



# Barmera Moorook Field and Game - Management of the Loveday Wetland Complex



A brief review of the club history highlighting the deep connection between the club, members, communities, environment and country.





# The Beginning



The Clubs first official meeting was held at Peter Schramm's house on the 7<sup>th</sup> May 1967. Peter was elected Captain along with the committee and other office bearers.

The club was formed as the Barmera Moorook Field and Game Branch of the South Australian Field and Game association.

19 people were present

meeting held at P. Schramm  
10.30 AM. 7.5.67

19 Present

Meeting opened by L. J. Monahan  
report on principal of Organization &  
outlined activities.

Identity card suggested

Mr. E. Vivan President of S.A. F+G. Assoc.  
was introduced & addressed the assembly.

Mr. McDiarmid moved Mr. Monahan second  
that F+G Club be formed in the area.

Election of Officers

Peter Schramm was elected as Capt  
Peter Hall Sec.

Committee of three members was elected  
consisting of Ouse Tsherpig. Mack White  
& E. Wachtal.

Apology received from Len Stratman.  
Moved Jim Gordon seconded Kev Crawford  
that the Club be known as the  
Barmera-Moorook Field & Game Branch  
of Association.



# Shooters Buy Swamp Area

The Barmera-Moorook Region of the SA Field and Game Association has bought the annual lease of the Loveday-Cobdogla swamp area.

The property, previously leased by Mr. D'arce Wright, of Barmera, extends from the Cobdogla pumping station south to the mouth of Blackfellows Creek, including river frontage, an area of about 1,458 hectares.

The purchase was supported by the Minister of Environment, Dr. Hopgood, as well as officers of the National Parks and Wildlife Service who recently inspected the property.

Although generally seen as a hunting organisation, the objects of the Field and Game Association are to develop facilities for game hunting by the promotion of wildlife conservation and management projects, as well as to inform and educate hunters in the value and ethics of the sport.

The Barmera-Moorook Region recently contributed \$1,000 to help fund a NPWS survey on evaporation basins in the Riverland, with the scientific work being undertaken by scientists from Adelaide University.

Other Riverland regions are also currently

involved in conservation projects.

The Loxton region is presently developing the Noora basin as a Wildlife habitat while the Renmark-Berri region for some time has been involved in a box tree planting program at Woolenook Bend.

An association spokesman said certain areas of the property were infested with box thorns and one of the first projects would be their removal and the plantings of red gum and box trees.

Control of European carp is another project of high priority because of their devastating effect on waterfowl feeding areas.

Public access to the property will remain similar to that under the previous owner.

The Barmera-Moorook Region has held the sole shooting rights on the property since 1967, so hunting will continue to be strictly for Barmera-Moorook members only, with the exception of certain periods each season when it may be open to members of other field and game regions.

The spokesman said it was not intended to prevent the public from

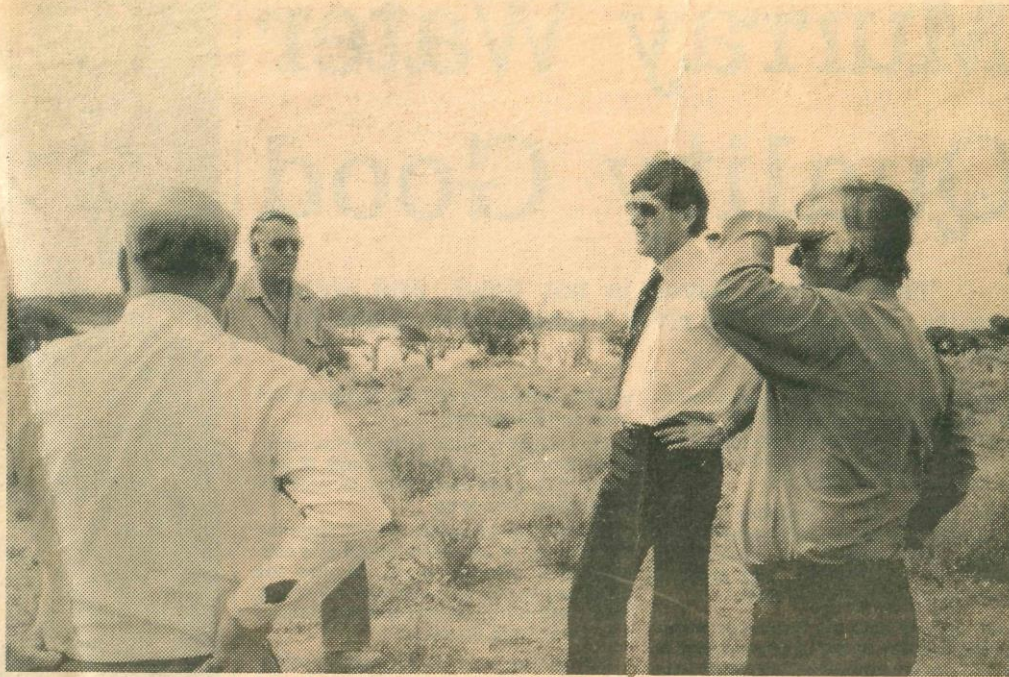
camping on the river frontage, but campers would be closely monitored.

Past working bees held by members resulted in large amounts of litter being collected, particularly following the long Easter break and other long weekends.

Another area of great concern, was the indiscriminate cutting down of trees for firewood.

The region has a membership of 140 from a State-wide total of about 700.

Membership is open to people residing in the Barmera-Moorook area and any enquiries should be addressed to the Secretary, Box 380, Barmera, SA 5345.



On a recent visit to the property, from left, Mr. Allan Leitch, Field and Game State president; Mr. Bob Twyford, State Reserves Advisory Board member; Dr. Don Hopgood, Minister of Environment and Planning and Mr. Peter Schramm, Barmera-Moorook Association president.



Since inception in 67 BMFG has exclusively hunted the property however when the opportunity to acquire the property lease arose in the early 80's Peter Schramm and the committee sought government support to acquire the lease and started working on what we have today.

In many respects much of this article could have been written today, with the control of carp, annual working bees to keep on top of rubbish, and the local community using the property for walking, camping and fishing.




# Peter Schramm the clubs inaugural captain was one of the original wetland conservation pioneers.



## Pioneer of wetlands conservation

**Peter Schramm**  
Wetlands crusader  
**Born:** October 2, 1929; Tumby Bay  
**Died:** July 4, 2002; Barmera

PETER Schramm received national and international acknowledgement for the pioneering work he did in helping restore Riverland wetlands. An unpretentious man, he grew up on a farm near Tumby Bay and left school at 16 to become a carpenter and builder. From an early age his hobbies were in nature, particularly waterfowl and fish.



He arrived in Barmera in 1952 and became the foremost authority on waterfowl in the Riverland and beyond, being able to identify birds without binoculars at a distance. It was a revelation to be in the field with this unassuming, but so knowledgeable and experienced man, who gradually converted from being a duck hunter to a conservationist of considerable acumen, persuasion and perseverance.

From 1984, with the gradual support of members of the Barmera-Moorook Field and Game Association, he designed and installed a system of culverts which allowed the natural wet-and-dry cycle to regenerate 1400ha of land at Loveday. Later, he turned his attention elsewhere including helping to revitalise an area of Banrock Station.

His other community work included being a foundation member of the Barmera Apex Club and the South Australian Field and Game Association, of which he was made a life member in 1985. He was also a foundation member of the Barmera-Moorook association and its first chairman.

He was appointed to the Flora and Fauna Advisory Committee to the Minister of Agriculture for the Fauna Conservation Act in 1970, served 10 years on the National Parks and Wildlife Board, and was an inaugural director of Ducks Unlimited Australia.

K.J. Mack

## River Murray Catchment Water Management Board Environmental Awards - Peter Schramm

Peter Schramm is an initiator, an instigator and pioneer in the vital subject of emulating nature. Peter's interest in the wetland management has stemmed from his avid bird watching abilities which began as a child, so refined is his skill he is able to identify from a distance with no binoculars any water fowl, just by their flight, stance grouping and movements. Added to this, is Peter's encyclopaedic knowledge of bird habits, migration, feeding and plumage patterns.

In 1984, Peter convinced the Barmera Moorook Field and Game Association to take up a land tenure called Hack's Paddock that surrounded the Loveday Lagoons.

Locking, grazing, seepage and rubbish degraded this trek of land. The first step was to convince all involved to remove the cattle. Fencing was improved and enclosures built which illustrated the damage caused by cattle. Agistment fees from grazing was the Field and Game Associations main fund raising activity, but once it was clearly illustrated to the members the damage it was causing, it was gradually removed in 1985. From here the association undertook extensive revegetation projects that involved the eradication of rabbits and weeds.

