



Olive Hill Project Site - Morialta Conservation Park.

It was here that the groups first poject commenced in 1986 and since, a great deal of work has been undertaken. As this is a Group Project Area we are keen to continue to carry out our program of rehabilitation and weed control in our area but our goal would be more easily achieved if we had some extra helpers at times. If you can occasionally lend a hand we would be pleased to see you and show you the progress being made at Olive Hill. The following is part of a fact sheet I produced for Pembroke School &



Rostrevor College geography students. I hope you too find the information contained herin of interest.

Graham Churchett

A Volunteer Revegetation Project

Explanatory Note.

Officially, this area has no name but due to the heavy infestation of olive found here when the Friends of Black Hill and Morialta first began its revegetation program in 1986 it was appropriate to give it the name Olive Hill.

Introduction

The Olive Hill Revegetation area rises to a height of 250 metres and is found in the Morialta Conservation Park in the foothills of Adelaide Hills.

It is approximately 8km from Adelaide and adjacent to residential developments on its western and south-western boundaries.

Olive Hill is unfortunately typical of many areas adjacent to settled areas where native vegetation has been removed due to agricultural or horticultural pursuits then abandoned. Agricultural activities modify and increase soil fertility enabling introduced plants (weeds) to quickly become established and take over any remnant native vegetation which may still exist.

In addition to residual weed populations found on site more weed species are introduced into such areas by the wind, mud on vehicles, on animal fur and by other vectors. Introduced animals such as Starlings, Black Birds and Foxes, which eat olive fruits along with other weed species, disperse seed widely in their scats.



Fox Scat contents observed in the Morialta and Black Hill Conservation Parks.

Seeds	Other
Grape	Animal Fur - possibly possum
Blackberry	Animal Fur - Mouse/small mammal fur
Boneseed	Small bones of small mammals
Plum	Small bird bones. Balloon (one occasion)
Olive	Feathers of small birds.

Spread of Olives

It has been recorded that olives were sparse in 1949 but by the 1980's they had become well established. Thickets of olives form a dense canopy which obliterates native vegetation, prevents it regeneration, and due to the high oil content presents a high fire hazard.

Weeds

Among the most time consuming jobs in managing a revegetation area is the removal and control of weeds. The problem is that you have to choose the right method of removal so that native species are not damaged. The cost of weed removal can be high so volunteers are always very welcome.

Olive Hill Soils and Remnant Native Vegetation

Soils

Mainly clay/loams which are variable in fertility overlaying limestone.

There is some quartzite outcropping.

Vegetation - dominant native species.

To the eastern and northern aspects we find Mallee box (*Eucalyptus porosa*) and in the southern and western areas there are stands of South Australian Blue Gum (*Eucalyptus leucoxylon*)

Project History and Future Actions

In 1986 the Firends of Black Hill & Morialta Inc. held its inaugural meeting and adopted this site for its first project. The aim was to totally reomve all olives, replace with endemic vegetation and continue to monitor the site to keep olives and other weeds under control. It is a long term commitment but unfortunately that is what it takes to protect and enhance our natural environment. The following steps were taken to bring the area to its present stage.

- A survey of remnant species found that only 55 were recorded over a period of 5 years. Many species were poorly represented and in a number on instances only one ot two specimens were recorded.
- In 1986 the Firends of Black Hill & Morialta Inc, along with the National Parks & Wildlife Service, commenced removing olive trees. The service employed heavy equipment to rip out trees while volunteers adopted cut & swab chemical methods.
- Chemical used was Garlon at a rate of 1:30.
- Great care was taken so that remnant species were not damaged.
- When sufficient area was cleared, particularly on the western slopes, planting commenced and each year plantings took place using tube-stock raised by the group from local and nearby seed sources.

note:- Only local seed which is genetically suitable is used in all of the group's project areas.

- olive removal has continued at the summit and down the northern slopes. Planting has been carried out each year and will continue until the entire area is planted out sufficiently to enable natural revegetation processes to continue to restore flora and fauna communities.
- Ongoing weed control will be necessary but we will not have to deal with large trees and dense olive thickets which we originally encountered in 1986.

