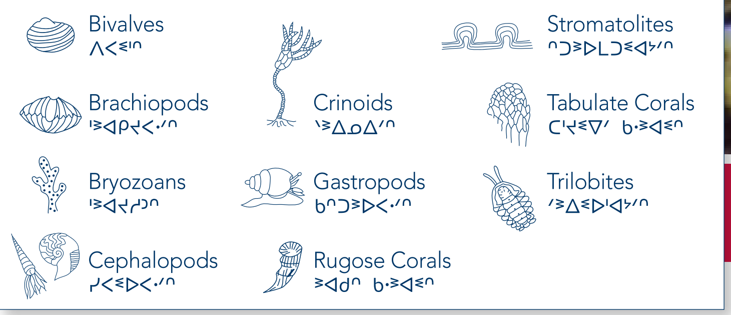
Fossils of Ontario ᐅᐣᑌᕒᐃᔪ ᐊᐦᑭᐠ ᑫᑯᓇᐣ ᑲᒪᓯᓂᓯᑭᐣ

OLD ROCK – ANCIENT LIFE ᑫᑌ ᐊᓯᐣ – ᑲᔭᐡ ᐱᒪᑎᓯᐃᐧᐣ

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

ᑫᑯᓇᐣ ᑲᒪᓯᓂᓯᑭᐣ: ᒥᑕᐡ ᐅᑫᐧᓂᐊᐧᐠ ᑲᓇᑲᐧᑭᐣ ᑲᔭᐡ ᑲᑭᐱᒪᑎᓯᐊᐧᐨ ᑲᓇᑲᐧᑭᐣ ᑐᑲᐣ ᐊᐃᐧᔭᔑᔕᐠ ᒥᓇ ᑲᓂᑕᐃᐧᑭᑭᐣ ᐃᒪ ᑲᑭᐊᑯᑕᒪᑲᑭᐣ ᑲᔭᐡ ᑲᑭᐱᔑ ᐊᓯᓂᐊᐧᑕᐊᐧᑲᐠ ᒥᓇ ᐊᓯᓂᑲᐠ.

Ancient Sea Life Legend
ᑭᒋ ᑲᔭᐡ ᑭᒋᓯᐱᐠ ᑲᑭᔭᒪᑲᑭᐣ ᑫᑯᓇᐣ ᑭᑭᓇᐊᐧᒋᒋᑲᐣ



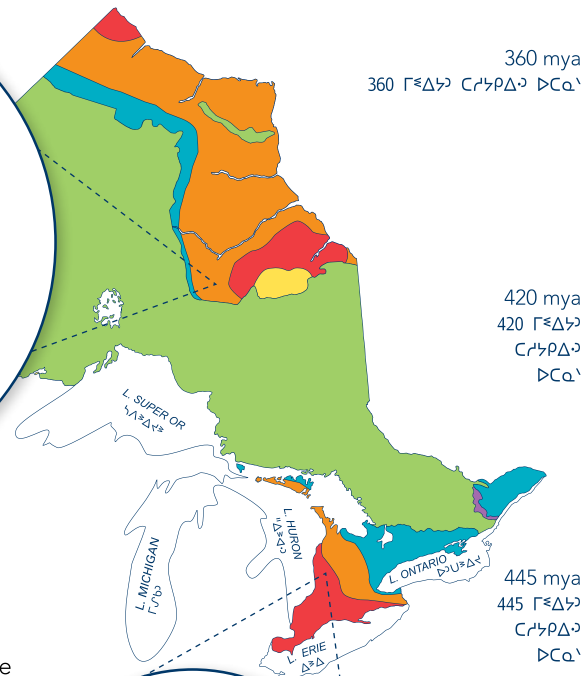
English	ᑭᑭᓇᐊᐧᒋᒋᑲᐣ
Bivalves	ᐱᐸᕒᑊᐢ
Brachiopods	ᑊᕒᐊᑭᔪᐸᐧᐟᐢ
Bryozoans	ᑊᕒᐊᔪᓱᐣᐢ
Cephalopods	ᓱᐸᕒᐅᐸᐧᐟᐢ
Crinoids	ᐠᕒᐃᓄᐃᐟᐢ
Gastropods	ᑲᐢᑐᕒᐅᐸᐧᐟᐢ
Rugose Corals	ᕒᐊᑯᐢ ᑲᐧᕒᐊᕒᐢ
Stromatolites	ᐢᑐᕒᐅᒪᑐᕒᐊᔭᐟᐢ
Tabulate Corals	ᑕᑊᔪᕒᐁᐟ ᑲᐧᕒᐊᕒᐢ
Trilobites	ᐟᕒᐃᕒᐅᑊᐊᔭᐟᐢ

LEGEND ᑭᑭᓇᐊᐧᒋᒋᑲᐣ

🟨	Mesozoic	ᒉᓱᓱᐃᐠ
🟥	Devonian	ᑎᐳᓂᔭᐣ
🟧	Silurian	ᓯᕒᐅᕒᐃᔭᐣ
🟦	Ordovician	ᐅᕒᑐᐱᔑᐣ
🟪	Cambrian	ᑫᒼᑊᕒᐃᐊᐣ
🟩	Precambrian	ᑊᕒᐃᑫᒼᑊᕒᐃᐊᐣ

In Northern Ontario fossils are mainly found in sedimentary rocks that underlie the Hudson and James Bay Lowlands. Fossils from these areas have been transported by glaciers to other areas of the Canadian Shield.

