bear
- Do not run, climb a tree or swim
- Quickly assess the situation and try to determine which type of an encounter this might be – sighting, surprise or close encounter
- Always watch the bear. While watching the bear, slowly back away until the bear is out of sight
- If you are near a building or vehicle get inside as a precaution
- If you are berry picking, or enjoying other outdoor activities like hiking, jogging cycling or camping leave the area
- Tell others about bear activity in the area

*There's more ...
see over!*





What to do if you encounter a bear.

Knowing what to do if you encounter a bear is being Bear Wise. But some encounters may be more dangerous than others, so it's important to recognize the signs, and know what you can do to protect yourself.

BEARS CAN
BE DANGEROUS



In an immediate emergency,
call your local police or 911.
To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our
website:

ontario.ca/bearwise

Know the language of black bears:

If you by chance encounter a black bear it may:

- Stand on its hind legs to get a better look at you
- Salivate excessively, exhale loudly, and make huffing, moaning, clacking and popping sounds with its mouth, teeth and jaws
- Lower its head with its ears drawn back while facing you
- Charge forward, and/or swat the ground with its paws. This is also known as a bluff charge

Generally, the noisier the bear is, the less dangerous it is provided you don't approach the bear. These are all warning signals bears give to let you know you are too close. When bears are caught off guard, they are stressed, and usually just want to flee.

What to do – Surprise and Close Encounters:

- Remain calm. Do not run. Stand still and talk to the bear in a calm voice
- Arm your pepper spray
- Do not try to get closer to the bear
- If the bear does not get closer to you, slowly back away, talking to the bear in a quiet, monotone voice. Do not scream, turn your back on the bear, run, kneel down or make direct eye contact
- Watch the bear and wait for it to leave
- If the bear does not leave or approaches you, yell and wave your arms to make yourself look bigger. Throw objects, blow a whistle or an air horn. The idea is to persuade the bear to leave
- If you are with others, stay together and act as a group. Make sure the bear has a clear escape route
- If the bear keeps advancing, and is getting close, stand your ground. Use your bear pepper spray (if the bear is within seven metres) or anything else you can find or use to threaten or distract the bear
- Do not run or climb a tree

About attacks:

Black bear attacks are extremely rare. A black bear may attack if:

- It perceives you to be a threat to it, its cubs or it may be defending food. This is a defensive bear that wants more space between you and it. Such attacks are exceedingly rare although a bear's aggressive display may seem to suggest otherwise
- It is a predatory bear. These bears are also very rare. Predatory attacks usually occur in rural or in remote areas. Predatory bears approach silently, and may continue to approach regardless of your attempts to deter them by yelling or throwing rocks

What to do if an encounter results in an attack:

- Use your pepper spray
- Fight back with everything you have
- Do not play dead except in the rare instance when you are sure a mother bear is attacking you in defense of cubs

There's more ...
see over!



Keep bears out of your neighbourhood.

You may not even know you are doing it. You could be attracting bears onto your property and into your community. Garbage is the main reason why bears are drawn into communities. Bird and pet food, greasy barbecues and ripe or decaying fruit, berries and vegetables are other invitations to bears to forage for food in your yard. This is not good for you, for your neighbours or for bears.

BEARS CAN
BE DANGEROUS



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1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

Problems with bears are usually created by people. By following these tips every spring, summer and fall, you can avoid attracting bears to your property:

Garbage:

- Eliminate odours. Put garbage in containers that have tight fitting lids, and only put it out on the morning of garbage day, not the night before
- Whenever possible, store garbage in bear-resistant containers, or indoors (house, shed, garage). Do not store garbage in plywood boxes, old freezers or vehicles
- Put meat scraps in the freezer until garbage day
- If you do not have curbside pick up, take your garbage to the dump often
- Frequently wash garbage cans and recycle containers and lids with a strong smelling disinfectant

Bird/Pet food:

- Fill bird feeders only through the winter months
- Do not leave pet food outdoors. Feed pets indoors, not outside or in screened in areas or porches

Fruits/Vegetables/Compost:

- Avoid landscaping with trees, shrubs or plants that produce food known to attract bears (some examples include crab apple trees, mountain ash, beech and oak)
- Do not put meat, fish or sweet food (including fruit) in your composter
- Remove vegetables and fallen fruit from the ground
- Pick all ripe fruit from trees and bushes

Smells:

- Be aware that cooking odours can attract bears
- Remove grease and food residue from barbecue grills, including the grease cup underneath, after each use

Learn about bears, their needs and behaviour. Share your knowledge with others. Encourage your neighbours and your community to practice Bear Wise habits. It takes everyone working together to keep bears away.

