

Australian Age of
Dinosaurs

museum
newsletter

December 2019, Issue 32



A NEW AUSTRALIAN WINGED REPTILE

***FERRODRACO
LENTONI***

Issue 32, December 2019

NEWS FROM THE JUMP-UP

MUSEUM STAFF 2019

More than 51,000 people visited the Museum and Dinosaur Stampede over the past twelve months, representing another year of record visitation. As with the previous year the majority of the Museum's visitation was achieved in July (26%) with an average of 300 visitors a day.

Our achievements have been many and varied over the past year – as you'll see in the following pages – and they couldn't have

happened without the involvement of the whole Museum team, including our dedicated Board, generous supporters and tireless employees and volunteers.

These exceptional people are constantly seeking to make each Museum tour unique and every experience world class. The entire team should feel proud of their efforts in 2019 and look forward to another spectacular twelve months ahead.



2019 Australian Age of Dinosaurs team

Insert (L-R): *Dianne, Bec, Jacqueline.* **Back row (L-R):** *Kim, Alex, Janelle, Tom, George, Steve.* **Sitting (L-R):** *Tanya, Sarah, Samantha, Karen, Molly, Grace.* **Front row (L-R):** *Jessie, Makita, Kylie, Janette, Trish.* **Not pictured:** *Kate, Kat, Anna, Judy, Joy, Naomi.*

NEWS FROM THE JUMP-UP

THE SOCIETY OF VERTEBRATE PALEONTOLOGY

In mid-October the 79th Annual Meeting of the Society of Vertebrate Paleontology was held in Brisbane. As a bronze sponsor of the event, the Museum's Operations Manager Trish Sloan and PhD candidate Sam Rigby attended the four-day conference.

Trish said that a particular highlight of the event was watching Museum Research Associates Dr Stephen Poropat, Dr Matt White and Adele Pentland present their research to participants from around the world: "Hearing Stephen, Matt and Adele talk about the specimens they are currently researching and describing was surreal. After so many years overseeing the preparation of specimens and assisting in research it was a great opportunity to see what we are doing from a broader, international perspective.

Each fossil specimen is a piece of a global puzzle that we are all trying to understand."

In addition to the meeting in Brisbane, Matt and Stephen hosted a seven-day field trip to Central Queensland where four participants visited Cretaceous localities that have produced Australia's most complete dinosaurs and marine fossils – including Belmont Station.

"The Australian Age of Dinosaurs Museum was great and I look forward to hearing more about the developments, especially the new displays and the completion of the sauropod tracksite. Keep up the great work with science, interpretation and education."

– Brent Breithaupt, participant



Brent, Larry, Jacqueline (Australian Age of Dinosaurs), Rose and Holly.

A NEW AUSTRALIAN WINGED
REPTILE

FERRODRACO LENTONI

On 4 October the Museum announced the discovery of *Ferrodraco lentoni*, a new genus and species of ornithocheirid pterosaur from western Queensland. The fossilised bones were recovered from a sheep station located near the northeastern margins of the Winton Formation, a geological deposit that is approximately 96 million years old.

The pterosaur specimen was discovered by grazier Bob Elliott on Belmont Station, near Winton, in early 2017. The new site is located 8km from where the holotype skeleton of *Savannasaurus elliottorum*, a unique species of sauropod dinosaur, was discovered in 2005. Bob, who has been involved with the Museum since childhood, brought the specimens to the Museum Laboratory where they were identified as belonging to an ornithocheirid pterosaur.

The pterosaur site, which is located on the bank of a small creek, was excavated by staff and volunteers from the Museum in June 2017. Although the fossils were fragile and widely scattered, two weeks of sifting

Picture of Mayor Butch Lenton with Butch the pterosaur.



through the deposit, using a combination of dry and wet sieving techniques, produced the remains of the most-complete specimen of an ornithocheirid, and of any pterosaur, discovered in Australia to date.

Ferrodraco lentoni (Lenton's iron dragon) is the third Australian pterosaur to be named, with all three named species



coming from western Queensland. The specimen was nicknamed Butch after the late Mayor of Winton, Graham 'Butch' Lenton who died several months after the discovery. The species' name *lentoni* was chosen in recognition of his staunch support of western Queensland's regional communities.