ᐁᑲᐧ ᐃᒪ ᑭᐁᐧᑎᓄᐠ ᐅᐣᑌᕒᐃᔪ ᑫᑯᓇᐣ ᑲᒪᓯᓂᓯᑭᐣ ᒪᒥᑭᑲᑌᐊᐧᐣ ᑲᐃᔑᐊᔭᓯᓂᐊᐧᐠ ᐊᓇᒥᑲᒥᐠ ᐦᐊᐟᓴᐣ ᒥᓇ ᒉᒥᐢ ᐯ ᓇᑐᐃᐧᑭᒋᑲᒥᐠ. ᐅᑐᐧᓂᐊᐧᐣ ᑲᒪᓯᓂᓯᑭᐣ ᑭᐱᐅᒋᒪᒋᐁᐧᐱᐡᑯᑌᐊᐧᐣ ᑲᑭ ᑭᒋᒥᑲᐧᒥᐊᐧᑭᐸᓂᐠ ᐸᐸᑲᐣ ᑲᓇᑕ ᐊᐦᑭᐠ ᐁᑭᔭᓂᔑᐁᐧᐱᐡᑯᑌᑭᐣ.



Fossils are found across Southern Ontario, in bedrock outcrops such as the Niagara Escarpment.

ᑲᒪᓯᓇᐱᑭᓯᑭᐣ ᑫᑯᓇᐣ ᒪᒥᑭᑲᑌᐊᐧᐣ ᒥᓯᐁᐧ ᐁᐧᑎ ᔕᐊᐧᓄᐠ ᐅᐣᑌᕒᐃᔪ, ᑐᑲᐣ ᑲᐃᔑ ᔕᓀᐡᑲᐧᐱᑲᐠ ᐃᒪ ᓇᔭᐠᕒᐊ ᓀᐡᑲᐧᐱᑲᐠ.

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!**

ᑲᒪᓯᓂᓯᑭᐣ ᐃᐧᑕᒪᑫᐃᐧᓇᐣ

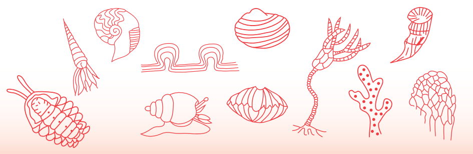
- ᐅᐣᑌᕒᐃᔪ ᑊᕒᐃᑫᒼᑊᕒᐃᐊᐣ ᐊᓯᓂᐠ ᒥᐦᐃᒪ ᐁᔭᐱᐊᐧᐨ ᑫᒼᑊᕒᐃᐊᐣ, ᐅᕒᑐᐱᔑᐣ, ᑎᐳᓂᔭᐣ ᒥᓇ ᒉᓱᓱᐃᐠ ᑲᐅᒋ ᑭᑭᓇᐊᐧᒋ ᑕᓱᔭᑭᐃᐧᓄᒋᑲᓱᐊᐧᐨ ᑲᔭᐡ ᐊᓯᓂᐠ.
- ᐅᑫᐧᓂᐊᐧᐠ ᐊᓯᓂᐠ ᓂᐢᑕᒼ ᐊᔑᐡᑭᐠ ᑭᐅᒋᐅᔑᐦᐅᐊᐧᐠ ᐊᓇᒥᐣᑎᒥᐠ ᐃᒪ ᐁᑲ ᑲᐃᔑᑭᐡᑲᐊᐧᐠ ᑭᒋᑲᒥᓯᐱᐠ ᒉᑲᐧᐨ ᐊᐱ 500 ᒥᓇ 360 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ.
- ᐅᑐᐧᓂᐊᐧᐣ ᓯᐱᐊᐧᐣ ᐊᐁᐧᐡᑲᒼ ᑭᓇᓂᑭᐳᑌ ᑫᑲᐟ ᒥᓯᐁᐧ ᐅᐣᑌᕒᐃᔪ ᒥᓇ ᐊᓇᒥᑎᒥᐠ ᑲᑭᔭᑭᐣ ᒥᐦᐃᒪ ᑲᑭᐊᓂᐃᓇᐦᐅᑌᑭᐣ.
- ᐅᑐᐧᓂᐊᐧᐣ ᐊᓇᒥᐱᐠ ᑲᐸᐸᒪᐦᐅᑌᑭᐣ ᑭᐅᒋᐸᐸᑫᐧᔭᐦᐅᑌᐊᐧᐣ ᑲᑭᐃᔑᐊᔭᑭᐣ ᑭᒋᐊᐧᒋᐣ ᒥᓇ ᐅᑕᓇᐠ ᑲᑭ ᑭᒋᑯᒥᐊᐧᐠ.
- ᓄᓯᑭᐊᓯᐣ ᑭᐱᐅᒋ ᑭᒋᑲᒥᐊᐧᐡᑯᐣ ᒥᓇ ᐊᐃᐧᔭᔑᔕᐠ, ᑐᑲᐣ ᑲᑭᔭᓂ ᔑᑯᐡᑲᐊᐧᐨ ᐁᔕᐠ, ᐅᑲᓇᐣ ᓇᐣᑕ ᒥᓇ ᑲᑭᒪᒥᓯᐊᐧᐨ.
- ᒥᐢᑕᐦᐃ ᑭᐁᐧᓄᑕᐣ ᐱᒪᑎᓯᐃᐧᐣ ᐃᒪ ᑲᑭᐃᔑ ᑭᓀᐊᐧᐠ ᓯᐱᐊᐧᐣ.
- ᐊᓂᑯᓴᐱᔭᐦᐅᑯᐊᐧᐠ ᐊᐃᐧᔭᔑᔕᐠ ᑲᔭᓂ ᓂᐳᐊᐧᐨ ᒥᓇ ᐱᑯ ᑲᓂᑕᐃᐧᑭᒪᑲᑭᐣ ᑫᑯᓇᐣ ᑲᓂᐳᒪᑲᑭᐣ.
- ᐊᓇᒥᐱᐠ ᑫᑯᓇᐣ ᑲᔭᒪᑲᑭᐣ ᐃᓇᐦᐅᑌᐊᐧᐣ ᑲᐃᔑᓴᔭᐱᐊᐧᐠ ᐁᑲᐧ ᐊᐱᐣ ᐁᓂᔑᐃᐧᑫᐧᐊᑯᑕᒪᑲᑭᐣ ᐊᐃᐧᔭᔑᔑ ᐅᑲᓇᐣ ᒥᓇ ᑲᓂᑕᐃᐧᑭᑭᐣ.
- ᐱᓂᐡ ᑕᐡ ᐃᑐᐧᓂᐊᐧᐣ ᑲᓄᓯᑲᑕᐊᐧᑲᐧᐠ ᑲᐸᐸᒪᐦᐅᑌᐠ ᒥᓇ ᐊᐃᐧᔭᔑᔑ ᐅᑲᓇᐣ ᒥᓇ ᑲᓂᑕᐃᐧᑭᑭᐣ ᑕᐱᐡᑯᐨ ᑲᑭᓂᑲᐧᐦᐃᑲᑌᑭᐣ ᐁᑭᔭᓂ ᐊᓯᓂᐃᐧᑕᒪᑲᑭᐣ ᒥᓇ ᐁᑭᔭᓂ ᒪᓯᓇᐱᑭᓯᑭᐣ ᑲᔭᒪᑲᑭᐣ ᐊᓇᒥᐠ ᑲᐃᔑᐸᐸᒍᓭᔭᐠ.

