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- The new Arid Lands NRM Plan (p10)

President's message

Another season of field work has ended with three trips being undertaken. Reports on these are included in this *Newsletter*: the activities ranged from an introduction to the region for members not particularly familiar with springs, through to maintenance of the walking tracks at the Peake.

A number of issues previously reported on remain with us, including proposed fencing at Levi Springs on the *Peake* station. Negotiations with the new lessees of *Anna Creek* and the *Peake* – the Williams Cattle Company – have been ongoing and we are currently waiting on a decision from the Company's Board. As part of the negotiations we met with both Tony and Trevor Williams on site in the course of our August field trip.

The maintenance of *existing* protective fencing at important mound spring sites is currently under consideration. This includes the cattle proof enclosure around Strangways Springs (on *Anna Creek*) put in place by S Kidman & Co in the 1990s. Additionally, a number of important springs on the *Peake*, *Nilpinna* and *Allendale* pastoral leases were fenced by the SA Government's Environment Department in the 1980s and discussions about future management arrangements for these are

continuing between the current Environment agency (DEWNR) and FOMS.

DEWNR has been subject to severe budget cuts over recent years and has a greatly reduced capacity in many different fields, but although FOMS currently has a core of capable and committed field workers it is unrealistic to expect that a volunteer group can be a substitute for a government agency – it simply does not have comparable resources and cannot guarantee the same level of continuity over time. In an effort to find a way around this potential impasse FOMS has proposed to DEWNR an alternative source of funding to maintain these fenced springs and we currently awaiting a response from the agency.

I encourage as many members as possible to attend our forthcoming AGM. FOMS has achieved a lot in its relatively short life, but it needs the ongoing support of its membership. Come along and be part of that support base!

Colin Harris
President, Friends of Mound Springs

FOMS Repairs Walking Trails at the Peake

FOMS members will recall that FOMS established two walking trails at the Peake Overland Telegraph site in 2011 – the Creek Walk and the Copper Top Smelter and Mine Walk. Observations in August 2016 showed that both trails – particularly the Creek Walk – had been significantly eroded by the heavy rains of that year and needed repairs.

In August 2017 a FOMS group travelled to the Peake to do the necessary repair work. The group comprised Colin Harris, Bruce Gotch, Stafford Dow, Bernice Cohen, Brian Donaghy, Bren and Elizabeth (Bis) Lay, Sony Manning and Simon Lewis.

The group had a full day at the Peake Overland Telegraph site on 9th August 2017, focussing on repair of the two walking trails. Some work was also undertaken to prune back vegetation on the track up to the ruins and other vegetation growing over signage.

The Creek Walk required substantial work, including repair of water erosion damage, re-routing of sections as a result of shifting spring tails, and installation of two additional marker posts to improve the definition of the trail. Work on the Walk was completed by lunch-time, after which more minor repairs were effected on the Copper Top Smelter and Mine Walk.



At work on the Creek Walk

During this trip the group also visited Elizabeth Springs in the Wabma Kadarbu Mound Springs Conservation Park. It has been suggested previously that FOMS could consider working with DEWNR in establishing a walking trail at Elizabeth Springs but the inspection showed that, for several reasons, a walking trail would not be particularly feasible.

A further highlight of the August 2017 trip was an inspection of the old lime kilns near the Peake Overland Telegraph site.



Colin Harris and Bernice Cohen at Elizabeth Springs



The FOMS group at the old lime kilns on the Peake

FOMS Organises Introductory Trip

In June 2017 the Friends of Mound Springs (FOMS) organised a trip as an introduction to the springs for those members who had not previously participated in a FOMS trip to the springs. Those on their inaugural FOMS trip were Craig and Helen Whisson, Brian Wheeler, Ali Ben Kahn, Peter and Barbara Bansemer, David and Lorri Ragless, Bill and Jan Clifford and Duncan Ross-Watt. Most had travelled in the region previously but not as part of a FOMS outing. Seasoned FOMS travellers accompanying the group were Colin Harris, Elaine Smyth, Bruce and Sherrie Gotch, Brian Donaghy and Simon Lewis, along with Iris Iwanicki who accompanied Brian Donaghy in a FOMS trip to Queensland springs several years ago.

The group convened at the Eldo Hotel in Woomera in the evening of 20 June. Iris Iwanicki gave a presentation on the history of Woomera, illustrated with a number of photos. Information packs for the FOMS trip were also distributed.