Meanwhile, Peter did not lose sight of the real potential for the area pressing for wetting and drying cycles. It took the ever-declining duck numbers and other factors to convince the majority of members to commence the trail blazing work. It took nearly 10 years to gain the funding to install 2 structures that were designed to manipulate water flow and exclude European carp. Their installation began an amazing train of events. The drying of lagoons that had been wet for nearly 100 years due to the lock system, removed thousands of carp from the wetland lagoon system. To follow was a massive congregation of birds, so extensive, no one alive in

the Riverland had witnessed such an event. Birds included 15,000 White and Straw-necked Ibis, 27 Spoonbills chicks and 10,000 Little Black Cormorant chicks were reared. These Cormorant chicks require daily feeding three times their body weight, proving that the Loveday Lagoons were a vast storehouse of the correct aquatic life.

Building on this success, Peter designed and installed a further 6 control structures throughout the 1990's, which allowed the manipulation of water through an integral lagoon system. As there were no guidelines for designing or building such structures, Peter's blue prints are now sought after by organizations such as Banrock, Akuna Station and many other community groups trying to emulate the work undertaken at Loveday in their own patch. Peter has been supportive of all who come to him for his advice, showing hundreds of community volunteer groups, researchers, politicians and students around the Loveday Wetlands, informing them of the pitfalls to avoid, the benefits that can be reaped and difficulties they may face if they decide to take up the challenge.

To aid these groups Peter has developed a set of Posters that illustrate the structures he has installed, explaining the features and costs of each.

*By Michelle Campbell  
as read 4.6.01 at Environmental  
Awards night. (Most of data was from*



Tony Sharley (WCA Marketing Director) profiles one of WCA's founding directors – Peter Schramm.



Above: Peter Schramm and Max Moorfield heading up a tour during the Loveday expedition in December 1995.

Right: Eastern Lagoon outlet at Banrock Swamp. One of the flow control structures designed by Peter as part of his work for WCA.



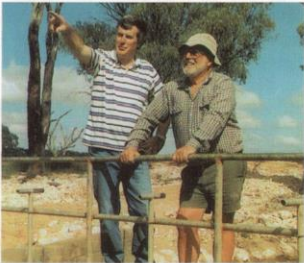
What sort of person gains the title 'Wetland Champion'? It's someone who knows the birds, knows the fish, understands the changes in wetlands that have removed the birds and the fish, and knows how to fix a wetland to bring them back. And in doing so, he has generously shared his knowledge.

Peter Schramm has earned the title 'Wetland Champion' several times over!

As a founding director of Ducks Unlimited Australia, which we now know as Wetland Care Australia, Peter Schramm has volunteered thousands of hours to rebuild the degraded wetlands at Loveday, Banrock Station and Akuna Station. At each wetland, Peter, in consultation with the owners, identified the sites to locate flow control structures or remove flow barriers. He drew on the knowledge of Ducks Unlimited Canada's wetland engineers and cleverly adapted their designs for Australian conditions.

As a retired master builder, Peter used his knowledge of building and his supervision skills in constructing permanent flow control structures to the highest standard. With more than \$500,000 of infrastructure in place, Peter's knowledge of the natural watering regime has enabled the owners of these sites to re-create the natural wetting and drying cycles that existed before the Murray became a heavily regulated river. And the reward for Peter: the birds and the fish are returning.

Thanks to Peter, these projects have set high standards for wetland conservation. Groups



Peter Schramm and Mike Harper surveying some works.

wanting to see how to restore wetlands visit them frequently. Akuna Station recently won a South Australian Ibis Award for its integrated approach to managing its wetlands and its vineyards. BRL Hardy Wine Company, which owns Banrock Station, is building its Banrock Station Wine promotion around the Banrock Station wetlands. The Barmera-Moorook Field and Game Association has entertained numerous visitors at Loveday who are enthusiastic to learn more about wetlands.

Peter's untiring work has enabled Wetland Care Australia to form strong partnerships with these wetland owners, and to gain vital experience that will benefit all our future wetland initiatives.

Peter's passion for wetlands includes passing on his knowledge to many other people, including groups of school students. Eight-year-old Tracey McFarlane was so impressed that she wrote a story about him that was published recently in the book *Special People*:

Peter Schramm is a true wetland champion! ▲

## Mr Schramm

Mr Schramm is a special person because he has a special place at Loveday Swamp. He loves to watch the birds. The thing I like about Mr Schramm is that he cares for wilderness and so do I.

Mr Schramm has liked birds since he was six years old. He knows some of the duck and bird sounds. It was amazing to hear some of them. Some of the ducks' names were the hard-headed duck, chestnut teal, grey teal and blue-billed duck.

Tracey McFarlane, 8  
Cobdogla Primary School, Cobdogla, SA.

Peter Schramm was the driving force behind the development of the Loveday Wetland Complex - without his passion for wetland conservation we would not be where we are today. However it has always been a team effort whether that be Peter Schramm, Tony Sharley or Jim Godden at the helm there has always been a team of club members willing to pitch in and do some active conservation work.

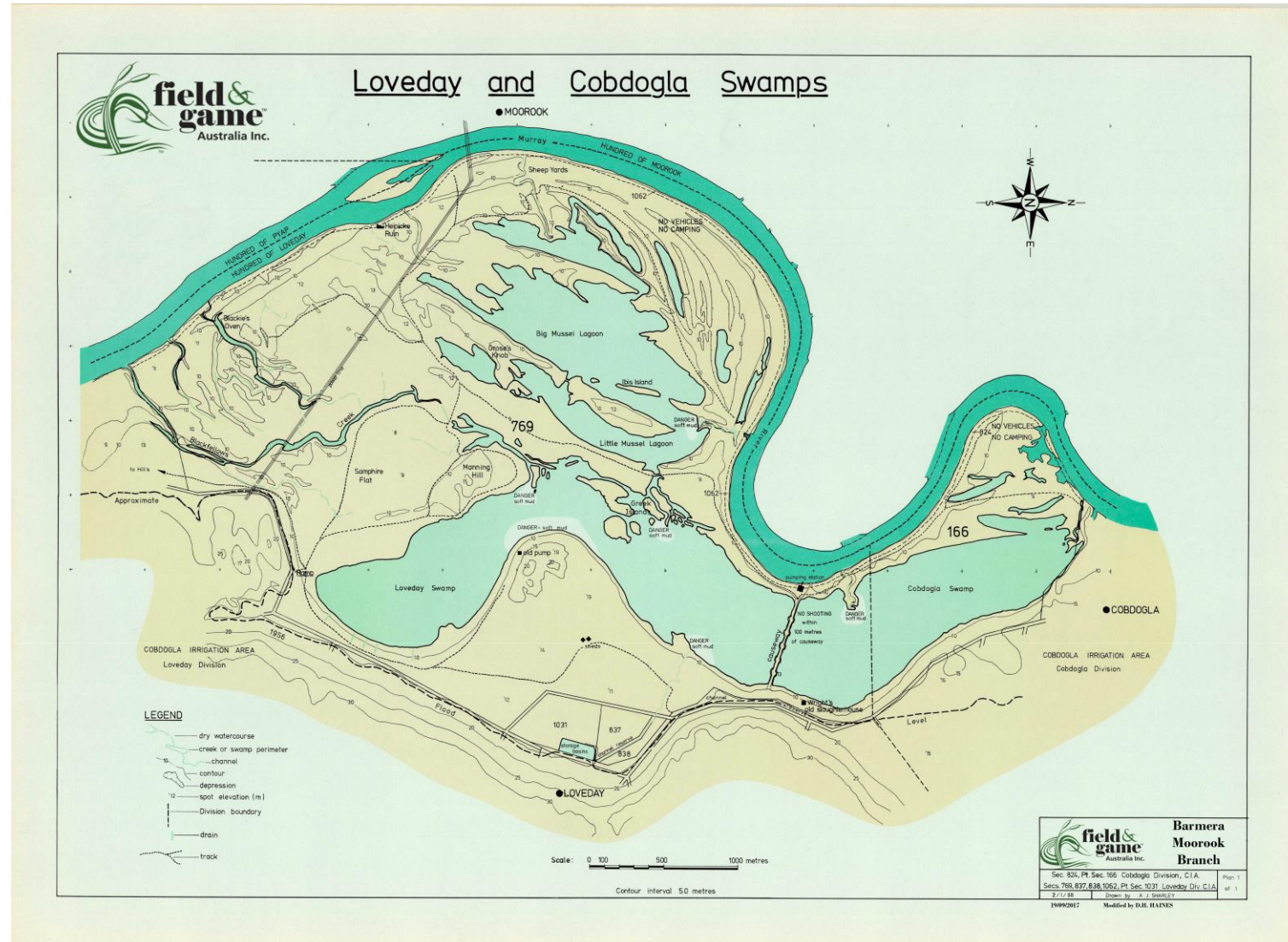




# The Loveday wetland complex



The Loveday Wetland Complex is a series of wetlands all nestled inside a bend on the River Murray just before the town of Cobdogla. The evaporation basin is the main wetland running from Cobdogla past the township of Loveday and is a shallow wetland while the Big and Little Musells are deeper. Together the complex provides ideal habitat for many waterbirds including: Spoonbills, Ibis, Purple Swamphens, Dusky Moorhens, Musk Ducks, all game duck species, Cormorants, Pelicans, Swans, Grebes and Egrets are just some of the wetland birds that can be seen daily.