mya: million years ago ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

Geological Time Scale: A system of time measurement that subdivides the Earth's history **ᑎᐸᐸᒋᑲᐣ:** ᑲᐊᐸᑕᐠ ᑲᐅᒋᑭᑫᑕᑲᐧᐠ ᑲᑕᓱᔭᑭᐃᐧᓄᒪᑲᐠ ᐊᐦᑭ

360 mya
360 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

DEVONIAN *Age of Fish and Forests* ᑎᐳᓂᔭᐣ ᑲᑕᓱᔭᑭᐃᐧᓄᐊᐧᐨ ᑭᓄᔐᐠ ᒥᓇ ᑲᐃᔑᓇᓄᐱᒥᐊᐧᑭᐣ

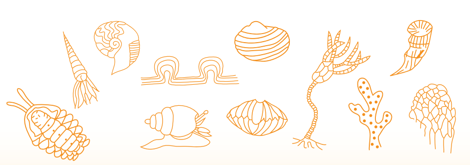


- 85% of the Earth was covered with oceans and the climate was warm.
- Life got big, and modern fishes appeared in the oceans.
- First forests and amphibians appeared on land.

- 85% ᒥᓂᑯᐠ ᐅᒪ ᐊᐦᑭᐠ ᑭ ᑭᒋᑲᒥᐊᐧᐣ ᐁᑲᐧ ᒥᓇ ᑭᑭᓀᐊᐧ.
- ᐱᒪᑎᓯᐃᐧᐣ ᑭᔭᓂᒥᔕ, ᒥᓇ ᑭᓄᔐᐠ ᑭᔭᓂᐊᔭᐊᐧᐠ ᑭᒋᑲᒥᐠ.
- ᑭᔭᓂ ᐊᔭᒪᑲᓄᐣ ᓄᐱᒥᐊᐧᑭᐣ ᒥᓇ ᑭᓄᐱᑯᐠ ᑭᔭᓂᐊᔭᐊᐧᐠ ᒥᑕᑲᒥᑲᐠ.

420 mya
420 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

SILURIAN *World Underwater* ᓯᕒᐅᕒᐃᔭᐣ ᐊᓇᐱᒥᐠ ᑫᑯᓇᐣ ᑲᑭᐊᔭᒪᑲᑭᐣ

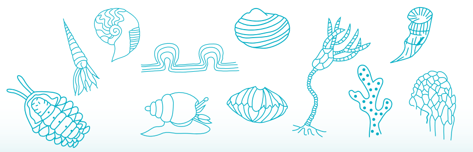


- A higher sea level than today.
- Shallow seas covered Ontario and the climate was warm.
- First land plants started growing near sea coasts.
- First land habitats appear: near-river and wetland.
- Early fish and wingless insects appear.