For more information about bears, see our Fact Sheets "Bears travel far for food" and "Bears are part of our natural heritage".

There's more ...
see over!



What to do if you see or encounter a bear *on your property.*

Black bears live mostly in forested areas where they are best able to find food, winter den sites and refuge. With human activity, development and population increasing in what we often call “bear country” or “cottage country” so too are the possibilities for people to see or encounter bears. Knowing what to do if you see a bear on your property is being Bear Wise.

BEARS CAN
BE DANGEROUS



In an immediate emergency,
call your local police or 911.
To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our
website:

ontario.ca/bearwise

Every encounter with a black bear is unique. The following information is what experts recommend you do. There is no guarantee that what works in one instance will work in another.

Black Bear safety basics:

- Never approach the bear to get a better look
- Do not attempt to feed a bear
- Anticipate and avoid encounters
- Know what to do if you encounter a bear
- Learn about bears and their behaviour
- When outdoors, supervise children and never leave pets unattended

If you spot a black bear:

- Stay calm. Often the bear is simply passing through
- Do not run away. Walk towards a building or vehicle and get inside
- If you have children and pets, bring them inside too
- Once indoors, observe the bear. Did it move on or did it stay on your property? If the bear stayed, what was it doing or eating?
- Encourage the bear to leave. Bang pots and pans, or blow an air horn or whistle. The more stressful a bear's encounter with you, the less likely it is to come back
- If the bear got food (like garbage or bird food), or if the bear tried to get food, you will need to remove or control the item that attracted the bear
- Once the bear leaves, remove the attractant and assess your property for other possible attractants like garbage; dirty barbecue; bird or pet food or fruit or berries from your trees or bushes
- It is possible for a bear to return even though you removed the attractant. Bears do return to places where they have found food. Once the bear does not get food, it will move on
- If you have done everything you can to remove attractants, and the bear persists, call 1-866-514-2327
- If a bear is damaging your property, breaking into your home or threatening your personal safety or that of others, call 911 or your local police
- Alert your neighbours about bear activity, and work together to keep your neighbourhood free from items that attract bears
- Work with your municipality to solve problems before they happen
- If a bear is in a tree, leave it alone. Remove people and dogs from the area. The bear will usually come down and leave when it feels safe

NOTE: If you have shot a bear in defense of your property, you are required by law to immediately report it to your local Ministry of Natural Resources office either in person or by telephone. This requirement applies whether you intend to keep the bear or not. Failure to do so is a violation of the Fish and Wildlife Conservation Act.

To learn more about bear encounters, see our Fact Sheets “Be safe in bear country” and “What to do if you encounter a bear”.

There's more ...
see over!





How to avoid encounters with black bears while enjoying the outdoors.

Black bears are nothing like friendly cartoon bears. They are smart, curious, powerful and potentially dangerous. And they don't like surprises. If you are a hiker, cyclist, jogger, berry picker, or you plan to spend some time in "bear country", you need to know how bears behave so that you can avoid an encounter.



In an immediate emergency, call your local police or 911. To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

Bears usually avoid humans. Generally you won't see a bear even if one is close by. Remember, you are a visitor in the bear's home range, so do all you can to avoid encounters.

- Make noise as you move through wooded areas – especially in areas where background noise is high, such as near streams and waterfalls. Singing, whistling or talking will alert bears to your presence, giving them a chance to avoid you
- Travel with others if possible
- Be aware of your surroundings by keeping your eyes and ears open:
 - Do not wear music headphones
 - Keep an eye out for signs of bears, such as tracks, claw marks on trees, flipped-over rocks or fresh bear droppings
- Carry and have readily accessible a whistle or an air horn, and bear pepper spray. Know how to use this spray – practise on a stationary object to get the feel for how the canister sprays, and to know its limitations
- Consider carrying a long-handled axe, particularly if you are in "back country"
- Avoid strong fragrances that may cause a bear to be curious; put any food you are carrying in sealed containers in your pack
- If you are out with a dog, control it. Uncontrolled, untrained dogs may actually lead a bear to you
- While berry picking, occasionally scan your surroundings to check for bears, and rise slowly from your crouched position so you don't startle any nearby bears. They may not recognize you as a human when you are in a crouched position

There's more ...
see over!





