

# WINRAP NEWS

## Wilson Inlet Catchment Committee Inc.

### Welcome to our first edition

Welcome to our first edition of WINRAP NEWS, produced by the Wilson Inlet Catchment Committee (WICC). WINRAP stands for the Wilson Inlet Nutrient Reduction Action Plan.

The Action Plan is a 5 year program to reduce algae coverage in the inlet to help secure the future health of this culturally and environmentally important estuary.

The plan focuses on work that has the greatest level of community support and likelihood of implementation, and that provides the best environmental benefits for the resources used.

Options to deal with excess nutrient input have been discussed for many years by various sections in the community.

Using the results of extensive studies WINRAP has steered away from major engineering solutions and instead looks to the cause of the problem, rather than just dealing with the symptoms.

As such we work with all sections of the community to better manage the risks associated with nutrients.

Major activities under the WINRAP include helping landowners to improve fertilizer efficiency through improved pasture



The Wilson Inlet catchment covers 2254sq.km of farmland, forests and towns.

management, having a better understanding of their soils and minimising nutrient export through correct waterway management (such as creating vegetated buffers or improved drainage design).

We also help intensive rural land uses with nutrient wastes and work to ensure planning decisions take into account urban or industrial nutrient sources.

The Wilson Inlet Catchment Committee receives State and Australian Government funding through the South Coast Natural Resource Management (NRM) Inc to undertake on ground actions with technical support from the Department of Water.

- by Craig Carter, WICC Project Officer



Wilson Inlet Catchment Committee Inc.

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### From the Chair

Mike Lanigan, Mt Barker farmer and WICC Chairman



On behalf of Wilson Inlet Catchment Committee (WICC), I would like to welcome you to the inaugural edition of the WINRAP news.

The importance of Wilson Inlet and nutrient reduction is paramount in WICC's vision to leave a sustainable environment for future generations and it's great to be able to have a regular publication that can promote the important work being done. This newsletter will also provide practical tips for householders, farmers and industry to help us all move towards our shared vision.

The Wilson Inlet Catchment Committee employs a NRM officer and Project Officer based in Mt Barker, as well as a Project Officer based in Denmark. These people are here to assist in the implementation of on ground NRM works in the catchment. Along with the WINRAP we are implementing other important projects such as, the Upper Hay Strategic Catchment Plan, which aims to tackle salinity and eutrophication in the Upper Hay sub-catchment.

As a community organization we encourage you to become part of WICC through becoming a member or nominating to be part of the management committee. I also encourage landowners to take advantage of our landcare and sustainable farming funding grants. This is your opportunity to become involved in Natural Resource Management in the Wilson Inlet catchment.

# Deep Rooted Perennial Pastures

by Ron Master, Department of Agriculture and Food WA

## Why Perennial Pastures make good sense

The reasons why landholders decide to establish perennial pastures is different for every person, however the benefits are clear, especially in the high rainfall areas of the state. There are both production and environmental benefits to be gained.

Production benefits include:

- Out of season green feed
- Increased carrying capacity due to having a more even distribution of feed.
- Ability to increase productivity on problem country
- Ability to turn out animals at target live weights all year round.

Environmental benefits include:

- Reduced groundwater recharge by utilizing more water and therefore reducing water logging and salinity
- Reduced loss of nutrients, both from leaching and erosion
- Reduced wind and water erosion.

## Establishing perennial pastures

When considering whether to plant perennials you need to consider a number of key points.

These will help you to determine both the species to use and the area needed as part of your long term planning. The points are:

- What feed gaps do you have?
- When do they occur and for how long?
- Which species best suit this gap
- Do you have under performing areas (waterlogged, eroded etc), if so plant these first (less opportunity cost)
- If you are concerned with salinity, erosion etc consider how much you need to plant to impact on these issues.
- Do you have the infrastructure (especially water) to make the best use of your perennials

There are other points to consider however these should get you thinking in the right direction.

Perennial pastures can be split into temperate and subtropical grass species as well as perennial legumes and herbs.

Subtropical species (Rhodes grass, Kikuyu, Setaria) are planted in spring (no earlier than September) while temperate species (Tall Fescue, Phalaris, Lucerne) are usually planted in autumn.

Periods of activity vary between the subtropical and temperate species with subtropicals being summer active. The temperate species can have both summer and winter activity depending on the species and variety.

Methods of establishment will depend on machinery available to the farmer but there are some principles that should be followed to insure effective establishment:

- Generally plant no deeper than 10mm
- Preferably use a disc machine with press wheels as this will provide better seed soil contact, if this is not possible use a machine that disturbs the soil as little as possible with press wheels.
- Start preparing the paddock early, apply lime at least 6mths earlier and use strategic grazing to reduce rye grass seed set.
- Adequate site preparation including chemical control of weeds (refer to next section)
- Plant the right species in the right part of the landscape.
- Do not graze the stand too early, allow the root system to establish or you might kill it.