- ᑭᑭᐡᑲᐧᔭ ᑭᒋᓯᐱ ᐊᐱᐨ ᐃᐧᐣ ᓄᑯᒼ ᑲᑭᔑᑲᐠ.
- ᑭᐸᑲᐧ ᑲᑭ ᑭᒋᓯᐱᐊᐧᐠ ᐅᐣᑌᕒᐃᔪ ᒥᓇ ᑭᑭᓀᐊᐧ.
- ᓇᑐᐤ ᑭᒋᓯᐱᐊᐧᐣ ᒥᐦᐃᒪ ᒪᐊᐧᐨ ᓂᐢᑕᒼ ᑲᑭᔭᓂ ᓂᑕᐃᐧᑭᒪᑲᑭᐣ ᑫᑯᓇᐣ.
- ᓂᐢᑕᒼ ᐊᐦᑭᐠ ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ ᑭᔭᓂᐊᔭᐊᐧᐠ, ᐯᓀᐨ ᓯᐱᐠ ᒥᓇ ᑲᐃᔑᓇᓂᐱᐊᐧᐠ.
- ᑭᔭᓂᐊᔭᐊᐧᐠ ᑭᓄᔐᐠ ᒥᓇ ᐁᑲ ᑲᐱᒥᓭᐊᐧᐨ ᒪᑐᒍᔕᐠ.

445 mya
445 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

ORDOVICIAN *Tropical Seas. Deep Freeze* ᐅᕒᑐᐱᔑᐣ ᑲᐯᐦᐃ ᑲᑭᓀᐊᐧᑲᒥᐠ ᓯᐱᐣ. ᑲᑭ ᑭᒋᒥᑲᐧᒥᐊᐧᐠ

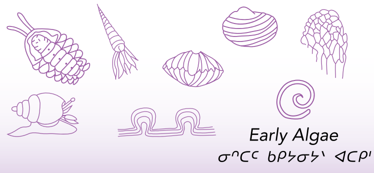


- Ontario was located near the equator and was periodically covered by shallow, tropical seas.
- A 500,000 year long ice age contributed to an extinction of 85% of marine life and marked the end of the Ordovician.

- ᐅᐣᑌᕒᐃᔪ ᑭᐊᔭᒪᑲᐣ ᑫᑲᐟ ᐃᒪ ᑐᓇᐤ ᐊᐱᑕ ᐊᐦᑭᐠ ᐁᑲᐧ ᓇᓇᑫ ᑭᒪᒍᐡᑭᐱ ᐁᐸᑲᐧᐠ ᑲᑭ ᑭᔕᐧᑲᒥᐠ ᓯᐱ.
- ᐁᑲᐧ 500,000 ᑕᓱᔭᑭ ᑲᑭ ᑭᒋᒥᑲᐧᒥᐊᐧᐠ ᐊᒥᐦᐃᒪ 85% ᑲᑭᐅᒋᒐᑭᑐᐊᐧᐨ ᓂᐱᑲᐠ ᑲᑭᐊᔭᐊᐧᐨ ᐊᐃᐧᔭᔑᔕᐠ ᒥᓇ ᒥᐦᐃᒪ ᑲᑭᐅᒋ ᑭᔑᐸᑭᒋᑲᑌᐠ ᐅᕒᑐᐱᔑᐣ ᑭᑭᓇᐊᐧᒋᒋᑫᐃᐧᐣ.

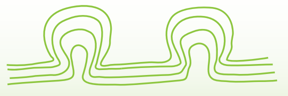
485 mya
485 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

CAMBRIAN *Explosion of Life* ᑫᒼᑊᕒᐃᔭᐣ ᑲᑭᔭᓂ ᒥᓱᑌᐸᓂᐠ ᐱᒪᑎᓯᐃᐧᐣ



540 mya
540 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

PRECAMBRIAN *Life is Small* ᑊᕒᐃᑫᒼᑊᕒᐃᔭᐣ ᐊᑲᓱᐣ ᐱᒪᑎᓯᐃᐧᐣ



4600 mya
4600 ᒥᕒᐃᔭᐣ ᑕᓱᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

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.

ᐊᓂᐣ ᑲᑭᐅᒋᐃᓯᓭᐠ ᐁᑲ ᒋᐊᐣᑲᐧᓇᓂᐊᐧᐨ ᑲᒪᓯᓇᐱᑭᓯᑭᐣ ᑫᑌ ᑫᑯᓇᐣ?

ᒥᑕᐡ ᐁᓯᓭᐠ ᐁᑲ ᒋᐊᐣᑲᐧᓇᓂᐊᐧᐨ ᒋᒪᓯᓇᐱᑭᓯᓄᐊᐧᐨ ᐃᑫᐧᓂᐊᐧᐠ ᐊᐃᐧᔭᔑᔕᐠ ᒥᓇ ᑲᓂᑕᐃᐧᑭᑭᐣ ᒐᒪᐠ ᒋᓂᐣᑲᐧᑕᐊᐧᑭᓭᐊᐧᐨ ᐊᔑᐡᑭᑲᐠ ᓇᐣᑕ ᑐᐊᐧᑯᑲᐠ, ᐁᑲ ᒥᓇ ᑲᐃᔑ ᐊᐧᑫᐃᐧᑭᐱᐡᑭᑕᒪᑲᐠ ᒥᓇ ᒋᔑᐊᔭᒪᑲᑭᐣ ᑲᐃᔑᒥᓇᐧᔑᐠ (ᑐᑲᐣ ᑲᐃᔑᑯᐣᑕᐊᐧᐠ, ᐊᐧᓂᐱᔭᐠ). ᑲᒪᐡᑲᐃᐧᑲᑐᐊᐧᐨ ᒥᓇ ᐁᔕᐠ ᑲᐃᐧᐣ ᒋᐊᐧᑫ ᐊᐣᑲᐧᓇᓂᑭᐣ ᐊᐱᐨ ᐃᐧᐣ ᑲᓄᓯᑭᔭᑭᐣ.

