

ARKAROOLA WILDERNESS SANCTUARY



From the ARK

NEWSLETTER NUMBER 9

AUTUMN/WINTER 2008

We were hoping to tell you that the rains had come and Marathon had gone. But the drought-breaking rains we so desperately need are yet to arrive. And Marathon is planning to recommence drilling at Mount Gee if approval is granted by the Rann government after completion of rectification works. On a positive note, we are enjoying drought's strange beauty. Drought paints the landscape with stunning colours that reflect subtle variations in soil chemistry and local rocks. Add the light of dawn and dusk. Magic!

In this Autumn/Winter 2008 issue of *From the Ark* we bring you news of important events in the Arkaroola calendar and provide an update on the Marathon situation. Our regular feature articles will explore rich and diverse worlds that make Arkaroola such a special place to live and visit.

To join our mailing list just email us at marketing@arkaroola.com.au
To download *From the Ark* visit our Web site at www.arkaroola.com.au
For an informed commentary on the ongoing Marathon issue visit <http://unknownsa.blogspot.com>

A MESSAGE FROM MARG

The Marathon issue continues to take up much of my time. In a recent interview on ABC Radio, Marathon Resources Chairman Peter Williams admitted that a culture of poor practice had prevailed during Marathon's exploration drilling program within the Environmental Class A Arkaroola Wilderness Sanctuary. The company is preparing to implement its Rectification Plan more than nine months after my brother and I discovered the unauthorised burial of more than 45 tonnes of mineral waste at Mt Gee. Marathon has engaged consultants to improve the company's public image as they prepare to seek approval to recommence exploration drilling. In the industry this is known as 'outrage management'!



Despite an apology delivered by Peter Williams on the public broadcaster recently, we remain steadfastly opposed to any further exploration or future mining within the ranges on Arkaroola. The battle is far from over. Doug and I ask that our many supporters continue to keep writing letters of protest to federal and state ministers. Your ongoing support is greatly valued.

For an opportunity to win two complimentary Ridgetop tours on your next stay with us be sure to ponder the brain teaser on page two.

I hope you enjoy our ninth edition of *From The Ark*.

Marg

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Design, & Text Lorraine Edmunds

*Images provided by Lorraine Edmunds, Egon and Carol Lenc,
Marg Sprigg, Peter MacDonald*

NORTHERN FLINDERS RANGES SOUTH AUSTRALIA

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ARKARoola WILDERNESS SANCTUARY

NEWS FROM THE ARK

VOICES FROM THE WILDERNESS



Marg and Doug Sprigg recount their discovery of the unauthorised burial of mineral waste by Marathon Resources, to Greens' Mark Parnell, MLA, at the Mt Gee Geological Monument site. All waste will be exhumed under a Rectification Plan required by the State government.

An unlikely group of allies, Greens' Mark Parnell, MLA, former Federal Resources Minister Senator Nick Minchin and South Australian Liberal Iain Evans continue to call for a ban on mining in the Arkaroola Wilderness Sanctuary.

Mark, Nick and Iain have visited Arkaroola to see first-hand the impacts that come with exploration drilling in such a fragile mountainous landscape. All agree, with or without a past history of mining, this Environmental Class A landscape is a priceless part of Australia's natural heritage. It must be protected from all future mining including exploration.

"The Rann government should simply ban exploration and mining at Arkaroola so future generations can be assured of the opportunity to enjoy this magnificent area of our state."

The Advertiser 14th August 2008

Senator Nick Minchin

Greens MLA, the Honourable Mark Parnell and his researcher Craig Wilkins visited Arkaroola recently to see for themselves the sites where mineral and other waste was buried during exploration drilling by Marathon Resources.

In October 2007 Mark Parnell introduced a Private Members Bill into the State Parliament seeking to prevent exploration and mining in all South Australian sanctuaries. The Bill was defeated in March 2008, by the Rann government, Liberal Opposition and No Pokies Independents Ann Bressington and John Darley.

Mark will introduce a second National Parks and Wildlife Amendment Bill in October, designed to specifically protect the Arkaroola Wilderness Sanctuary from all mining activity, including exploration. To follow its progress visit Mark's website at www.markparnell.org.au



Millions of years in the making. Minutes in the desecrating. Mark Parnell and Craig Wilkins are shown the scant remnants of a fluorite deposit at Mt Gee by Doug Sprigg. Known for more than half a century the deposit was excavated by Marathon staff and mysteriously vanished soon after.

