# Weeds

## What's in a name?

A weed is a plant growing where it is not wanted, so runs the old definition. Any plant can be a weed, then, depending upon your point of view. Most commonly, weeds are unwanted plants in gardens and crops, or introduced plants in bushlands, but there are more specific definitions.

Marie Lochman

G Keighery

A weed introduced from South Africa. (top)

They look like they belong, but they are in fact invasive natives: lemon-scented gums in Kings Park.

Agricultural weeds are usually plants which compete for crop space and/or nutrients. They may parasitise plants, be poisonous, cause injury to animals, damage machinery, taint produce or harbour pests and diseases. Within this definition, native plants within their natural ranges can often be classified as agricultural weeds (a recent publication, *Weeds - An Illustrated Guide to the Weeds of Australia*, lists 108 native species as weeds). Some of the more serious agricultural weeds are listed (declared) in a legal sense by the Agricultural Protection Board, to ensure that landholders are bound to control them. The types of declared plants are listed on page 46. These are largely, though not entirely, agricultural weeds affecting primary production.

Obviously, native species are rarely considered undesirable for conservation. Some **agriculturally** undesirable native species such as native poison peas, however, are now very rare due, in part, to their history as agricultural weeds. Conversely some very desirable agricultural plants are pests in conservation areas.

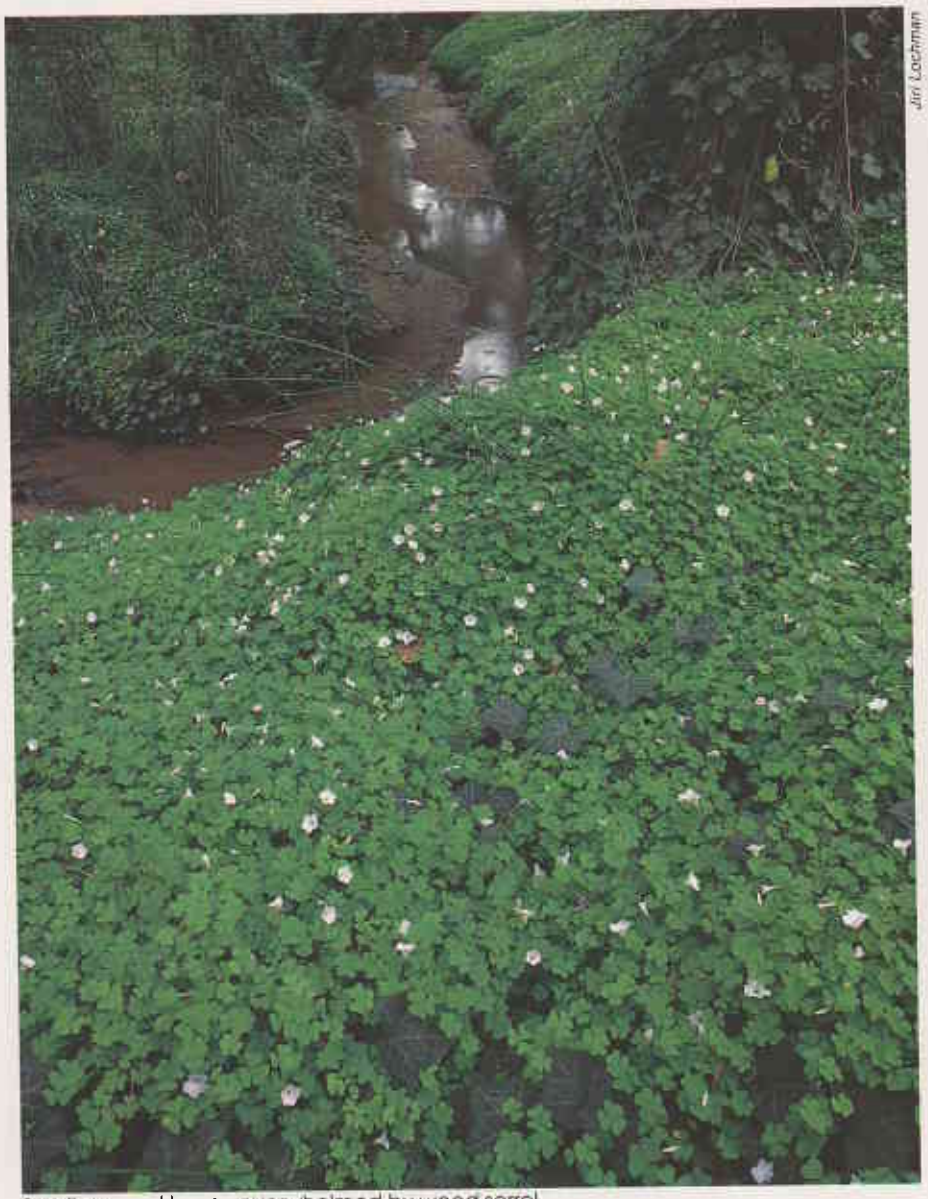
Environmental weeds are plants which affect the conservation values of conservation lands. These plants may include some declared plants (e.g. blackberries) and even some native species introduced outside their normal range and subsequently escaping from those plantings (e.g. peppermint [*Agonis flexuosa*] in Yanchep National Park, or lemon-scented gums [*E. citriodora*] in Kings Park bushland). These are categorised as invasive natives.