# A brochure put together by SAFGA highlighting the Loveday Wetlands



The South Australian Field and Game Association Inc. [SAFGA] is a member of the Field and Game Federation of Australia [FGFA].

SAFGA was established in 1963, pioneered by recreational waterfowl hunters to promote and demonstrate the principles of wildlife utilisation as a powerful conservation tool. Currently SAFGA are actively involved in wetland rehabilitation and restoration projects, wetland and waterfowl research, education including training and hunting.

Another important component of SAFGA is to provide opportunity for local, State, Interstate and international competition clay target shooting. There are Nine [9] SAFGA Branches across South Australia, with 5 within the Riverland so join now and support our conservation and shooting future. Barmera – Moorook although not actively involved in providing clay target shooting competition is one of these branches with the objectives of the branch being to enhance South Australian wetlands for game hunting in general by promotion of wildlife conservation and management/implementation of environmental projects, rehabilitate the Loveday Wetland Complex and to reintroduce endangered species back into the wetlands through adaptive management.

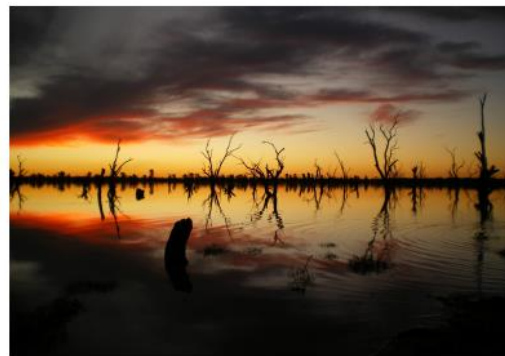
Membership of the branch does not consist only of hunters so if you are interested in the Loveday wetlands come and join us.



South Australian Field and Game Association Inc.

BARMERA MOOROOK BRANCH

## Loveday Wetland Complex



*"The wild life of today is not ours, to dispose of as we please. We must account for it to those who come after"*  
King George VI



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PO Box 162, BARMERA S.A. 5345  
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Mobile : 0438898106  
<http://www.facebook.com/pages/Barmera-Moorook-Field-Game-Assoc/246117498784938>



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Field and Game Federation of Australia  
Director Hunting & Habitat: Peter Teakle  
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South Australian Murray-Darling Basin Natural Resources Management Board  
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Ph: (08)8580 1800 Fax: 08 8582 4488

This brochure was funded by the SA MDB NRM boards Community small grants program





# Pg.2 of the brochure



## Loveday Wetland Complex



River Murray Arial mapping 2008 (Not to scale)

**Structures location where works were carried to help protect the structures against high river water damage:**

Name of Structure	Works
1. Main Gate	Preventative maintenance – stone pitching
2. Grosses Knob	Matting and stone pitching placed in inlet and outlet
3. Blackies Oven	Matting and stone pitching around regulator. Stone pitching in wash away on track (2) and near boat ramp (3).
4. ESTA Blackies Oven	Preventative maintenance – stone pitching
5. Red Gate	Preventative maintenance – stone pitching
6. Wainwright Crossing	Preventative maintenance – stone pitching
7. Sheepyards Crossing	Preventative maintenance – stone pitching
8. Main Inlet	Preventative maintenance – stone pitching

The Barmera – Moorook Branch of the South Australian Field & Game Association Inc. (BMF&G) took over the lease on the Loveday Evaporation Basin (now Loveday Wetlands Complex) and surrounding land in 1983 (Sutherland & Lloyd 1993) and currently still hold the lease for land management, conservation purposes and the right to carry out recreational activities such as hunt wild waterfowl.

The Loveday Wetlands Complex is situated 175 km north east of Adelaide, between the town of Loveday and the River Murray. Moorook adjoins the wetlands on the other side of the River Murray. The wetlands cover an area of approximately 1400ha; 800 ha of land, and 500 ha of water.

As part of BMF&G commitment to the ongoing rehabilitation and enhancement of the wetlands a number of project proposals were forwarded to potential funding bodies to implement projects associated with wetlands such as funding for fencing, signage and earthworks to protect flow regulators against high river damage. Thanks to the financial support from state and federal field & game associations and the South Australian Murray Darling Basin Natural Resources Board the earthworks component was able to be completed. In kind support and project management was provided by the Berri Barmera Local Action Planning Association and the BMF&G.

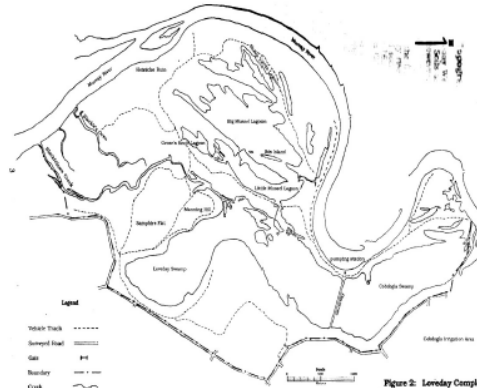


Figure 2: Loveday Complex

With over a decade of drought and now high river flows has created a number of so called "wash aways" around the existing flow structures, infrastructure (e.g. vehicle access tracks) and icon trees. There was requirement for stone pitching to reduce the risk of further damage by the drying floodplain soil followed by the high river water velocity eroding the soil away.

Other activities are proposed further demonstrating BMF&G and partners commitment towards the rehabilitation of the wetlands such as repair to water damaged signs created by the recent high water, repair/replacement of fencing, entrance gates/repairs/blockage to the property, continuation of the monitoring, reporting and evaluation of the land management practices, conduct hunters education weekends, implement a compliance program in relation to use of the area, promotion/awareness of these activities to the community and provide bio-security sampling when hunting. These works will require additional funding and in kind support so the ability of the BMF&G to meet the aforementioned works program depend on how successful BMF&G is in obtaining the necessary funds.

There is new challenges the lease agreement such as sulphate acid soils and odour problems within the north portion of the Loveday which now needs to be address with old & new partners.

BMF&G is extremely grateful for all persons and partners who have provided support in our ongoing works and management at the Loveday Wetland Complex.

**Put Before and after Photos here:**





## Loveday Wetlands Barmera - Moorook Field & Game

The Loveday Wetland is an area of approximately 1400 ha; 800ha of land, and 500ha of water at times of normal flow within the River Murray. The Loveday wetlands is located



Bird watching and Duck hunting are popular pastimes at the Loveday Wetland.

within the regional area of the Riverland, South Australia approximately 175km north east of Adelaide, between the town of Loveday and the River Murray. The area comprises of river floodplain, creeks and lagoons with one lagoon used for disposal of excess irrigation water from the surrounding fruit properties. The area is generally flat but rises in some places creating red sandhills, with the flats interspersed with creeks, lagoons and meandering tracks. The Barmera Moorook Field & Game manage the area which has greatly enhanced the wetlands.

## Wetland Management

Since 1984 the wetlands has been managed by the Barmera Moorook Field & Game with then the Minister for Fisheries & Fauna, Dr Don Hopgood gave the lease in goodwill to the association. The one permanent wetland is completely dried out when conditions are right to implement the management mentioned above often known as creating a wetting and drying cycle. This has allowed vegetation to regenerate with amazing results in providing a food source for many native birds and other fauna such as frogs. The area is left natural in times of high flows within the River Murray.

### Hardhead Habitat



Photo by Paul Sander

## Monitoring

Monitoring of the effectiveness of the rehabilitation is done by members such as

Bird Bander A512, Universities such as Adelaide and Flinders and by funded specialist. To date some of the benefits has been the regeneration of vegetation, sighting of 124 Hardhead ducks in 1998, the first time in 12 years and the increase of frog numbers.