The research on *Ferrodraco* is being spearheaded by Museum palaeontologist Adele Pentland as part of her PhD in vertebrate palaeontology through Swinburne University of Technology. According to Adele, who has extensively researched Australia's pterosaurs, the skeleton of *Ferrodraco* is exceptionally well preserved and comprises five partial



“With a total of 30 bones preserved, or 10% of *Ferrodraco*’s skeleton, the number of pterosaur bones reported from Australia has now tripled.”

Adele Pentland

Following its discovery *Ferrodraco* was prepared in the Museum’s Laboratory (left), before being extensively researched by Adele Pentland (above) using a variety of tools including a CT scanner at St Vincent’s Hospital Melbourne (right).



vertebrae, eight limb bones, a large portion of the jaw, skull and crest, and 40 isolated and partial teeth.

Pterosaur fossils are exceptionally rare in Australia and *Ferrodraco* is the first pterosaur to be named from the Winton Formation. In fact prior to the discovery of *Ferrodraco* only 15 fragmentary pterosaur specimens had been described from the entire continent.

Based on the shape and characteristics of its jaws, including crests on upper and lower jaw and spike-shaped teeth, Adele and colleagues identified the specimen as an ornithocheirid, a group of pterosaurs that is also known from Brazil and England. *Ferrodraco lentoni* joins several significant dinosaur specimens at the Museum

including *Australovenator wintonensis*, Australia's most-complete carnivorous dinosaur, and bones from the sauropod species *Savannasaurus elliottorum* and *Diamantinasaurus matildae*.

Museum Executive Chairman David Elliott described the new discovery as one of the Museum's most exciting accessions. "The Winton area has produced the majority of Australia's large dinosaur fossils so presenting a significant pterosaur skeleton alongside the giants with which it co-existed is a huge bonus for science, education and regional tourism."

The fossilised remains of *Ferrodraco* are now on display at the Museum for all to see.



Supporting a lasting
legacy to Australia's
natural heritage.

PHOTO STEVE LIPPIS

THE AAOD LEGACY FUND

was established to build an investment portfolio that will provide ongoing and permanent income for operations and development of the Australian Age of Dinosaurs Museum of Natural History.

Tax-deductible donations are a great way to contribute to a worthy cause. Every time you make a gift to the AAOD Legacy Fund, provided your donation is \$2 or more, you will most likely be able to claim the full amount of your charitable donation on your tax return (check with ATO if you are unsure). The AAOD Legacy Fund relies on the generosity of Museum supporters to ensure a lasting legacy to Australia's natural heritage.

To donate, visit *make a donation* and select [AAOD Legacy Fund](#).

LABORATORY UPDATE

2019: PROGRESS REPORT

The focus of the Laboratory team over the past twelve months has been the preparation of the sub-adult sauropod from the Judy site, which is now 70% complete. This percentage includes the preparation of the sauropod's articulated neck, cervical ribs, tibia and fibia. The remaining preparation work includes the humerus, sternal plate and cervical vertebrae.

Preparation on *Diamantinasaurus* (from the Matilda site fossils) has also continued throughout the year. The Lab team and volunteers have fully prepared the hip girdle, sacral vertebrae and five metacarpals with just one sternal plate left to prepare.

An unexpected preparation highlight occurred following the Museum's recent

excavation and discovery of a variety of sauropod teeth (as well as teeth from theropods, plesiosaurs, crocodylomorphs, lungfish and even a [possible] pterosaur) at the Mitchell site. The small but important finds were prioritised for preparation and research, as the site produced more sauropod teeth than was previously known from the entire state of Queensland.

The preparation of these fossil specimens was made possible by the hundreds of fossil preparation participants who have worked in the Lab in 2019. On behalf of the entire Museum team, thank you for your patience, dedication, keen eyes and steady hands!

A sauropod tooth being prepared from the Mitchell site.



MAKE YOUR **NEW YEAR'S RESOLUTION** TO LEARN HOW TO **PREPARE REAL DINOSAUR FOSSILS!**

Join the Australian Age of Dinosaurs team in the most productive Fossil Preparation Laboratory in the Southern Hemisphere and learn how to prepare real dinosaur fossils for display. Working with dinosaur bones involves patience, a good eye and a steady hand. Work undertaken in the Lab includes mechanical preparation of bones, restoration, repairs, consolidation of specimens, sieving, sorting of matrix for micro-fossils and helping to put pieces of the dinosaur puzzle together. Find out more [online](#).

