



Case studies

Jack and Julia Gooderham, 'Myling' and 'Sefton',
Tulloona NSW



PROPERTY DETAILS

Location: Tulloona, 70 kilometres north of Moree, north-west New South Wales

Catchment: Croppa Creek, Macintyre River catchment

Property area: 2,025 hectares

Main enterprises: Beef cattle and grain production

Where lippia is a problem: Floodplain grazing country, creek riparian areas



Jack Gooderham with a lippia patch in a
Bambatsi pasture

(Photo by P. Crawford)

General information and lippia infestation

The properties are located on the floodplain adjacent to Croppa Creek. Of the total area, 80% has been cultivated for cropping or introduced pastures. Jack has been gradually putting floodplain country back to pasture, mainly for erosion control, as the soil type is very prone to erosion from flood events.

There was no evidence of lippia in the area until about 1992. In the initial stages, lippia was transported onto the property via table drains. Lippia now occurs to varying degrees across the whole property. Ducks and probably cattle have spread it to higher ground and it establishes easily where water lays but it does not need water to survive.

Traditional stocking rates were one beast to two hectares on introduced pasture and one beast to 2.8 hectares on native pastures. Since the invasion of lippia, stocking rates have been reduced to one beast to four hectares on the majority of the area, and as much as one beast to 12 hectares on badly affected paddocks.





This paddock previously had a magnificent stand of Floren bluegrass which has now all but disappeared

(Photo by P. Crawford)

Methods of lippia management

Although Jack has experimented with some chemical control, planting introduced pastures is the major lippia control measure and, at this stage, Jack is extremely happy with the results. If native grasses regenerate, as they appear to be doing in some areas, Jack is quite happy to see them but he considers that most of the main natives are not robust enough to compete with lippia to the degree that species such as Bambatsi panic will.

The pasture species used include Bambatsi, Purple pigeon grass, Floren bluegrass and medics such as barrel and snail. Jack says it is important to include medics wherever possible to feed the grasses. The floodplain paddocks have been split up into smaller paddocks and a cell grazing system has been implemented.

Jack's method of pasture establishment does not always involve ploughing. In fact, Jack's philosophy is one of working with the natural system as much as possible and this means leaving organic matter and fine soil particles on top of the ground to assist with the germination of pasture seeds. Jack considers that by ploughing these are all buried, making it much harder to get pasture seeds established.

Jack's method is to spray out the lippia (and other groundcover) in summer, leaving the stubble and organic matter on the surface during winter. New pasture is then seeded (using a fertiliser spreader, air-seeder or aeroplane) in early spring to maximise its exposure to rainfall. Jack allows the grasses to establish and set seed before grazing. Jack says that you have to be prepared to have those pastures out of commission (not grazed) for two years.

Newly seeded pastures are sprayed to control lippia regrowth two to three times each year for the first few years until the grasses have established, using 2,4-D amine and a wetting agent.

Floren bluegrass planted on its own has not been a successful species on this property, although in a mix it is more successful. One paddock on the northern side of the creek was planted to a straight Floren pasture in 2004. For the first year after establishment, the Floren was a superb pasture and Jack has figures to show better weight gains than cattle grazing on oats. However, most of the Floren died during the drought, exposing a poor drought tolerance trait of this species.

Future control options

Jack and Julia will continue to manage their floodplain country under introduced pastures for the long term. The cell grazing system will be further developed and fine-tuned with more subdivision fencing and water points established.

Jack is considering using their zero-till summer crop planter to establish grasses, with the only ground disturbance being from the coulters. The seed will be dropped onto the coulters groove, and the following presswheel will lightly press the seed into moist soil.