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.

ᑫᑯᓄᐣ ᑕᐡ ᑲᒪᓯᓇᐱᑭᓯᑭᐣ ᐁᐅᒋᑭᒋᓄᑕᑲᐧᑭᐣ?

ᑲᓇᓇᑕᐃᐧᑭᑫᒋᑫᐊᐧᐨ ᐅᐃᐧᒋᐦᐃᑯᓇᐊᐧ ᒋᑭᐁᐧᐃᐧᔑᓇᑯᑐᐊᐧᐨ ᐊᓂᐣ ᐊᐦᑭ ᐅᑕᓇᐠ ᑲᑭᐱᔑᓇᑲᐧᐠ ᐊᔑᐨ ᐃᑐᓂᐊᐧᐣ, ᐊᐦᑭ ᒥᓇ ᓂᐱ, ᑲᒥᓇᐧᑲᒥᐠ ᒥᓇ ᔑᐃᐧᑕᑲᓇᐳ, ᑭᒋᑭᐁᐧᑎᓄᐠ, ᑲᓇᐦᐃᐊᐱᑌᑕᑲᐧᐠ ᒥᓇ ᑲᑭᒋᑭᔑᑌᐠ ᑲᐊᐃᔑᐁᐧᐸᐠ. ᐸᐸᑲᐣ ᑲᒪᓯᓇᐱᑭᔑᓄᐊᐧᐨ ᑭᐱᐊᔭᐊᐧᐣ ᐸᐸᑲᐣ ᑲᐱᑕᑕᓱᔭᑭᐃᐧᓂᐊᐧᐠ ᐁᐧᑎ ᐱᐅᑕᓇᐠ. ᒥᑕᐡ ᐃᒪ ᐁᐅᒋ ᑭᑫᒋᑲᑌᐠ ᑲᓇᓇᑲᒋᐦᐃᑕᐧ ᐊᓯᓂᐠ ᐊᓂᐣ ᐁᐱᑎᓱᐊᐧᐨ ᐃᒪ ᑲᒪᓯᓇᐱᑭᔑᓄᐊᐧᐨ ᐊᐃᐧᔭᔑᔕᐠ ᒥᓇ ᑫᑯᓇᐣ.

Paleontology: The study of fossils and the rocks they occur in • **Lithification:** Changes sediments (mud and sand) into hard rock • **Sedimentary rocks:** Rocks produced by lithification of sediments

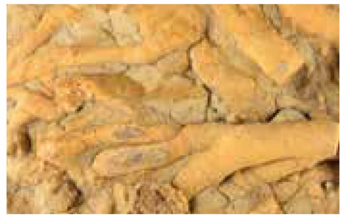
ᑭᒋ ᑲᔭᐡ ᑫᑯᓇᐣ ᓇᓇᑕᐃᐧᑭᑫᒋᑫᐃᐧᐣ: ᑲᓇᓇᑕᐃᐧᑭᑫᓂᒋᑕᐧ ᑲᒪᓯᓇᐱᑭᓯᑭᐣ ᒥᓇ ᐃᒪ ᐊᓯᓂᑲᐠ • **ᑲᑐᐊᐧᑯᑕᒪᑲᐠ:** ᑲᓂᑫᐧᑭᑕᒪᑲᑭᐣ (ᐊᔑᐡᑭ ᒥᓇ ᑐᐊᐧᐠ) ᐊᐱᐣ ᑲᑭᒋᒪᐡᑲᐊᐧᓯᓂᐃᐧᑕᒪᑲᐠ • **ᑲᒪᐊᐧᑐᐊᐧᐱᑭᐡᑲᐨ ᐊᓯᐣ:** ᐊᓯᓂᐠ ᑲᓂᐅᔑᐦᐅᐊᐧᐨ ᑐᐊᐧᑯᑲᐠ

Fossils of Ontario ᐅᐣᑌᕑᐃᔪ ᐊᐦᑭᐠ ᑫᑯᓇᐣ ᑲᒪᓯᓂᓯᑭᐣ

ONTARIO BENEATH YOUR FEET ᐅᐣᑌᕑᐃᔪ ᐊᐦᑭ ᑲᑕᑕᑯᑲᑕᒪᐣ

TRACE FOSSILS

ᑲᓇᑲᐧᑭᐣ ᑫᑯᓇᐣ ᑲᒪᓯᓂᓯᑭᐣ



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Preserved evidence of animal or plant activities.

Time: 550 mya to present.

Examples: Burrows, footprints, tracks, plant root networks (roots not preserved).