What do Marathon Resources and the leopard have in common? If you think you know, email us. All correct answers will go into a draw for a complimentary Ridgetop Tour for two on your next visit to Arkaroola.



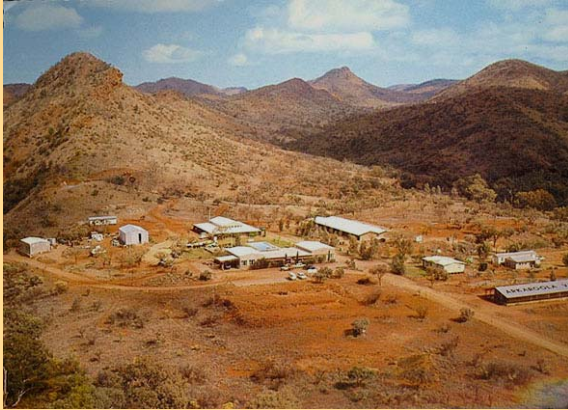
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NEWS FROM THE ARK

IT'S OUR BIRTHDAY



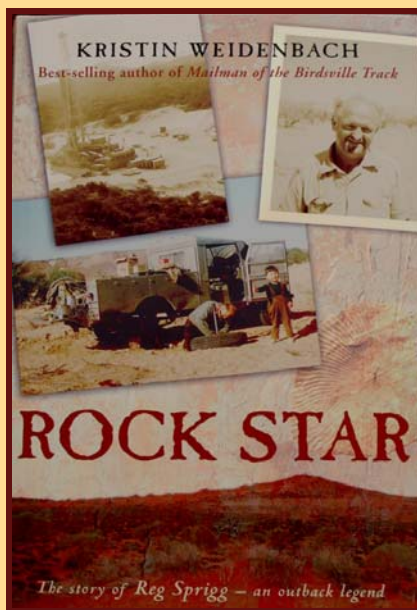
Arkaroola opened for business in October 1968, with the completion of Greenwood Lodge, the first of its motel-style accommodations. To acknowledge Arkaroola's 40th birthday, the South Australian Museum is featuring a photographic display celebrating the career of Arkaroola's founder, Reg Sprigg.

The idea that controlled tourism could be used to support practical on-ground conservation, was pioneered in South Australia in 1968 with the creation of the Arkaroola Mt Painter Sanctuary. The only National Park in the Flinders Ranges at this time was Mt Remarkable in the southern Flinders Ranges. The Gammon Ranges and Oraparinna National Parks were dedicated in the 1970s. Reg was once again a man ahead of his time, an attribute that shaped his life and career.

Original specimen material from Reg's Ediacaran fossil discovery in 1946 will be included in the commemorative display. The exhibition is free and will run until the end of October. You can find the exhibition in the Origin Energy Fossil Gallery on Level 3 of the South Australian Museum, North Terrace, Adelaide.

Within four years of the opening of its first accommodation, most of Arkaroola's infrastructure was in place, a major investment in a pioneering concept.

EXPLORING AN EXTRAORDINARY LIFE



Family, friends, and old colleagues met in the foyer of the South Australian Museum recently for the launch of *Rock Star - the story of Reg Sprigg*.

Professor Ian Plimer (Mining Geology, Adelaide University) and Reg Nelson (Managing Director of Beach Petroleum) joined with writer Kristin Weidenbach, to launch her second book *Rock Star*. Kristin's first book, *Mailman of the Birdsville Track - the story of Tom Kruse* was published in 2003.

Kristin spent two years trawling through archives, conducting interviews, collecting photographs, letters and other documents as she researched the life of Reg Sprigg, one of South Australia's most extraordinary men. With mountains of material at hand, she spent a further twelve months writing *Rock Star*.

Palaeontologists, geologists and former colleagues of Reg's from Geosurveys and the mining industry joined Kristin at the launch. Special guests included Lee Parkin, (a fellow student of Mawson), Betty Wilson (Geosurveys), Dr Harry Medlin and Dr Rowl Twidale (formerly Adelaide University), Dr Scoresby Shepherd (formerly SA Fisheries), and Griselda's bridesmaid Ngaire Teesdale-Smith.

