

Lord of the Weeds

**Trevor Street
Ulverstone Tasmania**

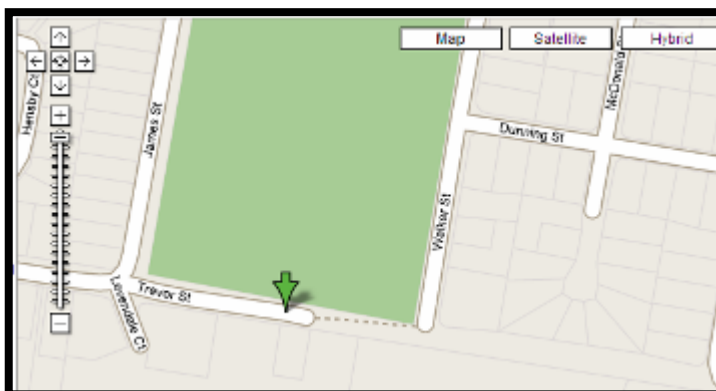


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Introduction

In this project I will be looking at a section of land in a suburban area that has been left unattended by the council and is now overflowing with unattractive plant life (weeds). Trevor Street on the southern boundary Ulverstone High School is a non-through street as indicated by the map and satellite image.



The area is next to the local high school, and some of the weeds that inhabit the area, particularly Hawthorn were originally planted in the school grounds, by one of the former principals, as landscape plants. It was not known then that they would later be considered undesirable plants. These weeds were soon eradicated from the school area once their true identity was known, but unfortunately the weeds had already spread to adjacent areas of our community such as the area in Trevor Street. Many types of weeds are still growing aggressively in areas around the school and Trevor Street was of immediate interest because it is one of the few uncared for areas owned by the council, and because of the local history of the weeds, that grow there.

I will be looking at the species of the weeds that grow in the section of Trevor Street and then I will consider a management plan that will help to control the area.

As I was undertaking this project, the area under investigation underwent some changes which had an impact on subsequent management strategies. This will be discussed at a later stage in this report.



Trevor Street



The weeds:

The main weeds we discovered in this area of Trevor Street are the Blackberry (*Rubus fruticosus*), the Hawthorn (*Crataegus monogyna*), Deadly Nightshade (*Atropa Belladonna*), Sweet Pittosporum (*Pittosporum undulatum*), Round leaf Mallow (*Malva Neglecta*).

Fortunately the major weed infestation has been restricted to the boundary areas of our selected location due to the unmade road providing a type of physical barrier.

The Blackberry (*Rubus Fruticosus* Aggregate)

The blackberry is an aggressive, spreading plant best known for its little black fruit which is used in desserts and jams and sometimes wine. The blackberry plant has dense stems or branches covered in small curved thorns. The blackberry is regarded as one of Australia's worst weeds because of its durability, its ability to spread and the impact it has on the environment.



Blackberry in Trevor Street

The blackberry is a violently spreading weed and is often seen invading paddocks, roadsides, fences, farms, dam sides and areas such as the one we are studying in Trevor Street. It is a very hardy plant or weed and because of its amazing ability to spread it is extremely difficult to eradicate. Birds are attracted to the delicious fruit and then the seeds are spread over large areas from their faeces.

Botanical drawing



The Deadly Night Shade (*Atropa Belladonna*)

The Deadly Night Shade is a weed known by many names, for example, belladonna, devil's cherries and devil's herb. It can be used both as a medicine and a poison. The Night Shade was often used as a hallucinogenic in medieval times. The night shade produces three toxins called atropine, scopolamine and hyoscyamine. The most important component is the atropine which comes out of the leaves and the roots. Atropine, when eaten, causes the tongue and mouth to become dry, the dilation of the pupils and it also relaxes muscles, such as the ciliary muscle which leaves the eye paralysed. The Night Shade is an extremely dangerous plant when used inappropriately. This plant is native to Europe, North Africa and Western Asia and was introduced to Tasmania. It is not commonly a garden plant and in most areas is considered a weed. There are quite a lot of these infesting the Trevor Street area.



Trevor Street Night Shade weed



Botanical Picture

The Hawthorn (*Crataegus macrocarpa*)



This specific type of Hawthorn is a species native to Europe, Northwest Africa and Western Asia. The Hawthorn shrub produces white flowers in late spring and later in the year they become covered in little red berries. This plant has an amazingly strong ability to attract

Trevor Street Hawthorn

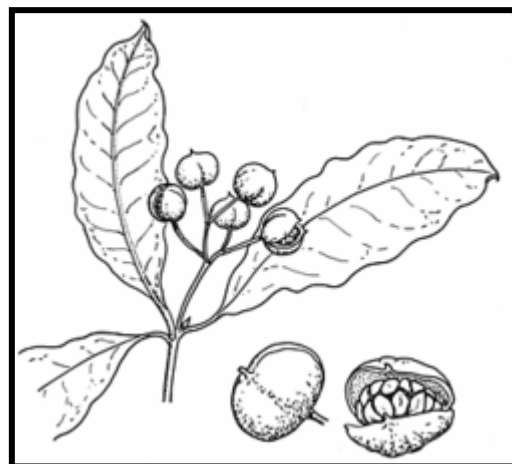
animals so it is really an ideal garden plant even though in many areas it's considered a weed. The Hawthorn grows relatively quickly and its wood polishes up rather well and can be used for making small items such as combs and boxes. It seems to grow relatively well against fences or small walls and its vibrant red berries make this a very attractive looking plant. Due to its ability to spread and take over homes to native plants, it would be an extremely time consuming and hard plant to control and restrict as a garden plant. If not for the fact that the Hawthorn grows at a surprisingly fast rate and it seems to be very hard to keep under control due to its amazing ability to spread and its resilience against irradiation, the Hawthorn would be a very attractive plant or weed.