### Weed Control

Annual pasture and weed control is essential before sowing perennials. If this is not done, annual pasture plants will out compete perennial seedlings in establishment.

Experience has shown that it is best to kill annuals about 5 weeks prior to sowing. Starting the control of annuals earlier will allow time for a second kill of newly germinated plants. Early weed control will also build soil moisture levels.

If the paddock has been under an annual pasture for a long time then a tickle up after the first spray may need to be considered to promote the germination of annual pastures and weeds.

An alternative to a double knock is to spray top the paddock the year before to remove as much rye grass annual grass weeds as possible. This has the added bonus of increasing



*Wilson Inlet and Torbay farmers getting advice on suitable perennial pastures for wet paddocks.*

*- 'Taking Stock on Perennials' Field Day*

the clover seed bed prior to establishing the perennials. Once the perennials are established then having a good annual component (especially clover) is critical to having a highly production pasture and should be encouraged, but only after the perennials were well established. It is also recommended to spray for red mites as they can have a dramatic impact on establishment success.

There are many species of perennial pastures that suit various soil types, waterlogging, salinity levels and temperatures.

It is strongly recommended that you get some advice prior to establishment if you have not planted perennials before from an agronomist or the Department of Agriculture and Food Albany.

## Spotlight on Tall Wheat Grass

Tall Wheat Grass (*Thinopyrum ponticum*) is a temperate tufted perennial grass native of the Balkans, Asia Minor and southern Russia.

It was introduced into Australia in 1935 and is fast gaining popularity as a species to sow on moderately saline sites. It is suited to areas with a rainfall above 350mm and will grow in poorly drained and moderately saline soils. It will also grow on acid sands over clay or loam and clays with high water holding capacity. It also tolerates alkaline soils.

### Production Benefits

- Tall wheat grass has good summer growth with slow winter growth. For example 10-16kg/ha/day production was achieved at Frankland over summer/autumn.
- Using this pasture species will also result in a reduction in the need for supplementary feeding
- It has advantages in meat production where animals can be turned out into higher priced markets.
- Extended growing season with summer growth in response to available soil and rainfall.
- Highly water logging tolerant
- Will tolerate a wide range of soils
- Salt tolerant
- Excellent drought tolerance
- Resistant to stem and leaf rust from cereals

### Environmental Benefits

- Being highly tolerant of water logging can be used to help manage farm hydrology
- Salt tolerant
- Excellent drought tolerance
- reduces soil erosion
- Uptake of nutrients can result in a reduction of fertiliser lost to waterways

### Management issues

- Can become rank if not grazed appropriately.
- Generally should not be set stocked; prefers rotational or crash grazing and can have dry matter digestibility levels of between 54% and 80%.



### **Growing together : lower catchment farmers network**

Getting the most out of your farming business involves learning from others in the agricultural and NRM industry - sharing new ideas, solving problems and looking over the fence. Whether you are new to farming or have been working on the land your whole life there is the opportunity to learn and to teach others (as the Prograze groups have shown).

A number of landowners have suggested they would like to share information as an informal, farmer led group to learn more about farming and NRM in the lower, wetter, parts of the catchment. This could involve having guest speakers, visiting other farms to look at how they are tackling certain issues (eg drainage, perennials, revegetation), establishing trial sites and revegetation techniques.

If you would like to know more or to register your interest call Craig on 9848 2955. All ideas are welcome too.

## Current Research - Seagrass Mapping in Wilson Inlet

The Department of Water's Aquatic Science Branch and South Coast Region staff have begun a project to assess the seagrass condition of waterways along the South Coast. It will help scientists and the community to better understand the changes in habitat condition and the health of Princess Royal Harbour, Oyster Harbour and Wilson Inlet.

Current studies will assess and report on changes from previous mapping surveys conducted in Wilson Inlet in 1994 and in Princess Royal Harbour and Oyster Harbour in 1981, 1984 and 1996.

The Albany harbours study used a combination of locally produced aerial imagery and ground-truthing with towed underwater video, visual

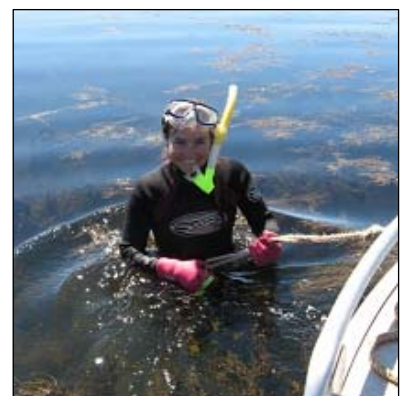
assessments by boat and snorkelling along transects. As the water in Wilson Inlet is darkly coloured, aerial photography cannot be used so the assessment is carried out by snorkelling along transects.

