

Mission Statement:

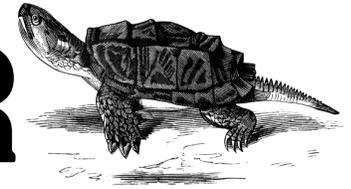
Our mission is to connect youth and families with nature and the outdoors, to raise awareness and appreciation for our natural world, and to foster a strong environmental ethic through community-based education and hands-on activities to improve our local environment



Summer 2012

Volume 4, Issue 1

The SNAPPER



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Learn about our "winged jewels"

They're pretty to look at as evidenced by the popularity of butterflies and dragonflies in works of art, but did you know that these insects are also extremely important to the environment? Butterflies are important pollinators and dragonflies are essential to controlling the populations of other insects, including mosquitoes.

The health of any ecosystem is a delicate balance that can tip in one direction or the other very easily. Take, for example, the relationship between flowering plants, dragonflies, pollinators such as butterflies and bees, and fish. It's difficult to see how fish can affect flowering plants, but they do. Fish eat dragonfly larvae. Dragonfly larvae turn into adult dragonflies. Adult dragonflies eat pollinators such as bees and butterflies. The more fish there are, the fewer dragonflies there are. Fewer dragonflies mean more pollinators and therefore, more seed production and more plants. However, the balance can also go the other way: too few fish means too many dragonflies, which will result in too few pollinators, and suddenly the plants are unable to produce enough seeds to sustain a population. Interesting how species are dependent on each other, isn't it?

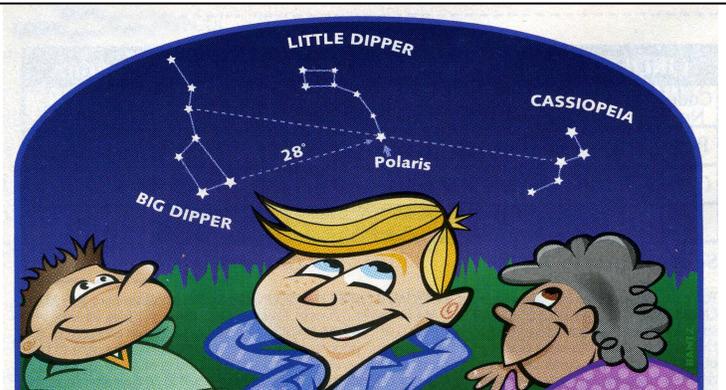
To learn more about butterflies and dragonflies and their importance to the environment, attend the **3rd Annual Butterfly and Dragonfly Festival** at Backus Heritage Conservation Area on Sunday, July 8, 2012 between 10 a.m. and 3 p.m.

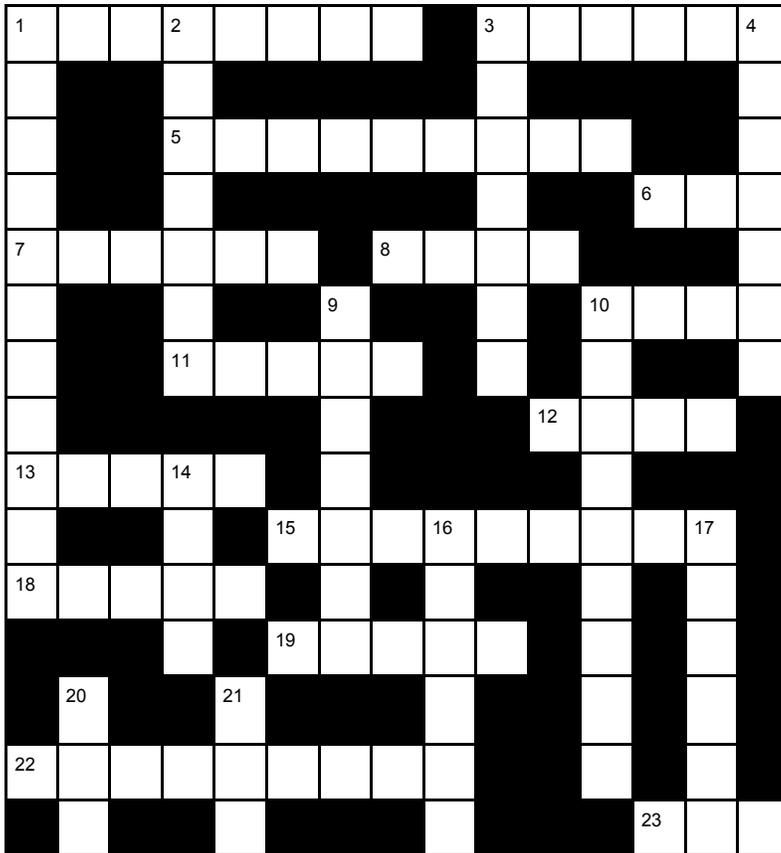
Seeing Double?