Sweet Pittosporum (*Pittosporum undulatum*)



Sweet pittosporum also known as the Australian Cheesewood, Mock orange, Victorian box and the Victorian Laurel, to name a few, is a weed that has had a serious effect on the environment and native plant life. There are many Sweet Pittosporum plants that have infected the Trevor Street area, and destroyed the native plant life. Many of these plants have become established after being used in ornamental gardens. However, the fact that birds and possums are attracted

to its fruit enables its rapid growth through the area. The Sweet Pittosporum in this area is currently not flowering so has not been identified by its creamy white, sweetly scented flowers or small orange fruit, but by its shiny, dark green oval leaves. Sweet Pittosporum is now causing serious problems outside its native habitat, destroying native plant life and infesting native habitats in many areas of Australia and Tasmania. It has proved itself to be a hardy weed and difficult to eradicate like the majority of weeds in this area.



Botanical picture

The Sweet Pittosporum is one of the biggest infectors of Trevor Street and has caused much of the devastation to the native plants in the area.

Round Leaf Mallow (*Malva neglecta*)

The Round leaved mallow is a smaller weed that can be located in many gardens, on farms and in undeveloped areas such as the one under study in Trevor Street. The round leaved mallow seems to be a competitive weed, spreads by seeds. Planting other competitive plants such as canola and cereal near or around the mallow seems to be an effective way to control its growth. Even though the mallow doesn't seem to be a particularly vicious weed there are many of them spreading throughout the Trevor Street area.



Trevor Street Round leaf Mallow



Botanical Picture

Minor weeds

Other weed species found in the Trevor Street location include

Nodding Thistle



Plantain



Wild Mustard



Management Plan

The area at the end of Trevor Street is an area that no longer has potential to be a piece of land abundant with native plant life. It gets little attention and is in an undesirable location of the Ulverstone area. We contacted the Central Coast Council concerning the management of this area after our initial study and were informed that the road (Trevor Street) was going to be continued through the area to enable housing to be built. As a consequence they did not have a significant plan in place for the protection and management of the native species of the area.



Road Continuation through Trevor Street

However, as a student at the high school who does have to look at this area on a regular basis I believe that something should be done. Not only is the area visually unappealing it is a hazard as it is spreading unwanted weeds and impacting on the native flora in the area. Fortunately the Trevor Street area that we have chosen to work on has recently been under construction as the council informed us. A small gravel road has been built through the Trevor Street area, and due to the location of this area we believe that this was the best course of action. Now this once weed infected area, that had little potential to grow into anything beautiful, has a practical use and looks much better.

There are many other areas like this around Ulverstone that have more potential, if developed, than this that would benefit more from weed eradication work. We believe that the council should focus their attention on other weed infected areas around the Ulverstone area.

Although we would not have originally considered this as a possible management plan when we initially studied the area it has certainly provided a solution to a difficult problem. However, the area directly bordering Ulverstone High School is still of concern and contains many Hawthorn plants from the initial school planting as well as Pittosporums and Blackberry.

On speaking with the groundsman we came up with an initial eradication and management plan for this specific area. He is looking at eradication through a combination of physical removal and poisoning although the last option is not considered optimal. It goes without saying that the use of chemicals is done in a very controlled manner and under very strict guidelines. The other major concern is the size of the Hawthorn especially making it particularly difficult for physical removal by students.

Pittosporum can be removed in its early growth stage by simply weeding. However, once established it can be poisoned with a weedicide although these chemicals must be applied to cut areas quickly for efficient uptake by the plant.

Obviously the use of chemical eradication is questionable as its use poses risks to other plants native to the area. Once the area has been cleaned a group of students may be willing to take over its on going management in conjunction with the groundsman.

Studying the small, weed infested area in Trevor Street has encouraged me to look at areas as we drive around Ulverstone. There are numbers of weed infested areas that do require attention. Ultimately attention is the best management plan. This can be expensive however, perhaps we should be encouraging schools or groups to adopt some of these areas as a service to the community. This division of responsibility may assist in overcoming the problem.

Students or community groups would have a more hands on approach especially in the removal of small weed plant species before they become successfully established. It is also imperative that flowering weeds are removed before flowering season so that the fruits and seeds are not dispersed by animals.

Future Management

The optimal plan for long term management is undoubtedly the removal of the main weed species and their eventual replacement with native species.

Bibliography

<http://www.plantpress.com/wildlife/o474-hawthorn.php>

<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/SLEN-5NL7FL?open> to find the nightshade

<http://www.weeds.org.au/cgi-bin/weedident.cgi?tpl=plant.tpl&state=tas&s=®ion=tns&card=S07>

<http://www.portfolio.mvm.ed.ac.uk/studentwebs/session2/group13/deadnight.html>

<http://en.wikipedia.org/wiki/Belladonna>

<http://www.environment.gov.au/biodiversity/invasive/publications/r-ruticosus.html>

http://en.wikipedia.org/wiki/Crataegus_monogyna

<http://www.dgsgardening.btinternet.co.uk/fathen.htm>

http://en.wikipedia.org/wiki/Fat_Hen

<http://www.dgsgardening.btinternet.co.uk/fathen.htm>

<http://www.botanical.com/botanical/mgmh/b/blaber49.html>

<http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Pittosporum~undulatum>

<http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Malva~neglecta>

<http://maps.google.com.au>