In the sunny following morning, Iris continued the historic theme with a short guided tour of parts of Woomera – sufficiently interesting to attract four other non-FOMS visitors to join the tour group.



Iris leads a tour around Woomera

The group then moved on to Roxby Downs for two presentations in the local theatre. The first was a film on the Olympic Dam mining operation. Then followed a presentation by Katherine Tuft, General Manager, Arid Recovery, about the operation of

the Arid Recovery Program. Katherine noted the successes of the program in re-establishing many native species within a vermin-proof enclosure. She also highlighted work being done to promote survival responses by native fauna in the presence of feral cats – as an effort to assist survival without the need for protective fencing.

The party then journeyed up the Borefield Road to a camp-site on Gregory Creek near the Oodnadatta Track. There we were joined by Arabana Elders Uncle Dean Stuart and Uncle Lloyd, who had driven up from Port Augusta to guide us in our inspections of springs on the Finniss Springs property.

Thursday 22 June commenced with an inspection of two springs on Finniss Springs that had been subject to trial burns in 2016 – see separate item in this newsletter about this topic. The group then had a brief look at West Finniss Springs – a large group of springs dominated by *Phragmites* – before moving on to the Finniss Springs Mission. There Uncle Dean showed the group the restored accommodation buildings, as well as the former church and school buildings, and talked about his early days at the Mission.



Restored buildings at Finniss Springs Mission

The group then moved north of the Oodnadatta Track to look at Hermit Springs and the ruins of Finniss Springs Station, before finally journeying west and north on to Stuart Creek Station to view Gosse Springs and McLachlan Spring, both looking resplendent in the late afternoon light.



Overflow from McLachlan Spring

On Friday 23 June the group headed towards Wabma Kadarbu Mound Springs Conservation Park experiencing along the way the only real mishap for the trip – a flat tyre on David and Lorri’s vehicle. At Wabma Kadarbu the party looked at Blanche Cup and the Bubbler before taking a walk out to the Little Bubbler. The Little Bubbler is of interest as it was free of *Phragmites* until the early 2000s, when *Phragmites* was seen to have become established. It was noteworthy, though, that the *Phragmites* still only occupies a few square metres and has not proliferated as much as might have been expected.

At Horse Springs in the southern section of the park we noted substantial and recent impacts by cattle and also saw cattle grazing around the nearby

Buttercup Spring (see separate item in this Newsletter).

With the afternoon slipping away, the group moved on to Coward Springs camp-ground to camp for the next two nights.

On Saturday 24th, after re-fuelling at William Creek, the group returned to Strangways Springs. Duncan Ross-Watt provided an overview of the stabilisation work undertaken at the ruins by the State Heritage Branch and the group then ventured along the Springs Walk, one of two self-guided walks established by FOMS in 2011.

Sunday 25th June saw the trip approaching finality. The group drove down the Oodnadatta Track to Marree, pausing to look at Herrgott Spring. With the weather starting to look a little dubious, the party headed south, pausing at Farina to look at the restoration work and sample the bakery and also viewing the ochre deposits near Lyndhurst. The group then continued on to the Leigh Creek Outback Resort for the final night.

The morning of 26th June marked the official end of a very successful trip. Some returned home by Monday night, others took an extra day or more with their return journey.



The group (at Strangways): L to R: Bruce Gotch, Duncan Ross-Watt, Bill Clifford, Jan Clifford, Craig Whisson, Colin Harris, Helen Whisson, Iris Iwanicki, Ali Ben Khan, Peter Bansemer, Barbara Bansemer, Brian Wheeler, Elaine Smyth, David Ragless, Lorri Ragless, Sherrie Gotch, Brian Donaghy. (Photo: Simon Lewis)

FOMS goes High-Tech

The FOMS trip to the springs in August 2017 provided the opportunity for FOMS member Stafford Dow (pictured right) to use his drone to capture some fine aerial photographs of mound springs and associated features.

Stafford advises that the drone is a DJI Phantom Plus 4, able to take 2.7K HD videos and 12 Megapixel photos with the integrated aerial camera, and to fly for up to 25 minutes on a single charge. Having had a few traumatic and somewhat costly flight failures with earlier aircraft, Stafford purchased this one some two years ago and is progressively gaining confidence in his piloting skills.

There is no doubt that drone technology has enormous potential for aerial photos in mound springs country, particularly in some of the less accessible groups of springs such as Hawker Springs and Francis Swamp.



