



BOAB BULLETIN

No. 152

June 2019

NOTICE OF GENERAL MEETINGS

commencing 7.15 for 7.30 p.m.

Mount Claremont Community Centre, 107 Montgomery Avenue

(see April newsletter for information about parking at new venue)

Wednesday, 5 June 2019

Rhonda Povey (PhD candidate at the Centre for Advancement of Indigenous Knowledges at the University of Technology Sydney)

“Schooling at Moola Bulla, in black and white”

Wednesday, 3 July 2019

Chris Done (Conservationist & cruise ship lecturer)

“Phillip Parker King – Legendary Surveyor of the Australian Coast: progress towards the 200th anniversary celebration of his voyages”

PROGRAM FOR THE REMAINDER OF THE YEAR

7 August	To be advised
4 September	David Dale : “Kimberley: the last 100 years”
2 October	To be advised
6 November	Mt Gibson Iron Ltd : “Iron ore mining at Cockatoo and Koolan Islands”
4 December	Kimberley Society Members : “Highlights from 26 years of the Kimberley Society”

Members and visitors are invited to stay for supper after the meeting.

The Society asks a \$2.00 hospitality fee from non-members.

FROM THE CHAIRMAN

Rio Tinto's Argyle diamond mine in the East Kimberley is scheduled to close in 2020. Following its discovery in 1979 it commenced production in 1983 as an open-cut operation and has been mined as an underground operation since 2013. The open-pit mine produced some 800 million carats of diamonds and Argyle has consistently produced more than 10% of the world's diamonds since 1985. Total world diamond production is about 150 million carats per year.

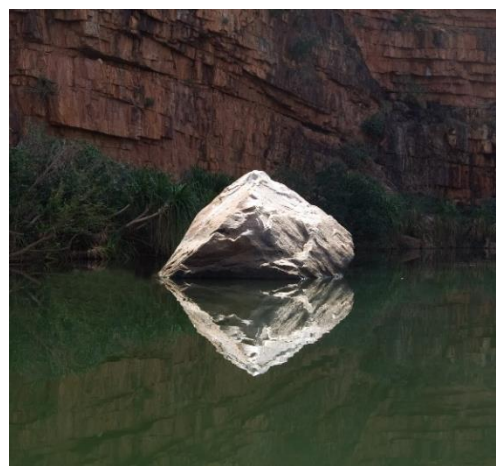
Last month Argyle Diamonds announced the discovery of one of the largest gem-quality white diamonds in its 35-year history – a beautiful 28.84-carat octahedral stone they named Argyle Octavia (pictured). This magnificent gem made me recall a huge white octahedral stone that I photographed in the Chamberlain River about 10 years ago. The river was as smooth as glass and the stone was faithfully reflected in the water and contrasted strongly with the shaded cliff behind so that it looked like a huge octahedron and the comparison with a diamond crystal was unescapable. I estimated

$$V = \frac{\sqrt{2}}{3} a^3$$

it was about two metres wide and using the formula for calculating the volume of an octahedron where a is the length of one side of the octahedron (courtesy of [Wikipedia](https://en.wikipedia.org/wiki/Octahedron)), and the specific gravity of diamond being 3.52, I estimated this 'diamond' to be at least 70 million carats which is around half the world's annual diamond production. Unfortunately, I couldn't sample the stone at the time to see if it was actually diamond rather than a block of white quartzite.



The 28.84-carat Argyle Octavia



The 70-million-carat Chamberlain stone

With the closure of the Ellendale mine a few years ago the rich and exciting history of Kimberley diamond exploration, discovery and production looks like it will soon take a breather. Exploration is continuing throughout the Kimberley and maybe another Argyle is just around the corner.

Mike Donaldson

KIMBERLEY HONEY

On 25 May, the Travel supplement in *The West Australian* carried an interesting article (by Sue Yeap) on [Walaja Raw Bush Honey](#). Drawn from hives standing near three types of native trees on [Roebuck Plains Station](#), it is produced by former pearl diver **Dave Appleby** and sold locally. The cattle station connection comes through Dave's wife **Dianne**, a Yaruwu woman. The enterprise reflects Dave's nostalgic memories of honey brought to Broome from the Beagle Bay Aboriginal community in the 1970s.

