



GILES



Allen Nuttall

FARM

GAWLER HIGH SCHOOL



Colette Aunger

1. Introduction

The weeded area that we are investigating as part of the “Lord of the Weeds” competition is the Agriculture area of our school, Gawler High School. Gawler High School is situated approximately 40 km north of Adelaide. The school has approximately 850 students and is considered a semi- rural school.

The Agriculture area of the school is approximately 8 acres. The area is used for a few livestock, including cows and sheep and there are also some vines and vegetable garden areas for the year 8 and 9 students. The school also have chickens and ducks, which are used for selling eggs and meat birds. The school has a heavy Agriculture focus with all students completing Agriculture at some point in their schooling.

We got involved because we have been studying Agriculture for 4 years and we both have an interest in horticulture/landscaping. Colette has lived on a farm all her life and has some good background knowledge and a huge interest in this area. We are completing this project as a SACE Stage 2 Community Studies project. We both have had some learning difficulties at school but have Agriculture to be an area where we have had a lot of success at school.

2. Process

The first thing we did was find the competition on the internet. After we applied to be part of the competition we choose six weeds that we see commonly in the Agriculture area. We then asked our school groundsman Mr Webb to help us identify the weed. Using text books from the library, research off the internet and school contacts we were able to identify the most common of the weeds. We also contacted The Adelaide Plains Plant Control Board to get help from them. They sent us information to us with the identification of weeds and additional information on how to control them.

3. Weeds

The six most common and problematic weeds in the Agriculture Area of Gawler High School are:

1. Barley Grass
2. Mallow
3. Common Herons Bill
4. Sour Sob
5. Common Sow thistle
6. Small Nettle , Stinging Nettle

3.1: Barley Grass

Name

Barley Grass, *Critesion murinum* subsp.

Seed/seedling identification

Seed head a dense 2 row barley-like spike up to 100 mm

Flower identification

Spikelets 1 flowered, 20 to 50 mm long

Mature plant identification

Leaves narrow, tapering to a long point with prominent auricles



Growing Seasons

August to December.

3.2: Mallow

Name

Mallow

Seed/seedling identification

The hard seed coat enables the seed to last up to 100 years

Flower identification

The flowers are inconspicuous, pale- purple to white, 5 mm across

Mature plant identification

The stems are usually prostrate and up to 1 meter long



3.3: Common Herons Bill

Name

Common Herons bill, common Crowfoot, small crowfoot, storks bill
Erodium cicutarium (Geraniaceae)

Seed/seedling identification

The seeds have a long spirally coiled awn, which is hairy on the inner surface.

Flower identification

The flowers have 5 pinkish-purple club shaped petals in a cluster of 2 – 5.

Mature plant identification

It has rosette leaves, deeply divided into segments that are again deeply lobed or toothed.



Growing Season

It grows from September to December. So that's mainly though summer and a bit of spring.

3.4: Soursob

Name

Soursob, Bermuda butter cup

Seed/Seedling identification

This weed does not spread by seeds it does it by bulbs deep in the ground

Flower identification

The flowers are yellow and trumpet shaped\

Mature plant identification

The plant erect with haired flowering stems up to 30cm.

Growing season

The weed grows June to November



3.5: Stinging Nettle

Name

Small nettle, stinging nettle

Seed/seedling identification

The seeds are shiny and yellow to green-gray

Flower identification

The flower is small, green in clusters at the axils

Mature plant identification

Mature plants erect to 90cm have a square stem and they are covered in stiff stinging hairs

Growing season

The weed grows all year round



3.6: Milk Thistle

Name

Common sow thistle, milk thistle

Seed/seedling identification

The seeds are small, light, white parachutes of thistle down

Flower identification

The flower heads on long stalks at the end of the branches its 18mm long

Mature plant identification

The plant grows up to 1 meter

Growing season

The weed grows from September to March



4 Problems caused by the weeds

The problems that these common weeds cause for our school is they take the nutrition out of soil and therefore out of the vegetables. They also cause some problems with the animals we have at the school eating them and getting sick from eating them. In the vineyard they can cause a problem when they take over and smother the soil and again take nutrients and water from the soil leaving fewer nutrients for the vines which can they give us a poorer season for grapes.

These weeds grow in the middle of nowhere and they can (if not controlled) take over areas of the Agriculture area. Another problem is the time that it takes to remove the weeds if they get out of controlled and they are not managed.

5 Management and control of weeds in the Agriculture Area

5.1 Soursob

Repeated mowing will eventually deplete the carbohydrate in the underground bulbs, but this may not remove the bulb. The soil, from which the soursob were removed, should also be carefully examined or sifted to remove all bulbs.

Herbicides can help to manage soursob however the timing of this chemical treatments is crucial for successful control of the weeds.

5.2 Milk Thistle

Thistles are most susceptible to chemical control in the fall. The Thistle is the most susceptible to control while in the seeding stage, or as they grow from seeding stage to the rosette state.

A non-chemical control method would be to remove by hand or tillage in the early stages of the weeds growth.

5.3 Mallow

Chemical control on mallow with selected herbicides is often unsatisfactory at seeding stage however the plant can be killed by the taproot being cut.

5.4 Stinging Nettle

Remove the weeds by hand when they are small with a pair of thick gloves so you don't get stung. Spraying with weed killer can do the job if the weeds are in a suitable place to use this method for example on the border of a field, crop or garden area. Spray the weed with systemic weedkiller as it is absorbed through the leaves

5.5 Barley Grass

This weed requires a three-pronged herbicide to keep it under control.

5.6 Common Herons bill

Try to remove by hand first by the roots. Or use herbicide if it gets out of control in the area it is in.

It is recommended that in the Agriculture areas of the school we try to minimise the use of chemicals and we try to use more organic approaches. What we try to do is control the weeds as early as possible, removing them by hand and tillage. Another method we use is to use a thick layer of mulch to block the light that the weeds get.

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