

# Athel Pine

## National Best Practice Management Manual

Managing athel pine and other *Tamarix* weeds in Australia

July 2008



**Australian Government**



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Expert interviews were conducted with around 20 land managers. This manual represents a rigorous review of successful and legal *Tamarix* control methods practiced in Australia.

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*Athel pine has been widely planted across inland Australia as a shade tree*

## Foreword

Athel pine, tamarisk and smallflower tamarisk could become some of Australia's worst weeds, with the potential to infest inland drainage systems across all mainland states and the Northern Territory. Because of its potential impacts on the Australian people, environment and economy, athel pine has been nominated as one of the country's 20 worst weeds, or a "Weed of National Significance".

Fortunately these weeds have a limited distribution at the moment, and now is the time for land managers to move against athel pine, tamarisk and smallflower tamarisk. We know that for every dollar spent acting early on a weed problem, we save \$16 in reactive weed control down the track. A relatively small investment now will safeguard our water supplies, grazing lands and unique wildlife against the negative impacts of these weeds forever.

This manual brings together the best management practices available to date on control options for athel pine, tamarisk and smallflower tamarisk. It also illustrates successful control programs with case studies that demonstrate how these weeds can be managed effectively in Australia.

I speak for all members of the National Athel Pine Management Committee in recognising that all land managers, be they primary producers, community groups or government, need to live up to their responsibilities and work together to overcome the threat posed by athel pine, tamarisk and smallflower tamarisk.

This manual will be an asset to any land manager dealing with this suite of weeds and I give it my highest recommendation.



J.B. Forwood AM  
Chairman  
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## Introduction

### A Weed of National Significance

Athel pine (*Tamarix aphylla*) is one of the worst weeds threatening inland Australia today. It was identified as a Weed of National Significance (WoNS) in 1999 because of its invasiveness, its potential to spread and its impacts on the environment and primary industry. Although athel pine has already overrun 600 km of the Finke River in central Australia with devastating results, its potential impact in Australia has hardly been realised. Most of this country's inland river systems, lakes, springs, waterholes and bore drains are at risk.

Athel pine has been introduced around the world for shelter and erosion control. It arrived in Australia in the 1930s and was widely planted for shade and windbreaks into the 1970s. Athel pine has naturalised - or gone wild - at only 20 locations, but any of Australia's thousands of domesticated athel pine trees could potentially start a devastating new infestation.

Athel pine threatens Australia's pastoral industry because it dries up or salts the waterholes, springs and rivers where stock could otherwise drink and makes mustering difficult and expensive. It threatens the environment by out-competing the river red gums, coolbahs and endemic herbs which birds, reptiles and invertebrates rely on for food and shelter. Finally, athel pine impacts on the Australian people by damaging the natural landscapes we value.

Australia's state and territory governments have taken the threat from athel pine seriously by making it a "declared", or "noxious" weed. This imposes restrictions on growing or selling athel pine, and in many instances obliges all land managers - government, private or community - to control this weed on their land.

Athel pine has two close relatives – tamarisk (*Tamarix ramosissima*) and smallflower tamarisk (*Tamarix parviflora*) – which have recently naturalised and demonstrated their potential to become equally serious weeds in Australia. Tamarisks have invaded a million hectares of river systems in south western USA, forcing out endemic plants and animals and sucking up to 27 million megalitres of water out of rivers every year. This manual recognises the threat these weeds pose to Australia and looks in detail at their control.

### A national approach

A national strategy was developed in 2001 to tackle the current and potential threat from *Tamarix* weeds to the nation. The vision of the *Weeds of National Significance athel pine (Tamarix aphylla) strategic plan* is "Protecting Australia's biodiversity, landscape and industries from athel pine (*Tamarix aphylla*)" but the plan also establishes the need to deal with tamarisk and smallflower tamarisk at a national level. The plan's four outcomes are:

1. The prevention of new infestations of athel pine
2. The eradication of all athel pine occurrences in riparian zones
3. The management of athel pine in non-riparian areas
4. The coordination of strategic athel pine management nationally.

Implementation of the strategic plan is led by the National Athel Pine Management Committee, a group comprising community, agency and industry representatives.

### Using the manual

Section 1 of this manual outlines the ecology and threat of athel pine, tamarisk and smallflower tamarisk. Section 2 discusses proven control options and talks about how to plan and prioritise work and deliver a program which leads to eradication. Section 3 showcases successful Australian and overseas programs against these weeds. Section 4 gives useful links, contact numbers and ideas about where to find more information on weed and land management.