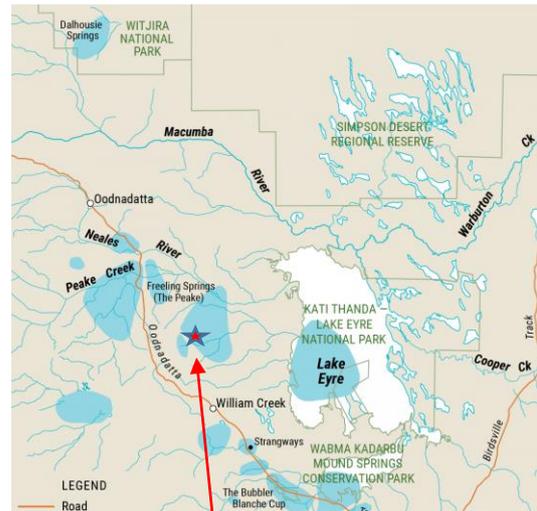
A drone's eye view of the ruins of the Peake Overland Telegraph Station (left) with several of the springs known as Freeling Springs in the vegetated strip on the right.



Portion of North Freeling Spring. A band of *Phragmites* (reeds) can be seen on the RH edge and also towards the more distant end of the spring.

Fencing of Levi Springs still under Discussion

The State Department of Environment, Water and Natural Resources has recently completed a three year project, known as *Desert Jewels*, looking at the management of mound springs and the FOMS has had some involvement. As part of that project, fencing of several springs at Levi was proposed. An initial proposal to fence all of the springs at Levi was not supported by the Arabana Aboriginal Corporation and a revised and reduced fence alignment was marked out on the ground during a visit in 2016 by FOMS and Arabana Elder Uncle Dean Stuart. The Arabana Aboriginal Corporation subsequently endorsed the revised alignment which is shown **in red** on the image below. The area proposed for fencing is around 10 – 12 ha.



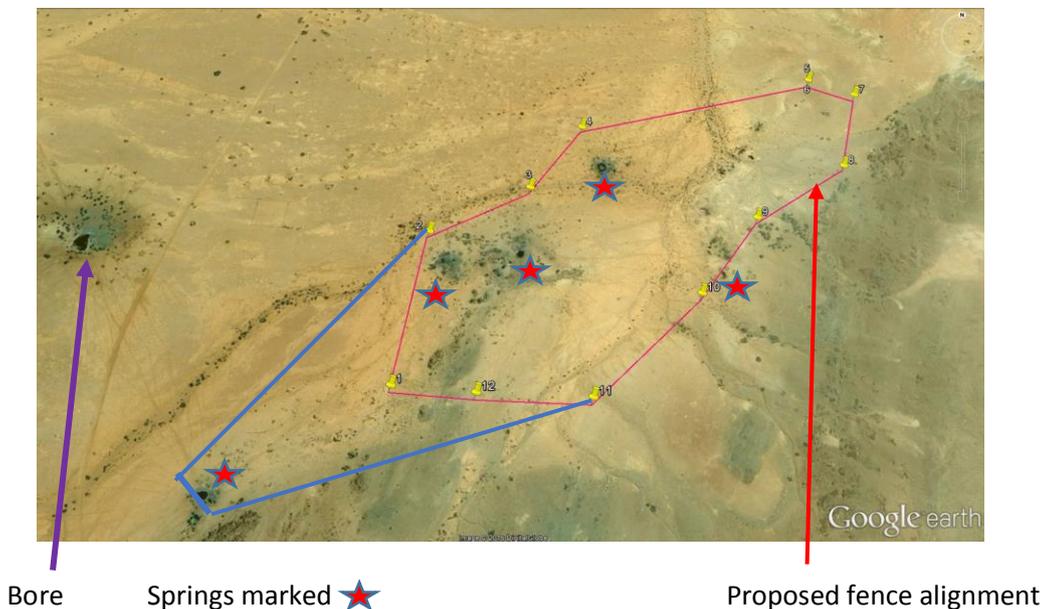
Levi Springs (approx.)

Former lessees S Kidman and Co were fully supportive of the proposal but the on-ground works were not undertaken before the sale of the property to the Williams Cattle Company. In an effort to progress this matter, FOMS members Colin Harris, Bren Lay, Bruce Gotch and Simon Lewis met with Tony and Trevor Williams during the FOMS trip of August 2017.

by their company and noted that a watering point would still be needed in the vicinity. In this respect, the group inspected the bore nearby, currently used by cattle, but in need of an upgrade. There was also some suggestion that the fencing could be extended to include the main spring in the bottom left of the image below, by following the alignment marked in blue on the image.

