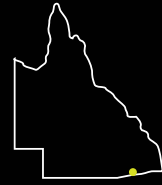




# Case studies

John, Liz and Monty Wood, 'Taraba', Toobeah Qld.



## PROPERTY DETAILS

Location: 30 kms south-west of Toobeah, southern Queensland

Catchment: Coomonga Creek and Mamonga Creek, Macintyre River catchment

Property area: 4,400 hectares, with 1,030 hectares of dryland cropping and 1,060 hectares of irrigation

Main enterprises: Beef cattle, cotton, irrigated and dryland grain production

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



Bambatsi paddock showing areas of poor germination being infested with lippia

(Photo by P. Crawford)

## General information and lippia infestation

John and Liz Wood bought 'Taraba' in 1968 as undeveloped land. The property is located on the banks of the Macintyre River and the entire property is inundated during large floods.

Over the ensuing years they developed half the land for cropping, with wheat, cotton, sorghum, barley and faba beans being grown, leaving the remainder for grazing. The soil types are mainly heavy black clays.

When the Woods first moved onto the property there was one lower more open paddock on the floodplain heavily infested with lippia. Over the years, it has spread and is now present over almost the entire property, with lippia occurring at a high density across 1,500 hectares of the property, including grassland, woodland and riparian zones. Areas of heavily flooded and swamplier country are the most affected with some areas currently dominated by 100% lippia cover.

The increasing presence of lippia in paddocks on the floodplain after flooding events was reflected in reduced stocking capacities. Liz says that under their present grazing regime the native pastures are not able to out-compete lippia. Lippia has effectively displaced many of the native grasses present at 'Taraba', resulting in a decline in production.





Good stands of Bambatsi have reached equilibrium with lippia

(Photo by P. Crawford)

## Methods of lippia management

John and Liz first started planting introduced pastures in 1972 to increase productivity. However, from the late 1980s onwards it became obvious that further pasture introduction was necessary for the sole purpose of managing lippia. The area of introduced pasture is now approximately 800 hectares in eight grazing paddocks. Plantings have taken place when conditions have been favourable, the most recent in 2006.

The introduced pasture paddocks have been planted exclusively with Bambatsi, as this species suits the natural conditions of the property, provides good feed, and is capable of competing with lippia. About half of this country has a good Bambatsi cover, with some areas having a less than desirable establishment rate.

John believes that 'equilibrium' eventually develops between lippia and Bambatsi, the time taken depending on the establishment success of the grass. John defines this equilibrium situation as one where there is a good cover of Bambatsi, but with lippia persisting between grass tussocks.

Liz as grazing manager is happy with the stocking rate achieved in these equilibrium type situations. She believes that, once established, the Bambatsi can live quite contently with the lippia without seriously affecting stocking rates.

Paddocks that were sown straight to pasture have generally had a poorer strike rate and were quickly re-infested with lippia. The most successful pasture establishment has been in paddocks that were first cropped before being sown to Bambatsi. These paddocks had a good strike rate and reached the equilibrium stage relatively quickly

John believes this is for several reasons, including:

- competition has been reduced;
- crop stubble protects the topsoil from harsh weather conditions and aids in water infiltration;
- the build-up in soil moisture favours seedling establishment; and
- cropping develops the soil into a better seed bed.

## Future control options

John has trialled spraying with Amicide® 625 and Agricrop Lantana® 600 after sowing pasture seed, but follow-up treatment was prevented because of the dry conditions.

John and Liz intend to move to a rotational grazing system in the next few years. This will be another tool for improved management of lippia infested pastures. They believe that apart from the production benefits rotational grazing will lead to a reduction in the incidence of woody weeds and weeds in general.

The riparian areas along the creek banks are a concern as the areas are well timbered and the environmental impacts of chemical control in these areas could be high. The creek banks are generally higher than the surrounding country which results in water flowing out from the creek rather than into it in time of flood. Fencing of creek banks would be problematic, as a major flood would inundate most of the fences every time.

There is no evidence of bank slumping and both John and Liz are of the opinion that with minimal stock pressure on the banks, combined with a good vegetation cover, bank slumping will not occur here however they continue to closely monitor this situation for any deterioration.