Remnant Fauna

Native species		
Western grey kangaroo	Macropus fuliginousus	Rarely seen
Echidna	Tachyglossus aculeatus aculeatus	Occassional vistors
Koala	Phascolarctos cinereus	Rare sighting
Bats	Various species	Frequently seen
Reptiles		

Coastal bearded dragon	Pogona barbata		
Common grass skink	Lamppropholis guichenoti		
Greys skink	Menetia greyii	Reptile fauna relatively	
Marbled gecko	Phyllodactylis marmoratus	common	
Legless lizard sp			
Common brown snake	Pseudonaja textilis		
Introduced species			
Rat	Rattus rattus	Common	
Mouse	Mus musculus	Common	
Feral/domestic cat	Felis catus	Occasional	
Fox	Vulpes vulpes	Occasional	
Rabbit	Oryctolagus cuniculus	Occasional	

Birds - 30 species have been recorded including					
Rainbow lorikeet	Port Lincoln parrot	Galah			
Little falcon	Black shouldered kite	Australian kestrel			
Grey currawong	Striated pardalote	Adelaide rosella			
Tawny frogmouth	White-browed scrub wren	Grey fantail			
Rufus whislter	Willie wagtail	Yellow-faced honeyeater			
Peregrine falcon					

In our Parks and here in the Olive Hill Revegetation Area weeds, and even some native pants from other parts of Australia, **do not belong**.

One such native is the Sugar Gum (*Eucalyptus cladocalyx*). Some have been removed near the boundary to the north and they line the roadway and flank the valley slopes right up into the main valley of the Morialta Conservation park. These plants are endemic to Kangaroo Island, southern Flinders Ranges, near Port Lincoln and Eyre Peninsula.

Other Olive problems

While a number of plants and dusts cause a variety of respiritory problems, it has also been found that olives are one of the worst allergy causing agencies and many people who suffer severe asthmatic symptoms do not realize that olives could be the cause.

Biological Control

(Another method of weed control) Sometimes Government agencies have employed insects or plant diseases to control some weed plants and a beetle which has been trialed in Morialta is the Boneseed beetle from South Africa. However, a great deal of care and testing needs to be done before releasing such creatures as they may become a bigger problem than the weeds themselves. eg the Cane toad in Queensland.

A list of weeds common in the Olive Hill Revegetation Area					
African daisy	Onion weed	Kikuya			
African boxthorn	Salvation jane	St Johns wort			
Allepo pine (now all removed)	Bridal creeper	Rhamnus			
Blackberry	Soursob	Scabiosa			
Boneseed	Three-corner jack	Cotton bush			
Olive	Apple of Sodom				

Summary

As you can see a lot of hard work and dedication has and is still being put into the Olive Hill Revegetation project. Fauna and flora lists show that the biodiversity of the area is extremely low but in time we can make the difference.

Why not join the Friends (contact.htm) - we would appreciate the extra help.

2012 Project Report

Due to the increased focus on the 4th Creek project site, we have had only one working bee at the Olive Hill project site this year.

Despite this, it was an enjoyable and productive day, with repairs being made to the fencing, that excludes rabbits from a section of the project site. In this fenced off area, we found a several colonies of plants, that appear to be Lagenophora huegelii (pictured), however this identification is yet to be confirmed. I am very surprised to have found a plant in such large numbers that we don't have on our plant list. Hopefully we won't find out that it has been mis-identified and is actually a terrible weed!

While we were inside the fenced area, we hand pulled a number of Boneseed plants, that were in flower. Outside the fenced area, we found Vittadinia blackii and Lotus australis, and worked on controlling the olive regrowth. A big thank you to Ann, Bernice, Colin and Russell for their work on the day.

2010 Project Report

Due to the concentrated effort on the 4th Creek project site, the number of working bees at the Olive Hill project site were reduced this year. Our main effort continues to be keeping the Olives at bay. We have found a substantial amount of Goodenia albiflora at this site, and small cuttings from these plants have been used to propagate the plants used in the Wildflower Garden this year. This year we also dealt with Acacia iteaphylla, Boneseed and African Daisy.

Thanks to Ann, Colin, Raelene, Graham, Joy, Bruce, Mieke, Maree and Russell.

John Fleming - President.

2009 Project Report

It is hard to believe another year has gone by. However, we had three working bees in the Olive Hill project site in 2009. Our activities have been focused on the woody weeds, with drilling and filling of some pesky olive regrowth, Boneseed and finally dealing with a rogue Acacia iteaphylla. Thanks to Russell and Ann for their support!