During this on-site discussion it was clear that the springs were being heavily impacted by cattle. Tony and Trevor agreed that the current situation was in nobody's best interests. They stressed that any decision about fencing would need to be made

The meeting was positive and FOMS is confident of a good outcome. FOMS has sent further information to the Williams Cattle Company and we await their decision.



Bore

Springs marked

Proposed fence alignment

Grazing Trial Infrastructure established on Billa Kalina Spring

The Department of Environment, Water and Natural Resources *Desert Jewels* project, as referred to in the previous item, has also resulted in the establishment of fencing around a mound spring on Billa Kalina Station for the purpose of a grazing trial. DEWNR provided the fencing materials and Billa Kalina lessee Colin Greenfield has now completed the fencing work. In effect this will enable three grazing scenarios to be assessed:

- Cattle will be permanently excluded from the spring vent and its immediate environs;
- Another larger area including part of the spring tail is fenced but cattle will be allowed to graze this area from time to time;

- Another section of the spring tail is outside of the fencing and thus will be permanently available for grazing by cattle.

During 2016, FOMS members Bren and Elizabeth Lay and Bernice Cohen collected vegetation data at the site and established photopoints prior to the fencing. In May 2017, FOMS members Bruce Gotch, Colin Harris and Simon Lewis inspected the completed fencing work and took the photographs included below.

It is expected that the actual grazing regimes to be applied within the trial area will be the subject of discussion between DEWNR and the pastoral lessee. FOMS may have some involvement in this and may assist with vegetation monitoring.



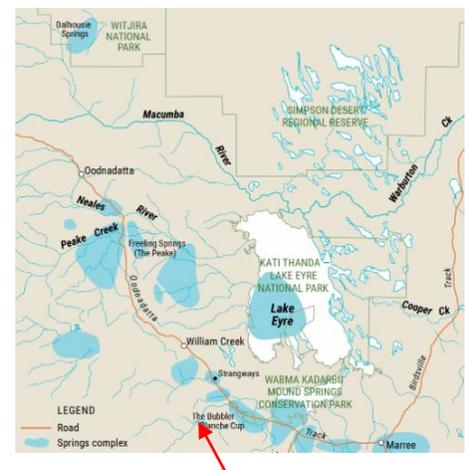
Protected spring pool



Section of spring tail to be periodically grazed



Indicative fence lay-out at Billa Kalina Spring: vent (small red enclosure) permanently protected; part of spring tail to be periodically grazed; part of tail outside of fence and open to grazing



Billa Kalina Spring

Horses Complicate Burning Trials

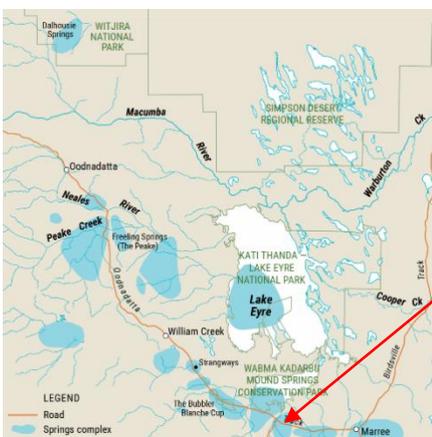
In our last newsletter we reported on a burning trial conducted on three springs on the Finniss Springs property, Bopeechee, Beatrice and a spring described as HBO 004, in May 2016. This trial was undertaken as part of DEWNR's *Desert Jewels* project as an initial effort to assess the potential ongoing role of fire in the management of reeds, particularly *Phragmites*, in mound springs. Prolific growth of *Phragmites* has occurred at many springs that have been protected from cattle grazing to the apparent detriment of other wetland species. DEWNR and FOMS have been considering options for the active management of this prolific reed growth, with fire and periodic grazing (see also the Billa Kalina article) being two options for consideration.



Trial burn, Bopeechee Spring, May 2016

just 7 or 8 weeks after the trial burn. At the time, FOMS carried out some vegetation monitoring, measuring density and height of regrowth.

However, in June 2017 a further FOMS inspection showed that the regrowth of *Phragmites* is being severely grazed by horses. The photos included here of Spring HBO 004 illustrate the situation. This has significantly complicated the monitoring program. While the horses remain in the area we are not simply monitoring the response of *Phragmites* to a trial burn but monitoring a combination of regrowth from fire and grazing impacts. Some discussion will be needed about the value of continuing the current vegetation monitoring or the need to adopt a different approach.