Our weed flora mainly originates overseas (alien plants, for example, the blackberries which are such a nuisance along our waterways). These plants were introduced intentionally or unintentionally with European settlement, and can be documented as originating in this manner. Some species, however, appear to have been introduced naturally, by long-distance dispersal, before European settlement and are considered acquired species. Examples are capers and sow thistles. These acquired species would probably have differentiated over time into native species, different from those species initially introduced. Currently, an acquired species would not be considered a weed.

The weed flora of W.A. is in a constant state of flux, highly dynamic with species constantly being added or removed due to changes in their status. Weeds (alien, acquired or invasive native) all pass through various stages. A plant is first planted, it can then persist after cultivation has ceased, spread (adventive) and become locally common then widespread (naturalised).

This process is still occurring, and there are examples of all these stages to be found in W.A., and every gradation in between.

Currently, after 162 years of settlement, W.A. has acquired 838 species of alien plants, and more are always being added. It is estimated that Australia now has over 2 000 species of naturalised alien plants, and studies on South Australian flora suggest that in that State it is growing at the rate of about six species per year. Many of these species do not directly affect bushland, but many do, and may, by invading our nature reserves and national parks, eventually cause the extinction of many of our local plants.



Jiri Lochman

A valley near Harvey overwhelmed by wood sorrel.

Jiri Lochman

G. Keighery

Lantana. (top)

Potato creeper. (below)

weed flora continues to expand and change. Recently, I read a management plan for Booragoon Lake (part of series undertaken for the city of Melville to manage their bushland heritage, probably a first for W.A. local government). In the flora list I noted with surprise a *Commelina* sp. (tradescantia or wandering jew) recorded. Since CALM had no record of this as a naturalised plant or a garden escape, we visited the Lake, and to my dismay found not only Commelina (*Commelina ?benghalensis*), but also populations of lion flowers (*Leonotis leonurus*), potato creeper (*Anredra [Boussingaultia] cordifolia*) and fresh garden rubbish.

The potato creeper is particularly disturbing. Although sterile, it derives its name from the numerous tubers formed in the leaf axils. Infestations of this species in Queensland and northern New South Wales have proved very difficult to eradicate.

Wetlands are particularly bad sites to dump garden rubbish because establishment of weeds in this material is enhanced by the better soils, and lower summer drought stress.

CALM is very concerned about the growing threat of garden escapes. We need to rate how serious a threat each environmental weed is, and to document control measures and remove them before they become too widespread.

Even more important is making people aware of just how dangerous dumping garden rubbish is to our bushland areas. Garden refuse belongs on the compost heap to be recycled into a better garden, or at least taken to an approved refuse site. Garden plants are indeed nice in their place, but we already have too many weeds threatening our native bushland without carelessly adding more.

# LANDSCOPE

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## EDITORIAL

Anybody who reads tourist brochures in this State will appreciate that the tourist industry is, to a large extent, dependent on natural features and wildlife for its 'product'. Many people who are concerned with the natural environment are antagonistic to tourism, and it is certainly true that in the past there have been some insensitive tourist developments in the State. But, just as the farming community over the past ten years has become one of the greatest allies of conservation, so, increasingly, is the tourist industry. For example, in a recently published tourist industry report on tourism in the Kimberley, the need to preserve this environment was given top priority.

This report is indicative of the growing awareness in that industry of the symbiotic relationship between tourism and the protection and maintainance of our unique flora, fauna and landscapes. Rather than being despoilers, the tourist industry has the potential to become one of the strongest advocates for conservation in the broadest sense.

There is a great potential for synergism between those interested in the science of conservation and the tourist industry. One of the ways by which the tourist potential of any natural area can be enhanced without any cost to the environment is by providing information to the visitors on the natural science that makes that area special.

*Landscope* is one avenue by which we are attempting to provide an added dimension to the 'look it's lovely' tourist experience. Interestingly, while *Landscope* receives almost universal acclaim from the general public, there is ongoing, often vigorous, internal debate about how technical we should make the magazine. We would appreciate your views.

**Cover Photo**

*'Now, just how do I find my way out of this Renoir landscape?'*
Photographer **Richard Woldendorp** captured this lizard taking a sighting.

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