On a clear, moonless night, you can see as many as 2,000 stars with the naked eye, 30,000 with binoculars, and almost two million with a telescope.

To start on your journey to becoming an amateur astronomer, go to the library and borrow an astronomy guide. This book will give you an idea of what you're looking at. To start, track down the Big Dipper, which is usually seen toward the north. This constellation circulates around the North Pole, or Polaris. If you draw an imaginary line that connects the two stars that form the side of the dipper away from the handle and extend that line, it will run into Polaris.

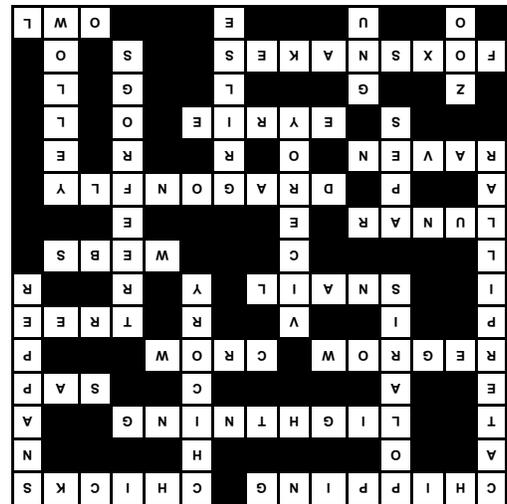
How many stars make up the Big Dipper constellation? On first glance, it looks like seven. However, if you look at it with binoculars and focus on the middle star in the handle, you will see that it's a double star, Mizar the horse and Alcor the rider. In fact, more than half of all stars we see with the naked eye are double or multiple stars.





- 10. A large plant with a trunk, leaves and usually a crown.
 - 11. A slow-moving mollusc with a round shell.
 - 12. What spiders weave to trap prey.
 - 13. Pertaining to the moon.
 - 15. A large flying insect that eats other insects.
 - 18. A member of the crow family that is often found in Aboriginal mythology.
 - 19. The nest of an eagle built on a cliff.
 - 22. Tree-climbing reptiles that shake their tails to scare predators.
 - 23. A nocturnal bird that flies silently.
- Down:**
- 1. A common name for insect larvae.
 - 2. The official name of the North Star.
 - 3. A wildflower that is sometimes used as a coffee substitute.
 - 4. A nickname for a type of large turtle (and the name of this publication.)
 - 9. A butterfly that mimics the Monarch.
 - 10. These amphibians spend much time in trees and use the colour yellow to scare predators.
 - 14. Gorillas, chimpanzees and orangutans.
 - 16. Young Atlantic salmon.
 - 17. The throat colour of a masked warbler.
 - 20. A park with lots of animals.
 - 21. A large African antelope.

- Across:**
- 1. The nickname of this species of sparrow is "hairbird."
 - 2. Baby birds.
 - 5. Bright flashes seen during a thunderstorm.
 - 6. Liquid used to make syrup.
 - 7. Some small lizards can do this with their tails if they are bitten off by a predator.
 - 8. A very intelligent, large black bird.



