GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Prosopis glandulosa***

Prosopis glandulosa 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Fabales	Fabaceae

Common name mesquite (English), honey mesquite (English), Texas mesquite (English), Mesquite-Busch (German)

Synonym

Similar species

Summary Prosopis glandulosa (mesquite) is a perennial, woody, deciduous shrub or small tree. It forms impenetrable thickets that compete strongly with native species for available soil water, suppress grass growth and may reduce understory species diversity.

view this species on IUCN Red List

Species Description
Multi-stemmed shrub, branches with zigzag shape. Bipinnate leaves generally dark green but can be bluish green, leaflets 5-15 times as long as broad (20mm long). Flowers are yellow and grouped in dense drooping \"lamb's tail\" spikes. Seed pods bean-like (10-20cm long) with slight constrictions. Spines above axillary bud.

Notes
Occurs over climatically diverse regions, grows well on all soil types. Thrives in high temps >38&#176C. Moderate frost tolerance. Moderate salt tolerance. Pods high in sugar (16%) and protein (12%) and so are sought by animals.

Lifecycle Stages
Seeds viable 2-50 years. Maturity 2-5 years. Flowering commences in summer. Seeds mature 35-40 days after flowering. Plants may be deciduous. Seeds germinate after warm temperatures and rain, these conditions may occur only sopradically. Spread facilitated by grazing animals.

Habitat Description
Occurs over climatically diverse regions, grows well on all soil types. Thrives in high temps >38&#176C. Moderate frost tolerance. Moderate salt tolerance. Pods high in sugar (16%) and protein (12%) and so are sought by animals.

Reproduction
Seed production and suckering (dormant buds below the ground, stimulated by disturbance).
10's of thousands of seeds per square metre per year, seedling mortality high less than 800 seedlings per hectare after one year

Nutrition
No signficance nutrient requirements.

General Impacts
Rapidly outcompetes understorey plants resulting in complete loss of grass cover. Erosion is exacerbated by allelopathic affects of ground litter.

Management Info
Preventative measures: A Risk assessment of *Prosopis* spp. for Australia was prepared by Pacific Island Ecosystems at Risk (PIER) using the Australian risk assessment system (Pheloung, 1995). The result is a score of 20 and a recommendation of: reject the plant for import (Australia) or species likely to be a pest (Pacific).
The Best Practice Manual Mesquite Control and management options for mesquite (*Prosopis* spp.) in Australia aims to provide the most current information on mesquite in Australia. The control and management options presented in this manual are the combined results of years of trials carried out by many dedicated researchers, landholders, herbicide companies, government officers, landcare groups and others. As mesquite species respond differently to control methods, the most effective method or combination of methods will vary depending on the size, density and species of mesquite present. The manual includes a 'mesquite control tool box'. Included also are a number of case studies to demonstrate best practice.

Principal source:

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)
Updates with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review: Craig Walton, Senior Policy Officer (Ecologist), Land Protection, Department of Natural Resources and Mines, Queensland, Australia.

Pubblication date: 2010-04-13

ALIEN RANGE

[1] AUSTRALIA

Red List assessed species 1: VU = 1;

Parus nuchalis **VU**

BIBLIOGRAPHY
9 references found for **Prosopis glandulosa**

Managment information
Agriculture & Resource Management Council of Australia & New Zealand, Australian & New Zealand Environment & Conservation Council and Forestry Ministers, 2000. Weeds of National Significance Mesquite (*Prosopis* species) Strategic Plan. National Weeds Strategy Executive Committee, Launceston.
Summary: Available from: http://www.weeds.org.au/docs/msqstrat.pdf [Accessed November 13 2009]
Australian Weeds Committee, 2008. Weeds of National Significance. Mesquite
Summary: This site provides information on the strategy for the management of Mesquite (*Prosopis*). Documents available for download include the strategy, Mesquite control manual, brochures, posters and current and potential distribution maps.
Available from: http://www.weeds.org.au/WoNS/mesquite/ [Accessed 23 October 2008]
Cooperative Research Centre (CRC) for Australian Weed Management, 2003. Weed Management Guide: Mesquite *Prosopis* species. CRC for Australian Weed Management the Commonwealth Department of the Environment and Heritage and the Queensland Department of Natural Resources and Mines
Summary: Available from: http://www.weeds.gov.au/publications/guidelines/wons/pubs/prosopis.pdf [Accessed 13 November 2009]
IUCN/SSC Invasive Species Specialist Group (ISSG)., 2010. A Compilation of Information Sources for Conservation Managers.
Summary: This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

Mwangi, Esther & Brent Swallow., 2008. *Prosopis juliflora* Invasion and Rural Livelihoods in the Lake Baringo Area of Kenya. Conservation & Society Year : 2008, Volume : 6 Issue : 2 Page : 130-140
Summary: Global concern about deforestation caused by fuelwood shortages prompted the introduction of *Prosopis juliflora* to many tropical areas in the 1970s and 1980s. *P. juliflora* is a hardy nitrogen-fixing tree that is now recognised as one of the world s most invasive alien species. The introduction and subsequent inva�sion of *P. juliflora* in the Lake Baringo area of Kenya has attracted national media attention and contra�dictory responses from responsible agencies. This paper presents an assessment of the livelihood effects, costs of control and local perceptions on *P. juliflora* of rural residents in the Lake Baringo area. Unlike some other parts of the world where it had been introduced, few of the potential benefits of *P. juliflora* have been captured and very few people realise the net benefits in places where the invasion is most ad�vanced. Strong local support for eradication and replacement appears to be well justified. Sustainable utilisation will require considerable investment and institutional innovation
Mwangi, Esther & Brent Swallow, June 2005, Invasion of *Prosopis juliflora* and local livelihoods: Case study from the lake Baringo area of Kenya. ICRAF Working Paper – no. 3. Nairobi: World Agroforestry Centre
Summary: Also available from: http://www.worldagroforestry.org/downloads/publications/PDFs/wp03mwangi.pdf [Accessed 12 November 2009]
Osmond, Rachele, 2003. Best Practice Manual Mesquite Control and management options for mesquite (Prosopis spp.) in Australia. This manual is sponsored by the National Weeds Program (Natural Heritage Trust) and the Queensland Department of Natural Resources and Mines.
Summary: Available from: http://www.weeds.org.au/WoNS/mesquite/ [Accessed July 15 2010]
World Agroforestry Centre, 2005. Environmental Services. *Prosopis juliflora* as a pest or resource–the role of institutions, markets and livelihood strategies (Eastern Africa and India)
Summary: Available from: http://www.worldagroforestry.org/es/prosopis.asp [Accessed 9 December 2005]

General information

ITIS (Integrated Taxonomic Information System), 2005. Online Database *Prosopis glandulosa*
Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.
Available from: http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Prosopis+glandulosa&p_format=&p_ifx=plglt&p_lang= [Accessed March 2005]