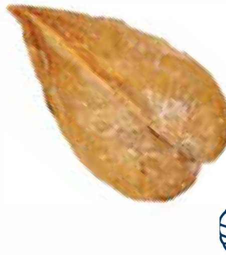
ᑲᐸᐁᐧᓇᑲᐧᑭᐣ ᐊᐃᐧᔭᔑᔕᐠ ᑲᑭᑕᔑᐃᐧᑐᐊᐧᐨ ᓇᐣᑕ ᑫᑯᓇᐣ ᑲᑭᓂᑕᐃᐧᑭᑭᐣ.

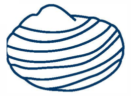
ᐃᐁᐧ ᐊᐱ: 550 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

ᑭᑭᓇᐊᐧᒋᒋᑲᓇᐣ: ᐊᐧᐡ, ᐱᒥᑲᐊᐧᓇᐣ, ᐱᒪᑕᒍᒋᑲᓇᐣ, ᑲᓂᑕᐃᐧᑭᑭᐣ ᐊᐧᑕᐱᐣ (ᐊᐧᑕᐱᐣ ᐃᐧᐣ ᑲᐃᐧᐣ ᒋᐸᐁᐧᓇᑲᐧᑭᐣ).

BIVALVES - Pelecypods (Mollusc)

ᐱᐸᓬᐱᐢ - ᐯᓬᐁᑲᐩᐸᐧᐟᐢ (ᐁᓴᐠ)





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Time: 540 mya to present.

Description: Each has two shells (often symmetrical to each other), hinged together and held closed by strong muscles.

Life/Habitat: Filter feeder.

Modern Relatives: Modern clams, mussels, etc.

ᐃᐁᐧ ᐊᐱ: 540 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

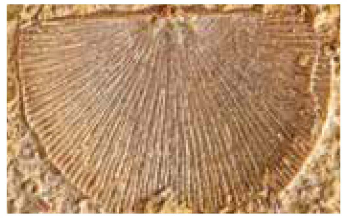
ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᐁᓴᐠ ᓂᔕᑫᐧᑫᐧᐠ ᑭᐸᐦᐃᑲᓄᐊᐧᐠ (ᐸᐯᔑᑲᐧᐣ ᐃᔑᓇᑲᐧᓄᐣ), ᐁᑲᐧ ᒪᐊᐧᐨ ᒪᐡᑲᐃᐧᑭᐱᓯᐣ ᐅᒋᑕᑎᔭᐱᐣ.

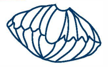
ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᓄᑯᒼ ᑲᐃᔑᓇᑯᓯᐊᐧᐨ ᑯᑕᑭᔭᐠ ᓇᓇᑲ ᐁᓴᐠ.

BRACHIOPODS

ᑊᕑᐊᒋᐅᐸᐧᐟᐢ





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Time: 540 mya to present.

Description: Two shells that are symmetrical along the center of each shell.

Life/Habitat: Filter feeder.

Modern Relatives: Brachiopods.

ᐃᐁᐧ ᐊᐱ: 540 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

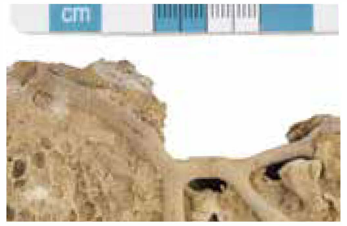
ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᓂᔑᐣ ᐁᓴᐠ ᑌᑎᐸᐦᐃ ᐯᔑᑲᐧᐣ ᐃᓇᓯᓇᓯᐊᐧᐠ.

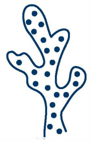
ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᑊᕑᐊᒋᐅᐸᐧᐟᐢ.

BRYOZOANS

ᑊᕑᐊᔦᓱᐣᐢ





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Time: Possibly 488 mya to present.

Description: Many different forms, including branching twig-like structures and lacy networks. Openings to individual chambers are smaller than those of corals.

Life/Habitat: Filter feeder.

Modern Relatives: Bryozoans.

ᐃᐁᐧ ᐊᐱ: 448 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

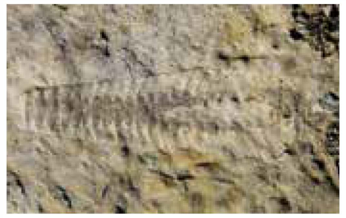
ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᒥᔑᓀᐧᐠ ᐃᔑᐸᐸᑲᓇᓯᓇᓯᐊᐧᐠ, ᑐᑲᐣ ᒥᑎᑯᓴᐣ ᑲᐱᐊᐧᑯᓯᑭᐣ ᒥᓇ ᐊᔭᓴᐱᓯᐊᐧᐠ. ᐊᔭᑲᓯ ᐸᐸᑯᓀᓯᐊᐧᐠ ᑲᐅᒋᐸᑯᓀᓯᐊᐧᐨ ᑲᐃᐧᓂᐣ ᑐᑲᐣ ᑲᐃᔑᓇᑯᓯᐊᐧᐨ ᑲᐧᕑᐊᓬ ᑲᐃᓂᑕᐧ.

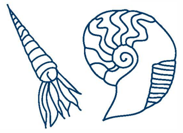
ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᑊᕑᐊᔦᓱᐣᐢ.

