A barn owl is perched on a dark, textured branch. The owl has a white face with large, dark eyes and a small beak. Its body is covered in mottled brown and white feathers. The background is a soft, out-of-focus green. In the foreground, there are several small, white, daisy-like flowers and some brown, fuzzy seed heads.

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Mark your calendar for interesting upcoming environmentally-focused events in Southern Ontario!

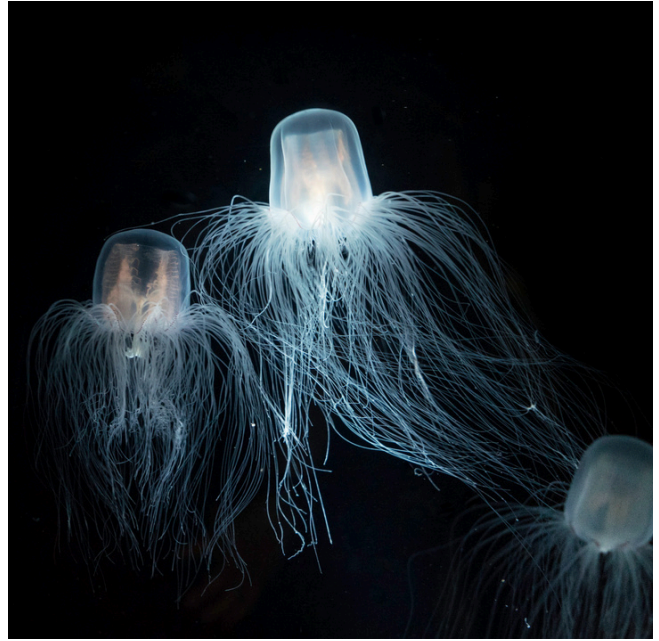
Did You Know?

The hydrozoan *Turritopsis dohrnii*, dubbed the immortal jellyfish, can actually reverse its life cycle.

When the medusa (adult) of this species is damaged or experiences stresses such as starvation, instead of dying it shrinks in on itself, losing the ability to swim. Over the next 24-36 hours, it develops into a new polyp - the jellyfish's previous life stage - and after maturing, it transforms back into a medusa.

To learn more visit

<https://www.nhm.ac.uk/discover/immortal-jellyfish-secret-to-cheating-death.html>



Species Spotlight



PURPLE CONEFLOWER
(*Echinacea purpurea*)

Flowers: April to September,
pink/purple

Leaves: lanceolate and ovate, green

Habitat: open woods, thickets,
prairies

Interesting Fact: the flowers of *Echinacea* species are used to make an extremely popular herbal tea, purported to help strengthen the immune system

Terminology Time

Umbrella species are plants and animals that have similar requirements to many other species in the same habitat.

Grizzly bears are an example of an effective umbrella species because they have a large home range as they are often on the move seeking food and mates. This means they need to use many different habitats in a single year so conservation efforts targeted for them help a variety of other species also.

To learn more visit <https://y2y.net/blog/why-are-grizzly-bears-called-umbrella-species/>



CREATURE FEATURES

Sugar Glider

Found in the forests of Australia and New Guinea, the Sugar Glider plays an important ecological role. As opportunistic omnivores, they consume plants such as acacia gum, eucalyptus sap, and flower nectar, as well as animals like lizards and small birds. They also act as prey for owls and snakes.



Sugar Glider

Anhinga

Found in ponds and swamps from the southeast area of the United States to Uruguay, Anhingas play an important ecological role. Mostly feeding on “rough” fish, they maintain the populations of species such as catfish, pickerel, and mullet. They also act as predator to aquatic insects, crayfish, and shrimp.



Anhinga

Eurasian Skylark

Found primarily in open fields across Eurasia and parts of North America, the Eurasian Skylark plays an important ecological role. Like most birds, they consume seeds of grasses, acting as pollinators. They also maintain the populations of insects such as beetles and caterpillars, as well as spiders and snails.



Eurasian Skylark

POSIDONIA OCEANICA CONSERVATION

Spain



Background

- *Posidonia oceanica* meadows are a priority habitat. In Andalusia, Spain, around 95% of these meadows are found in six Natura 2000 marine sites (SCIs). Conservation actions within these SCIs would guarantee the conservation of almost all of the *Posidonia oceanica* meadow.
- The Life Posidonia Andalusia project's main objective was to improve the conservation status of *Posidonia oceanica* meadows in Andalusia.