John Fleming - On behalf of the Committee



Drill and fill

2008 Project Report

What an interesting year it has been at Olive Hill. Some of our working bees have been very poorly attended, however, with the support of the Kiwanis, we are making progress again.

New techniques are being used on this project site to put an end to the Olives. Thanks to Eric de Smit, we have been introduced to the tree-popper, and this is a tool which is very popular now at the working bee. Trees too large for the tree popper succumb to drill and fill of the lignotuber.



Athelstone Kiwanis help out 29 June 2008

Special thanks to Phyl Smith from the Kiwanis for organising additional help for this project.

At the August working bee, we spied Goodenia albiflora adjacent to where we were working, and as we were packing up, I realised right where we were working was healthy clump of what appeared to be Goodenia pinnatifida.



Working bee 29 June 2008



Working bee 29 June 2008

John Fleming - On behalf of the Committee

2007 Project Report

We can certainly see the results of the controlled burn last year.

While this has damaged some of the earlier Friends plantings, it also appears to have killed the only Correas in the project site.

Regrowth of weeds is now the challenge, as not only does fire stimulate the germination of many of our native plants, it also results in the germination of many weed species.

Recent working bees have looked at the regrowth in the site, and we dealt with some Olive seedlings, Bridal Creeper, and sprayed Artichoke coming up on the edge of the project area.

We will need to work with the Department to decide the best way forward at this site, and look forward to the much anticipated Draft Fire Management plan to help inform us in the direction the Department is heading with controlled burns.

John Fleming - On behalf of the committee



Goodenia albiflora is in the foreground 16 November 2007

2005 Project Report

This year a number of working bees were undertaken and again, year 10 students from Pembroke School spent two terms removing woody weeds, planting and conducting rabbit burrow surveys. Rostrevor college too again planted in the eastern portion of the project site as part of the National Tree Day activities.

Other working bees have been directed to woody weed control and plant surveys and a total of 300 hours have been dedicted to this site this year. We have been advised that a cool burn will be undertaken from the Woodforde Track to the south later this year and whilst I am not an advocate of the practice, the decision is political so as to protect property and will take place no matter what. However, it concerns me that we are prepared to burn areas in out parks but I see the huge thickets of olive, and other woody weeds, through Skye and other sites on private land that could be the instrument of a disaster but, I head nothing from the policitical front to have landowners play their part in lowering the fire potential of such areas.

We have set up photographic markers in the proposed burn area and will monitor after the burn to assess the effects.

Graham site coordinator

2003 Project Report

This was the group's first project and commenced in 1986. Olive Hill was appropriately names as most of the area was densely covered with olives and sparse remnant native species. Over the years we have made an enormous difference here and are indebted to Pembroke School students and staff who have worked here for 16 years cutting and swabbing olives and planting. Primary schools in the Collaborative Landcare Project too have helped and this year Rostrevor College planted along the summut track. The Friends also received a grant to control woody weeds and this has been partly applied to the removal of Olives and other woody weeds in this site.



Chainsawing Olives October 2003

Graham for Friends Executive

2001 Project Report

A great deal of work has been carried out here over the past twelve months and for two terms Pembroke School year 10 students have contributed substantially to that effort.



We have ceased cutting large olive trees this year but have concentrated on regrowth and seedlings within planted areas to ensure that sites are not going to re infest. We have also planted another 520 seedlings here and while rabbits and kangaroos have eaten some plantings on the edge of the eastern section by the enclosure, others are doing well.

Don, Lola and Ann April 2001

Contract spraying is continuing when the weather permits but the latter part of this year has been frustrating weather wise.

Next year we will continue to cut large olive trees on the northern edge of the project area then plant in May to further extend our regenerative program.

Earlier plantings have now grown, and together with piled heaps of olive and other weeds, they have provided habitat for many small creatures. Insects, small lizards and spiders etc have increased, and likewise, so have other animals which prey on them.

Leaving piles of olive, rather than burning, has provided a much needed habitat as the area has little leaf litter or rock which might give small fauna cover.

This project, the group's first, is a winable site but, we must keep up the effort to achieve our goal here. I would ask every member to consider some commitment here each year, even if it is only a few hours once a year it will make a difference to our collective outcomes.

Graham Churchett - On behalf of the Friends Executive.