## Use of Loveday

- Members of Barmera Moorook Field & Game Assoc. only have recreational use of the area. Become a member of Barmera Moorook if you plan to have use of the area.
- Ensure the use of appropriate hunting principles.
- Group visitation is encouraged but is at the discretion of the Barmera Moorook committee. Notify the committee before the visitation.
- If you wish to assist in rehabilitation works, monitoring or management of the Loveday Wetlands area please do not hesitate to contact the Barmera Moorook Field & Game.
- Please if you use the Loveday Wetlands area respect it for others wish to follow.
- There are rules for use of this area please make yourself aware of these rules before the use of the wetlands.
- Ensure you have appropriate field monitoring sheets.
- Become involved in reintroducing the River snail.
- Listen for frog sounds and note where you hear them.
- Fill out below if you wish to visit the Loveday Wetlands Complex or join the association.
- Local members welcome.

Barmera & Moorook Field & Game  
PO Box 380, BARMERA SA 5345

Sponsored by :

- \*Wildlife Conservation Fund
- \*Natural Heritage Trust
- \*Barmera Moorook Field & Game

Phone: (08) 8588 2578

Email: [pjgrose@riverland.net.au](mailto:pjgrose@riverland.net.au)





# Sustainable use for enjoyment today and the future



BMFG has always had strong policy for controlling membership and member behavior. Always with a balanced view of respect for local community, member enjoyment today and protection for the future generations.



## **BARMERA MOOROOK FIELD and GAME INC.**

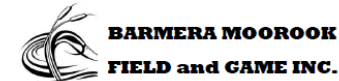
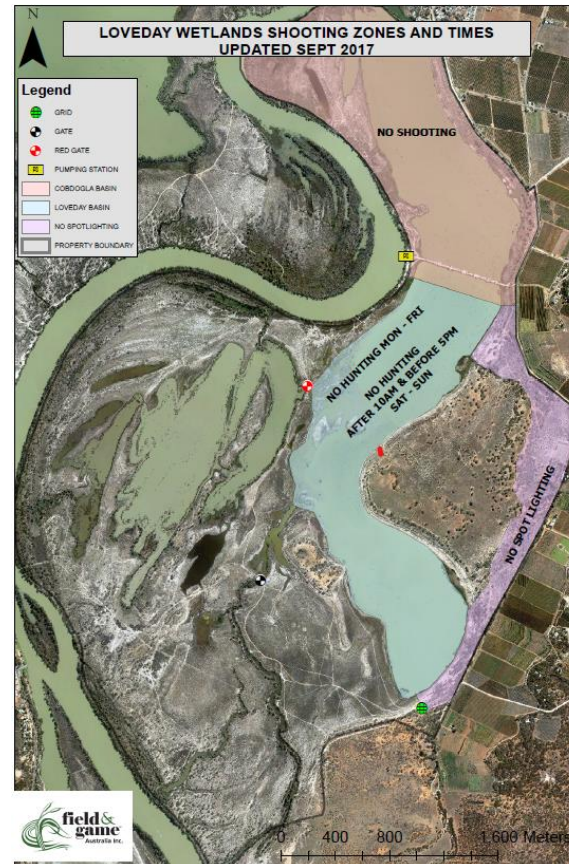
### **LOVEDAY WETLANDS PROPERTY RULES & REGULATIONS**

#### **GENERAL**

- The Committee is not responsible for items lost or stolen from the property.
- All feathers, gizzards, etc. from cleaning ducks to be disposed of in an area away from tracks and camp sites.
- At no time will protected animals or animals out of season be harassed or shot at including Snakes.
- Chainsaws are not allowed to be used on the property except for Conservation works.
- Only take what you can use, breaches of the mandated bag limits will not be tolerated.

#### **HUNTING REGULATIONS**

- Once a month the entire property will be closed to hunting. Please refer to the season calendar for the confirmed dates.
- The Northern Evaporation Basin (Cobdogla) is not to be hunted due to its proximity to the township.
- No hunting on the Loveday Basin during the week, spotlighting is permitted, on weekends No hunting between 10am and 5pm
- No hunting anywhere on the property on a Friday night during duck hunting season (this includes spotlighting)
- Hunting over the Easter long weekend is not permitted, the property is closed to shooting.
- Spotlighting to be concluded by midnight
- Buffer of 200 metres be put in place for the Eastern Boundary (Loveday township side) for any spotlighting, all shooting must be concluded by midnight at that Police will be notified prior to the event
- Respect Other hunters and the property boundaries
- Respect neighbouring areas—the property does have neighbours in close proximity
- The animals— don't shoot unless a humane result is possible and you are sure of your target
- Observe all posted signs and warnings
- All empty casings and litter to be removed from the property, exercise care when smoking.



## Membership Policy

### **Purpose**

To achieve the sustainable development and management of our wetland the following membership policy has been implemented.

### **Context**

Barmera Moorook Field and Game Inc (BMFG) manages the loveday wetlands complex in accordance with its constitution.

Membership to BMFG is via its parent organisation Field and Game Australia (FGA). To be a member of BMFG a person must join FGA and request BMFG as its member organisation. Historically the majority of activity by members at the loveday wetlands is during the duck season and revolves around members hunting ducks.

Management of the wetland however is a 365 day a year activity. Consequently the BMFG committee seeks to actively encourage member participation. To manage the property BMFG committee plans to hold 2 to 3 working bees per year to complete tasks such as fencing, weed control, rubbish removal, habit improvement, pest control etc.

BMFG has a limited source of income mainly driven by membership fees (note only a small portion of fees paid to FGA is deposited to BMFG, the majority remains with FGA to cover things such as insurance). The club has undertaken other fund raising activities such as pursued government grants in one form or another, held dog trials, completed waterfowl identification training and shotgun education training and other fund raising activities.

BMFG has identified a number of capital works that are required to improve the long term sustainability of hunting on this property.

1. Fencing – BMFG needs to gain control of the property so the wetland can be sustainably managed. Currently a large proportion of the property remains open to the general public. To gain active control of the property fence lines from the committee camp grounds to Blackfellows creek and the old Loveday Pumping Station to the Causeway are required. Estimated cost > \$20,000 each
2. Channel cleanout – The channels that feed the big mussels need to be cleaned out so water can flow freely. Likewise Blackfellows creek has become choked with Kubungi and needs cleaning to allow water to flow through to the evap basin.
3. Recently an opportunity to purchase a property adjacent to our lease arose. Such a purchase would make for an excellent club base. Unfortunately, BMFG was not in a financial position to take this opportunity hence it was allowed to pass. Estimated cost \$70K.
4. There are numerous other smaller capital works such as nesting boxes, native vegetation planting, signage and the likes.



# Revegetation to combat salinity

Throughout the years the club has performed many conservation projects, the clipping to the right shows one of them. This is one of the original revegetation programs carried out by the club; it aimed to both reduce salinity and provide better habitat around the wetland.

Despite man's interference with the environment, which has led to loss of natural vegetation, there is a major counteracting revegetation scheme developing at the Loveday Evaporation Basin.

The Barmera-Moorook Field and Game Association aims to revegetate selected areas of a 2000 hectare property which they presently lease.

Vegetation clearance in the early 1940s and soil salinisation around the shoreline of the Loveday Evaporation Basin since 1972 has left very few trees and shrubs in the area.

SA Field and Game Association research officer and BMFGA member, Mr Tony Sharley, says BMFGA members will voluntarily plant 5000 seedlings mid-year and the project will be on-going.

Ultimately, revegetation will reduce soil erosion and provide an improved waterbird

habitat by giving shelter, food, and suitable areas for breeding.

The Loxton Field and Game Association has already been successful in establishing trees around Noora Evaporation Basin.

Mr Sharley has carried out research for more than two years, under a grant from the Wildlife Conservation Fund, to determine the factors which affect the ecology of waterfowl in Riverland wetlands.

Part of the research has included a study to determine the effects of cattle grazing on waterbird habitats.

Two fence enclosures were erected in June 1986 to prevent cattle from grazing on part of the shoreline vegetation around Loveday Evaporation Basin.

The study has shown that cattle are removing sedges and grasses which are an important source of food for waterbirds, as well as destroying young trees that have been planted by BMFGA members.

The cattle would be removed from the

property in June, when the seedlings would be planted, Mr Sharley said.

The members, who manage the property, have been laying irrigation pipelines, and constructing rabbit proof fencing, in preparation for the tree planting.

## High Salinity

Overcoming the salt problem has meant selection of salt tolerant species for a trial planting along the shoreline.

