Oct...Nov....Dec 2005 VOLUME 1 ISSUE 10

THE ZOO REVIEW



Little Ray's Reptile Zoo

5305 Bank Street Ottawa, Ontario

PHONE: 613-822-8924 Toll Free 1-877-522-8440 FAX: 613-822-8926

E-MAIL: <u>litttleray@raysreptiles.com</u> FALL/WINTER HOURS OF OPERATION FRIDAY, SATURDAY & SUNDAY 10:00 a.m. – 5:00 p.m. Beginning September 6th

We're on the Web! Visit us at: www.raysreptiles.com What's inside: Zoo Christmas Hours on page 3

Little Ray WAS right... The corniest joke ever Updated website info. Page 1 of 4

Little Ray's Message

Hello zoo patrons! It is difficult to believe that December is already upon us, and Christmas is less than 3 weeks away. Time flies when you are having fun[©] Hopefully everyone is prepared for the upcoming holiday season. We are frantically working on getting a new feature animal in for the Christmas holidays, and have a couple irons in the fire with three other zoos. Sheri and I have yet to make a final decision. We were hoping to be able to announce the new arrival by newsletter time, but it is looking like we won't know what exactly is coming until closer to the holidays. So stay tuned.

We are running a **membership campaign starting December 5th and running until January 8th.** During this time, we are offering Little Ray's Reptile Zoo Family Memberships at a discounted rate of \$90 (regularly priced at \$105). You can purchase a new membership for your own family, or buy one as a gift for family or friends. You can even renew your existing membership early (existing members can renew early to get this discounted rate and their membership will still expire the same time the following year). It is a great way to spend time with the family and to support the zoo. We also offer gift certificates in the form of "Zoo Bucks" which come in denominations of \$5, \$10, and \$25, making great stocking stuffers. Speaking of stocking stuffers, there are lots of fun items in our gift shop to suit any animal lover. There are even items starting as low as \$1.00.

To get your membership, or to purchase some Zoo Bucks, drop by the zoo or call us directly at: 613-822-8924 or 877-522-8440, and we can take care of everything right over the phone. If done by phone, your membership or gift certificate will be sent to you in the mail.

As for new critters at the zoo, our last batch of Western Hog Nose Snake babies hatched two weeks ago, and it is already breeding season for our Ball Pythons and Boa's. We are still sitting (not literally) on some Red Footed Tortoise eggs, but are unsure as to whether or not the eggs are fertile. We should know soon enough.

In the fall, the zoo brought its fun, live, interactive animal display to a variety of Ontario towns and cities including: North Bay, Sudbury, Kitchener, Cornwall, and Sault Ste Marie. And, as always, our staff and animals were well received in each town. I myself was lucky enough to be called up to Iqaluit (the capital of Nunavit on Baffin Island) at the end of November for the second time, to work on a mini series for the APTN (Aboriginal Peoples Television Network) about the diversity of living things. (cont'd on page two...)

Address cont'd from page one...

This mini series is an elementary school initiative, promoting the learning of science and language in the high arctic. The program was shot with students from Iqaluit and was filmed in both English and Inuktitut. We brought up a nice cross section of animals from the zoo that included: mammals, birds, reptiles, amphibians, and bugs. You know you are a long way away from home when you arrive at the airport at 1:30p.m. and the sun is already starting to go down. There are no trees in Iqaluit and the only colour besides the man made structures is white. Further, the only sign of life is parka covered people scurrying around with ravens flying over head. That being said, the week was once again an amazing experience for myself and the children of Iqaluit, and I hope to return really soon. We will be certain to let everyone know when this mini series airs.

Scary Sheri & I will be heading to Arizona in January, and will hopefully find lots of rattlesnakes, scorpions, and if we're really lucky, a Gila monster or two. You will hear all about it in February's newsletter.

We certainly hope to see everyone over the holiday season. From myself, Scary Sheri, and all the staff & volunteers at Little Ray's Reptile Zoo, **Happy Holidays**.

A picture <i>is</i> worth a thousand words.	The rectangle belonging to kids
Little Ray is correct - it's a Burmese python. Yes he already knows, who do you think told us ;)	Okay, since you are back into the school year routineit's homework time.
This scene was discovered in a Florida Everglades National Park last month. A 13 foot long Burmese python constricted and consumed a 6 foot long alligator. The end result for both animals was death. The alligator is indigenous to Florida; the Burmese python is not. The snake was someone's pet. This picture, taken by Michael Barron, clearly illustrates the ecological damages caused as a result of introducing non-indigenous species of animals to any given area.	Three options
	#1 What is the difference between 'indigenous' and 'non-indigenous'?
	#2 What is on your Christmas wish list? Don't ask Santa for the answer to question #1.
	#3 What is your favorite Christmas carol? It's never too early to start singing loudly.
	Corny Joke:
	Q: What would you get if you crossed a newborn snake with a basketball?
	A: A bouncing baby boa!
	(So, how did those school photos turn out this year?)



