April 1999
Vol. 3, Number 2

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

Western Wildlife

NEWSLETTER OF THE *LAND FOR WILDLIFE* SCHEME
Registered by Australia Post Print Post: 606811/00007

YEBWEN - "A WIGWAM FOR A GOOSE'S BRIDLE"

by Sylvia Leighton

THE Newbey property is one of the most impressive landcare properties I have observed whilst working in the Landcare industry for the past eight years. At a time when many farmers in the region despair about the encroaching salt problems, Stephen Newbey has been applying his energy and effort into slowing this process on the family property. He has installed a creative whole-farm, revegetated corridor network across the family property incorporating most of the remnant bush and linking it to vegetation corridors adjoining the property. It is a great example of how a broadacre farm can protect its remnant vegetation and promote regeneration. It also provides a great corridor system to encourage wildlife back on to the property.

One of the wetland sites Steve is recreating around one of the farm dams. Note the "Wigwam for a goose's bridle" structure made from old jam fence posts to act as a waterfowl hide from predators.

The area, north west of Ongerup in the southern wheatbelt, was opened up for agriculture in 1911. The Newbeys purchased their 1080 ha property, "Yebwen", in 1938. The property was slowly cleared for cropping and grazing through to 1962 with approximately 5% remnant vegetation remaining. Many small mammals and birds have disappeared from the area over the last 60 years. Stephen's grandfather remembered bilbies occurring on the farm until the late 1940's. Numbats, phascogales, chuditch, emus and echidnas were also present. The most recent disappearances have been malleefowl in 1955, blue wrens in 1962, curlews in 1994 and red capped robins have not been seen for a while.

The native vegetation of this area is a combination of brown mallet, blue mallet, York gum, morrel, *Eucalyptus annulata* (tree form), merrit, salmon gum, moorts and southern wheatbelt eucalypt mallee species on the slopes; with samphire salt flats bordered by swamp mallet, yate and paperbark species in the valley bottoms. Yebwen probably has one of the most detailed plant lists of any individual property in WA, with over 180 species identified so far by Steve and regional botanist, Jack Mercer. An interest in the botanical diversity of the property began with Steve's father, Ken, who had a great interest in botany and native plant seed collection.

Stephen believes in integrating conservation and agriculture where possible. He believes you need to look for their ability to complement each other, eg weeds can become habitat, so can dams. He designed a vegetation corridor network across the property so that it linked all the remnant vegetation and most of the farm dams into the corridor system. He revegetated alleys which are usually 40-100 m wide but sometimes extend out into areas encompassing up to 8 ha. He has experimented with both direct seeding and planted seedlings and installed species from all vegetation storeys

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except the 15-30 cm range (to avoid rabbit harbourage). The property now has about 12% vegetation cover. The whole corridor network is linked to fenced-off remnant bushland and creek corridors which adjoin the property.

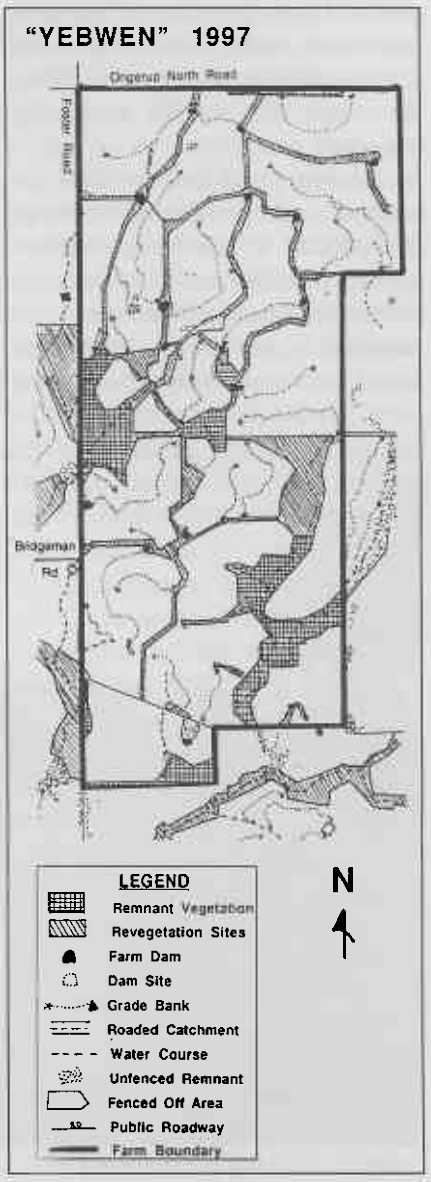
A tributary of the upper reaches of Warperup Creek extends in a north to south direction through the southern half of the farm. Stephen has revegetated the catchment area, expanding the vegetation in most of the degraded drainage sites.