What to do if you encounter a black bear while enjoying the outdoors.

Bears usually avoid humans. But if you do encounter one, it's important to remember that they are powerful and potentially dangerous animals. If you are a hiker, cyclist, jogger, berry picker, or anyone who plans to spend some time in "bear country", there are some things you should do if you encounter a bear.



In an immediate emergency, call your local police or 911. To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

If you encounter a bear:

- If the bear is not paying any attention to you, slowly and quietly back away while watching the bear to make sure it isn't following you
- Do not approach the bear to get a better look
- If the bear obviously knows you are there, raise your arms to let the bear know you are a human. Make yourself look as big as possible. Speak in a firm but non-threatening voice while looking at the bear and backing away
- Watch the bear to gauge its reaction to you. Generally, the noisier the bear is, the less dangerous it is, providing you don't approach the bear. If a bear huffs, pops its jaw or stomps its paws on the ground, it wants you to back away and give it space
- If a bear closely approaches you, drop any food you are carrying and continue backing up
- If the bear continues to try to approach, stand your ground and be aggressive – use your whistle or air horn, yell, stand tall, wave your arms and throw objects
- If a bear keeps advancing and is getting close, continue to stand your ground. Use your bear pepper spray and anything else to threaten or distract the bear – bears will often first test to see if it is safe to approach you
- Do **not** run or climb a tree. Bears can run faster and climb better than you
- If the bear makes contact, fight back with everything you have

If you are concerned, contact the local Ministry of Natural Resources office in the area you are going to visit to determine whether there have been any reports of bear encounters or conflicts.

There's more ...
see over!



How to avoid encounters *while camping.*

When enjoying Ontario's campsites, lakes, forests and hiking trails, it's wise to remember that you're in the natural habitat of black bears. Bears have a keen sense of smell, and are attracted by the odour of human food and garbage. To avoid conflicts with bears, prepare ... and be aware.

**BEARS CAN
BE DANGEROUS**



In an immediate emergency, call your local police or 911. To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

What campers can do – know before you go:

- You are responsible for your own safety. Plan your trip with safety in mind. Before you go, learn about black bears; signs of bear activity (like tracks and scat), and how to prevent and handle encounters with bears
- If you are bringing children, always keep an eye on them. When hiking, it is wise to keep children between adults
- Before you go, discuss bears with children. Teach children simple things like making sure they can always see an adult; to never approach a bear or other animals; to never run from a bear and if they see a bear to stay calm and call for help
- If you plan on bringing a dog, you should verify whether there are any rules that prohibit dogs or require them to be on a leash
- All food odours can attract bears. Pack all food, including dog food, with special care. Double or triple bag food to reduce smells. Consider choosing meals that require minimal preparation
- Think about how you will handle your garbage, and how you will keep your campsite clean and odour free. Your safety and that of other campers depends on your diligence to keep the area clean and free from all odours
- Pack a couple of long ropes for hanging your food pack. Practice hanging a pack before you go
- Think about bringing a whistle, air horn, long-handled axe or pepper spray. If you bring pepper spray, know how to use it
- The Ministry of Natural Resources or an Ontario Parks Office can provide general information about recent campsite or route closures due to bear problems. Keep in mind, however, that bear activity can not be predicted
- Once in a while people will encounter black bears. Have a plan in mind if a bear enters your campsite
- People are rarely attacked and/or killed by black bears. Nonetheless, it is important that you be prepared to handle an encounter or an attack

For more information on bear encounters, see our Fact Sheets "What to do if you encounter a bear" and "Be safe in bear country". For more information on avoiding encounters, see our Fact Sheets "How to avoid encounters with black bears while enjoying the outdoors" and "What to do if you encounter a black bear while enjoying the outdoors".

There's more ...
see over!



How to avoid encounters *while camping.*

When enjoying Ontario's campsites, lakes, forests and hiking trails, it's wise to remember that you're in the natural habitat of black bears. Bears have a keen sense of smell, and are attracted by the odour of human food and garbage. To avoid conflicts with bears, prepare ... and be aware.