Spot the differences



VICEROY

Limenitis archippus

To mimic something means to appear to be similar to something else and many species in nature use mimicry to protect themselves. One example is the Viceroy butterfly which mimics the Monarch. Why would it do this? The main reason is that the Monarch butterfly's caterpillar eats milkweed and becomes poisonous to anything that eats it. The poisons are also passed on through metamorphosis to the adult butterfly, making Monarch butterflies distasteful to predators and will induce vomiting if eaten, teaching the predator to stay away from Monarchs. Viceroys have evolved to look very similar to Monarchs and therefore benefit from the lessons learned by predators to stay away from all orange and black butterflies.

What are the differences?

The Viceroy has a black line crossing the veins on the hindwing.

The white spots on the Monarch are circular, while they are oblong on the Viceroy.

Viceroys hold their wings flat when gliding, and Monarchs hold them at an angle.

The Viceroy is smaller than the Monarch.

Viceroy larvae feed on willows and poplars; Monarch larvae feed on milkweed.



MONARCH

Danaus plexippus



Summer Nature Watch

Photos, unless otherwise noted, by Marg Werden



AMERICAN LADY
Vanessa virginiensis

This butterfly is very similar to the Painted Lady, but to identify the American Lady, look for a butterfly with blue centres in the black spots near the edge of the hindwing and a white dot in the orange field on the upper forewing. Larvae feed on everlastings and pussy toes and adults fly from June to September in meadows, forest clearings and along roadsides.



CHICORY
Cichorium intybus

Chicory is a non-native wildflower in North America, having been brought to this continent from Europe. Common chicory is also known as blue sailors, succory, and coffeeweed, because the roots are considered one of the best caffeine-free substitutes for coffee. Chicory is most commonly found in disturbed habitat such as construction sites and roadsides.



BANDED WOOD SNAIL
Cepaea nemoralis

Snails are molluscs, protected by a hard shell that makes them less susceptible to dry conditions and sun exposure. Snails can seal the opening of the shell with a mucus sheet to allow the snail to become dormant. The Banded Wood Snail (an invasive species) shell is a conspicuous, pale yellow with brown stripes, and is approximately 2.5cm in diameter.

Flying lights in the night

As the weather gets warmer, the chances to sit outside in the late evening increase. Imagine yourself sitting on the patio or deck thinking about what you're going to do tomorrow and suddenly you see a flicker of light out of the corner of your eye. Then you see another one just a few feet further along, and another a few seconds later. It's a firefly!



Also known as lightning bugs, fireflies are **bioluminescent**, (pronounced bye-o-loom-i-nes-sent), meaning they are a living organism able to produce light. Fireflies are actually beetles, not flies.

The light emitted by these beetles is 98 per cent efficient, with only two per cent of its energy lost as heat. Compare this to an old-style household light bulb, which converts only about three per cent of its electrical energy into visible light.

The light produced by fireflies, their eggs, and their larvae, known as glow-worms, is produced by two compounds, luciferin and luciferase, which react in the presence of oxygen.

One of the larvae's favourite meals is slugs, so gardeners should appreciate the presence of them in their gardens.

During their short adult lifespan of only a few weeks, fireflies use the light they produce to attract mates. However, for larvae, the light is a warning signal to other species that the larvae taste bad and can make the predator very ill.



KILLDEER NEST
Charadrius vociferus

Killdeer nests are built in a shallow depression scratched into bare ground, usually about 3 to 4 inches across. After laying the eggs, Killdeer often add light-coloured rocks and sticks to the nest. The eggs are buff coloured and heavily marked with blackish-brown. Killdeer chicks are born with a full coat of down feathers and can walk out of the nest as soon as their feathers dry.



GRAY TREE FROG
Hyla versicolor

This tiny frog, only 3 to 6 cm in length, spends much of its time in trees or tall vegetation. As the Latin name suggests, it has the ability to change colour from greenish-gray to gray-black, depending on the colour of the substrate they are sitting on and becomes darker when the air is cooler. The mottled, bumpy skin is toad-like and the inner thigh is bright yellow, which is intended to frighten away predators.