Rock Star is available in all good book stores and retails for \$32.95.

“HOW GREAT THOUGH ART”



Audiences were left *Standing in Amazement* after seeing Tim Baier's short stereoscopic production filmed in the Flinders Ranges.

A feature film visual effects artist, Tim hosted fourteen screenings of his digital 3D production *Standing in Amazement* at Adelaide's Iris Theatre in July. This is what people said:

*Absolutely stunning, thank you!
Excellent, not to be missed.
Mind blowing, I am lost for words.
Magnificent insights and experiences!
How great though Art!*

Tim has been invited by the Art Gallery of South Australia to present three further screenings of *Standing in Amazement* on November 29th. With views from the eye of the eagle to intimate 3D images of Mt Gee crystals, Ediacaran fossils and the soles of geckoes feet, Tim's vision will take your breath away. Put **November 29** in your diary today!

Upcoming Speaking Events include:

- Sept 18** Friends of University of Adelaide
Barr Smith Library
Talk about Reg Sprigg's relationship
with Sir Mark Oliphant
RSVP robina.weir@adelaide.edu.au
- Nov 10** Mostly Books at Mitcham Shopping
Centre, Torrens Park
RSVP mostlybooks@intemode.on.net
- Nov 13** Burnside Library
- Dec 6** Dymocks, Rundle Mall, Adelaide
In-store book signing

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ARKAROOLA WILDERNESS SANCTUARY

GEONOTE

GEOTOURISM - CELEBRATING THE GEOLOGICAL LANDSCAPE



Fresh from the World Youth Congress, flags from thirty countries flanked the stage in the Sirius room of the Esplanade Hotel in Fremantle. Here delegates from countries as diverse as China, Ireland, America, South Africa, Oman, Malaysia, New Zealand and Australia gathered for 3 days in August to talk about geotourism.

So what is geotourism? You won't find a definition in the dictionary yet, but geotourism is essentially 'geological tourism' - the landscape, its rocks, its formations, and the processes that have shaped it over time. A special interest market is emerging, of travellers interested in visiting geologically significant locations around the world.

Nine delegates from South Australia attended the inaugural Global Geotourism Conference in Western Australia. Arkaroola's Marg Sprigg and Lorraine Edmunds presented papers. Darren Crawford from the Flinders Ranges National Park and Copley resident Maxine Hawking also attended.

In July 2008 Western Australia's Edith Cowan University became one of the first universities in the world to introduce a geotourism unit as part of its Bachelor of Tourism Management Degree.



Marg Sprigg and Professor Ellery Hamilton-Smith meet for the first time at the Global Geotourism Conference in Perth. The veteran environmentalist's first campaign was fought in 1948 when Ellery successfully lobbied the South Australian government to protect and preserve what was to become the Mount Remarkable National Park in the Southern Flinders Ranges.

At Arkaroola visitors can glimpse the depth of Time and the reach of Space.

Arkaroola Wilderness Sanctuary is the Flinders Ranges' premier geotourism destination. Its diverse geological landscapes and stunning night skies form the basis of Arkaroola's signature tour products.

With its complex geology, 1.8 billion year old rocks and astronomical observatories, Arkaroola provides visitors with a spectacular window into terrestrial and cosmological Deep Time.

Arkaroola is intimately connected with the evolving story of the origins of life on Earth. It's founder Dr Reg Sprigg was the first scientist to describe the world's oldest multi-cellular organisms which he discovered in the Ediacara hills in 1946. Today scientists are looking for signs of fossilised microbial life in the ancient hydrothermal spring systems of Arkaroola's Mt Gee and Mt Painter as part of NASA's search for life beyond the Blue Planet.

Arkaroola Wilderness Sanctuary has more geological monuments than any other property or reserve in South Australia. They include Mount Gee, Mount Painter, Paralana Hot Springs, the Armchair and the Pinnacles.

Arkaroola is proud to support ongoing scientific endeavours to better understand the complex questions of Time and Space. The geological landscape provides the window to that understanding.