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BE DANGEROUS**



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1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

What campers can do – at your campsite

- If you are going to an Ontario Park or a private campground do follow advice provided by their staff
- No matter where you camp, always pack out all garbage from the backcountry and use bear-resistant containers where available
- Be aware that all food odours and residues can attract bears, so do everything you can to eliminate or reduce odours from yourself, your camp, your clothes and your vehicle
- Never feed or approach a bear
- Clean fish away from your campsite
- After a meal, store leftover food away from your campsite in sealed plastic bags and, if possible, in bear resistant containers
- Keep your site clean. Burn food scraps and fat drippings thoroughly in a fire. Drain dish water away from your camp site
- Never cook, eat or store any food (including snacks), cooking equipment or toiletries in your tent
- If you are sleeping in a tent try to not sleep in clothes you have worn while cooking meals
- Store food so that bears cannot reach it – in the trunk of your car or hanging at least 4 metres (13 feet) above the ground and 3 metres from tree limbs or trunks that can support a bear. Fishing tackle, clothes worn when cooking, garbage, toiletries and all snacks should also be hung. If you cannot hang your pack, put it in a canoe or boat that is anchored offshore
- Look for signs of bear activity nearby. Consider moving elsewhere if it appears as though a black bear has been active in the area
- If you plan to camp in remote areas you should take additional precautions to ensure your personal safety

For more information on bear encounters, see our Fact Sheets "What to do if you encounter a bear" and "Be safe in bear country". For more information on avoiding encounters, see our Fact Sheets "How to avoid encounters with black bears while enjoying the outdoors" and "What to do if you encounter a black bear while enjoying the outdoors".

There's more ...
see over!



Don't invite bears *to the cottage.*

Most problems between black bears and humans occur when bears are attracted by the smell of and rewarded with an easy meal. When bears pick up a scent with their keen noses, they will investigate it – even at your cottage property. If bears are rewarded with feasts of bird food, garbage or pet food, they will return as long as the food source continues to be available. It takes all cottagers working together to eliminate these attractants and to stop bear problems. Here are some tips to help avoid these unwanted visitors.

**BEARS CAN
BE DANGEROUS**



In an immediate emergency, call your local police or 911.

To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

What cottagers can do:

- Fill bird feeders only through the winter months
- Never purposely feed bears (or other wildlife) or try to approach them
- Put garbage in containers that have tight fitting lids, and only put it out on garbage day, not the night before
- Store garbage in a bear-resistant container, secure shed or garage. Do not store garbage in plywood boxes, old freezers or vehicles
- Do not stockpile garbage, take it to the dump frequently
- Never leave garbage behind. If you must leave before garbage day, or if you do not have curbside pick up, take your garbage with you when you go. Take it to the dump or to your home
- Keep meat scraps in the freezer until garbage day
- Do not leave pet food outdoors. Feed pets indoors, not outside or in screened in areas or porches
- Remove grease and food residue from barbecue grills, including the grease cup underneath, after each use
- Do not put meat, fish or sweet food (including fruit) in your composter
- Pick all ripe fruit off trees, and remove vegetables and fallen fruit from the ground
- Encourage your neighbours to practice good Bear Wise habits
- If you rent your cottage, tell your tenants the importance of being Bear Wise
- You are responsible for your own personal safety. Take precautions when you are in the outdoors. Visit ontario.ca/bears to learn more

For more information on bear encounters, see our Fact Sheets "How to avoid encounters with black bears while enjoying the outdoors" and "Be safe in bear country".

*There's more ...
see over!*



Before you leave *the cottage.*

Garbage continues to be the number one reason why bears are drawn onto properties, followed closely by bird seed, suet and nectar. Whether you are closing the cottage for the season, or just between stays, you can take a few simple precautions to avoid problems with bears and other animals too.



In an immediate emergency, call your local police or 911. To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

Before you go:

- Remove your garbage. Take it home or drop it off at the dump on your way out
- Use a strong disinfectant to eliminate all odours from garbage and recycling containers and lids
- Never discard cooking grease outside. Instead, place it in a container with a lid, transfer it to a plastic bag, and put in with other properly stored garbage
- Take your barbecue with you when you leave the cottage, or store it in a secure shed. Make sure it is clean
- Do not leave any food or food scraps outdoors for pets or other wildlife
- When packing up, remember to remove all the food from the inside of your cottage – a box of pudding or fruit-flavoured dessert mix may be all it takes to attract the bear
- Do not leave scented products outside. Even non-food items like suntan lotion, insect repellent, soap and candles may attract bears
- Close and lock all windows and doors
- If you are away for an extended period of time, have a neighbour or someone in the area occasionally do a walk around to look for signs of a bear visitor or break in. Let the person know where and how to contact you

For more information on bear encounters, see our Fact Sheets "How to avoid encounters with black bears while enjoying the outdoors" and "Be safe in bear country".

