



Harold Hodges' Opal Teeth

The newsletter of the Lightning Ridge Opal and Fossil Centre Project

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THANKS to our supporters:



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MILESTONE: TITLE GRANTED

We have our site!

LROFC Inc has been granted a special-purpose Western Lands Lease for construction of Lightning Ridge Opal and Fossil Centre, on the historic Three Mile opal field at Lightning Ridge.

The site was excised from a Permissive Occupancy Lease held by Walgett Shire Council and converted to a Western Lands Lease created for a public museum and car park.

"It's taken over two years to go through the stakeholder consultations and formal processes," said LROFC president David Lane, "and we're very pleased to have our certificate of title."

The Opal and Fossil Centre will reverberate with 100 years of opal mining history, overlooking the settlement of Nettleton on Three Mile Flat and adjacent to Lunatic Hill open cut. This is a dramatic and beautiful location, with sweeping views and a sense of place that emanates from the area's rich aesthetic, cultural, scientific and historic attributes. Visitors will remember not only the Centre itself, but their journey there and their experience of the 'real' Lightning Ridge.



PHOTO: ROBERTA SMITH



Moonrise over the site for Lightning Ridge Opal and Fossil Centre in 2006 (above) and a quarter of a century ago (below left).

"Lightning Ridge is a great town, but it's opal, opal mining and the opal fields that set the place apart," David said.

The site has been mined extensively. As well as underground shaft and tunnel mines, it includes ground once open cut, then later refilled and rehabilitated. The building itself will be recessed into the earth, its roof level with the ground's surface; excavation for the building will effectively open cut the building site.

Old mine workings encountered while digging may be incorporated into the Centre's exhibitions. And who knows: with a little luck, there may still be some opal down there! ***

NAME CHANGE ON THE AGENDA

Lightning Ridge Opal and Fossil Centre is planning a change of name.

The name should reflect the Centre's role as Australia's primary public collection and centre for research, education and promotion of its National Gemstone - the nation's 'crown jewels'.

Suggestions have included 'National Opal Centre,' 'Australian Opal Institute' and 'National Opal Treasury.'

WHAT DO YOU THINK? We would appreciate your suggestions and comments.

WHAT'S HAPPENING Highlights of current LROFC project activities

Work is underway on plans for renovation of LROFC's display and office in Morilla Street, Lightning Ridge. The refurbished display will feature highlights of the Centre's growing collection, as well as information about the planned Three Mile facility. We intend to have the new display completed by Easter 2007 and open for regular hours thereafter.

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RIGHT: Elizabeth Smith and museum planner Richard Wesley on the LROFC site in November; see story on p.2.

EVENTS

In November, the research group focusing on Riversleigh World Heritage fossil area in Queensland celebrated its 30th anniversary with a gala event and scientific symposium attended by palaeontologists from around Australia.

LROFC Project Manager Jenni Brammall worked with the Riversleigh group for seven years before moving to Lightning Ridge.

Jenni travelled to Sydney for the symposium and delivered a paper introducing Lightning Ridge Opal and Fossil Centre and its fossil collection.

This attracted strong interest and new members from among the researchers gathered.

LROFC Vice President Elizabeth Smith contributed a paper about her important research into fossil horned turtles from Lightning Ridge (see this page). Elizabeth was overseas at the time of the symposium, so her paper was delivered by LROFC's honorary adviser Henk Godthelp.

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In November, Kevin Humphries, candidate for the state seat of Barwon, visited Lightning Ridge with his wife Linda.

Kevin and Linda met with representatives of LROFC and were impressed by the Opal and Fossil Centre Project.



Elizabeth Smith shows Kevin and Linda Humphries precious fossils from LROFC's collection.

Thanks to our wonderful supporters in 2006. All the best for the coming year!

TURTLES THAT TALK AND TIME TRAVEL - HORNS AND TAILS FROM THE OPAL DIRT

ELIZABETH SMITH

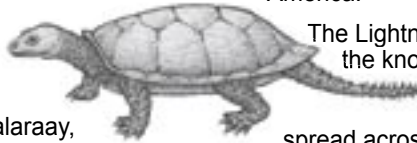
Over the past 20 million years or so, the horned turtles or meiolaniids ('mayo-laniids') were a splendid component of Australia's prehistoric fauna. Sometimes as big as dodgem cars, these monster turtles had cow-like horns, bony skull plates and neck frills, and massive tail spikes.