FROM CARNIVOROUS PLANTS TO ROCK POOLS: DIVERSITY AND ECOLOGY IN THE KIMBERLEY

On 7 November 2018, **Adam Cross** and **Laura Skates** spoke to the Kimberley Society about their research. Adam is a postdoctoral researcher in the Centre for Mine Site Restoration at Curtin University. His half of the talk was on the ecology of rock pools in the Kimberley region, highlighting the importance of these rock pools as habitat for a diverse array of flora and fauna. Some species are only known from a couple of rock pools in a single small area in the region, so they are highly dependent on conservation.



Dr Adam Cross taking photographs by the edge of a creek in the Kimberley. Many carnivorous plant species can be found growing amongst other vegetation on the fringes of creeks such as this.

Laura is a PhD student in the School of Biological Sciences at UWA (supported by Kings Park and Botanic Gardens, and by the BayCEER Laboratory at the University of Bayreuth, Germany). She provided the following summary of her presentation.

Carnivorous plants are well known for their ability to capture and digest prey using specialised leaf traps. Charles Darwin was the first to provide scientific evidence of plants being capable of carnivory. He did that through a series of elegant experiments carried out in his own glasshouse in England.



Charles Darwin glasshouse

Darwin believed the Venus flytrap (*Dionaea muscipula*) to be one of “the most wonderful plants in the world”, but he was arguably even more fascinated by a relative of the Venus flytrap: the sundews (*Drosera*). Instead of capturing prey with a snap-trap, sundews use an adhesive trap – their leaves are covered in glands, which produce a sticky mucilage to capture prey and secrete digestive enzymes to break down and digest the prey. In a letter to a colleague, Darwin wrote “at this present moment, I care more about *Drosera* than the origin of all the species in the world”.

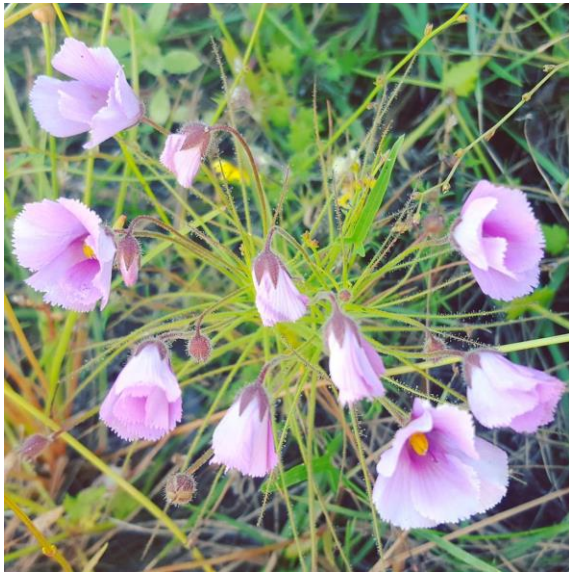


Drosera glabriscapa



Drosera ordensis

Sundews can be found on every vegetated continent, but the greatest diversity of sundews is found right here in Western Australia, spread across both the Southwest region and the Kimberley region. If you go on a bush walk, keep an eye out for their sticky dew, which shines and glitters in the sunlight. You should also keep an eye out for a group of plants which can look quite similar to sundews: the rainbow plants (*Byblis*). *Drosera* and *Byblis* have evolved independently, the former arising from the family *Droseraceae* in the order *Caryophyllales*, and the latter arising from the family *Byblidaceae* in the order *Lamiales*. Despite this, they have both evolved an adhesive trap to capture prey. This is just one example of convergent evolution of a sticky trap, and many more exist amongst the carnivorous plants of the world, including species of *Roridula*, *Pinguicula*, *Philcoxia*, *Drosophyllum lusitanicum*, and *Triphyophyllum peltatum*.



Byblis in the Kimberley



Laura Skates with *Byblis* in the Kimberley

One of the questions that I have been interested in exploring with my PhD research is whether or not *Byblis* species gain any nutritional benefit from the prey they catch. We've known since the time of Darwin that *Drosera* species can be very successful at capturing and breaking down prey, and more recent evidence gathered over the last 40 years has shown that *Drosera* species are able to take up a large proportion of nitrogen (an essential element) from the prey they capture. However, we know relatively little about *Byblis* species – we know that they are quite successful at capturing and breaking down prey, but we don't know how much they benefit nutritionally from that prey. My research has used natural abundance stable isotope techniques to look at the nutrition of *Byblis* species in both the Southwest and Kimberley regions, and compare their uptake of nitrogen from prey to that of co-occurring *Drosera* species. My PhD supervisors and I are planning to publish the results from this work in 2019, and will be eager to share the final results and outcomes with the Kimberley Society.