There's more ...
see over!



Don't invite bears *into your community.*

Communities must play a vital role in preventing Ontario's black bears from becoming a problem. Applying some basic steps in the way garbage is stored and collected, and how landfill sites are managed is responsible action communities need to take to help keep bears away. Here are some examples of how your community can get started.



In an immediate emergency, call your local police or 911. To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

What your community can do:

- Get involved in the *Bear Wise* program by contacting your local Ministry of Natural Resources office
- Conduct a bear hazard assessment to identify potential problem areas
- Develop a plan to reduce human-bear conflicts
- Involve and engage all people in your community by inviting them to help or by providing them with information on steps they need to take to reduce bear problems
- Review future development plans relative to greenspace
- Provide a regular garbage collection schedule and consider adopting regulations that prohibit leaving garbage and other food attractants out, except on pickup day
- Provide bear-resistant garbage containers for community parks, streets and transfer sites
- Implement policies and procedures to ensure that residents and businesses are not attracting bears to the community
- Properly manage landfill sites to reduce their attractiveness to bears
- Install electric fencing around landfill sites
- Adopt and enforce garbage management by-laws. For more detailed information and ideas, visit ontario.ca/bearwise

Black Bears:

Keep them off the farm.

As an experienced farmer, you are more likely than most Ontarians to be aware of bears and their behaviour. You know that black bears often approach farm properties to find food, especially when their natural food sources are scarce. There are several things you can do to keep bears away from your farm so that the use of firearms becomes a last resort.



In an immediate emergency, call your local police or 911. To report bear problems call:

1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

What farmers can do:

- Plant grain or cornfields as far away from the edge of the forest as possible. Leave a swath of open land or pasture between crops and the forest edge
- Pick all ripe fruit off trees and remove vegetables and fallen fruit from the ground
- Use electric fencing around orchards, beehives and vegetable and berry patches, or between grain crops and adjacent forest areas. Electric fencing can also help protect your animals and livestock
- It is best to install electric fences before bears become a problem or as soon as possible if bears are a problem. Electric fencing works best to deter bears if they have not become food-conditioned
- Keep your livestock away from woodlots and bear travel routes
- Ensure that calving areas are located in an open space away from forest cover
- Bears will eat carcasses. Dispose of dead stock according to legal requirements, and in a manner that bears can not access them
- Be alert for bears when working in bear habitat
- Develop a network with your neighbours to help keep each other informed about bears in your area
- For more detailed information, including tips on how to install electric fencing, visit ontario.ca/bearwise

Note: If you have shot a bear, you are required by law to immediately report it to your local Ministry of Natural Resources office either in person or by telephone. This requirement applies whether you intend to keep the bear or not. Failure to do so is a violation of the Fish and Wildlife Conservation Act.

To learn more about bear encounters, see our Fact Sheets "What to do if you encounter a bear" and "Be safe in bear country".



Bears love *fast food and leftovers.*

Food service operations such as restaurants, fast food establishments and highway snack bars often have substantial amounts of garbage behind their buildings or stored nearby. Black bears are attracted to the smell of human food and garbage, and often come around foraging for an easy meal. It's wise to take steps to prevent this from happening.



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1 866 514-2327

(1 866 514-BEAR)

TTY 705 945-7641

For more information, visit our website:

ontario.ca/bearwise

What your food business can do:

- Avoid stockpiling garbage – including edible oils
- Use bear-resistant containers wherever possible and secure the lids at all times
- Lock dumpster lids every night or use containers that are self-locking
- Empty garbage containers frequently
- Put garbage out on the morning of collection day, not the night before
- If your business takes its own garbage to the dump, make sure that it is stored behind securely closed doors or in a bear-resistant container, and take it to the dump frequently
- Clean your garbage containers frequently and thoroughly. Pay particular attention to storage and disposal of edible oils and greases, and use disinfectant to eliminate odours
- Share this information with your staff
- Encourage customers to use garbage containers, and to not leave scraps or garbage on the ground
- Visit ontario.ca/bearwise for more tips

To learn more about bear encounters, see our Fact Sheets "What to do if you encounter a bear" and "Be safe in bear country".

To learn more about black bears, see our Fact Sheets "Bears travel far for food" and "Bears are part of our natural heritage".