Mapping of the seagrass *Ruppia megacarpa* in Wilson Inlet commenced in February 2007. As well as comparing changes between surveys, the information gathered will complement cobbler fish habitat research being conducted by the Department of Fisheries and the Murdoch University Fish Research Group.

The mapping also includes the establishment of permanent transects for future monitoring.

For more information about this and other South Coast Water Information projects contact the Department of Water on 9842 5760.

*The project has been partially funded through the Wilson Inlet Nutrient Reduction Action Plan's monitoring program (via South Coast NRM)*



Tracy doing seagrass mapping in Wilson Inlet

Fulfilling the WINRAP actions remains on track with numerous on ground works underway, such as fencing & revegetation of waterways and the establishment of perennial pastures. This success has been due to the positive response shown by land owners within the catchment who understand the philosophy behind what we are trying to achieve and are enthusiastic participants.

We continue to hold educational workshops that receive positive feedback. This year we have joined up with our neighbours in Torbay to hold two soil fertiliser workshops and a workshop for smaller landholders. The first involved presentations and demonstrations by nutrient and soil experts from the Department of Agriculture and Food WA. The aim was for people to learn how their fertilisers react in their soil and how to interpret soil test results.

The workshop 'Looking after your small property' looked into animal health and welfare, pasture and grazing management, revegetation planning and weed control.

With only one year to go with the current WINRAP funding round we are busy developing and implementing as many projects as possible.

Get on board by calling me on 9848 2955 or coming in and visiting me at my new office at 2/27 Strickland St, Denmark. My new postal address is P.O Box 978, Denmark 6333.

[craigc@southcoastnrm.com.au](mailto:craigc@southcoastnrm.com.au)



Construction begins on riffle crossing. Bank reshaping and planting will stabilise the banks.

### Bob builds a buffer

One of the properties that have recently received funding through WINRAP has been the cattle/sheep farm of Bob Churley in Dawson Rd, Youngs Siding.

Like many farms in the area Bobs property has a Water Corporation drain and several smaller waterways running through it. While erosion was not a major issue, without adequate buffers all the waterways had the potential to transport excess nutrients downstream.

In a meeting with Bob on site, it was decided to fence the 1km of drain and nearly 1.5km of smaller creeks. The waterways will also be given a buffer of vegetation planted next to them to assist with the uptake of excess nutrients, provide habitat, shelter and help stabilize the banks. In addition to funding the fences, WICC has helped fund several watering points and stock crossings on the property. Bob has also expressed an interest in planting perennial pastures next season which will be funded through WINRAP.

"As this project involved fencing a Water Corporation drain, consultation with the Water Corp led to them assisting by cleaning out the drain of silt buildup and smoothing out the dirt spoil heap that ran along side part of the drain" Bob said. Work has started in earnest with the aim to get the fence up, weed control done and plants in the ground before the winter rains.

### Who is involved in the action plan?

The success of the WINRAP relies on the cooperation of all of us who live or work in the catchment. However, the plan identifies a number of key groups who have pledged their cooperation in implementing the Wilson Inlet Nutrient Reduction Action Plan:

*Wilson Inlet Catchment Committee, Department of Water, Shire of Denmark, City of Albany, Department of Agriculture and Food WA, Fisheries WA, Water Corporation, Wilson Inlet Management Advisory Group.*

### Financial assistance: helping you farm for tomorrow

Through the Wilson Inlet Nutrient Reduction Action Plan we can help you build your farm to be more environmentally responsible. Call Craig on 9848 2955 to find out more.

#### Waterway protection

- **Fencing of drains and creeks**  
Up to \$2500/km in the priority sub-catchments (Sleeman, Cuppup, Lake Saide and Sunny Glenn) and up to \$2000/km in the rest of the catchment.
- **Stock crossings & watering points**  
Up to \$700 for a crossing and \$300 for a watering point
- **Vegetated buffers**  
\$450/ha to provide bank stabilisation, nutrient removal and increasing wildlife habitat.

#### Production

- **Deep Rooted Perennial Pastures**  
\$60 per hectare is available to help establish suitable deep rooted perennial pasture species.
- **Soil Testing**  
A 50% subsidy for soil testing is available. Don't Guess...Soil Test

#### Point Source Nutrient Control

More intensive industries, such as dairies, viticulture or intensive horticulture, often need specialised assistance to help reduce their nutrient export. Contact us to talk about how we can help.