CEPHALOPODS (Mollusc)

ᓯᐸᓬᐅᐸᐧᐟᐢ (ᒧᓬᐊᐢᐠ)





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Time: 520 mya to present.

Description: Cone - or coil - shaped shell divided into chambers.

Life/Habitat: Predator or scavenger. Top predators in the Ordovician.

Modern Relatives: Nautilus, octopuses, squids and cuttlefish.

ᐃᐁᐧ ᐊᐱ: 520 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

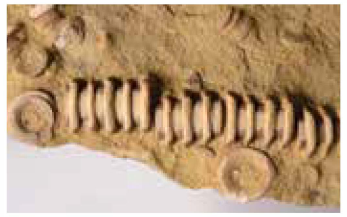
ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᓂᔑᐣ ᐁᓴᐠ ᑌᑎᐸᐦᐃ ᐯᔑᑲᐧᐣ ᐃᓇᓯᓇᓯᐊᐧᐠ. ᒋᐳᓇᑯᓯᐊᐧᐠ ᓇᐣᑕ ᑎᑎᐸᐱᑫᓯᐊᐧᐠ ᐃᑫᐧᓂᐊᐧᐠ ᐁᓴᐠ ᐁᐃᐧᐱᓯᐊᐧᐨ.

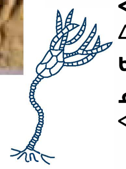
ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ. ᐅᐸᐸᒥ ᓇᓇᑕᐊᐧᐸᑕᐣ ᑫᒥᒋᐨ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᑭᒋᐁᓴᐠ, ᑲᒥᔑᓇᐧᑯᓂᑫᐨ, ᐃᐢᑭᐧᐟ ᒥᓇ ᑲᑐᓬᐱᐡ.

CRINOIDS

ᐠᕑᐃᓄᐟᐢ





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Time: 485 mya to present.

Description: Animals resembling flowers with a grouping of feathery arms at the top of a stem.

Life/Habitat: Filter feeder.

Modern Relatives: Sea lilies, starfish and sea urchins.

ᐃᐁᐧ ᐊᐱ: 485 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

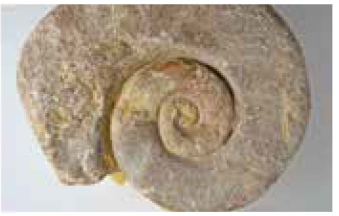
ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᑐᑲᐣ ᐊᐃᐧᔭᔑᐡ ᑕᐱᐡᑯᐨ ᐊᐧᐱᑲᐧᓂᐠ ᐃᔑᓇᑯᓯᐊᐧᐠ ᒥᓇ ᒥᑲᐧᓂᐠ ᐃᔑᓇᑲᐧᓂ ᐃᐡᐱᒥᐠ ᑲᐅᓂᑭᐊᐧᐨ.

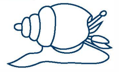
ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᑭᒋᑲᒥᐊᐧᐱᑲᐧᓂᐣ, ᐊᐧᓇᑯᐡᑭᓄᔾ ᒥᓇ ᐊᓇᒥᐱᐠ ᑲᐱᑲᐧᑯᑎᓯᐊᐧᐨ.

GASTROPODS (Mollusc)

ᑲᐢᐟᕑᐅᐸᐧᐟᐢ (ᒧᓬᐊᐢᐠ)





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Time: 510 mya to present.

Description: Coiled shell houses the animal.

Life/Habitat: Filter feeder, algae eater or detritivore.

Modern Relatives: Snails and slugs.

ᐃᐁᐧ ᐊᐱ: 510 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

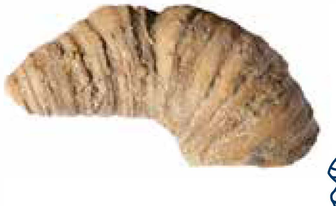
ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᑐᑲᐣ ᐊᐃᐧᔭᔑᐡ ᐊᐧᐃᐧᔦᔭᓂ ᑲᐃᔑᐱᒋᔑᓄᐊᐧᐨ.

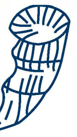
ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ, ᐊᑕᑭᑊ ᐅᒥᒋᐣ ᓇᐣᑕ ᑲᐱᐊᐧᑲᐧᐣᑌᑭᐣ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᓴᓇᐢᑲᐧᐩ ᒥᓇ ᒧᓴ.

RUGOSE CORALS

ᕑᐊᑯᓴ ᑲᐧᕑᐊᓬᐢ





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Time: 462 mya to 251 mya.

Description: Hard cone shaped skeleton; the interior is divided by vertical walls.

Life/Habitat: Filter feeder.

Modern Relatives: Corals.

ᐃᐁᐧ ᐊᐱ: 462 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ 251 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ.

ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᑐᑲᐣ ᐊᐃᐧᔭᔑᐡ ᒪᐡᑲᐃᐧᒋᐳᑲᓀᓯ, ᐁᑲᐧ ᐱᐣᒋᔭᐦᐃ ᐸᐱᑭᓯᑲᑲᐡᑭᓯ.

ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᑲᐧᕑᐊᓬᐢ.