Ten more dams have been added to the property in the last ten years and they have been sited to reduce evaporation. On some of the dams Stephen has recreated wetland sites by encouraging recolonisation of reed and sedge species along with the shrub and tree species associated with this habitat. Where required, he has left one side of the dam open to stock access. He also provides shelter for the wetland bird species in the middle of his dams by using old jam fence posts constructed into various shapes. This gives the birds protection from birds of prey and allows them to roost at night safe from cats and foxes. Some of Steve's more creative shelter structures include a wigwam shape, a fort, and a BBQ and wall. As a child, when asking his mother what she was making, she often used to come out with the saying; "A wigwam for a goose's bridle", and Stephen feels his original waterfowl hide fits this saying! He has observed black ducks, wood ducks and grey teal successfully breeding this season and a majority of the duckling broods survived through to adulthood.

Brenda Newbey, Stephen's stepmother, lived on the property for 10 years and compiled a list of over 90 bird species, of which 34 were observed to be breeding. White-fronted chats have been observed using the samphire sites, western yellow robins, elegant parrots, mudlarks, scrub wrens and bronzewings nest in the moorts, while quails and Richard's pipits like the grass cover.

A revegetation site. Stephen scalp-mounds all sites using a Chatfield tree planter, whether the site is prone to waterlogging or not. No chemical weed control was used at this site.

Steve believes it is too early to gauge the effects of the corridor network on the farm production. Before drawing up his farm plan, Steve read everything that he could find on farm planning and designed the plan to address all of the problems he perceived that Yebwen might have. One of these was lack of stock shelter. Ongerup is the coldest place in WA during the winter and spring months and is often overcast in the afternoons. Although the farm had patches of what was called 'timber', most of these were badly degraded and had little understorey. On cold days the sheep often sheltered in the 'timber' and Steve observed sheep that had died overnight, curled up behind individual trees. Lambing percentages were also poor and on occasions up to 50 lambs died overnight where the mob had camped, presumably from exposure. Within the next few years, the corridor network will provide adequate shelter to all paddocks from winds coming from any direction. (Wind erosion is not a real problem on "Yebwen" under the present management.)



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Over the years Stephen has also observed better crop and pasture growth on the western side of the remnant vegetation. He believes this is due to the fact that during the winter and spring months these areas are sheltered from chilly winds and this allows the morning sunshine to raise the temperature somewhat more quickly. This improved micro-climate enables greater plant growth during these months. Whilst doing his research reading, Steve remembers he came across articles describing farms with replanted shelter belts of up to 30% of the farm area without overall loss of farm production. He is confident that in the medium term the farm production on Yebwen will increase more than enough to compensate for the land replanted to bush. However, this is not an easily measured condition!

Stephen described in detail his success story with direct seeding. He collects as much local native seed as possible and buys in some seed of the species he has missed - mainly acacias. His seed mixes are based on his knowledge of what species grow, or probably grew, locally on each soil type and in each situation, while taking into account what is practical to grow ("It would be nice to muck around with things such as orchids, but I can't spare the time.") He includes as many species as is practical with mallees, melaleucas, acacias and hakeas forming most of the mix but also including many other species. Up to 100 species are now used. If trees are required, he plants them as seedlings so that they do not dominate the understorey species. Stephen tries to mix his seed to gain extended flowering periods, fire tolerance, prickly habitat and locally rare species, while avoiding rabbit-harbouring species and weeds like *Acacia saligna*.

Stephen says he has never conquered weed control. If he gets good weed control prior to and/or at seeding, he usually ends up with a huge wireweed problem later in the year. At the moment he opts for post emergent grass weed control. He admits this is not ideal, but wireweed is the greatest problem his reseeding faces. He scalp mounds all sites using a Chatfield tree planter, whether the site is prone to waterlogging or not. He has found that often the seeds wash away and mounding reduces this problem. He doesn't rip as deep as he would like, as ripping to a depth of greater than 15cm usually drags up huge clods of clay, making seeding extremely difficult. Stephen seeds in rows and spaces the rows to allow access in the following year to reseed between them and get a double chance of succeeding. If everything in one year is a disaster, he finds it difficult to reseed over scalped areas successfully. If there are individual areas of poor germination they are replaced in following years with a variety of seedlings.

Stephen Newbey is employed as the Gnowangerup Landcare District Coordinator so he is continually encouraging and advising farmers in the district to incorporate landcare into their property operations. He also encourages catchment groups to design revegetation corridors which extend across farm boundaries and link up whole catchments. His most ambitious project has been the "Pallinup - North Stirlings Bushlands and Wetlands Management Plan". He is definitely setting an example of creative landcare 'in his own backyard.'

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Stephen standing in amongst a direct seeded corridor planted in approx 94/95.

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