Burning Trial Site

In July 2016 a FOMS group visited Finniss Springs and noted quite strong regrowth of *Phragmites*



Spring HBO004 in June 2016, about 7 weeks after trial burn. Significant regrowth of *Phragmites*.



Same spring in June 2017. *Phragmites* now gone from spring vent as a result of grazing by horses

Action being taken to address Cattle Grazing in Wabma Kadarbu

Wabma Kadarbu Mound Springs Conservation Park is best known for Blanche Cup and the Bubbler, the two mound springs with easy visitor access, parking facilities, interpretive information and boardwalks. However, tucked away to the south and north of these springs is an extensive array of springs not readily accessible to the public. In the south of the park are Horse Springs and Buttercup Spring and FOMS inspected these springs during the June 2017 introductory trip described elsewhere in this newsletter.

During this inspection, FOMS members were concerned to note cattle actively grazing on Buttercup Spring. Likewise, at Horse Springs there has been substantial and recent cattle damage (see photo). It is clear that cattle have intruded into the Park from the adjoining Stuart Creek pastoral lease.



FOMS members noted similar damage during a visit in August 2016.

FOMS has reported the situation to DEWNR and the Department has advised that action is under way to repair boundary fencing in collaboration with the Stuart Creek managers.

FOMS Meets with Marla Oodnadatta NRM Group

Many FOMS members will be familiar with the Natural Resources Management (NRM) arrangements applying in South Australia, with eight regional NRM boards scattered across the State. In the Far North pastoral areas, the operating NRM body is the SA Arid Lands NRM Board. At a sub-regional level there are six NRM Groups in the Arid Lands and these tend to focus on community engagement and local NRM programs and on-ground works.

Most of the mound springs of interest to FOMS fall within the area of the Marla Oodnadatta NRM Group and FOMS has been thinking for some time that closer working links with this NRM Group are desirable. The opportunity to forge some links arose during the August 2017 FOMS working bee. Colin Harris and Simon Lewis met with the Marla

Oodnadatta NRM group, along with DEWNR's Lil Kamphorst and Kat Lynch at Coober Pedy on 11 August. Colin and Simon gave a power-point presentation, highlighting the issues which were thought to be of common interest to both FOMS and the NRM Group:

- Maintenance of fencing around protected springs on pastoral leases;
- Increased protection of springs in line with targets in the Regional NRM Plan;
- Management of reeds in fenced springs;
- Fencing at Levi.

Several members of the Group were not able to attend, but we have now established contact with the NRM Group and will be looking to build on that.

New NRM Plan in place for Arid Lands Region

A new regional plan for Natural Resources Management (NRM) in the SA Arid Lands became operational on 1 July 2017. The plan is intended to provide a basis for the management of land, water and biodiversity in the region. It comprises a strategic component with a ten-year time-frame and a three-year business plan that is more specific about management programs and associated budgets.

FOMS members may recall that the SA Arid Lands NRM Board put out a draft regional NRM plan for comment in the latter stages of 2016. FOMS responded with a submission. FOMS noted that the approach taken with the drafting of the plan was quite different from that applied in the 2010 regional NRM plan. Whereas the 2010 plan focussed to some extent upon NRM assets (water, soil, biodiversity etc), the new draft plan applied more of a systems approach, with emphasis upon landscapes and linkages. FOMS commended the

Board for a draft plan that had a number of fine features in terms of presentation and graphics, but expressed concern that the “high level” approach in identifying management issues and in setting out proposed strategies made it very difficult for a group like FOMS to interpret what strategies, priorities, actions and targets will be directed to mound spring conservation.

FOMS’ assessment of the final NRM plan is that little has changed from the draft version in terms of the overall approach and in setting out priorities for mound spring conservation. The importance of mound springs is certainly recognised and issues such as water pressure reduction and date palms at Dalhousie Springs are mentioned but there is little specific information about management priorities and programs. Having said that, FOMS has enjoyed a good working relationship with relevant NRM Board and DEWNR personnel and will seek to maintain and build on that relationship.

Joining Friends of Mound Springs

If you wish to become a member of Friends of Mound Springs, please contact Treasurer Hadyn Hanna – see contact details below. The membership subscription is \$20 per household per calendar year.

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