STROMATOLITES

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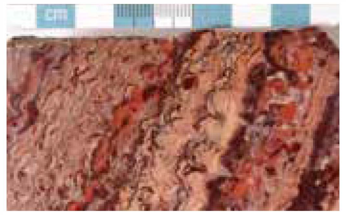

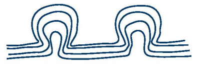

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Time: 3500 mya to present.

Description: Colonies of bacteria. They trap grains of sediment, forming layers and building mounds.

Modern Relatives: Stromatolites.

ᐃᐁᐧ ᐊᐱ: 3500 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ ᓄᑯᒼ.

ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᒪᒪᐃᐧ ᓂᑕᐃᐧᑭᒪᑲᐣ ᑲᐊᐣᑯᐡᑭᑫᒪᑲᐠ. ᐃᐧᑯᐱᒋᑫᒪᑲᐣ ᑫᑯᓇᐣ ᑲᓂᑯᐣᑕᐊᐧᐦᐅᑌᑭᐣ, ᐁᓂᐊᔭᑫᐧᑕᐃᐧᔭᒪᑲᑭᐣ ᒥᓇ ᐊᓂᒋᐸᐧᑭᑌᐊᐧᐣ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᐢᑐᕑᐅᒪᑐᓬᐊᐩᐟᐢ.

TABULATE CORALS

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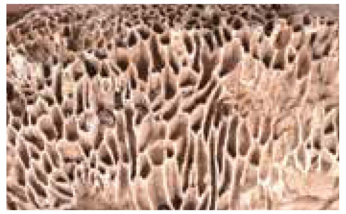

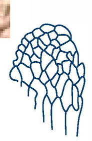

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Time: 488 mya to 251 mya.

Description: A skeleton of vertical tubes further divided horizontally.

Life/Habitat: Filter feeder.

Modern Relatives: Corals.

ᐃᐁᐧ ᐊᐱ: 488 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ 251 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ.

ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᐅᑫᐧᓂᐊᐧᐠ ᐊᐧᐃᐧᒼᐱᑲᓀᓯᐊᐧᐠ ᐁᑲᐧ ᒥᓇ ᐸᐱᑭᓯᐊᐧᐃᐧᒼᐱᓯᐊᐧᐠ.

ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᓇᒥᐱᐠ ᑭᑕᔑᓇᓇᑕᐃᐧ ᐃᐧᓯᓂ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᑲᐧᕑᐊᓬᐢ.

TRILOBITES

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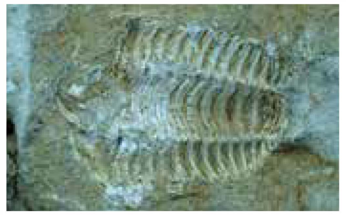

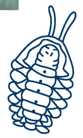

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Time: 520 mya to 251 mya.

Description: Often have three distinct sections lengthwise and crosswise. Fossils found are often pieces of the external skeleton.

Life/Habitat: Burrower, detritivore, possibly predator and scavenger.

Modern Relatives: Horseshoe crabs, scorpions, spiders, etc.

ᐃᐁᐧ ᐊᐱ: 520 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ ᐱᓂᐡ 251 ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ.

ᐊᐧᐃᐧᒋᑫᐃᐧᐣ: ᓂᐦᓴᐧᔦᐠ ᐃᔑᐸᐸᑫᓯ ᐃᒪ ᑲᐃᑯᓯᐨ ᒥᓇ ᑲᐃᑲᐧᑌᓯᐨ. ᐅᑫᐧᓂᐊᐧᐠ ᑲᒪᓯᓂᔑᓄᐊᐧᐨ ᐊᑲᐧᒋᔭᐦᐃᐠ ᐅᑲᓂᐊᐧ ᓇᑲᐧᓂ ᐁᒪᓯᓂᔑᓄᐊᐧᐨ ᐊᓯᓂᑲᐠ.

ᑲᑕᔑᐱᒪᑎᓯᐊᐧᐨ: ᐊᑕᑭᑊ ᐅᒥᒋᐣ, ᒪᐡᑯᐨ ᒥᓇ ᐅᐸᐸᒥ ᓇᓇᑕᐊᐧᐸᑕᐣ ᑫᒥᒋᐨ.

ᓄᑯᒼ ᑲᑭᐱᐅᒋ ᐊᓂᑫᓇᑯᓯᐊᐧᐨ: ᐊᔕᑫᐠ, ᐅᒋᑕᐦᐅᐁᐧᒪᐣᒍᐡ, ᑯᑕᑭᔭᐠ ᓇᓇᑐᐠ ᒪᐣᒍᔕᐠ.

LEGEND ᑭᑭᓇᐊᐧᒋᒋᑲᐣ

🟨	Mesozoic	ᒣᓱᓱᐃᐠ
🟥	Devonian	ᑎᐳᓂᔭᐣ
🟧	Silurian	ᓯᓬᐅᕑᐃᔭᐣ
🟦	Ordovician	ᐅᕑᑐᐱᔑᐣ
🟪	Cambrian	ᑫᒼᑊᕑᐃᐊᐣ
🟩	Precambrian	ᑊᕑᐃᑫᒼᑊᕑᐃᐊᐣ

mya: million years ago ᒥᓬᐃᔭᐣ ᑕᓯᔭᑭᐃᐧᐣ ᐅᑕᓇᐠ

English and Anishininiimowin