Aside from species of *Byblis* and *Drosera*, the Kimberley region is also home to a diversity of *Utricularia* species (such as this *U. chrysantha*) which use a suction trap to capture their prey (traps not pictured, these are found below ground).

Finally, I'd like to again express my thanks to the Kimberley Society for providing funds so that I could travel to the Kimberley region to conduct this research. I am very grateful for your kind support and for your enthusiasm about carnivorous plants!

Editor's Note: In May 2019, numerous media outlets reported on [Dr Adam Cross](#) and honours student Thilo Krueger having recently found the largest Australian population yet discovered of *Aldrovanda vesiculosa*, an aquatic venus flytrap. Located on Theda Station, it was the first such population found in the Kimberley in 20 years. The species is considered critically endangered.

OCCASIONAL KIMBERLEY FOOTBALL COLUMN

Cedric Cox, Brisbane Lions – [Cedric](#) is still on the Brisbane Lions list but has not added to his 12 games and 3 goals since his debut in 2017. That year he was nominated for goal of the year but I don't recall that he won that award.

Sam Petrevski-Seton, Carlton – [Sam](#) has played 49 games and kicked 18 goals for Carlton since his debut, also in 2017. This year he is averaging 21 disposals with a scoring accuracy of 60%. It was reported in the afl.com website that he had a breakout performance when Carlton defeated the Bulldogs for their one and only win so far this season. On that particular day he was reported as 'finishing the day as the Blues clear best with 35 disposals and a goal'.

Sam also came under notice according to the *West Australian* newspaper of 8 May this year when it mentioned that he was hit by a Hawthorn player and the Hawthorn player received a week's suspension.

Joel Hamling, Fremantle Dockers – Although born in Denmark [Hamling](#) played initially in Broome for Cable Beach Football Club on the Peter Haynes Oval. The afl.com website also mentioned the fact that he was initially drafted by Geelong but delisted without playing a senior game. He was then recruited by the Western Bulldogs and of course played an important part in the 2016 Grand Final. This year he has played an integral part in the Fremantle Dockers backline which are currently the second stingiest defence in the league. With Alex Pearce and Luke Ryan he is forming a cornerstone of one of the best defences in the AFL this year.

Brendon Ah Chee, West Coast Eagles – [Brendon](#) has not played for West Coast this year so far but had an excellent game against Perth recently where he managed 32 possessions and took a "hanger". I was able to view this "hanger" on the WAFL website and voted for it as "Mark of the Week". I thought it was clearly the best mark. He was in fact an emergency for the 2018 Grand Final but did not play. It's suggested by the afl.com website that he is due for an imminent recall.

Stop Press: Brendon was taken to Melbourne as an emergency for the round 8 game against St Kilda. One football website suggested he might be included at the expense of a taller forward to give the team balance.

Francis Watson, West Coast Eagles – [Francis](#) has still not played for West Coast Seniors as yet, despite being named as an emergency on several occasions and certainly at least once this year. Unfortunately on 20 April this year he suffered an injury to his acromioclavicular joint (AC joint), when West Coast Reserves played Claremont at Claremont Oval. He went off on the mobile stretcher but was expected to be ready to play again at the end of May. He no longer has a ponytail which reminds that I'm not up to date with the current hairstyle of Sam Petrevski-Seton. Perhaps I will be able to update that later on in the year.

Jack Vercoe

CONSERVATION

The Department of Biodiversity, Conservation and Attractions in WA is calling for submissions on two draft joint management plans for Kimberley land. One is for the [proposed Niiwalarra Islands \(Sir Graham Moore Islands\) National Park and Lesueur Island Nature Reserve](#). The other is for the [Guniyan Binba Conservation Park](#) — an intertidal reserve that covers an area north of Cable Beach to Willie Creek. The closing dates are, respectively, 5 June 2019 and 28 June 2019. Further information is available online or from the Department.

MINUTES OF THE 26th ANNUAL GENERAL MEETING OF THE KIMBERLEY SOCIETY (INC)

Held at Mount Claremont Community Centre on Wednesday 3 April 2019

Chairman's welcome

The meeting was opened at 7:30 pm and the Chairman Dr Mike Donaldson welcomed members, guests and visitors.

Apologies and attendance

There were 50 members and 11 visitors in attendance.