The most successful species have been *Melaleuca halmaturorum* also known as Salt Paperbark, *Eucalyptus sargentii* (Salt River Gum) and a Western Australian Mallee, *Eucalyptus spathulata*.

"The land around the Loveday Basin is highly saline because of shallow water-tables and therefore very salt tolerant species had to be selected," Mr Sharley said.

The *Melaleucas* have proven most popular

close to the water's edge where the salt is most concentrated.

Eventually as the trees grow, they may even lower the water-table and thus reduce the amount of surface salinisation.

## Wetland

Mr Sharley explained that before the Locks were built to regulate the River Murray, Loveday Swamp (now Loveday Evaporation Basin) was a seasonal wetland, highly productive in plant, bird and fish life including yabbies, mussels, and the Murray Cod.

Since 1972, when this natural depression was turned into an evaporation basin, it has remained permanently full, increased in salinity, and become much less productive.

Revegetation of the land around the Loveday Evaporation Basin is only the beginning of a series of projects by the BMFGA to improve the wildlife habitats in the area.

By  
Debbie Drummond

SA Field and Game Association research officer, Mr Tony Sharley has been carrying out research for two years to determine factors affecting the distribution and abundance of waterfowl in Riverland wetlands. The results will ascertain measures to be taken to improve waterfowl habitat.

The Barmera-Moorook FGA have undertaken a revegetation project in the Loveday Evaporation Basin to counteract the loss of natural vegetation due to salinisation.







# Hunter organises important duck ecology study

By Chris Kenny

A Riverland duck hunter has begun a hunt for facts which will lead to better management of waterfowl in the area.

Keen shooter, Mr Tony Sharley, of Loxton, has been busy studying ducks of late, as his sights have been aimed at discovering what most affects duck numbers in the Riverland.

Mr Sharley received a 7500 grant from the Wildlife Conservation Fund to conduct the study of factors affecting the ecology of waterfowl in wetlands (in particular, Riverland evaporation basins).

The Wildlife Conservation Fund is contributed to by hunter's licence fees — so the study is an excellent example of hunters contributing to the conservation of their prey.

And many local duck hunters and bird lovers are helping Mr Sharley conduct the study.

Mr Sharley is a member of the Barmera-Moorook Field and Game Association and the study centres largely on the Loveday

Swamp area, which the BMFGA leases.

Part of the study, a bag survey and questionnaire on the opening morning of duck season, required the co-operation of all BMFGA shooters and Mr Sharley was pleased with the response because most shooters returned the questionnaire.

The Department of Environment and Planning, National Parks and Wildlife Service, Department of Fisheries, E&WS Department and Department of Lands have supported the study which Mr Sharley says will demonstrate that the BMFGA has a responsible attitude toward waterfowl conservation and management.

The study has four parts, each examining the affect of various factors on waterfowl populations. The factors to be studied are; water levels and quality, open season, cattle grazing, and European carp.

Mr Sharley believes the study will "provide information for the responsible management of waterfowl populations".

He explained this week how research had shown that duck hunting had little or no effect on the overall duck population.

This was because the open season was timed to occur when duck numbers were at their peak — so although many ducks would be killed, it would be no more than would die by natural attrition anyway.

Mr Sharley said the reproductive potential of ducks was reduced by increases in population density.

In other words, unless ducks are culled either by natural measures like starvation or by hunting, they find it difficult to breed successfully.

Research had shown the number of ducks which survived to breed the next season remained about the same despite hunting, said Mr Sharley.

This is the commonly accepted rationale on which the management of most prey species is based.

At present Mr Sharley is busy banding birds for the open season part of the study.

Using nasal saddles of different colours he and his keen group of helpers have been able to observe duck movements between hunting areas and the sanctuary of the Berri evaporation basin.

The saddles are a relatively new method of bird banding which are easy to see and cause no distress to the birds.

Bird censuses, taken with the aid of local experts, will show how many birds are killed in



Joe Mack, left, Tony Sharley, centre, and Allan Leitch have two ducks at the Berri evaporation basin. The ducks have been fitted with nasal saddles for later identification.

the open season, how many survive and how many move away from hunting areas.

To study the effects of European carp on waterfowl populations Mr Sharley intends to drain a swamp at Loveday and refill it, excluding the carp.

He will then be able to compare vegetation growth and aquatic life between carp-infested and carp-free waters.

The cattle grazing study has begun with the erection of exclosures to keep cattle out of certain areas so a comparison can be drawn between grazed and un-grazed areas.

Several government departments and authorities have already shown interest in Mr Sharley's study and are keen to see the results.

The completed study

will be of special relevance to the study area but should also be a useful guide to management problems in other parts of the river system.

Whatever the results of the study, they will be scientifically and accurately compiled, as is demanded by the Wildlife Conservation Fund.

They will not have been "doctored" to give conclu-

sions to justify hunting. If the open season seriously depletes Riverland duck numbers, Mr Sharley's study will disclose just that.

It is a blow to those who downgrade duck hunters that Mr Sharley and many other hunters are prepared to donate their time and expertise to conduct such a professional ecological study.

Hunters have been a part of waterfowl research for many years and BMFG is no different. By using hunter bag surveys, and the help from hunters to identify birds, information can be collected to further the research into native waterfowl. As well as research into ducks, the club has also facilitated research into the effects of grazing, and the effects of carp on ecosystems.



# Collaboration and Partnerships have always been how BMFG has managed this wetland



The Advertiser, Thursday, September 1, 1988 37

## Test project started in bid to beat Murray salinity problems

A test project to revegetate a highly saline area near Barmera is under way.

If successful, the project could be adapted to other highly saline areas along the River Murray.

Vegetation clearance and rising soil salinity levels in the Loveday Evaporation Basin began after the area was cleared in the 1940s and has risen markedly since the early 1970s.

However, the basin may be revived through the help of the Barmera Moorook Field and Game Association, SAFGA research officer Mr Tony Sharley and a \$12,600 grant from the Murray Darling Basin Commission.

The revegetation project involves plan-

ting \$2300 worth of selected salt tolerant native trees in a five-hectare area.

A two-kilometre rabbit-proof fence and the installation of a drip irrigation system also will be included.

A team of volunteers from the Australian Conservation Trust will come from Victoria in mid-September to plant the trees and will be paid for their work.

Over the past four weeks, some Field and Game Association members have started preparing the area for planting.

Mr Sharley said there was an extensive salinity problem in the region which killed many trees in the early 1970s.

The three main aims of the project were to revegetate the area by planting the trees, establish a habitat for wildlife and lower water table levels in the area.

Planting will start on September 17.

8—"THE MURRAY PIONEER", Friday, October 7, 1988

## Volunteers work on Basin scheme

Progress on the Loveday Evaporation Basin Scheme is well under way, thanks to a tremendous amount of help from the Australian Trust for Conservation volunteers.

Two groups have been working on the project for a fortnight each, and have completed most of the installation work on a rabbit-proof fence, which will surround the thousands of native trees being planted in the basin.

The Trust was only formed recently by a Ballarat farmer who had the idea of helping young people spend time in farming areas and in doing so, helping farmers.

Since the idea was formulated, young people from all over Australia and even Britain and America have given up

some of their time to help.

Their main aim, apart from gaining valuable experience, is to help farmers who may be having difficulty coping with problems such as salinity and soil erosion.

The second group of nine volunteers have been working on the Loveday Evaporation Basin Scheme for the past two weeks, and apart from having finished off the rabbit-proof fence, they have so far planted over 1300 native trees, completed a dam and installed a drip system.

The volunteers have also had a lot of help from the local community and the Barmera-Moorook Field and Game Reserve.

A spokesman for the group said the Trust received no Government funding so had to rely on money received from the

farmers and organisations they helped.

Among the group are some teenagers from the Californian Conservation Corp, who decided to get a taste of Australian life for a short time.

Three British teenagers are also among the group and have had to pay for the privilege of coming to Australia to see some of our farming techniques.

The Australian Trust for Conservation volunteers is certainly a worthwhile organisation, helping both young people and farmers in difficulty, but unless they receive more funding, particularly funding from the Government, the good work provided by the volunteers could be short-lived.



**MANY HANDS MAKE LIGHT WORK:** With help from two volunteer groups, local community members and the Barmera-Moorook Field and Game Reserve, work on the Loveday Evaporation Basin is nearly completed. The second group of the Australian Trust for Conservation volunteers planted more than 1300 native trees and add the finishing touches to one of the sections. The group is also partly responsible for the erection of a rabbit-proof fence and the installation of a drip irrigation system.