RIDGETOP TOUR
WRITTEN IN THE ROCKS TOUR
ASTRONOMICAL OBSERVATORY TOURS
SCENIC FLIGHTS

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CREATURE FEATURE

STEALER OF SECRETS



You'd better be careful of what you are thinking when Willie Wagtails are about. This sweet pretty little creature will steal your secrets as well as your heart.

One of Australia's most cherished birds, Willie Wagtails charm campers from Cape York to Cape Leeuwin. The largest of the Australian fantails, *Rhipidura leucophrys* is also a bird of settlement, a resident of urban parks and gardens. It is found all over Australia except in densely forested areas and on treeless plains.

Small though they may be, the feisty fantails of the Australian bush will take on anything that strays onto their patch, including Wedge-tailed Eagles, Magpies, cats and dogs. Like the highland Scots whose tattoo announced their coming to battle, Willie Wagtails chatter incessantly as they defend their territory. These restless birds use their distinctive white eyebrows to settle territorial disputes, especially during the breeding season. Rivals spar by flaring their prominent eyebrows, the equivalent of staring each other down. Disputes end when the defeated party completely withdraws its eyebrows, with little need for splints and bandages!

Widely featured in Aboriginal culture across Australia, the Willie Wagtail is both a stealer of secrets and a bearer of bad news. For the Adnyamathanha people of the Flinders Ranges, *Indhidindhidi* is a messenger bird. *Indhidindhidi* often visits on moonlit nights or comes right into camp to share its news.



Willie Wagtails breed from June to February, raising several clutches. Many young are taken by Butcher Birds, Magpies and Ravens despite vociferous protests from the parent birds.

PLANT PROFILE

WHEN ALL ELSE IS FINISHED



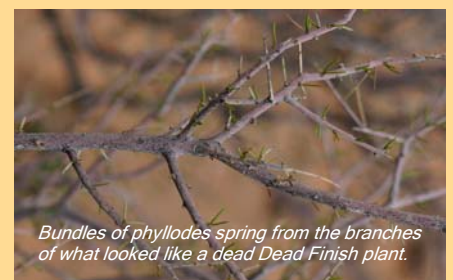
They say when the Dead Finish is 'finished' we're all finished!

Dead Finish or *Acacia tetragonophylla* was one of several species that regenerated spectacularly across Arkaroola Wilderness Sanctuary following the record wet years of the mid 1970s. It is a slow growing, drought-tolerant plant that can thrive on the skeletal soils of the arid zone. During prolonged dry periods, Dead Finish will drop most of its spiny phyllodes and plants may appear to be dead.

Dead Finish is a favourite 'bird bush'. Its dense branches and prickly foliage provide excellent refuge for Zebra finches and other small bush birds. The stiff four-sided, needle-like leaves or phyllodes end in a very sharp point creating a formidable barrier to predators. The curling 'Capital C' pod, tightly pinched between each seed, is a useful identification feature for this ubiquitous arid country plant.

For Aboriginals of arid Australia, Dead Finish is a 'one-stop shop'. This versatile wattle produces bandages, cough medicine, an antiseptic for treating open sores and wounds, an edible paste, damper flour and hard timber for implements and tools. Across arid Australia Dead Finish was commonly used to treat warts. Dry phyllodes were arranged around the edge and on top of the wart, the ends broken off leaving the tips in place. Within three days the wart would wither and drop. For the Adnyamathanha people of the Flinders Ranges, the fine-grained, wood of the *vara-vada* bush was used to make boomerangs. *Vara-vada* branches were also used in burial ceremonies.

Although many Dead Finish plants have perished in recent years and some are struggling to survive, others are flowering. It seems we aren't all finished just yet!



Bundles of phyllodes spring from the branches of what looked like a dead Dead Finish plant.

ARKAROOOLA WILDERNESS SANCTUARY

CONSERVATION & RESEARCH

DECONSTRUCTING DROUGHT

With or without climate change, drought is no stranger to Arkaroola. It has influenced the ecology of the northern Flinders Ranges for centuries and is reflected in the oral histories of both Aboriginals and non-Aboriginals.

