

Fossils of Ontario

OLD ROCK – ANCIENT LIFE

Ancient Sea Life Legend

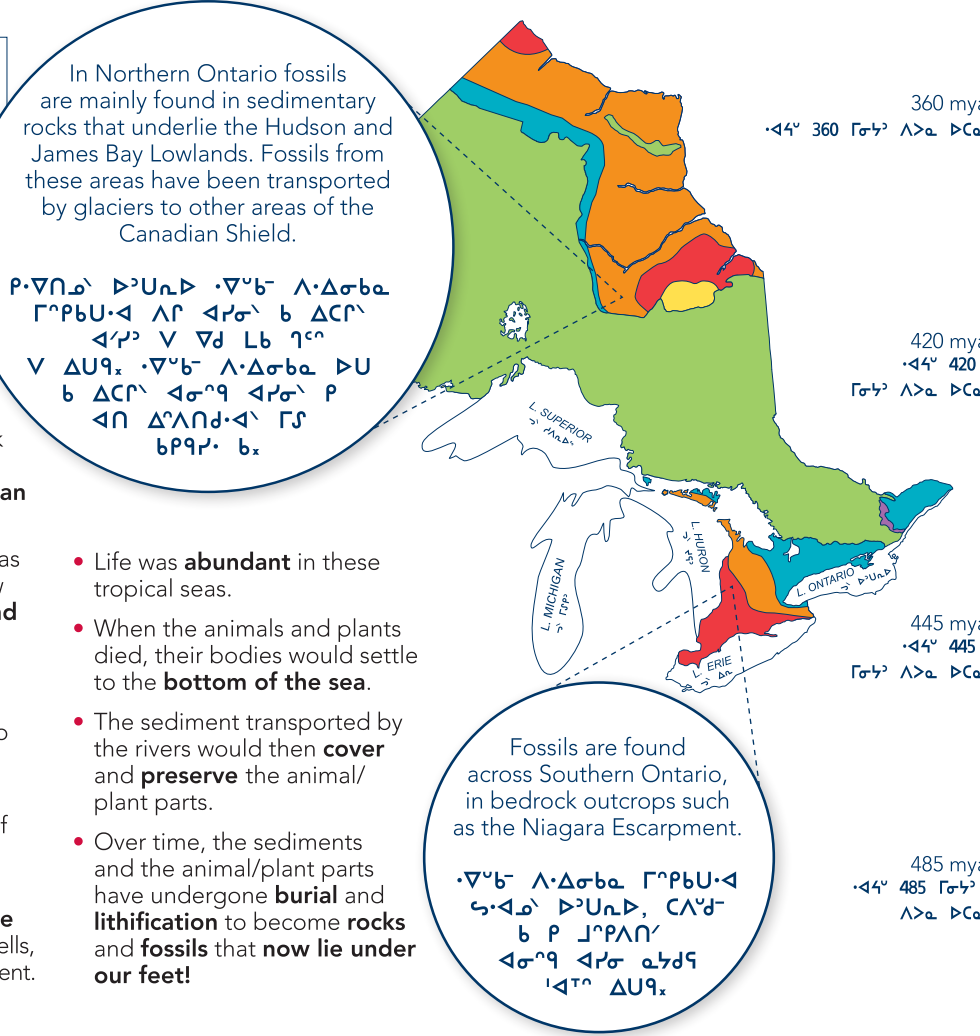
Bivalves ▽ סעב-9ר	Crinoids רנב-ד	Stromatolites ר'PLDעד
Brachiopods יפרד-ע	Tabulate Corals C'4-7 ב9ד	Trilobites רנכ-ד
Bryozoans יפא-ד	Gastropods ב'ק-ע	Rugose Corals יגד ב9ד
Cephalopods י'ד-ע		

FOSSILS: PRESERVED REMAINS OR OTHER EVIDENCE OF ANIMALS AND PLANTS FOUND IN ANCIENT SEDIMENTS AND SEDIMENTARY ROCK

·נ'ב- א·דסב: ב ר'C·דנר דרס- ד·דנ'ט' א·דסב ט'C אד ס·C·דפ'Cב

LEGEND

Mesozoic	7'ד'ר'א
Devonian	נ'י'ד-ד
Silurian	ר'ד'נ-ד
Ordovician	ד'נ'י'ד-ד
Cambrian	9'ע-ד
Precambrian	ר' 9'ע-ד



FOSSIL FACTS

- Ontario Precambrian bedrock is covered by **Cambrian, Ordovician, Silurian, Devonian** and **Mesozoic** aged rocks.
- These rocks originally began as **mud** at the bottom of shallow tropical seas between **500 and 360 million years ago**.
- These seas periodically **covered** most of Ontario and had **sediments** transported to them by rivers.
- Most of these sediments originated from the erosion of **mountains** and **previous glaciers**.
- Limestone comes from **marine plants** and **animals**: eroded shells, skeletal material and/or excrement.

