



Most of the physical work of moving the large rice bales was done by hand.

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Rice straw for erosion control

by Dianne Dixon

In May 2009 the Rotary Club of Southern Mitchell, supported by the Pretty Sally Garden Club, had loads of rice straw baled and transported out of Deniliquin. The straw was donated by local farmer Colin Bull and made available free of charge to property owners in fire-affected areas on steep country to help with erosion and siltation control.

Rice straw doesn't harbour pasture weeds and holds together as a mat so it doesn't blow away in the wind. The rice straw takes around a year to decompose and generally animals do not find it palatable. During our unseasonably wet summer a number of property owners reported that rice had sprouted, but of course it was short lived.

The bales are broken up into biscuits about 10-20 centimetres thick. The biscuits are packed close together across slopes and drainage lines to create low barriers. These barriers take the velocity out of the water flow and restrict the movement of soil and gravel. Ring lock fencing and posts salvaged from the fire are placed down slope from the straw, with the netting folded back under to help hold the straw in place.

On slopes, the contours are followed to avoid channelling the water. Fallen branches and small burnt trees can also be placed across slopes to slow water.

The lowest point in the barrier must be in the middle of the drainage line so that water spills over the barrier rather than going around the side and creating a new line of erosion. Several barriers can be placed in series down a drainage line. Solid structures like stumps and old machinery are not recommended in drainage lines – water will bypass them creating more erosion and they may cause water pollution.

The ash and soil that builds up behind the straw can be used later as a planting bed. The bales can also be broken up and spread across an area to introduce much needed cover from heavy rain and build up biomass on the soil. The straw needs to be thinly spread – if it is too thick it may prevent plants from growing.



A fairly typical silt trap made from rice straw and old wire not long after installation.

A demonstration site has been established at Clonbinane in partnership with GreenCorp and Mitchell Shire Council. Rice straw, fallen branches and ring lock fencing recovered from fences damaged by the fires have been strategically placed to slow down and spread out water flow from rainfall, preventing further ash and sediments entering Sunday Creek.

A demonstration day on managing erosion after fire was held in August 2009. The day included a demonstration of rice straw techniques and fire-affected landholders were encouraged to collect rice straw from a nearby stockpile.

The Sunday Creek-Dry Creek Landcare Group has assisted in delivering the rice straw program, together with a GreenCorp team. Landcare Australia came on board in June 2009 which meant two more truckloads of straw could be purchased and delivered. One load of straw was provided to the Baynton Sidonia Landcare Group for use in the Redesdale fire area.

The rice straw program, trial site and demonstration day have created a greater awareness of what Landcare is all about. Our group has made some new friends and gained a substantial increase in membership.