



Case studies

Bruce and Jen Southeron, 'Old Dromana',
Moree NSW



PROPERTY DETAILS

Location: 70 kms west of
Moree, on the Gwydir River
watercourse

Catchment: Gwydir River

Property area: 4,300 hectares

Main enterprises: Beef cattle
production, some cropping for
forage crops

Where lippia is a problem:
Watercourse and floodplain
grazing country, Ramsar
wetlands



Bruce Southeron with lippia patch on the
watercourse

(Photo by P. Crawford)

General information and lippia infestation

'Old Dromana' is located on the floodplain of the Gwydir River and the majority of the area is subject to inundation. The Gwydir River actually ends as a defined channel about half a kilometre inside the eastern boundary of the Ramsar wetland site on 'Old Dromana' and from this point the river (when it floods) spreads out onto the broad plains of the Gwydir River watercourse. Over 90% of the area of 'Old Dromana' is located in the watercourse.

Prior to the construction of Copeton Dam in the late 1970s, regular flooding was a feature of the watercourse country. Bruce says that a good flood that lasted several weeks would provide enough soil moisture for twelve months feed supply. Since the expansion of the cotton industry over the last twenty-five years, floods have been far less frequent and short lived. This has resulted in the loss of the majority of the property floodplain grasses such as Bull couch, as these grasses need regular flooding for their survival.

A 600 hectare Ramsar wetland site is located on the property, the largest privately held Ramsar wetland of national significance in New South Wales, and 75% of this area is now covered by lippia. Where there were once thousands of birds breeding in the wetlands, the numbers now could be counted in the tens. Bruce is adamant that this has been caused more by over allocation of water for irrigation than by drought. Bruce and Jen are both keen naturalists and Jen is the membership and publicity officer for the New South Wales Bird Atlassers Inc.

Club rush (*Bolboschoenus sp.*) once covered over 4,000 hectares, the largest area of this plant in New South Wales. This area has been reduced to less than 80 hectares due to lack of flooding.

Lippia is present over 80% of the property in densities ranging from 10% to 90% cover. The worst lippia infestation is on the watercourse or floodplain country, although the weed has spread to some higher areas of the property.

Previous stocking rates have been up to 2,400 to 2,500 head of cattle. Between 1998 and 2002, the breeding herd was reduced from 1,000 to 700 cows. Currently, numbers on the property are down to 600 head. A conservative estimate of the cost of lippia to the profit margin on the property is at least \$200,000 - \$300,000 per year.



Methods of lippia management

Prior to the last five years, the distribution and spread of lippia was contained by using conservative stocking rates. The decline of the floodplain grasses has reduced the property carrying capacity dramatically and the resultant takeover by lippia has made this country now more or less useless.

About 30% of the property has been cultivated for lippia suppression, with mainly forage crops grown to support the cattle enterprise. Approximately 200 hectares of this country was planted with Bambatsi panic in 2004 and timely rainfall resulted in an excellent germination. The Bambatsi is competing well with the lippia and Bruce considers this species to be the most productive grass.

Future control options

Bruce considers that they have no alternative than to cultivate the floodplain area as a means of controlling the lippia. Before they can proceed with this plan they need to receive the authority to do so which involves an assessment of existing groundcover and vegetation. There is no tree cover on this area but the fact that there are dead trees with hollows suitable for bird breeding and habitat may restrict the ploughing of this area.

The plan is to crop the country with forage crops for two or three years and then plant the area to Bambatsi panic. Bruce believes that the native grasses will be too slow to re-establish and the species present will not compete with lippia as well as Bambatsi does.



General view of the watercourse country with lippia patches in the foreground

(Photo by P. Crawford)