CHRISTMAS HOURS

Please note that the zoo will be open daily from December 23rd until January 8th, 10:00 – 5:00p.m. with the exception of December 24th, 25th, and January 1st when we will be closed. During this time, the animals will be exchanging gifts with one another (purchased from our gift shop).

Nemo, our clownfish, has a second home. We recently added a carpet anemone to our saltwater tank. Clown's are one of only a few species of fish who are immune to the anemone's sting. Nemo can hang out inside the anemone, watch his favorite movie, and no one will bother him. Every time you visit us, chances are the anemone will have relocated in the tank!

We are in the process of updating the zoo's website and will let you know when this project is complete. The address remains the same: www.raysreptiles.com



The discovery, based on the remains of two plesiosaurs unearthed in Queensland, Australia, challenges the long-held idea that these impressive ocean predators targeted only fish, squid, and other free-swimming prey.

Study co-author Alex Cook, assistant curator of fossils at the Queensland Museum, says the team was surprised by the fossilized sea creatures' last meals, eaten between 100 and 110 million years ago.

"Throughout the stomach region [of one specimen] were bits of broken clam and snail shell," Cook said. "There was also a fossilized food mass from the intestine, which was basically a solid lump of broken shell.

"This elasmosaur wasn't bothering much with fish—it was feeding almost entirely on bottom-dwelling mollusks." The other elasmosaur's stomach contained crab and crustacean fragments.

Writing in tomorrow's issue of the journal *Science*, the Australian study team says the animals' varied diet could help explain why plesiosaurs were so successful. The predators prowled the Earth's oceans for some 135 million years before going extinct with the dinosaurs.

"Multipurpose Tool"

The two new specimens, each measuring 16 to 20 feet (5 to 6 meters) long and weighing around 2,200 pounds (1,000 kilograms), are from the elasmosaur family. These plesiosaurs had the longest necks of all—more than twice the length of their body and tail put together.

The bizarre-looking creatures became the inspiration for the Loch Ness Monster myth.

Colin McHenry, a biology lecturer at the University of Newcastle, New South Wales, describes the elasmosaur's extraordinary neck as a "multipurpose tool" for catching both free-swimming and seabed-burrowing prey.

"These were the dominant marine reptiles for 135 million years," he said. "The idea that the long neck was a generalized feeding tool is consistent with this success—specialized forms rarely last long.

"The almost impossibly long neck of an elasmosaur was one of the most successful structures in the history of life in the sea," he added.

The team's discovery provides hard evidence for a theory first suggested as long ago as the 1920s, according to plesiosaur expert Richard Forrest of the New Walk Museum in Leicester, England.

"Some plesiosaurs have rather long and slender teeth, which it has been suggested were for straining [the ocean floor] rather than biting," he said.

Forrest says "enigmatic traces" of such feeding behavior have been found in ancient seabed sediments in Switzerland.

"There are grooves in the sediments where it looks as if something has swept through it, and it's been suggested that this was done by plesiosaurs," Forrest said.

Yet in England, where numerous plesiosaur fossils have been unearthed, no evidence for bottom-feeding has been found.

Forrest says fossilized gut remains found in the region are "highly consistent with plesiosaurs living on things that swam past, such as fish, belemnites [squid-like carnivores], and even other plesiosaurs."

The paleontologist adds that around 60 percent of the plesiosaur bones found in Oxford Clay, a fossil-rich marine deposit in central England, have bite marks on them.

"Some of those are very obviously from the teeth of big plesiosaurs," he said.

Forrest suggests that differences in feeding habits might be because the two Australian elasmosaurs lived during the early Cretaceous period (144 to 127 million years ago), around 90 million years later than the English specimens.

"When you start coming to the Cretaceous you have mosasaurs taking the top marine predator role," he said.

Mosasaurs grew to a huge size and were armed with massive jaws and teeth.

Predator Competition

Forrest says competition from larger marine reptiles may have forced plesiosaurs to adopt different feeding strategies.

"The big plesiosaurs seem to have pretty well vanished by the [late] Cretaceous," he added. "Instead we have very big mosasaurs which had big, sharp, pointy teeth for crunching other animals."

The Australian finds may also help solve the riddle of why fossilized plesiosaurs are often found with large polished pebbles in their stomachs.

The function of the pebbles, called gastroliths, has been debated for years. The leading theory is that they were swallowed as ballast to help plesiosaurs hunt at deeper depths and to stop them from floating to the surface.

One of the two Queensland elasmosaurs contained 135 gastroliths.

Given the food remains found inside the two fossil skeletons, McHenry of the University of Newcastle thinks the main role of these stones is now obvious: Gastroliths would have been a useful digestive aid, helping the sea reptiles to crush up clams and crustaceans.

"An animal with stones in its stomach is going to make short work of a shellfish meal," he said.

"This doesn't necessarily sink the alternative theory—that they helped control buoyancy—but means that at the least gastroliths had a dual role," he added.

Angela Milner, associate keeper of paleontology at the Natural History Museum in London, says this idea makes sense.

"I don't think it has been suggested before that [gastroliths] might have acted as a gastric mill, but there is no real reason why not," she said.