Actions Undertaken

- 27,022 ha of habitat were mapped (152% of the area initially planned)
- A network was set up to monitor the species in the long term
- 2 artificial reefs were created to reduce the impact of illegal trawling
- 41 ecological mooring buoys were installed to reduce erosion

Results

- The beneficiaries now have standardized and improved methodologies and protocols to monitor this habitat type
- Successful education campaigns took place which raised awareness for this habitat type
- An "Anchoring Code of Conduct" was created

To learn more about this project visit <https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE09-NAT-ES-000534/conservation-of-posidonia-oceanica-meadows-in-andalusian-mediterranean-sea>



SPECIES OF NOVA SCOTIA

Written By Shelby Grohn

Nova Scotia is located on the eastern coast of Canada and is no more than 130 km wide at any point. Due to its topography and subsequent high tides (among the highest in the world), many acres of marshland exist. As well, the province includes more than 3,000 lakes and hundreds of streams and small rivers. With such a diverse landscape its no surprise the province is home to more than 140 species of birds, 40 species of mammals, and about 2,400 plant species.

With regards to Nova Scotia's vegetation, mosses, lichens, and ferns such as Little grapefern (*Botrychium simplex*) are common in swampy areas while an assortment of wildflowers can be found across the province such as the mayflower (*Epigaea repens*), pitcher plant (*Sarracenia purpurea*), and several varieties of violets. As well, coniferous trees such as Balsam fir (*Abies balsamea*) and shrubs such as Alternate-leaved dogwood (*Cornus alternifolia*) can also be found.

Due to regional and global threats, many species have been identified on the Species at Risk Public Registry at a stage of "at risk" in the province. Some examples of endangered species include the American Marten (*Martes americana*), Blanding's Turtle (*Emydoidea blandingii*), and the Harlequin Duck (*Histrionicus histrionicus*). Some species that are classified as threatened include the Brook Floater (*Alasmidonta varicosa*), Eastern Ribbonsnake (*Thamnophis sauritus*), and the Olive-sided Flycatcher (*Contopus cooperi*). There are currently no species classified as extirpated.

Such targeted conservation efforts have included the Nova Scotia Nature Trust's 100 Wild Islands Legacy Campaign which has so far protected over 85% of the 282 islands of the 30 km archipelago off Nova Scotia's Eastern Shore. As well, the No Open Net Pens initiative from Nature Nova Scotia aims to update legislation to follow the decision in British Columbia to transition completely away from open net salmon farms by 2029. Of course, the federal Species at Risk Act (SARA) is also applicable in Nova Scotia where species are designated "at-risk" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). This committee is comprised of experts guided by the SARA who use scientific research and expertise to assess the current level of risk to species in Canada. As well, Nature Nova Scotia works with members of Ecojustice to advocate for habitat identification for piping plovers.

In addition to voting for leaders that support positive environmental changes, readers can:

- **Be informed.** Understanding local ecology and environmental initiatives is helpful for making positive environmental changes.
- **Leave no trace.** When hiking, camping or travelling, ensure that you avoid impacting the natural ecosystem. For example, stay on trails and do not remove flora or fauna.
- **Consider your own property.** Growing native plants can help support local ecosystems by providing essential habitats and food sources.
- **Consider community involvement** and donate or support environmental organizations.

UPCOMING EVENTS

SIBLING RIVALRIES, ROTTING FOOD AND THE MAGIC OF TREES: A 58-YEAR STUDY OF CANADA JAYS IN ALGONQUIN PARK



February 6th, 2025 7:30-9:00pm EST

Since 2009, Ryan has collaborated with Dan Strickland researching the ecology of Canada Jays in Algonquin Park. Now in its 58th year, it is one of the longest running studies on birds in the world. Using a combination of long-term data and recent experiments, Ryan will discuss the year-round ecology of this fascinating and highly intelligent bird, including what factors influence its survival and reproductive success.

To learn more visit <https://natureguelph.ca/events/canada-jays-in-algonquin-park/>

PRECIPITATION PROJECTIONS: UNDERSTANDING THE LATEST CLIMATE DATA

February 12th, 2025 @2:00pm EST

Join CLIMAtlantic for a free webinar where we will take a deep dive into how to find, understand, use, and communicate the latest climate change data for water resources work.

To learn more visit <https://watersheds.ca/freshwater-stewardship/>

MUSSEL MAGIC: NATURE'S TINY WATER PURIFIERS

February 13th, 2025 7:30-9:00pm EST

Sarah will chat about what species you might find, which features are useful for identifying them, the creative way they reproduce, how surprisingly gorgeous these unassuming but vulnerable ecosystem indicators actually are, plus how and where to report your sightings.

To learn more visit <https://natureguelph.ca/events/mussel-magic-natures-tiny-water-purifiers/>

THE AMAZING WORLD OF ENVIRONMENTAL DNA

February 24th, 2025 7:30-9:30pm EST

Let's join Professor Elizabeth Clare of York University's Clare Lab as she presents the amazing world of environmental DNA.

To learn more visit

<https://waterlooregionnature.ca/event/environmental-dna/>



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