2000 Project Report

This was the group's first project and for 14 years we have battled Olives, Boneseed, Bridal creeper along with many other weeds and the occasional predation by rabbits on new plantings. However, in spite of these problems we have continued to plant and remove infestations so that native species, plantings and natural regeneration, can thrive. There are still a lot of Olives in the area but now they are on the northern and eastern slopes and retreating as a result of our work.

Contract spraying and cut/swab activities have also made their mark on weed populations and grant funds obtained,

will see this work continue into the future. Evidence of rabbits was found during our extensive weed



Stopping for morning tea July 2000

control programs this year and our thanks to Andy for fumigating burrows. Breaks in the enclosure were also found and repaired so as to prevent entry by any remaining rabbits.

Friends members have attended four working bees and are adopting more productive methods of weed control by spraying small to medium sized weeds. In addition, students and staff of the following; Thorndon Park, Campbelltown, Newton and Athelstone Primary Schools plus Pembroke School year 10 students, have made valuable contributions to the work we have started here. Thank you to all who participate in the ongoing work on this project and particularly to Pembroke students and other schools for their interest and time.

Erica, on behalf of the Group Executive.

1999 Project Report



Don and Ann planting July 1999

It's my second year of coordinating this project area in Morialta Conservation Project and I've experienced a mixture of some achievements and some frustrations. At two of our working bees this past year we've concentrated on Olive and other weed removal on the Northern slope and have continued to work our way down the hill. We're getting to the steep bit which should be an interesting challenge.

Our Winter planting bee was poorly attended (though exceedingly well attended by those present thank you!) but

we did plant 150 of the 300 seedlings available. The remainder have since been planted in another project area in Morialta.

Graham Churchett and the participating schools have again been working very hard with weed removal this year and we greatly appreciate their efforts - thank you all!

I've been attempting to control Bridal Creeper which has been a fast growing weed on Olive Hill; repeated spraying has still not knocked it on the head. Some Boneseed has quickly been pulled out as I refuse to let it take overagain.

Our next working bee in November will involve a scouring clean-out of wicked wayward weeds on the western slope. Hope to see you there.

Thank you to all who participated this year.

Erica Project Coordinator

1998 Project Report

This project has been running for 12 years and much has been achieved since its inception. Olives have been the major weed problem, thought two working bees in the past 12 months have seen some steady removal down the slopes. Continual follow up with hand pulling and cut/swab of regrowth has provided clear areas for revegetation and in June, 250 seedlings raised by the Friends members were planted. This is a large project area requiring much hands on work, so staff of the following; Thordon Park, Cambelltown, Newton and Athelstone Primary Schools plus Pembroke Schools plus Pembroke School year 10 students.

Plans for 1999 will follow along similar lines; removal of large olives, continual follow up and revegetation of cleared areas. Perhaps one day "Olive Hill" can again be renamed more appropriatley. Project Coordinator

1997 Project Report

This was the group's first project and has been running since 1986. Boneseed and Olives have been the major weed problems but Boneseed is now under control and we are continuing to work successfully on the remaining Olives. This year, Ranger Ron Saers from National Parks, commenced a major Olive removal programme adjacent to the project site and this will speed up the rehabilitation of this section on the Park. Earlier plantings on the southern and western slopes have done very well and these areas,



Taking a well deserved break from cutting olives October 1997

which were once weed infested, are now providing excellent habitat.

At present we are cutting Olive from the top of the Hill and sprialling down. Checking and rechecking of cut areas is an ongoing activity and 125 plants were put in during May and June of this year.

It is planned to increase planting activities now that more areas are being cleared and made available.

Olive Hill is an Executive Committee coordinated project and on behalf of the Committee, I would like to thank Friends members, members of the public, students and staff from the Collaborative School Landcare Project and Pembroke School for the excellent effort they have given the project.

Graham for Friends Executive Committee

1996 Project Report

Since November 1995 the Executive Committee has co-ordinated this projet site. Pembroke School, Landcare students and Friends have put in a tremendous effort removing olives, olive regrowth and other weeds from the area and seed collection has commenced so that we can propagate the endemic flora to plant in cleared areas.

Recently, members of the executive committee, our Distict Ranger, and Ranger Representative, Ron, inspected many of the group's projects and at this site we were shown areas where extensive olive removal and revegetation work is planned by the NP&WS to the east of our project.