NATIONAL TWITCHATHON

THE WHISTLING WINGNUTS



The National Twitchathon is *BirdLife Australia's* spring race for bird conservation. It's a friendly competition in which teams of birders race to see or hear as many bird species as possible in a set time, while raising funds for *BirdLife Australia* and their crucial conservation and research projects.

There are around 830 bird species in Australia with approximately 170 of these found in the Winton region. Trish Sloan and Karen Corkill from the Museum, along with Vicki Jones from Red Dirt Tours, took part in the Twitchathon challenge to find as many

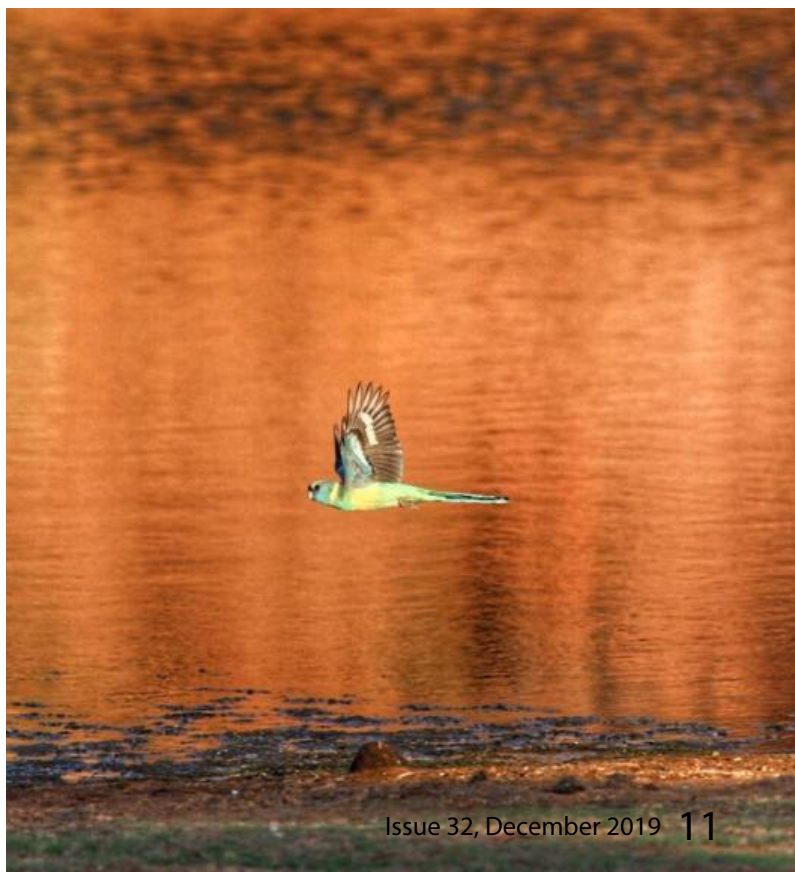
birds as possible in a twelve-hour period. Their team, the Whistling Wingnuts, took on the big day with great enthusiasm.

The challenge involves a full-day race during daylight hours. The Whistling Wingnuts started at Lark Quarry Conservation Park (photographing the elusive rusty grasswren) and drove over 250 kilometres to reach a variety of waterholes, Bladensburg National Park, Winton town centre and The Jump-Up. Over the course of the day the Whistling Wingnuts photographed and sighted 94

bird species and raised just under \$500 for *BirdLife Australia*. Of the 94 bird species identified, the team's highlights were the rusty grasswren, the Australian ringneck parrot and the grey falcon.

On the Queensland leaderboard the Whistling Wingnuts came in at fifth place, helping to raise over 6% of Queensland's total donation contribution. If you would like to donate to *BirdLife Australia* or would like to find out how to enter next year's Twitchathon, click [here](#).

Rainbow bee-eater (right), Australian ringneck parrot (bottom right) and rusty grasswren (bottom left).



WILDLIFE OF GONDWANA EXHIBITION

In October Australian palaeontologist Dr Patricia Vickers-Rich donated her *Wildlife of Gondwana* exhibition fossil collection to the Museum. Pat has dedicated much of her life to amassing this impressive collection which, over the past twenty years, has enthralled audiences around the world.