Minutes of Previous Meeting

Minutes of the 25th Annual General Meeting held on 4 April 2018 were circulated and approved as a correct record of proceedings.

Moved: Mike Cusack; **Seconded:** Bryan Smith; carried unanimously.

Matters Arising from the Minutes

There were no matters arising from previous minutes.

Chairman's report

The Chairman reported that monthly meetings had been well attended by members and visitors. Speakers covered a wide range of topics including:

Sam Lovell; Aboriginal cultural heritage in the Kimberley
Joc Schmiechen; First descent of the Drysdale River
Chris Done; Sandalwood - Heaven Scent
Jim Netterfield; Thunderbird mineral sands project
Patrick Courtney; Kings Park Boab
Martin Porr; German ethnographic expeditions 1938, 1954
Adam Cross and Laura Skates; Carnivorous plants and rock pools
Jeff Gresham and Tim Griffin; Gems of the Southern Kimberley
Mike Donaldson and Andy LeMessurier; Landscapes and rock art in NW Kimberley

The website continues to promote the Society's activities and provides access to information on the Kimberley region with talk summaries and book notes. It remains a valuable link to members and the public.

The Boab Bulletin, prepared by Cathie Clement, continues to be an important part of the Society. More than half our members now elect to receive copies by email, which means they get access to live links to articles and websites and get images in the newsletter in full colour. In the 2018 year the Council approved donations totalling over \$7000 as detailed in the attached Treasurer's Report.

A high-quality book resulting from the Society's Natural World of the Kimberley seminar held at the University Club, UWA, in October 2016 was released in July 2018 and by the end of the year more than 400 copies had been sold

The Society's previous publication on Kimberley History has been very successful and is highly regarded, with some 520 copies still available for sale.

In conclusion, thanks for being part of the Society, now in its 26th year. The speaker's program for 2018 again addresses the varied interests of our members.

Mike Donaldson
Chairman

Treasurer's report

The Society incurred a loss of \$9010.95 for 2018. The loss reflects the considerable expenses (\$26 078.09 during the year) incurred in producing the book, *The Natural World of the Kimberley*, the outcome of the seminar held in 2016. Despite this loss, at the end of the year, the Society remains in a strong financial position with a bank balance of \$17 271.12.

Income for the year totalled \$31 768.75 of which \$6200 came from member subscriptions and \$5910.34 from continuing sales of the Society's book *Kimberly History: People, Exploration and Development*. As at the end of the year 2550 copies of the book had been sold and distributed with 214 copies being sold during the year. 519 copies remain to be sold. Sales of *The Natural World of the Kimberley* commenced in July and by year end 440 copies of the book had been sold and distributed and \$13 047.05 of income generated. Approximately another 400 copies need to be sold to recover the publication cost of \$30 630.

Expenses for the year totalled \$40 779.70 with the major expense being the publishing and printing costs of *The Natural World of the Kimberley*.

During the year the Society made a grant of \$5000 to Ana Paula Motta of the University of Western Australia to support her PhD project, "People and Animal Interactions: A Relational Approach to the Study of Social Identity in North Eastern Kimberley Rock Art".

The Balance Sheet as at 31 December 2018 indicates cash of \$17 271.12 being held in the account. The other major assets are the carried value (\$7686.39) of the 519 copies of the history book and (\$22 809.14) of the 1117 copies of the Natural World book held in stock at the end of the year. The Society has no significant liabilities and there were no unrepresented cheques as at the end of the year.

Kimberley Society (Inc)

PO Box 8471
Perth Business Centre
Perth Western Australia 6849

Profit & Loss Statement

01/01/2018 through 31/12/2018

11/02/2019
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Income	
Subscriptions	\$6,200.00
Postage Collected	\$260.37
Miscellaneous Income	\$144.00
Book Sales - Various	\$45.00
Kimberley History Bk Sales	\$5,910.34
Donations	\$919.80
Other Income	\$5,240.00
Bank Interest	\$2.19
NWK Book Sales	\$13,047.05
Total Income	<u>\$31,768.75</u>
Cost Of Sales	
Gross Profit	<u>\$31,768.75</u>
Expenses	
Bank Charges	\$27.00
PO Box	\$304.00
Hall Hire	\$430.91
Insurances	\$562.60
Speaker Costs	\$863.65
Supper Costs	\$1,185.16
Newsletter	\$3,132.54
Website	\$348.00
Natural World Book	\$26,078.09
Office Supplies	\$240.65
Donations	\$5,000.00
Postage	\$978.74
Miscellaneous	\$1,628.36
Total Expenses	<u>\$40,779.70</u>
Net Profit/(Loss)	<u>-\$9,010.95</u>

Jeff Gresham

Treasurer

Moved: Kevin Coate; **Seconded:** Jack Vercoe

Membership Secretary's report

The Society has 224 members with some members yet to renew their membership for 2019. Following the introduction of the new Associations Incorporations Act 2015 membership categories were changed with Family Membership replaced by Individual Membership with discounts for associated parties.