In 1986 Lloyd Curnack returned to Arkaroola after a long absence. As a young man he had been a fencer for the Greenwood family. Soon after the Greenwoods took up the Arkaroola pastoral lease in 1937, Lloyd began building the first fences, a condition of the lease. The feral infested high country was to be fenced and feral animals controlled within the lease area. Lloyd spent months camping out, travelling with his team of camels, erecting fences. After a few days revisiting familiar places Lloyd came back to the Visitor Centre and said "I'd hate to be putting fences in today. There's bloody trees everywhere! It was different in the good old days."

We are witnessing a major vegetation 'death event' at Arkaroola. Dead red gums, dying mulga and stressed bullock bush speak of a landscape in serious decline. But we must not forget that we are prisoners of our own short lives. In a landscape where geological time is manifest, our 'three score and ten' does not equip us well to appreciate bigger cycles. Arid-adapted ecosystems have much more time than we do. Our plants and animals are wired for waiting. Ingenious survival strategies like delayed implantation (kangaroos), seed dormancy, rapid germination and prolific seeding cycles for some species ensure that life goes on.

Climate change may well be exacerbating current drought conditions. Normally a beneficiary of La Nina's bounty, Arkaroola is, instead, facing a record low rainfall year. However the odds are that favourable conditions will return triggering a cycle of renewal. Our plants and animals wait. So must we.

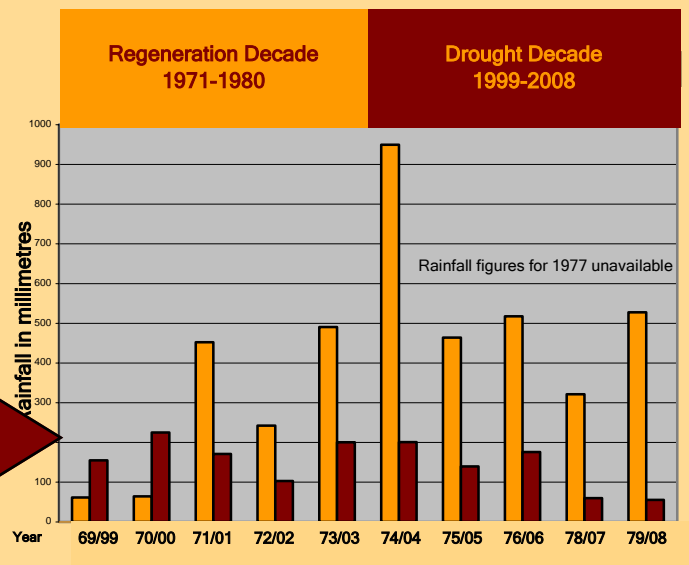


READING THE RAINFALL

Beware statistics! Data can be creatively crafted. Just ask any politician. But sometimes the bars, columns and pies speak for themselves.

Although average rainfall is quite meaningless at Arkaroola, what the graph opposite reveals is that rain has been in short supply across the sanctuary for much of the last decade. This contrasts dramatically with the sensational seventies when above-average falls were recorded for eight consecutive years. These bundled events are critical in maintaining healthy ecosystems, being times of widespread plant regeneration, the recharging of aquifers, the flushing of waterholes and springs and rebuilding animal populations depleted by drought.

ARKAROOOLA'S mean annual rainfall is 200 mm (1938-2008)



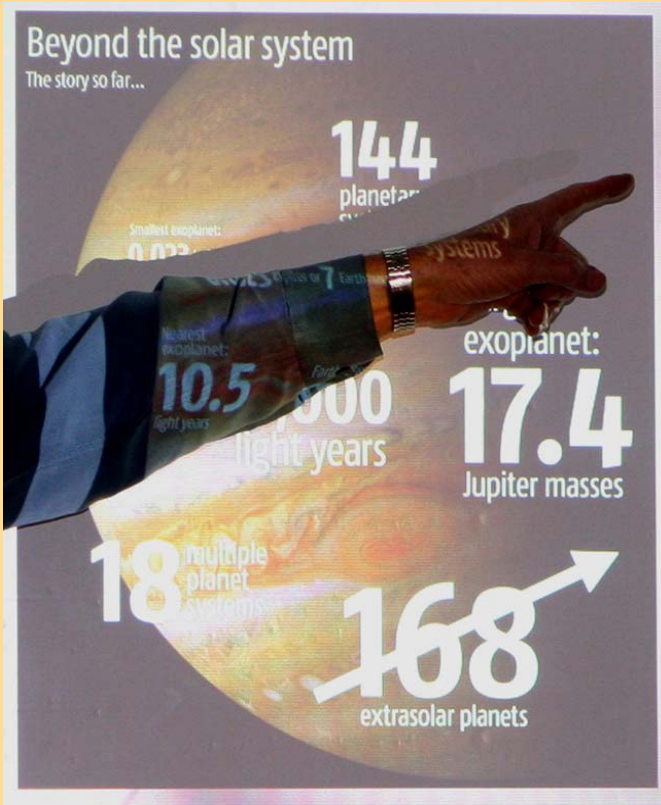
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GALACTIC GOSSIP