Wildlife of Gondwana represents the diversity of life in the great southern super-continent Gondwana from 3.8 billion years ago to the present and includes the fossils and fossil replicas of numerous prehistoric animals and plants that once lived on the Australian continent.

After twenty years of organising venues for her exhibition, Pat has decided to call it a day and make Australia its permanent home. Staff at the Museum have welcomed her collection and are thrilled that it will become part of the *Australia Through Time* exhibition, planned for the final and main stage of the Australian Age of Dinosaurs Museum of Natural History.

Operations Manager Trish Sloan flew down to Melbourne where she spent a few hectic days helping Pat pack up her collection. The fossils, along with display furniture and interpretive signage, were packed into a shipping container to make the long trip out to western Queensland.

The Museum would like to extend a heartfelt thank you to Pat and her husband Tom who have been staunch supporters of the Museum and involved in palaeontological work in western Queensland for many years.



Dr Pat Vickers-Rich and Dr Tom Rich at Flat Rocks, Victoria. PHOTO TRISH SLOAN

IS YOUR MEMBERSHIP **CURRENT?**

While many members are up to date with their membership fees, to ensure you do not miss out on the next AAOD Journal and another year of quarterly newsletters, please check your membership status [here](#).

The future has never
looked **brighter**

Renew now

Help us to **preserve** Australia's unique natural history

UPDATE ON THE DYNAMIC DESTINATION PROJECT

Since being awarded a grant from the Growing Tourism Infrastructure (GTI) Fund in June to deliver the Dynamic Destination project, the Museum has been a centre of activity. The project consists of six main components including the Gondwana Stars Observatory and *March of Titanosaurs* exhibition, which will become the cornerstone for future development work at Dinosaur Canyon and the construction of the Australian Age of Dinosaurs Museum of Natural History.

While the Dynamic Destination project is not due for completion until September 2020, the new bitumen road (Britton Way) from the Reception Centre to Dinosaur Canyon has already been completed. The road includes two turning areas, for visitors boarding and alighting the shuttles, and a shed to house the shuttles. The newly sealed road comfortably and quietly takes visitors past some of the most beautiful and tranquil parts of The Jump-Up.





GONDWANA STARS OBSERVATORY

Construction of the Gondwana Stars Observatory commenced in the second week of November. Shaped like a huge meteorite in a crater, the Observatory will be like nothing else on the planet – literally. The concrete tilt-panel walls for this building are nearly complete and the basic shapes of meteorite ablation marks are in the process of being developed using jet black concrete. The Observatory telescopes (15" and 22" Dobsonian telescopes from the United States) have arrived and are ready for next year's Museum Tour Guides to start training on.









MARCH OF THE TITANOSAURS EXHIBITION

Lastly, the bronze casting of two life-sized *Diamantinasaurus* models are nearing completion in the foundry. These models will take pride of place in front of our *March of the Titanosaurs* exhibition, Australia's best-preserved sauropod trackway which will be enclosed in a 900sqm air-conditioned building at Dinosaur Canyon. All construction drawings for this building have now been received and work will soon be underway on the concrete tilt-panel walls.



MULTI-AWARD-WINNING



MUSEUM AND GALLERIES QUEENSLAND

SUSTAINABILITY: ORGANISATIONS WITH PAID STAFF



On 19 September the Museum was awarded the Galleries and Museum Achievement Award (GAMAA) for its Sustainability project "Turning out the lights: Australia's first International Dark-Sky Sanctuary". Visitor Experience Supervisor Kim Stoter attended the event and accepted the trophy, created by Queensland artist Lucy Quinn, on the Museum's behalf.

The award was in recognition for the Museum's long-term conservation of its dark sky above The Jump-Up and its designation as Australia's first International Dark-Sky Sanctuary. This classification within the International Dark-Sky Places program is reserved for sites that are the remotest, often the darkest and with the most fragile state of conservation.

