

# CREATURE FROM THE DEEP

Maggy Horvath operates a huge shovel in Northern Alberta's oil sands. Workers like her dig deep, open pit mines. At the bottom, they uncover crude oil mixed with sand and water. Recently, Ms. Horvath dug up something else. She found the remains of a massive, 100-million-year-old sea creature!

## Rare Find

In November, while working in the pit, Ms. Horvath noticed a tan-coloured shape in the darker rock. It turned out to be the upper backbone and neck of a huge fossil. It was pushing through the face of the cliff.

Immediately she stopped working and called her supervisor. Soon, a paleontologist named Don Henderson was examining her find.

## A Closer Look

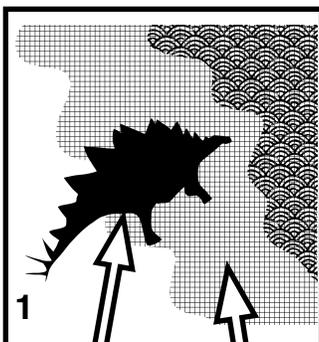
Mr. Henderson was absolutely thrilled. From the shape of the bones, he could tell that the fossil was a plesiosaur. This 20-metre long reptile swam in ancient tropical seas. It had a small head and short body, but a very long neck. With a mouth full of sharp, pointy teeth, it could hunt any big fish. Its limbs looked like paddles or turtle flippers.

"The plesiosaur is so rare. It is a top predator," said Mr. Henderson.

It is unusual to find fossils of predators. There are fewer predators than there are prey. "Think of Africa today. There are a few lions supported by thousands of wildebeests."

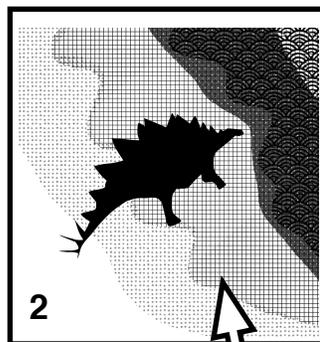
"It's the same thing here. This [plesiosaur] ate all the other fishes."

## From Dinosaur to Fossil

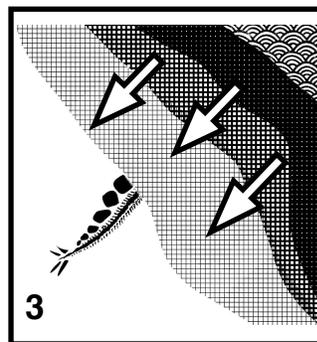


Dead organism

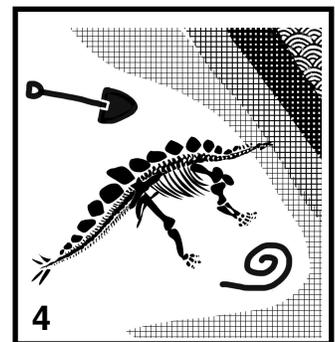
Sediment, water, and other matter



Layers of sediment



Downward pressure from layers of sediment applies pressure to buried remains



Erosion or excavation will eventually uncover the fossilized remains

## Ocean? What Ocean?

Why would a creature that lived in warm, shallow water be found in Alberta? It is far from any salt water.

That is true today. In prehistoric times, that area was covered by a sea. That is why there is oil there. Oil is formed from the remains of plants and animals that lived millions of years ago in the ocean. That also explains why a marine fossil would end up there.

## Window to the Underworld

Workers who dig in the oil sands are trained to watch for fossils. They are probing deep underground into ancient rock that is normally hidden from view.

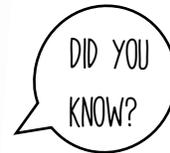
“If it wasn’t for the digging, we would never see this,” says Mr. Henderson after viewing the plesiosaur.

## “Pretty Good”

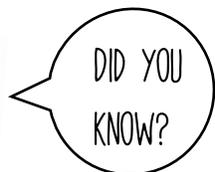
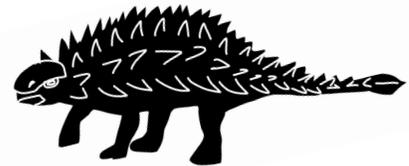
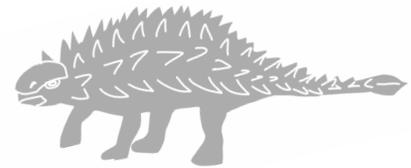
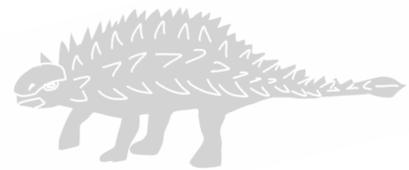
As for Maggy Horvath, she was proud to have played a part in this rare discovery.

“It felt good to call my son and let him know that I found a prehistoric fossil while working in the mine,” she said.

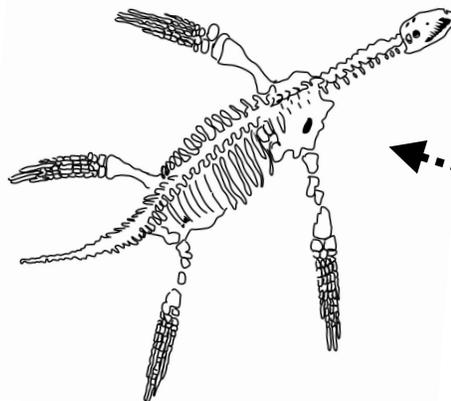
“You keep your eyes peeled for stuff like this. You never expect to go home at the end of the day and say you found something this old.”



Recently, another oil sands worker stumbled upon one of the oldest dinosaur fossils ever found in Alberta. It was a 110-million-year-old ankylosaur.



A plesiosaur is not actually a dinosaur.  
This prehistoric creature was a reptile.



PLESIOSAUR



# NONFICTION READING ASSESSMENT GRADES 4-9

## **Creature from the Deep**

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**Acknowledgements**

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**References**

Bowers, V. (2013). Creature from the Deep. *The Canadian Reader, December 2013*. Retrieved from <http://www.lesplan.com/en/publication/canadian-reader>

How are Fossils Formed? (2015). [Graphic illustration from the Australian Museum October 30, 2015]. Retrieved from <http://australianmuseum.net.au/how-are-fossils-formed>