BMFG has been a leader in change. Much of the original proactive work investigating the impact of lead shot on waterbirds was conducted at Loveday. Tony Sharley, a well know scientist and BMFG member, completed this important work that helped hunters transition from lead to non-toxic steel shot.

Hunters are adaptable with a proven track record of change when it comes to improving the sustainability of hunting.

## Loveday surveys assess lead shot in ducks

Surveys are being carried out in the Loveday Swamp area aiming to determine the availability of lead shot to ducks, as part of a continuing waterfowl ecology study.

In April 1986, a number of Black Swans and Magpie Geese died at Bool Lagoon in the South East, as a result of lead poisoning caused by ingested lead shot.

This has led Mr Tony Sharley, SA Field and Game research officer, to find out if ducks in the Riverland are ingesting lead shot.

Mr Sharley has carried out research for more than two years to determine what factors affect the distribution and abundance of waterfowl in Riverland wetlands.

The lead shot survey is part of this study.

The Wildlife Conservation Fund which is made up of hunters license fees (an example of fees assisting research to, in turn preserve the sport), has provided a \$19 500 grant for Mr Sharley's research.

Many local hunters, who are members of the Barmera-Moorook Field and Game Association, are assisting in the lead shot survey.

### Mud Sifting

The survey involves taking mud samples from the swamp

and sifting it to determine the number of lead shot pellets in a specific area.

Mr Sharley explained that ducks searching for grit to line their gizzard could often mistakenly ingest the lead pellets, which had been fired into the swamp during the duck hunting season.

For example, one cartridge contains more than two hundred lead pellets, he said.

Unfortunately, ducks can not distinguish between grit and lead shot, which they ingest while feeding on the bottom in areas with shallow water.

The study aims to quantify the amount of lead shot and grit in the known area, and to record its depth in the mud and the depth of the water.

The results will ascertain the availability of the lead pellets to ducks.

### Gizzards

The study will also determine the incidence of lead shot in the gizzards of ducks, and which duck species have the highest incidence.

The outcome of such research, if there are found to be high quantities of lead show which are easily available to ducks, may be to introduce steel shot (which is not poisonous), and to scatter grit in shallow areas for the ducks to seek out.

However, these measures may not be necessary.

Mr Sharley stressed that

before any decisions are made regarding the lead problem, the availability of lead shot in hunting areas must be fully understood.

Studies have been conducted at Bool Lagoon by SA National Parks and Wildlife Service, Mr Sharley said, to determine the incidence of lead shot in waterfowl.

"These studies have shown that between 12 and 20 per cent of Black Ducks had lead shot present in their gizzards, and about 25 per cent of Black Ducks had high levels of lead in their blood.

As a result, steel shot is now compulsory at Bool Lagoon.

"From our results so far, about seven per cent of Black Ducks at Loveday, had lead shot in their gizzards."

Mr Sharley said the SA National Parks and Wildlife Service is also measuring lead levels in the blood, livers and wingbones of Black Duck.

Members of other regions of the SA Field and Game Association have been carrying out mud and gizzard sampling at Katarapko Game Reserve, Moorook Game Reserve, The Coorong, and Woolenook Bend Game Reserve.

Before the 1988 duck open season, the SANPWS will make a request to local hunters who are not members of the SAFGA, to keep all duck gizzards, especially Black Duck, so that they can be analysed.







Tackling a tree planting and cumbungi conservation program at Loveday recently were Natalie Raven (left), Matt Raven, Otis Nading, Seth Hill, Christian West, Greg Hill and Don Mount. PHOTOS: supplied



Don Mount and Robert West making good use of a post hole digger.



## Conservation program's new roots at Loveday wetlands

Members and friends of the BARMERA MOOROOK FIELD & GAME have provided the following report on a tree-planting and cumbungi "conservation pilot program" for the Loveday wetlands.

THE first week of the South Australian school holidays saw a working group descend upon the Loveday wetland complex to execute a couple of pilot programs that are part of the club's environmental development plan.

Over the two days, three objectives were identified:

Objective 1: Plant out 200 trees in different locations to cover a range of species and soil types.

Objective 2: Experiment with some cumbungi-clearing techniques.

Objective 3: Have some fun in the process.

LIKE most clubs everything starts as a good idea.

Then eventually someone picks up the idea and does some work on it, and others in the clubs see the vision and effort and pitch in to lend a hand to make it happen.

In the case of this tree planting and Cumbungi clearing project, it was an initiative of junior club members Christian West and Seth Hill.

Through school they are members of native plant club that is a volunteer grower for the Trees for Life program.

Christian and Seth selected six species of trees, all native to the

area, with each one having characteristics of interest for the property.

The largest wetland at Loveday is a former evaporation basin, to which ground water from local irrigation centers was pumped to control salt.

While this no longer occurs, the ground water around the basin remains saline.

The basin has the lowest density of trees around it, hence this pilot is aimed at building the biodiversity of the basin.

This part of the pilot is searching for tree species that will survive in this area.

The species used were:

□ River cooba (native willow):

Common along the river fronts of the property but only lightly scattered on the basin. Has high salt tolerance, hence a good target for the flood plain

□ River cox: Endemic to the basin but up away from the high-water line. Again, good salt tolerance and future hollow former.

□ Red and white mallee: Not common on the property but an excellent flowering plant, hence good for bees and future pollination on the property. Good low-rainfall plant, hence targeted for the sand hills.

□ Dryland tea tree: Has appeared on the high-water line of the most recent (2016) flood, hence this pilot has aimed to infill this natural re-growth.

□ Hakea wattle: Another low-rainfall species targeted for the sand.



THE boys ordered the seeds, which came complete with native potting mix and plastic slips to grow them in.

In December they then gave each of the seeds the appropriate pre-treatment, that is hot or cold-water soaks before sowing.

Once struck, they were thinned, then grown out before planting in July. Of the 300 seeds planted approximately 200 seedlings were produced.

With the seedlings brought to the property the diverse skill sets and generosity of the club members came to the fore.

One of the juniors brought up a few friends and the extra labour was very much appreciated.

Another member is a retired park ranger who may have planted the odd tree before – 1100 or so – and his knowledge-sharing with us, particularly the juniors, was first class. He very much helped guide the "where to" and "how to" planting decision process.

One member knows a thing or two about water and turned up with

a water shuttle (trailer with bulk full of water), which was just brilliant.

Another member is a local tree surgeon who provided the working group with a post hole digger, which also proved invaluable.

WE started in the sand on the water's edge and the put in the 30 odd coobas quick smart.

We then moved along and up a bit to the high-water mark, where we in-filled the dryland tea trees.

Next we moved up a little more and put the box trees in, with the aim of extending the natural box line down a little.

So far it was all sand and too easy. As one group planted another was coming along with the shuttle and watering them in and progress was excellent.

Next were the dryland species, mallees and wattles. We moved up the to the "sand hill" which wasn't exactly sand. It was more a combination of rock, sand and hard clay. This was where the post hole digger turned the impossible into

possible. A shovel was never going to mark this dirt.

By day's end all were in and watered.

ON day two we headed off to give the seedlings another drink, then moved onto the next activity, to trial clearing some cumbungi.

Over the past few years, the cumbungi has started to take over parts of our wetland, hence the club has resolved to clear some. Ideas are great but the how is the tricky part.

Enter the local tree surgeon, complete with brushcutter and saw blade – magnificent.

We soon put it to good use and cleared the boat ramp in no time at all. The concept was proven and specification developed for the club to purchase a machine; we just need a little more power for under-water work.

The overgrown wetland is now entering a drying phase, so we plan to clear what is required during the next two years.

A massive thanks to Don for his time and knowledge, Ben for the brushcutter and post hole digger, Brad for the water shuttle, Seth, Natalie, Otis and Matt for doing most of the work and provided all the enthusiasm and energy, and lastly Christian and Jordan for growing the trees.

There's nothing like a team effort to make a good idea a reality. It's great to have junior members who are passionate about the wetlands.



A modern example of BMFG conservation work. The 2021 club members had the same passion as the 1967 group and came together for a tree planting working bee, planting 200 trees of various variety's along the wetlands edge, and sandhills. In this case the initiative was driven by the younger members. BMFG has always been a progressive organisation actively encouraging youth and allowing them to be part of the club decision making processes.



# Wetting and Drying Management through Structures



Wetting and drying of the property's wetlands are managed through structures built across the various creeks which let water into and out of the property.

This photo from 1994 shows wooden boards and plastic sheet being used to make a simple weir that keeps the water from entering the wetland.



# 1994 Full Dry

This Aerial photo shows the property completely dry in 1994. A full dry is typically for 18 months to 2 years.