Election of Office Bearers

Nominations having been received as below, and there being no further nominations from the floor, the following members were declared as elected to the positions shown

Chairperson	Mike Donaldson
Deputy Chairperson	Jeff Murray
Treasurer	Jeff Gresham
Secretary	Geoff Owen
Membership Secretary	Elizabeth Gresham
Committee	Roger Passmore
	Michael Cusack
	Margaret Shugg
	Sven Ouzman
	Tim Griffin

Moved: Bryan Smith; **Seconded:** Hamish McGlashan

General Business

The Chairman raised the question of the future of the Society given the continuing lack of younger members willing to join the Committee and manage and promote the Society. Winding up the Society at the end of the year will be considered by the Committee if there are no others to take on management of the Society. Members of the newly elected Committee indicated a willingness to continue to oversee the proper disposal of the assets of the Society if it is decided to wind it up. It may be necessary to call an Extraordinary General Meeting later in 2019 to allow members to vote on winding up the Society that would be done in accordance with the Associations Incorporations Act. Future options include members continuing to meet on an informal basis, perhaps quarterly, with a view to somehow maintaining the 27 years of the Society history.

Next meeting

Unless otherwise determined, the next Annual General Meeting of the Society will be held on Wednesday 1 April 2020.

The meeting closed at 7:40 pm.

FUNDING FOR KIMBERLEY PROJECTS

Ten Kimberley projects are to receive \$655,946 in the first round of [funding](#) from the State Government's Regional Economic Development (RED) grants. [Kununurra Neighbourhood House](#) will receive \$180,000 towards the construction of its new facility, including a crèche and commercial kitchen. Grants of \$100,000 apiece will go to the [Mamabulanjin Aboriginal Corporation](#) in Broome, to establish a two-hectare commercial orchard and trial site for wild harvest Kakadu plum production, and to the Shire of Broome, for a Short Street Transit Hub. The Shire will also receive \$50,000 for a [Chinatown Discovery Festival](#), while another \$20,000 will go to Shinju Matsuri Inc. for this year's [Shinju Matsuri Festival](#). [Lake Kununurra Barramundi Restocking Group](#) is to receive \$84,521 for its project. [Yawoorrong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation](#) will receive \$47,000 towards developing a 'robust commercial vision for East Kimberley industrial hemp'. Smaller grants are to go towards work at [Imintji Campground](#) and [Violet Valley Campground](#), and the Shire of Halls Creek facilities infrastructure upgrades (Phase 3).

ABORIGINAL STONE “MONUMENTS” IN THE KIMBERLEY

On 1 May 2019, Kimberley Society members **Mike Donaldson**, **Hamish McGlashan**, and **Mike Cusack** summarised the variety of stone structures or “monuments” that are prolific features of the Kimberley landscape.

Mike started proceedings with a summary of the main types of stone arrangements identified by the [Reverend J.R.B. Love](#) in a landmark paper published by the South Australian Museum in 1939:

- ❖ Remarkable natural features
- ❖ Monoliths, not heavier than one or two men could erect
- ❖ Groups of elongated or peculiar-looking stones
- ❖ Elaborate arrangements of stones, such as circles, parallel lines, ovals, or more intricate designs
- ❖ Cairns

Love showed clearly that it was impossible to interpret the meaning of a stone arrangement without first-hand knowledge from the Aboriginal group in whose territory it existed. Similar structures in different places had vastly different stories attached to them; standing stones at one site represented kangaroos that wrestled in the Dreamtime, whereas similar structures elsewhere marked where the Boobook Owl turned back the sea.



