

The page features seven different turtle species arranged around the central text. At the top center is a brown turtle. To the left is a turtle with a red and black patterned plastron. To the right is a turtle with a dark shell and yellow stripes on its head. Below these are three more turtles: one on the left, one in the center, and one on the right. At the bottom are two more turtles, one on the left and one on the right.

UNIT SEVEN
GLOSSARY
AND APPENDICES

GLOSSARY

- aestivate:** To spend the summer in a state of dormancy, not unlike hibernation, due to drought or high temperatures
- amniotic egg:** An egg containing a membrane (amniotic sac) that holds nutrient-rich fluid and helps with reproduction away from water
- barbels :** Fleshy, pointed projection of skin on throat, neck or chin
- behavioural thermoregulation:** Using behaviour to regulate body temperature such as avoiding or seeking heat sources
- bio-accumulation:** When tiny amounts of a dangerous substance are absorbed at lower levels of the food chain and accumulate into higher concentrations within organisms through subsequent levels of consumption
- biodiversity:** The variation and interactions within living species. There are three levels: genetic (diversity based on different genes contributing to an individual/population/community, etc.), species (diversity based on specific species and their role in the ecosystem), and ecosystem (based on patterns of species distribution and community within spaces). Biodiversity contributes to the stability of ecosystems and is an important factor in evolutionary processes
- biosphere:** The portion of the Earth that contains life, including the lower portion of the atmosphere, on and just below the immediate surface of the land and within the bodies of water and the immediate sediment below
- carapace:** The upper shell of turtles and crustaceans
- carnivorous:** Meat-eating
- carrion:** Dead animals
- cloaca:** Internal chamber that receives and discharges reproductive materials and body waste. It opens out at the vent, or anus
- CITES:** Convention on International Trade in Endangered Species of Wild Fauna and Flora
- COSEWIC:** Committee on the Status of Endangered Wildlife in Canada
- duckweed:** Floating aquatic plant with small flat green leaves and yellow spots

ectotherms:	Animals that rely on external temperatures to moderate their metabolism.
endotherms:	Animals that are able to generate their own body heat and maintain a constant body temperature
gene flow:	The flow of genetic material between groups of a species; contributes to biodiversity and variation within a species.
herbivorous:	Plant-eating
herpetologist:	A person who studies reptiles and amphibians
hibernaculum:	Area where an animal hibernates for the winter
hibernation:	To spend the winter in a state of dormancy
hinge:	A flexible joint on the plastron that allows the front part (of the plastron) to bend toward the carapace to protect the head
home range:	An area where an animal or group of animals normally inhabit
invertebrates:	Animals with no backbone or spinal column
Jacobsen's Organ:	A structure found in the roof of the mouth of reptiles (including turtles and snakes), which is directly connected to the brain and is used to detect scent particles in the air
keel:	A raised ridge
keratin:	A tough, fibrous protein material that makes up the horny outer covering of reptilian scales
metabolic rate:	The rate at which sugar in the body is converted into ATP or energy
metabolize:	Break down food to provide energy
nocturnal:	Most active at night
omnivorous:	Both meat and plant-eating
pharyngeal respiration:	Oxygen is obtained through gas exchange in the mouth cavity and cloaca. This type of respiration is important when turtles are resting underwater or hibernating
phylogeny:	The process of evolutionary development of a taxonomic group of organisms or species
plastron:	The lower shell of a turtle or crustacean

<i>reptilia:</i>	The “class” under which all reptiles belong
<i>scavenger:</i>	Animal who eats carrion (dead animals)
<i>scute:</i>	A large scale, also called a <i>plate</i>
<i>serrated:</i>	Notched
<i>succession:</i>	Replacement of one community by another; often progresses to a stable terminal community called the climax
<i>temperature dependent sex determination:</i>	Sex of offspring is determined by temperatures in the nest during incubation
<i>thermoregulation:</i>	Regulation of internal body temperatures by controlling amount of time spent in sun or shade
<i>tubercles:</i>	A small rounded protrusion on the skin

APPENDIX 1: REFERENCES

Publications

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Bailey, Kimberly et al. Adopt A Pond's Wetland Curriculum Resource.
Toronto Zoo and Picov's Water Garden and Fisheries Publication: Toronto.

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McClelland & Stewart Ltd., Toronto.