OUTBACK QUEENSLAND TOURISM ASSOCIATION

MAJOR TOURIST ATTRACTION AND BEST OUTBACK ECO PROJECT



On 2 November the Outback Queensland Tourism awards were held in the Museum's hometown of Winton. It was here that the Museum received the Major Tourist Attraction award and the inaugural Best Outback Eco Project award for its dark-sky conservation. To secure this award the Museum has carried out night-sky assessments for three years, implemented a Museum-wide Lighting Management

Plan and invested in Dark-Sky friendly lighting solutions. A large contingent of the Museum team attended the evening event and were thrilled to win the prestigious awards.

QUEENSLAND TOURISM INDUSTRY COUNCIL

MARIE WATSON-BLAKE AWARD: DAVID ELLIOTT AND GOLD FOR MAJOR TOURIST ATTRACTION



On 9 November David Elliott and Naomi Miles attended the Queensland Tourism Awards on the Sunshine Coast. Early in the evening David was awarded the Marie Watson-Blake Award for Outstanding Contribution by an Individual. David was surprised and elated to receive the award and spoke at length about sustainable Outback tourism and the role it plays in keeping regional Queensland alive. The last award for the evening was the coveted Major Tourist Attraction award, and Australian Age of Dinosaurs received gold.

This category recognises natural or built tourist attractions that attract amongst the highest visitor numbers during the qualifying period for Queensland. As 2019 is the Year of the Outback, the award wasn't just an award for Winton but for all the people in the Outback who have been doing it tough. Congratulations to the other Outback award winners: Cobbold Gorge and Village, Mount Isa Mines Rodeo, Birdsville Big Red Bash, Julia Creek Visitor Information Centre, Saltbush Retreat, Cunnamulla Fella Visitor Information Centre and Gilberton Outback Retreat.



A. GAMA Judge Robert Ryan, Mackay Regional Council, with Kim Stoter, Australian Age of Dinosaurs.

B. David Elliott, Australian Age of Dinosaurs.

C. George Sinapius, Leanne Coddington (Tourism Events Queensland), Trish Sloan, Kim Stoter, Tanya Mellar, Steve Lippis, Harry Elliott, Tom Beeston, Jacqueline Guy, Sam Rigby, Adele Pentland.



MUSEUM EDUCATION

BY GRACE ELLIOTT

It has been a very busy year for the Museum education team. In 2019 a record-breaking twenty schools and 829 students visited the Museum to participate in either a Junior Palaeo experience or Education tour. For the first time the Museum has also been actively engaged in education outreach to thirteen regional schools. This has involved giving talks about the extraordinary prehistory found in Outback Queensland and the tourism opportunities available to locals. I look forward to continuing this outreach in 2020.



BLAST FROM THE PAST

BY KIM STOTER

Participation in the biennial Outback Festival's Quilton Dunny Derby is a Museum tradition. In the past the Museum has entered as the *Veloci-crapper* (2012), *Poopydactyl* (2015) and *Savanna-sore-ass* (2017). This year it entered as *Blast from the Past*. The Dunny Derby requires each entrant's jockey to complete an obstacle course to their dunny with underwear around their ankles. From there teams of five must race their dunny around the course stopping at various points along the track to collect toilet brushes and toilet paper.

Unfortunately, after two heats *Blast from the Past* was knocked out of the race. Other entries included the *Wipekings*, the *Bog Splatter* and *Hell in a Hand*. The *Long Drops* took out first place and the toilet bowl trophy. The Quilton Dunny Derby certainly had everyone in stitches of laughter!



PALAEOPETE FUN



HOW TO PLAY

How many **THEROPOD** footprints can you count on this page?



DID YOU KNOW?
Lines of dinosaur footprints are called a trackway.

Tracking dinosaurs



ORNITHOMIMID FOOTPRINTS

Ornithomimids could walk on four feet or two feet. Their footprints have three toes and a rounded shape.



THEROPOD FOOTPRINTS

Theropods were bipedal and made more pointy three-toed footprints than ornithomimids.



SAUROPOD FOOTPRINTS

The biggest dinosaur footprints are made by sauropods, and their footprints are very round.



Answer on page 14

STOCKING-FILLER IDEAS



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*Christmas time is nearly here,
Our dinos send you lots of cheer.
May fun gifts bring smiles to all,
Whether flash, homemade, big or small.*

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*Our dinos are loved all year round,
In our store, dino gifts are found.
Friends, just explore [here](#) and [here](#),
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