

# Introduction

**Environmental weeds** are exotic (non-Australian) and other non-local plants that invade and multiply in areas reserved to protect their natural flora, fauna or other heritage values. These areas are usually nature reserves of some sort – bushland reserves and National Parks – or private property, but the definition is wide and includes creek banks, road reserves, water catchment reserves, rail reserves and other publicly owned areas which are not cultivated, grazed or used for forestry. Plants that are primarily weeds of productive areas sometimes invade adjacent environmental areas but seldom thrive there, and are generally not considered to be environmental weeds. The definition of what is and what is not an environmental weed is necessarily loose and subjective.

**The Toowoomba Region** includes the City of Toowoomba and those surrounding areas that were until recently the separate shires of Crow's Nest, Rosalie, Jondaryan, Clifton, Cambooya, Pittsworth and Millmerran. Apart from the escarpment areas of Toowoomba City, Crow's Nest and Cambooya, the area has been largely cleared of its natural vegetation for agriculture, grazing, urban development and other purposes, and in these areas little of the original natural vegetation remains.

**Reserved Areas** throughout the Toowoomba Region have mostly suffered severe fragmentation, loss of many of the larger natural grazers (marsupials and emus) and their predators and significant changes from Aboriginal fire regimes and burning patterns, as well as in many cases severe invasion by exotic plants (environmental weeds). Natural bushland is dynamic and consists of a series of interlocking ecological systems, and changes to these three fundamental parameters has had and will continue to have profound, long-term and irreversible effects upon it. Its retention in as good a condition as possible is important to preserve what is left of our local natural heritage. Little can now be done about fragmentation, loss of large natural grazers and their predators and altered fire regimes, but environmental weeds can and should be controlled since if left unchecked they may destroy what natural value remains in these areas.

**Management of these areas** rests primarily with the Toowoomba Regional Council, private landholders and the National Parks section of the Queensland Department of Environment and Resource Management. These bodies and the landholders are responsible for environmental weed control within their reserved areas. Community volunteers play a very important role in weed management in Toowoomba Regional Council's environmental reserves, and this publication is aimed primarily at volunteers and private landholders who manage and control environmental weeds within the Toowoomba Region.

**The impacts of environmental weeds** range from slight to catastrophic. Major impacts include competition with native plants for light, water and nutrients, interference with the feeding, movement and reproduction of the remaining native birds, marsupials, reptiles, amphibians, insects and other animals, changes in fire intensities and frequencies and hindering human access, whilst conspicuous exotic plants make native bushland visually unattractive. Fortunately we have only four or five really serious environmental weeds in our area – broad-leaved privet, lantana, cat's-claw creeper, Madeira vine and increasingly Chinese elm/celtis, although many more that are less immediately threatening occur and also need to be controlled.