Standing stones, north Kimberley coast



Idriess's Chanake Stone re-found

Hamish showed examples of monoliths encountered during bushwalks throughout the Kimberley, with particular emphasis on the Chanake Stone first described by [Ion Idriess](#) in his 1937 book *Over the Range*. Hamish was with a [group](#) that re-found this site in 2017, and again it was clear that without specific local Aboriginal knowledge there was no way the significance could be ascertained. Similar large standing stones were illustrated from other parts of the Kimberley and the Central Desert region where there was no knowledge of the sites meaning.

Mike Cusack followed with examples of ‘special stones’ including football-sized spherical boulders strategically placed on rock ‘altars’ near several waterfalls or rock art sites. He also showed examples of ‘signal’ stones, typically flat stones placed vertically near art, and examples of ‘retribution rings’ or ‘vendetta stones’ that typically surround a central mound of stones that once covered the body of an important person before the bones were cleaned, wrapped in paper bark, and placed in a cave of importance to the deceased person.



Placed boulders, Bachsten Creek



'Retribution ring' and burial mound, Lawley River

Mike Donaldson again took the microphone and showed numerous examples of linear stone arrangements found across the Kimberley on tidal flats, bare flat rock platforms, and as parallel lines leading to some Wanjina rock art sites. There is documentation for some sites such as the Brockman Wanjina site near Manning Creek where Ian Crawford recorded that a parallel pathway of stones leading to the site was made by ants pursuing the Wandjina. Another ring of stones near Munja was said to be a Barramundi increase site. The spectacular Jarrgun stone arrangement near Munja is said to represent the way food is shared between the local people, and there is an informative sign at this locality describing this responsibility.



Jarrgun stone arrangement near Munja



Large 'Sneezing Heap', Charnley River

Large stone piles, up to a metre high and three metres long, comprising stones 30-50 centimetres in diameter, are also common across the Kimberley and although poorly documented, they are understood to be 'Sneezing Heaps' – piles accumulated as passers-by add stones to avoid 'sneezing sickness'.

The presentation finished with some examples of similar stone arrangements from other parts of the country, including the Goldfields, Western Desert, and Arnhem Land.

Mike Donaldson

FITZROY RIVER WATER

Proposals to grow irrigated pasture using large volumes of water pumped from the Fitzroy River are back in the [news](#). [Professor Jeff Connor](#), in collaboration with Pew Charitable Trusts, dismissed a CSIRO report as too optimistic. He prefers an alternate approach—putting funds into R&D associated with Aboriginal enterprise. Undeterred, [Gina Rhinehart](#) is now asking the State Government to swap water for land.

AWARDS

In the WA Nursing and Midwifery Excellence Awards, **Andrea Rieusset**, Nurse Practitioner in the Emergency Department at Fitzroy Crossing Hospital, was named as the State's 2019 [Nurse of the Year](#). Her dedication to improving services and clinical outcomes for women and children experiencing family and domestic violence in Kimberley communities led to the development of a comprehensive regional family and domestic violence program, launched in September 2018. Andrea also took out the top award in the Excellence in Aboriginal Health category.

In the [WA Disability Support Awards](#) 2019, **Cyril Yeeda** from Far North Community Services was a joint winner of the Excellence in Regional Support Award. The Awards recognise and reward people who go beyond ordinary standards of service and provide the highest standard of individualised support to people with disability. In nominating Cyril, Far North Community Services wrote: 'Cyril worked closely with an individual who resided in the remote community of Billiluna preparing him for the transition into supported accommodation. Cyril spent many weeks getting to know the individual, learning how to communicate with him, building trust and rapport while assisting with his daily routines. Cyril was able to assist the individual in smoothly transitioning into supported accommodation in Derby where he now lives with another Aboriginal male. Cyril also helped train other staff in getting to know the individual and in providing care for him in culturally appropriate ways.'

In the Telstra Australian Women's Business Awards this year, **Jodie Silvester**, Managing Director and Founder of KAS Accounting Solutions, took out the [Small Business Award](#). The judges found that KAS, based in Kununurra, provides services to East Kimberley individuals, businesses and not-for-profit organisations that would otherwise have been unable to access those services. The company employs 15 people, has operated in the East Kimberley for more than a decade, and has recently opened a second office in Darwin, where Ms Silvester is now based.

COUNCIL 2018-2019

President:	Mike Donaldson
Vice-Presidents:	Jeff Murray
Secretary:	Geoff Owen
Membership Secretary:	Elizabeth Gresham
Treasurer:	Jeffrey Gresham
Councillors:	Michael Cusack, Tim Griffin, Sven Ouzman, Roger Passmore and Margaret Shugg

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