

## Saving SA from Alien Invasion

The future of South Africa's natural resources is threatened by the invasion of aliens. No, not little green space men, but rather species from other parts of the world that are taking over our ecosystems, using up the country's scarce water resources.

Invasive alien plants constitute one of the greatest single threats to conservation in South Africa. Some of these invaders arrived by accident, however, the majority were introduced deliberately by people who thought it a good idea at the time. Many alien species were imported for commercial reasons (such as forestry) or as ornamental garden plants.

Today, there are more than 700 alien plant species in southern Africa, originating from places such as Asia, South America and Australia. About 10% of these are considered invasive plants. This is because of their aggressive qualities, and their capacity to invade natural habitats and overwhelm some, or even all of the indigenous vegetation.

Invasive plants have specific traits that make them especially good competitors. Sometimes it can be as simple as having the ability to grow and reproduce more rapidly than native species. Other plants can directly or indirectly prevent other plants from growing nearby. Local herbivores might also find these alien plants inedible.

Invasive alien plants come in many shapes and sizes. They may be trees,



*Cape fynbos is severely threatened by alien species such as Australian acacias, which were originally introduced into the country for timber, bark products, and to stabilise sand dunes.*

shrubs, small herbaceous plants or waterweeds. These plants have been declared undesirable and may not

be grown on any public or private property. What they have in common is the ability to spread and reproduce rapidly and to resist all but the most determined attempts to control them.

Invasive alien plant species found in South Africa include chromolaena, lantana, pereskia, American bramble, sesbania, syringa, bugweed, prickly pear, and water hyacinth. These plants have already taken over more than 10 million hectares of South Africa.

Why do we need to worry about invasive alien plants? Of most concern in South Africa is the fact that most of these species consume vast amounts of water. Experts maintain that more than 7% of all water runoff is lost to alien plants. That's some 3,3 billion cubic metres of water (equivalent to the mean annual runoff of the Vaal River).

### WHAT CAN YOU DO?

- ◆ Plant indigenous plant species (nurseries can help you identify which species are local).
- ◆ Familiarise yourself with the pervasive alien plants plaguing your area and learn how to identify them.
- ◆ Don't bring foreign plants into the country.
- ◆ Join a volunteer clearing group, and adopt a piece of land to keep it clear from alien plants.
- ◆ Encourage your municipality, school, church and others to work with the Working for Water programme.



Courtesy of SA Tourism

*Many rivers and dams are clogged with exotic water lettuce, water hyacinth, Kariba weed or parrot's feather.*

## WORDS

**Alien:** This refers to a species which does not occur naturally in an area (in other words, it is not indigenous), but has been introduced by people. Also referred to as 'exotic' species.

**Biodiversity:** Biodiversity refers to the variability of all living organisms – including animal and plant species – of the genes of all these organisms, and of the terrestrial, aquatic and marine ecosystems of which they are part. Biodiversity makes up the structure of the ecosystems and habitats that support essential living resources, including wildlife, fisheries and forests.

**Indigenous:** An indigenous plant or animal is one which occurs naturally in the place in which it is currently found.

**Invader:** A few alien species reproduce and spread, unassisted by man, into areas where they are not wanted. For a species to become an invader it has to a) arrive, b) survive and c) thrive.

In addition, invasive alien plants can cause flooding and erosion, which destroys riverbanks and leads to the siltation of dams and estuaries, and consequent poorer water quality. These species can also fuel wild

fires, making fire management difficult.

To combat this invasion, the government, under the leadership of the Department of Water Affairs & Forestry, established Working for Water. The organisation employs especially underprivileged people to literally hack and cut their way through alien plants. Since its inception, Working for Water has invested more than R25-billion to clear invasive alien vegetation and establish programmes in more than 300 areas. At the same time it has created thousands of jobs. About 52% of the people employed by Working for Water are women, mostly single moms.

## WEBSITES

- [www.dwaf.gov.za/wfw](http://www.dwaf.gov.za/wfw)
- [www.sanbi.org.za](http://www.sanbi.org.za)
- [http://en.wikipedia.org/wiki/Alien\\_%28biology%29](http://en.wikipedia.org/wiki/Alien_%28biology%29)

*The first Jacaranda tree was imported to Pretoria from Brazil in 1888. Today some 70 000 of the trees grace parks, gardens and streets.*



*Working for Water was established 11 years ago to help clear South Africa of invasive alien plants while creating much needed employment.*