COMMON YELLOWTHROAT
Geothlypis trichas

This small songbird of the Warbler family, is more easily heard than seen. Its distinctive call, "wich-i-ty, wich-i-ty, wich-i-ty", can be heard coming from wet thickets. The male has a distinctive black mask and yellow throat, while the female is olive coloured with a pale throat. Although not threatened or endangered, the Yellowthroat population is decreasing in some areas.



Nature's Calling Coming Events

NATURE'S CALLING

Our name, Nature's Calling! Environmental Education, symbolizes a call to action to re-connect and embrace the natural world around us.

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3rd ANNUAL BUTTERFLY AND DRAGONFLY FESTIVAL

Sunday, July 8th, 10 a.m. - 3 p.m. at Backus Heritage Conservation Area

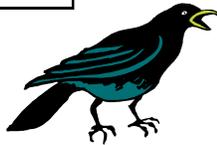
This family-friendly event provides opportunities to learn more about these beautiful and amazing creatures! There are numerous activities and workshops planned throughout the day including guided walks in search of dragonflies and butterflies, crafts, face painting, and many other educational activities. In addition to these activities, we will be holding a "Spread Your Wings" butterfly and dragonfly parade where kids can dress up and flutter around to live music accompaniment by local musicians. Admission into the park will be \$13/vehicle and will give access to all the activities throughout the day.



GREAT CANADIAN SHORELINE CLEANUP

Sunday, September 23rd, 1 p.m. to 4 p.m. at Hastings Drive Beach, Long Point

Roll up your sleeves and lend a hand cleaning up the beaches of Long Point. The Great Canadian Shoreline Cleanup is a national conservation initiative that allows all Canadians to have a positive impact on their local environment. More than just a program to pick up trash, valuable data is collected from each cleanup to determine the major (and minor) causes of shoreline litter in each area. We will meet at the parking lot across from the Causeway Restaurant on Long Point. We will be cleaning up Hastings Drive beach. Gloves and garbage bags will be provided. Be sure to dress for the weather - good walking shoes a must.



The Crow's Collection

Odds and ends of nature trivia

Research indicates that Crows are among the brightest animals in the world and will sometimes make and use tools to help them gain access to food. Young Crows will pick up almost any object to determine whether or not it is edible, including shiny things, and sometimes stash them for further investigation at a later time.

The temperature at which Snapping Turtle eggs are incubated determines the sex of the turtle; cooler temperatures tend to produce males. Global warming may affect future generations of this species.

Although it can climb up the trunks of trees and hammer on wood like other woodpeckers, the Northern Flicker prefers to find food on the ground, digging for ants and beetles with its unusual, slightly curved bill. When it flies, a flash of colour can be seen in the wings - yellow in eastern North America and red in the west - and a bright white

flash shows on the rump.

The Eastern Foxsnake has strong tree-climbing abilities, but is most comfortable on the ground where its patterned colours blend into leaves and grass. If threatened, it will vibrate its tail in surface litter, making a noise similar to a rattlesnake. This species is listed as threatened both provincially and nationally.

Northern Mockingbirds have been known to so skilfully imitate sounds such as squeaky gate hinges, sirens, and barking dogs that even an acoustical analysis could not tell the difference between the Mockingbird and the original sound. Northern Mockingbirds continue to add new sounds to their repertoires throughout their lives. A male may learn around 200 songs throughout his life.

The favourite host plant for the caterpil-

lars of the Eastern Tiger Swallowtail butterfly are Tulip Trees, Wild Black Cherry and Sweet Bay Magnolia. The caterpillar is camouflaged to look like bird droppings when it is very young to protect it from predators. Later, it develops distinctive eyespots, which make it look like a snake, scaring off some predators.

Chipping Sparrows have a habit of lining their nests with hair, thereby gaining the nickname "hairbird." They used to use horse hair for this, but with the decline in the number of available horses, the Chipping Sparrow has taken to using any available hair. They are even known to pluck the hair from nearby sleeping dogs.

Spiders often eat their used spider webs to re-use the protein and recoup some of the energy used to spin the web. The tensile strength of spider silk is greater than that of the same weight of steel.

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