- Life was **abundant** in these tropical seas.
- When the animals and plants died, their bodies would settle to the **bottom of the sea**.
- The sediment transported by the rivers would then **cover** and **preserve** the animal/plant parts.
- Over time, the sediments and the animal/plant parts have undergone **burial** and **lithification** to become **rocks** and **fossils** that **now lie under our feet!**

·נ'ב- א·דסב C·V·דע

- ד'נ'ב- א·דסב ר' 9'ע-ד דע'ד דרס ד·בס'ט' 9'ע-ד, ד'נ'י'ד-ד, ר'ד'נ-ד, נ'י'ד-ד נ'ד לב 7'ד'ר'א דרס'.
- נ'ד דרס'י ·C·L·S דרס-ד'ר' C·L·S' ד'ט'ר' ד'ס'9'ר-ד' ב ד'ס' <·ב'ט' ס'ל' ·44' 500 אס' 360 גס'ז' א'ג'ע ד'C'ע'.
- ד'ד ר'ר'ג'ז ד'ר'ב' פ'ס'ר'V' ד'נ'ב- ד'ר' ט'C ד'ס'ד ב P·V·C>C'ר' ר'ל' פ' ד'נ' ד'C·ד'L·ב'ע'.
- ג'ר' ד'ד ב P·V·C>U·P ר'ל' נ' א·נ'>U·P ·ד'ר'ז ט'C ד'C·P'ז' ב'ר'9'ר'·ב' P ד'ר'L·ב'ע'.
- ע'·י'נ'י' ד'ר'ס'י ד'ר'C P ד'ר'ס' ס'ל' ב'ס·C·ד'P·P ט'C ד'·ד'נ'ט'·ז'·: נ' 7'·C·C·V·R' נ'ד'י', ר'C·ד' ד'ר'ב'ס'·ט'C אד ס'ר'ג'.

- ע'·ל' P ג'ר'נ'י' א·L·N·R'·ד' ד'ר'U ע'·ד'ד' ר'ר'ב'ג'.
- ד'·ל' נ' ס'ל'ר' ד'·ד'נ'ט'·ז' ט'C לב נ' ס'ל'L·ב'ר' ב' ס·C·ד'P·P, ·ד'נ'·ד'·ד' P ד'נ' ד'C·ד'L·ב'ע' ר'ל'.
- ב P ד'י'>U·P ר'ל' ב P V·C>U·P P ד'נ' ס'ד·C·ס' ·נ'ר' P ד'נ' P·ס'·נ' <A·נ' ·ד'ר' ד'·ד'נ'ט' ט'C אד ב P ס·C·ד'P·P.
- ד'·ב'C ע'9, ב P ד'·U>U·P ט'C לב ד'·ד'נ'ט' ט'C אד ב P ס·C·ד'P' 9·ב' P ד'נ' ס'ד·C·ס'·ד' ט'C ד'ר'ס'·ד'·C·ס'·ד', נ'·ב'ס'P לב ד'ר'ס'י ט'C ·נ'·ב- א·דסב'ע ד'ס' ב ΔC·ב'P <C·R' ב Δ'ס' C'ד'9'ל'z.

mya: million years ago גס'ז' א'ג'ע ד'C'ע'

Geological Time Scale: A system of time measurement that subdivides the Earth's history

ב P V·R' <Δ'ס'·ב' <C·R' <ר'P: נ' Δ'ס' <V·P·N·C·ס'·ד' <C·R' <ר'P' נ' ·Δ' P·9'ס'ר'ב'U' C'ס' ב V·R' Δ'P' L·<R' >C'ע'z.

DEVONIAN Age of Fish and Forests

נ'י'ד-ד' ט'C' ב Δ'C' ע'7' נ'ד לב ר'L'ב'ג'.

- 85% of the Earth was covered with oceans and the climate was warm.
- Life got big, and modern fishes appeared in the oceans.
- First forests and amphibians appeared on land.

SILURIAN World Underwater

ר'ד'נ-ד' א·L·N·R'·ד' <C·R' ס'ל'

- A higher sea level than today.
- Shallow seas covered Ontario and the climate was warm.
- First land plants started growing near sea coasts.
- First land habitats appear: near-river and wetland.
- Early fish and wingless insects appear.

ORDOVICIAN Tropical Seas. Deep Freeze

ד'נ'י'ד-ד' P ר'ע'·ד'ב'G·ע' P·R'b'G·z P R'P' <·b'N'

- Ontario was located near the equator and was periodically covered by shallow, tropical seas.
- A 500,000 year long ice age contributed to an extinction of 85% of marine life and marked the end of the Ordovician.

CAMBRIAN Explosion of Life

9'ע-ד' P R'P' P·ס'·C·ד'P' A·L·N·R'·ד'

PRECAMBRIAN Life is Small

ר' 9'ע-ד' P <Δ'ס'·ז' A·L·N·R'·ד'

How are fossils preserved?
To become preserved as fossils, animals and plants should be buried quickly in mud or sand, escape erosion and be deposited in suitable environments (e.g. deep marine, lagoons). Hard bones and shells are more likely to be preserved than soft tissues.

Why are fossils so important?
They help scientists reconstruct Earth's past environments including: land and water, fresh and saltwater, arctic, temperate and tropical climates. Different fossils evolved at different times in the Earth's history. The relative age of sedimentary rocks can be identified through the fossil record.

9·ב' ע'·ל' ·נ'ר' P·U·C·ב'P ·נ'·ב- א·דסב'ע' ·Δ'ר'Δ'·ד' 9·ב'ס' ב ע·C·ד' P·9'ס·C·P' R'P' P·9'ס·C·P' C'ס' ב V·R' Δ'ס'·ב' <ר'P' ·נ'·ב-: C·L·S' <ר'P' נ'ד לב ס'ל', ב <4'ב'ג' ט'C ב S·Δ'C·b'G', L·<R' P·V·N·ד', ב Δ'C'z ע'ע'·ב' ·נ'·ב- א·דסב'ע' ·ב'ע' ב Δ'ס' A·L·N·R'L·b' <ר'P' ·נ'·ב- א·דסב' נ'·C·L·Δ'ס'·ב' C'ס' ד'ר' P·9'ס'r'b'U' C'ט'·A·N·R'·R' <ר'ס'·ז'.