We appreciate the opportunity to discuss what we are doing in the parks and look forward to working as part of a team to substantially increase the overall biodiversity of this area.

Graham for Friends Executive Committee

1992 Project Report

This project was the Friends of Black Hill and Morialta Centenary Project in 1991 and is now in its sixth year.

Formerly known as Olive Hill, this site is at the entrance to Morialta and is Mallee Box woodland with small patches of Blue Gum.

The project has concentrate on weed control each year, focusing primarily on olives, although boneseed has also been takcled.

Approximately 7000 plants have been established of 40 different species.

A report outlining the next 4-5 years activities was produced in early 1992 and presented to the Regional Manager of the National Parks and Wildlife Service. It is important that both the National Parks and Wildlife Service and the Friends Group work together in supportive roles, thus the need to formulate strategies and this project is a great success and has had an important role in educating many people in what can be achieved.

Graham for Friends Executive Committee

1991 Project Report

This is a major report written as part of the National Parks Centenary Project. The report was written in a booklet, available for download here: <u>Higher resolution (olive/FOBHM-OliveHill1991020.pdf)</u> 13.5 Mb .pdf <u>Lower resolution (olive/FOBHM-OliveHill1991020small.pdf)</u> 3.37 Mb .pdf

1990 Project Report

March 25th saw a larger attendance - both of group members and a large contingent of Kiwania. A number of remaining stands of olives on "Olive Hill" were attacked, including some very large specimens removed with Graham's chain saw and some pretty large ones removed by the Kiwanis without a chain saw.

There are now increasing areas of the hill lacking mature olive trees, but no real shortage of seedlings. All areas will need (and get!) follow up spraying, but for most of the east and west aspects the sizes are now manageable.

1989 Project Report



Report on Rabbit Warren Search, 15th January 1989 The heat kept the throngs away for this effort. Indeed, I was moderately confident the Park would be closed and I could come home again - but it wasn't Three other adults and two junior members turned up. A few more people would have enabled a more thorough search, but we were fairly happy that most of Olive Hill was reasonably covered.

Explaining the planting out process May 1987

Despite suggestions that rabbits would be squatting under thick branches and bulldozed olive stumps we found no

evidence of this, based on the absence of droppings and scratchings around what appeared to be suitable "squatting areas".

Rabbits in the vicinity of the tree plantings appeared to be remarkably few, with the concentration being in a band parallel to Brunners Track about halfway up the hill. A map is being passed to NPWS as requested. Finally, thanks to Bruce and Joy and children who made up two thirds of the team.

On 30th April the weed control on Olive Hill took us mostly to the very southern edge of Morialta Park Some small olives and thistles were removed but the major week was



1987 Mulching new plants Morialta Conservation Park

some very large boneseed - most of the smaller boneseed having already been pulled, These were far too big to pull, some taking a full five minutes to dig out.



Certainly it was fairly strenuous, but the patch was small enough so that the end was always in sight. Still we may not have got to the end of the patch without the help of a strong turn-out of Athelstone Kiwanis. Thanks! On 21st and 28th May a total of about 750 trees were planted Actually a large percentage of the "trees" were shrubs, but the mix was designed to a balance over-storey and under-storey revegetation using plants raised from locally collected seed.

May 1987 Planting Olive Hill

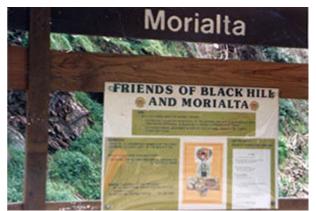
Our thanks must go to Kieran whose knowledge and help in collecting, propagating and organising these occasions is invaluable.

Attendance was an average of 30 people on both days as well as another useful contribution from the Kiwanis and Apex, there were a number of new faces whom I hope we will see more of. Planting of plots was mostly done as team efforts rather than people slogging away alone. Also refreshments and enough nibbles for a main meal were available producing a relaxing and more social gathering than one might expect at a "working bee"

With another successful planting session behind session us, a well attended weeding and continuing olive control by the NPWS, there is plenty of cause for optimism over Olive HIII.



Planting May 1987 Morialta Conservation Park



Friends sign in Morialta 1987 Morialta Conservation Park



Broken link fixed 28 May 2018, Embedded video changed to youtube account.