The Basin and the Mussels have separate feeder creeks with structures so can be dried independently with the Basin typically dried more frequently than the Mussels.

The ground water beneath the Basin is saline and the Mussels are 3m deep relative to the basin which is approx. 1.5m deep. Consequently, the Mussels are not dried unless the basin is also dry else the saline ground water is pushed into the mussels. Pre-locks the Basin would always have dried before the Mussels simply due to depth.





# Flowers emerge from the dry

When the Basin dries a small plant emerges and covers the swamp floor with beautiful purple flowers. The ground cracks as it dries allowing the air in to oxygenate the soil. As the water slowly returns these plants can change to live underwater helping establish an underwater ecosystem. When the wetland is submerged the carp grow and eventually destroy the underwater flora and another dry is required to remove the carp. The fitting of carp screens to the inlets is crucial as only small carp can enter which allows time for the flora to establish before the carp grow.





Feb 2018 Evaporation Basin. Following the flood in 2016 Loveday Wetland complex held approximately 10,000 waterbirds.





# Fire 2008 changes the landscape



You can really see the immediate impact fire has comparing the two photos from before and after the fire. Regardless though if it is flood, fire or drought the club and property have always survived and recovered.



# The Flood



The 2022/2023 floods saw the entire property flooded with > 5 meters of water. The cattle grid at the entrance to the property became the community boat ramp and many many yabbies were caught on the property. The photo to the left is where cable fence goes from the cattle grid to the normal water level. The photo on the right shows all that is left of Manning Hill.





# Minutes from 1970 discussing the procurement and erecting of 8 nesting boxes



Meeting at P. Schramm  
Apologies C. O. Tschupka  
L. Dunstan  
L. Barnes  
J. Gordon.  
P. Schramm discussed business from  
of previous meeting. Reported prog  
on plans etc of fish hatchery &  
it would follow the plan of Dunstan  
P. Schramm to contact Council Clerk  
Mr Barber and arrange lease of  
Program of shield shoot discuss  
arranged.  
Letters to be sent to Barmera  
Barmera Evop B.P. Motors  
for trophies  
It was resolved that pullers be  
for the day at normal rates  
Moved B. Schramm that region ac  
invitation from R.S.L. to atten  
mixed social evening at R.S.L.  
rooms on the evening of Friday  
7th.

That cards should be standardized from year to year.  
ERECTING OF NESTS.  
Eight nests sent to Pennington Club to be used at Wide  
Waters. B. Dixon to erect nests at North Lake. The 17<sup>th</sup>  
October has been set as day for erecting of nests & checking  
all that have been put up. Moved J. Gordon, seconded by  
B. Dixon. Meeting time 10. a.m. at P. Schramm's.  
Next meeting to be early November.  
Meeting closed 10:20 p.m.  
J. Schramm



# Today's Henhouse Programs



While the property has many hollows, competition for nesting sites is high with non waterbirds species such as parrots, galahs, correllas and rosellas all using the hollows. Throughout our history nesting box program have been run to reduce competition for nesting sites. The latest in nesting site technology, is the henhouse constructed from wire mesh and straw, being fast and simple to construct as well as proving very popular with waterfowl, supplied by FGA these are an optimal choice.

Mum and Dad with 8 teenage grey teal on the western bank of Dons Swamp.





# Recent Nesting Box Program

Traditional wooden nesting boxes are still used, these come flat packed from FGA or members have built their own versions. Nesting box construction/installation days are well supported by members with significant involvement from the younger club members.





# Today's Challenge with Wetland Management



With the benefits of wetting and drying now understood DEW has invested in structures throughout the Riverland to match and generally improve on those pioneered by BMFG. Today's plans see DEW conducting weir pool raising to flood wetlands and use structures with carp screens to let water in or keep it out. The weir pool raising planned for today are higher than our structures can manage hence we are working with DEW to improve our structures.



Site options profile #L9

## Loveday Mussel Lagoons

# Wetland Complex - Draft

### Lock 3 Master Plan




**Location:** Weir Pool 3, River Chainage Markers 455 to 447 km  
**Land Tenure:** Private landholders

**Wetland Size:** 157.2 Ha  
**Normal Pool Level:** 9.8 mAHD

PROPOSED OPTIONS	
<b>Option #1:</b>	<b>Promote and enhance wetting and drying wetland management outcomes, by allowing for the independent management of the North and South Loveday and Mussels Lagoons.</b>
<b>Description</b>	The central causeway structure and associated pipe culverts, dividing the North and South Loveday Lagoons provide an opportunity to manage these two lagoons independently. The presence of acid sulfate soils (ASS) in the North Lagoon has limited wetland management within the basin with prolonged lowered water levels, at times resulting in an odour nuisance to the surrounding community. Therefore, to achieve outcomes in the South Lagoon associated with longer drying periods and flexibility for managing for ASS in the North Lagoon, replacing or upgrading the existing structure with the ability to regulate flow is required. A review and potential upgrade of the inlet structure via the North Lagoon would also enhance management flexibility and outcomes.



# Always searching to improve our Wetland



These project minutes from 1999 discuss the same problem we are trying to solve today with the lock three master plan. Installation of carp screens and gates on the causeway to allow the southern basin to dry independent of the north. This will improve bird and fish habitat in the south and minimise odor impacts in the town of Cobdogla when the northern basin's acid sulphate soils are dried.



## LOVEDAY AND COBDOGLA SWAMPS

### PROJECT BRIEF

- survey culvert pipes through causeway between Loveday and Cobdogla basins
- provide design and costing for installation of fish screens on the 5 culverts through the above mentioned causeway
- survey and prepare design drawings and costings for the construction of a box culvert regulating structure on the outlet channel from Cobdogla Swamp, just upstream of the existing outlet regulating structure. The regulating structure is to incorporate 3 openings each 1.5m wide x 1.2m deep x 4.88m long box culverts with fish screens and stop log or sluice gate type control

Survey data should be provided in plan and sectional views.

Field Inspection-11/1/99  
Loveday and Cobdogla Swamps

**Present:** Peter Schramm (PS, caretaker, Loveday), Ken Smith (KS, Ken Smith Technical Services), Gary Schultz (GS, SAWater, Berri), Bruce Weir (BW, DEHAA, Berri), Rod Ralph (RR, Central Irrigation Trust), Scott Nichols (SN, Wetland Care Australia).

### Central Causeway:

- 5 pipes present NOT 3 as stated in Nichols (1998)
- pipes are working at a third of their capacity (PS)
- TREAT BOTH BASINS AS ONE WATER BODY, only a fish screen is needed on the central causeway (PS)
- concern that any changes to the hydrology of the basins may be detrimental to the causeway (by changing the conditions to that which the causeway was designed for-clay in the causeway may dry & crack irrigation pipes/electricity lines). Would like an engineering report before any proposals for implementing controls to dry out one side only (RR). It was decided not to proceed with such a proposal.
- despite the addition of drainage water into the Loveday basin, it dried last year due to evaporation completely on the southern side of the causeway, but with approximately 0.3m on the northern side. (PS)

### Pipe Descriptions:

- inside diameter of 1.2m;
- pipe closest to mainland (#5) has some rubble near the end of the pipe (Loveday side), water flowing into Cobdogla and carp swimming into Loveday (took photo);
- pipe #4 has some logs at the Loveday end, water flowing in at half level, carp swimming into Loveday;
- pipe #3 has log blocking half on Loveday side, water is about 30cm deep close to the pipe & nearly 60cm further out, Cobdogla side blocked by Phragmites;
- pipe #2 water flowing at half level, Phragmites beginning to encroach, a small log across, carp swimming into Loveday (photo taken), Cobdogla side three quarters blocked by large cement slab (photo taken).
- pipe #1 water flowing at two thirds capacity.



# Environmental Monitoring



DEW/Landscape boards periodically undertake environmental monitoring on the property. These surveys have included salinity, tree health, water condition and aquatic life. Recently as part of the lock 3 master plan project the club assisted with survey for Turtle nests, frogs and fish. These surveys were a great example of the partnership between BMFG and government.





# Weed Control

## The significance of Spiny Rush infestation.

The accompanying photo taken 10 km east of Loveday Swamp shows the implications of an uncontrolled Spiny rush infestation. The single plant in the centre foreground highlights the weeds individual characteristics :- long fibrous needle-sharp spines, abundant multi-seed producing inflorescence, a tough persistent plant of over a metre in height. In the background stretching to the distant fence line and trees, are hectares of the same pest plant, tightly bunched, somewhat matted, near impossible to walk through without suitable protective clothing. Unsurprisingly nothing else grows amongst it.