MSA ON A MISSION



Dr Vic Gostin giving a public lecture for Arkaroola's visitors during the MSA's reconnaissance expedition in July.

Tomorrow's astronauts and engineers are sitting in today's classrooms. But, the world over, fewer students are opting for physics, chemistry and engineering. How can we get students interested in these disciplines again?

A group of scientists, educators and communicators from the Mars Society Australia (MSA) visited Arkaroola in July, as part of a nine-day field trip to prepare for Australia's first 'Spaceward Bound' expedition next year. In 2007 Australia joined NASA's Spaceward Bound family. Through its AMES Research Centre in California, NASA has developed the Spaceward Bound Program to inspire the next generation of space explorers. The innovative educational program plans to take students and teachers to remote and extreme environments on Earth, places that have been selected as analogues for human exploration of Mars and the Moon. Here they will participate in planetary science research and simulated space exploration activities. Spaceward Bound's mission is to excite and inspire a new generation of space explorers in the classrooms of our schools.

The reconnaissance expedition was headed up by Dr Victor Gostin from the University of Adelaide, an old friend of Arkaroola, and Mr Mark Gargano, the MSA's Educational Director. A science educator and passionate advocate for space-related science education, Mark was one of two Australian teachers who participated in the Spaceward Bound Mojave 2008 Expedition in April. Mark wants to inspire teachers by taking them 'beyond the hypothetical' into challenging, field-based 'classrooms', where planetary science education can be lived for a brief but intense time. Teachers will then be better equipped to develop space science related course materials and inspire their students back in the conventional classroom.

Next year an expedition team will head for the MSA's MARS OZ analogue area at Arkaroola. Science teachers from Australia and America will work alongside scientists in several field units. They will undertake a range of technological, astro-biological, geological and sociological tasks.

In choosing a Mars OZ analogue for a simulated Mars station on Earth, the MSA had to find "an inspirational environment to explore the art of living on another planet" whilst "encouraging students to develop and improve their science skills"¹ What better place than Arkaroola?

¹ Proceedings of the 8th Australian Mars Exploration Conference 2008



On a mission, MSA's Jonathon Clarke and Mark Gargano, and Artemis Westenberg (Mars Society Netherlands), on reconnaissance for the 2009 Spaceward Bound Australia Expedition.

If you are planning a trip to Western Australia make sure you visit the brilliant Gravity Discovery Centre at Gingin. You will have more fun than you've had in years! And it's only an hour's drive north of Perth. More in our next issue!

www.gdc.asn.au
Email: education@gdc.asn.au



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PRODUCT INFORMATION

YATA NUKUNTHA

Looking at Country with Sharpy Coulthard

Arkaroola is delighted to have Adnyamathanha man, Sharpy Coulthard back with us. Sharpy has been busy doing tourism, conservation and land management certificates over the past ten years.

Join Sharpy on a 'dawdle' through Arkaroola's Mawson Valley. Sharpy will welcome you into the world of his people, the Adnyamathanha, the Rock People. Learn how Sharpy's people have used the resources of the land to live sustainably in the Flinders Ranges for thousands of years.

Visitors have described Sharpy's Yata Nukuntha guided walk as "moving, powerful, humbling".

3 hours at a gentle pace
Maximum 10 persons / Minimum 4 persons
Bookings are recommended



FROM THE ARK POSTCARD



Ridge Top Country

www.pmacdonald

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