Meiolaniid remains turn up at Riversleigh and the Darling Downs in Queensland, in South Australia, at Gulgong in New South Wales, on islands of the Pacific Ocean, and in Patagonia, South America.

But the great grandmother of them all, the oldest so far, comes from Lightning Ridge. Here we have the opalised remains of an Early Cretaceous horned turtle that at 100-110 million years is 50-70 million years older than the others.

The scientific name for this new meiolaniid includes the word 'opal' and the words for 'old wise woman turtle' in the language of the Yuwaalaraay, custodians of black opal country.

This horned turtle is known from a jawbone, a rib, some shell fragments and a toebone. The jawbone has been in the Australian Museum for decades. The other specimens were collected at the Coooran and Jag Hill and are recent donations to the Australian Museum and Lightning Ridge Opal and Fossil Centre.



This is a smaller turtle than the later meiolaniids, but with the same short wide skull, notched carapace edge, big flat ribs on the neck vertebrae and rounded hoofs - a landlubber or terrestrial turtle with no aquatic specialisations. Chances are that rudimentary horns and tail spikes were present, but more bones are needed to confirm this.

There's also evidence at the Ridge of a swag of smaller turtles that share many features with the horned turtles, including the high-domed shells and short hands and feet. The skulls of these smaller turtles closely resemble those of primitive turtles that are up to 100 million years older, from Triassic and Early Jurassic sites in South America.

The Lightning Ridge discoveries effectively double the known evolutionary history of the meiolaniids and suggest diverse clans and tribes of meiolaniids and meiolaniid-like turtles spread across the southern supercontinents, a group with ancient antecedents that survived for possibly 200 million years.

The most recent trace of horned turtles was recovered with charcoal from the cooking fires of Pacific islanders, on an island off New Caledonia. The last horned turtle may have been roasted with yams and coconuts. Humans may have caused the sad demise of this great turtle lineage, a mere 4000 years ago.

NEW SKILLS AND IDEAS FOR WORKSHOP PARTICIPANTS

On November 11 and 12 the Opal and Fossil Centre hosted workshops on fundraising and on caring for collections, thanks to support from Museums & Galleries NSW and LROFC's museum adviser Richard Wesley.

Richard Wesley is Director of Museum Planning Services Australia (NSW) and Property Manager for the National Trust. Richard's fundraising workshop revealed which organisations have received money in the last decade, why and from whom; and addressed fundraising strategies for the Opal and Fossil Centre.



Karen Coote teaches participants how to make protective storage boxes.

Karen Coote, Director of Antiquities Conservation Pty Ltd, is highly experienced in the care

and management of collections, having held positions such as Senior Objects Conservator at the Australian Museum and Manager of Conservation at the National Maritime Museum. Karen's workshop addressed both practical and strategic issues relating to the Centre's collection.

The weekend provided LROFC volunteers with a wealth of new ideas and information.

ANNUAL GENERAL MEETING

LROFC Inc held its 2006 Annual General Meeting on 9 November.

Fifty members heard reports about the marvellous progress made by the Opal and Fossil Centre Project in the 2005-06 financial year.

In elections for the LROFC Management Committee, executive positions remained the same. Ken Dale was reelected as a committee member; committee members Wolfgang Johansson and Michael Taylor retired and their positions were filled by Marie Lindqvist and Christina Johansson.

Vic Morgan and Graeme Anderson were welcomed as Life Members (Andrew Cody has since joined these hallowed ranks - welcome, Andrew!).

Lorraine Clayton's dinosaur (p.1) was introduced to a delighted public, which proceeded to fill it with money.

After travelling from Chinchilla to Lightning Ridge especially for the AGM, Cec and Doris Wilkinson presented a special tapestry to the Opal and Fossil Centre for its collection (see p.1), a gesture and a collection item very warmly received.

'The Shovel' entertained and delighted with a reading of his poem, 'The Doppler's Tale,' before supper was enjoyed. Gremlins caused the cancellation of a slide show of Robert Smith's spectacular photographs of opalised fossils from the Centre's collection; stay tuned for a special showing at a later date.

BEST WISHES for 2007
from
Lightning Ridge
Opal & Fossil Centre