The great thing about a club is it brings together like minded people who enjoy being together and working towards a common cause. Weeds are a part of life on any property and at Loveday BMFG typically have one working bee a year focused on weeds. Boxthorns have been eliminated from the property and spiny rush is now on the back foot.





## Barmera Moorook Field and Game Spiny Rush Control Program. 2021 to 2023

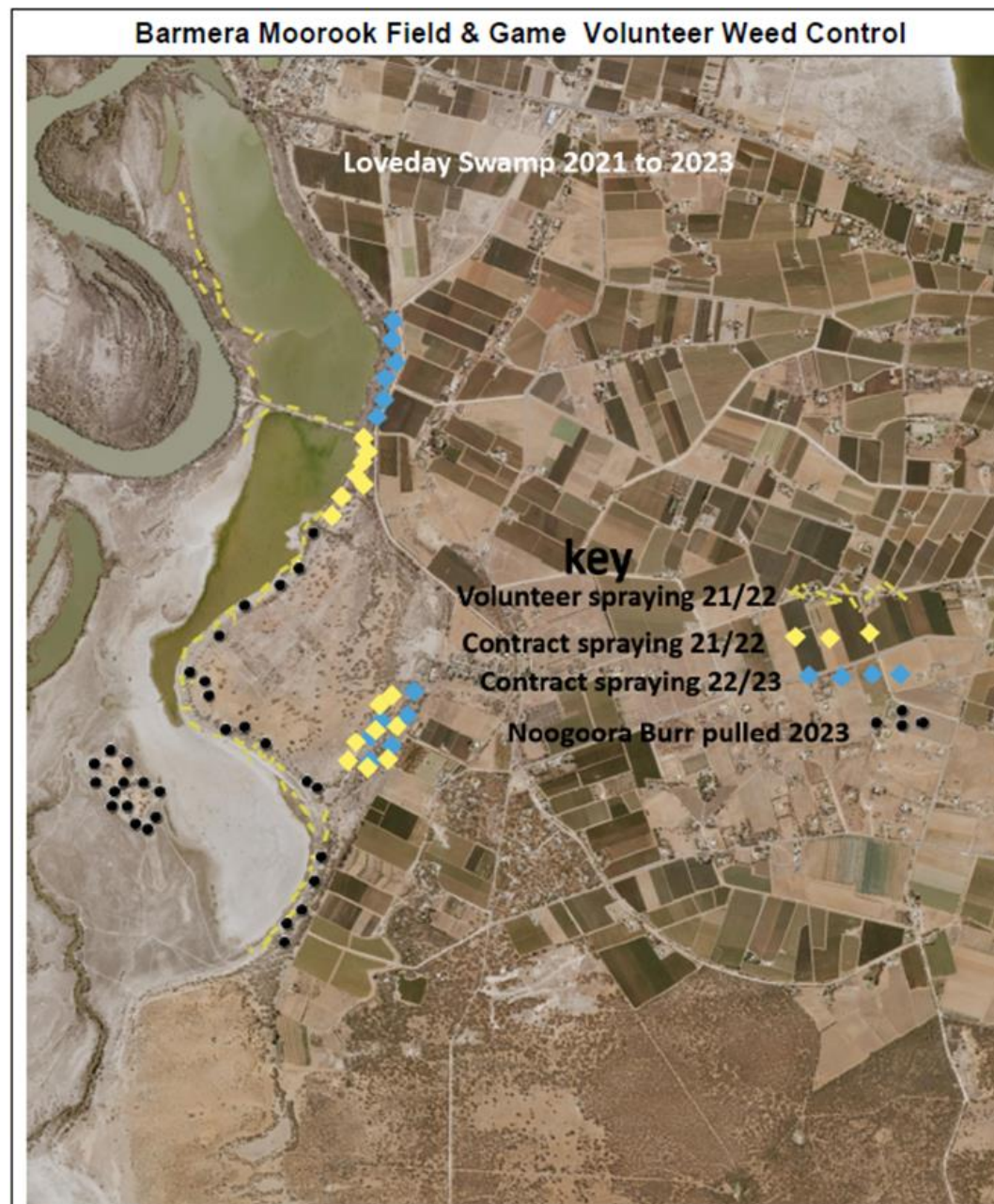
*Read in conjunction with viewing map!*

In 2021 the Committee of Barmera Moorook Field and Game decided that active steps were required to commence control measures against Spiny Rush. This pest plant was beginning to spread along shorelines and hinterlands of Loveday and Cobdogla swamps. The primary seed source of this invasion stemmed from old historic large plant infestations along the boundary of the Loveday/Cobdogla Road and Loveday township. A Grass Roots grant of \$7,600 through the Murrayland and Riverland Landscapes Board was successfully applied for. During the following 'growing season', that is October to March [when plants are susceptible to spray] through working bees and many hours of opportunistic volunteer labour, 95% plus of the pest plants on the northwestern and southeastern shorelines were eliminated. Most of these were young plants and had yet not reached seeding age. Most of the grant funds went to a specialist weed spray operator who was tasked with tackling the large, old, seed source plants along the eastern boundary. He achieved very good results.

In 2022 a Grass Roots grant of \$8,700 was successfully applied for. The initial plan of operation was to carry on from where we left off the previous year: - Barmera Moorook volunteers concentrating on 'follow up' along the swamp shoreline and hinterland while the weed spray operator continued along the eastern boundary mass infestation. It is now historical fact that the biggest Murray River flood in more than half a century commenced in 2022. Areas where spiny rush spraying occurred the previous "growing season" would end up under 2.5 metres of flood water at the peak. Due to the long hang time of the flood, high water and then boggy ground prevented much, as planned volunteer activity occurring. By the time conditions permitted the growing season was over. The flood level reached approximately 30% of the eastern boundary old seed source plants. The spray operator was able to carry out follow up on the Loveday township infestations and then continue on the unsubmerged plants along the Cobdogla Road, all with good result.

The overall flood effect was greatly beneficial to the floodplain environment. The great flush of fresh water has moved a lot of salt out of surface areas. Seedling river and floodplain Eucalypts are emerging widely. Post flood, many herbaceous native plant species have germinated, some probably not seen for years. However, Noogoora Burr, a declared weed has also germinated widely but primarily in the western areas of the swamp and is beyond remedial action. To maintain the southern basin as a reference area, volunteer labour over two days hand pulled several hundred plants. One beneficial side effect of the flood was its impact on plants sprayed the previous year. Once water receded there was virtually no evidence that they had even existed. Submerged unsprayed plants were not thus affected.

This year [2023] another successful grant has provided \$6,000 which will all be utilised by the contract weed sprayer to finish off the eastern boundary old infestations. Volunteers using the unused/stockpiled spray chemicals from the previous season will 'follow up' on all previously sprayed areas. Considerable effort will have to be put in on surveying all pre flooded areas as the likelihood of Spiny Rush recruitment from seed flood dispersal is high.





# Dog Trials



Dog trials highlight yet another community use of the property. Each August the Retrieving and Field Trials Club of South Australia uses the property for its annual competitions. This year 37 dogs were entered with the majority of entries from South Australian and Victoria. Many of the entrants are registered dog breeders and they use these competitions to test the skills of their dogs and themselves as handlers and trainers. While hunters often purchase dogs from these breeders, interestingly most of the dog breeders are not hunters, dogs are their passion in life.



Blank rounds are fired at the start of a run and the dog must remain still until the handler gives the command to fetch. Dogs that follow the handler's signals, proceeding directly to find the bird, before returning in a straight line to the handler score the highest points.





# Typical uses of the property

- The major uses of the property are
  1. Local people (members and non-members) walking themselves and their dogs each morning.
  2. Members working on environmental projects such as rubbish removal, weed removal, campsite development to keep camping in defined areas, track maintenance to keep people on defined tracks, and wetting and drying.
  3. Club members camping and hunting mainly ducks in season but rabbits and feral pigeons throughout.
  4. Members and local community camping and fishing targeting callop in the river and carp in the wetlands.
  5. Dog trials.



# Camping and Relaxing



Adventure in one of our creeks



Families have always used the property, it is a great place to camp with kids and teenagers, being able to bring the family dog makes it a holiday to remember. In Jan 23 this entire area in this photo was under water.



Fishing in the school holidays is always popular





# Hunting



While not the focus of this document our members love to hunt and collect wild foods from the property. We each have different whys for hunting but all of them include food, friendship and a cultural connection.



Loveday mixed bag, Feral Pidgeon, black duck, grey teal and pink ear



When the water is high it is fun to use the tinnie to get to some difficult places



Junior committee member Christian with a pair of teal



Junior committee member Seth with friends and a rabbit each