Pritchard, Dr. Peter C. H. Encyclopedia of Turtles, 1979.
TFH Publications Inc. Ltd., Neptune, N. J.

Web Sites

Adopt-A-Pond

<http://www.torontozoo.com/adoptapond>

Atlantic Leatherback Sea Turtle Working Group

<http://www.chebucto.ns.ca/Environment/FNSN/lbturtle.html>

Bagheera: A Website for our Endangered Species

http://www.bagheera.com/inthewild/van_anim_turtle.htm

California Turtle & Tortoise Club

<http://www.tortoise.org>

Canadian Amphibian and Reptile Conservation Network (CARCNET)

<http://www.carcnet.ca/english.reptileinfo.html>

Canadian Wildlife Service – Species at Risk

<http://www.speciesatrisk.gc.ca>

CITES

<http://www.cites.org>

<http://cites.ec.gc.ca>

COSEWIC – Committee on the Status of Endangered Wildlife in Canada

<http://www.cosewic.gc.ca>

Environment Canada: Habitat Rehabilitation in the Great Lakes-Canadian Great Lakes Turtles, Lizards and Snakes

<http://www.on.ec.gc.ca/glimr/data/habitat-rehabilitation/hab41.html>

Georgia: About North Georgia

<http://ngeorgia.com/history/nghisttt.html>

Gulf Of Maine Aquarium

<http://octopus.gma.org/turtles/convene.html>

Kawartha Turtle Trauma Centre

www.kawarthaturtle.org

Kawartha Turtle Watch

<http://www.trentu.ca/biology/turtlewatch>

The Maritime Fishermen's Union

<http://www.mfu-upm.com>

Natural Heritage Information Centre (NHIC): Range Maps of Ontario Turtle Species

<http://www.mnr.gov.on.ca/MNR/nhic/herps/turtles.html>

Natural Resources Canada: Turtles of Ontario

<http://www.qlfc.cfs.nrcan.gc.ca/landscape/turtle.html>

Nova Scotia Leatherback Turtle Working Group

<http://www.seaturtle.ca>

Ontario Parks

<http://www.ontarioparks.com/english/sar-status.html>

Ontario's Species at Risk

<http://www.rom.ca/ontario/risk.php>

Ronald J. Brooks

<http://www.ouguelph.ca/~rjblab/RonBrooksNT.htm>

Space for Species

<http://www.spaceforspecies.ca>

Trent University: Turtle Ontario Species Summary

<http://www.trentu.ca/biology/turtlewatch/List.htm>

The Turtle Pages

<http://theturtlepages.crosswinds.net>

Turtle Homes Canada

<http://www.turtlehomes.org/canada/index.htm>

University of California (Berkeley): Testudines-Life History and Ecology, Testudines-More on Morphology

<http://www.ucmp.berkeley.edu/anapsids/testudines/testudineslh.html>

<http://www.ucmp.berkeley.edu/anapsids/testudines/testudinesmm.html>

<http://www.ucmp.berkeley.edu/mesozoic/mesozoic/html>

University of Tennessee: Department of Psychology (Gordon Burghardt)

<http://psychology.utk.edu/people/burghardt.html>

Upper Thames River Conservation Authority

http://www.thamesriver.on.ca/species_at_risk/species_at_risk.htm

Vancouver Aquarium: Leatherback Turtle Awareness Program

<http://www.vanaqua.org/education/leatherbacks/index.html>

APPENDIX 2: ZOO TOURS WITH CURRICULUM LINKS

The Toronto Zoo has self-guided tours that correspond with the Ontario Science and Technology curriculums for the following grade levels. Taking one of these tours can be a fun way to learn more about turtles along with many other zoo species.

Grade One	Characteristics and Needs of Living Things
Grade Two	Growth and Changes in Animals (Simple Classification)
Grade Three	Growth and Changes in Plants
Grade Four	Habitats and Communities
Grade Six	Diversity of Living Things
Grade Seven	Interactions Within Ecosystems

Teachers can call Group Bookings at (416) 392-5932 to book the visit. Once the visit has been booked, you will receive a confirmation package containing the self-guided tour plan corresponding to your grade.

Guided tours are also available at no extra charge but must be booked separately by calling (416) 392-5942.

For general information, you can call the Toronto Zoo at (416) 392-5929.

