

# Acacia bussei

LC

Taxonomic Authority: Harms ex B.Y.Sjöstedt

Global Assessment  Regional Assessment

Region: Global

Endemic to region

No synonyms available

Common names

GALOL

Somali

Upper Level Taxonomy

Kingdom: PLANTAE

Phylum: TRACHEOPHYTA

Class: MAGNOLIOPSIDA

Order: FABALES

Family: LEGUMINOSAE

Lower Level Taxonomy

Rank:

Infra- rank name:

Plant Hybrid

Subpopulation:

Authority:

## General Information

Distribution

Acacia bussei is distributed in Ethiopia, Kenya, Somalia and Tanzania.

Range Size

Area of Occupancy:

Extent of Occurrence: 970000

Map Status:

Elevation

Upper limit: 1800

Lower limit: 50

Depth

Upper limit:

Lower limit:

Depth Zones

Shallow photic  Bathyl  Hadal

Photic  Abyssal

Biogeographic Realm

Afrotropical

Antarctic

Australasian

Neotropical

Oceanian

Palearctic

Indomalayan

Nearctic

Population

A. bussei has a wide distribution range at presents and it is generally recorded as common. It also represent the dominant species of the so called A. bussei woodlands. However in some areas of its range, such as in Somalia, a population decline has been observed due to the over-exploitation of the species which is used in many different ways, but mainly for charcoal production.

Total Population Size

Minimum Population Size:

Maximum Population Size:

Habitat and Ecology

A. bussei is a tree (3-10 m high) which grows in deciduous bushland, dry scrub, Acacia-Commiphora bushland, the species can also dominate large woodlands. It can be found on a wide range of soils from red sands to black cotton (clay) as well as on limestone outcrops. A. bussei woodlands are characterised by the openly spaced A. bussei associated with A. mellifera (Beil), Acacia nilotic (Mara) along waterways, and Acacia tortilis (guda) in depressions.

System

Terrestrial  Freshwater  Nomadic  Congregatory/Dispersive

Movement pattern

Crop Wild Relative

Is the species a wild relative of a crop?

Marine       Migratory       Altitudinally migrant

<u>Growth From</u>	<u>Definition</u>
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Tree - size unknow	Tree (any size), also termed a Phanerophyte (>1m)
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### Threats

A. bussei is widely browsed by cattle, sheep and goats and the flowers appear before the leaves and form an important part of the camels diet. Moreover, the species makes an excellent charcoal and it is in many areas facing over-exploitation (Thulin 1993), meaning that even though A. bussei is not a threatened species a present, woodlands formerly dominated by A. bussei are rapidly dwindling as the destruction of big trees changes the composition and structure of the ecosystems. The Horn of Africa is under heavy pressure from human activity, and is one of the most degraded hotspots in the world, with only about 5 percent of original habitat in relatively pristine condition. Nearly all of the land area is used for grazing, mainly by camels, goats and sheep. Overgrazing and subsequent land degradation is a problem in large areas of the hotspot, particularly near watering points. Shifting cultivation is particularly destructive in parts of central and southern Somalia, where bushland and woodland are cut and burned for the cultivation of cassava (Conservation International 2007). Somalia has been subject to intensive forest exploitation such as Bay, Bakool and Gedo regions, and part of Lower/Middle Shabelle regions. Tree cutting is common for firewood and charcoal, fencing and building materials. The elder part of the population have said that formally their area was forested, but now the land has developed into a desert. The lack of trees within and outside of the villages are a striking feature of the area. Consequently, this has been followed by hazards of soil erosion, drought and decline of soil fertility (Hussein and Abdi 1998).

	<u>Past</u>	<u>Present</u>	<u>Future</u>
1 Habitat Loss/Deqradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.1 Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3 Extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.3 Wood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### Conservation Measures

There are no known conservation measures specifically for A. bussei, however the species is known to occur in some protected areas: Kora National Park, Mkomazi Game Reserve, Shume Magamba Forest Reserve (Tanzania), Tsavo East National Park (Kenya). Samples of seed of A. bussei are held in the Millennium Seed Bank as an ex situ conservation measure. It is highly recommended that in situ conservation actions are promptly taken to ensure that the species doesn't fall into a threatened category in the near future. At present there is no a comprehensive protected areas network where the species occurs. Programmes of land management and sustainable use of resources should be encouraged.

	<u>In Place</u>	<u>Needed</u>
3 Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.2 Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.5 Threats	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.6 Uses and harvest levels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.8 Conservation measures	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.9 Trends/Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Habitat and site-based actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4.4 Protected areas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.1 Identification of new protected areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.4.2 Establishment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.3 Management	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.4 Expansion	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Species-based actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5.3 Sustainable use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.7 Ex situ conservation actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5.7.2 Genome resource bank	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Countries of Occurrence

	PRESENCE							ORIGIN				
	Year Round	Breeding Season only	Non-breeding season only	Passage migrant	Possibly extinct	Extinct	Presence uncertain	Native	Introduced	Re-Introduced	Vagrant	Origin uncertain
Ethiopia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kenya	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Somalia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tanzania	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## General Habitats

	Score	Description	Major Importance
3 Shrubland	1	Suitable	Unset
3.5 Shrubland - Subtropical/Tropical Dry	1	Suitable	Unset
3.6 Shrubland - Subtropical/Tropical Moist	1	Suitable	Unset

## Ecosystem Services

- Insufficient Information available       Species provides no ecosystem services

## Species Utilisation

- Species is not utilised at all

## Purpose / Type of Use

	Subsistence	National	International
2. Food - animal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Fibre	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This species is the main source of charcoal in Somalia. In Somalia bark and root bark fibre is used for making rope, roots for making storage sacks for sorghum and string hanging doors and even young thorns are said to be eaten for food. It is also used as fodder.

Trend in the level of wild offtake/harvest in relation to total wild population numbers over the last five years:

Trend in the amount of offtake/harvest produced through domestication/cultivation over the last five years:

CITES status: Not listed

## IUCN Red Listing

Red List Assessment: (using 2001 IUCN system) Least Concern (LC)

Red List Criteria:

Date Last Seen (only for EX, EW or Possibly EX species):

Is the species Possibly Extinct?  Possibly Extinct Candidate?

## Rationale for the Red List Assessment

A. bussei is currently distributed in Kenya, Tanzania, Somalia and Ethiopia, meaning that the species has a wide distribution range at present, but it is used for a wide variety of purposes as well as fodder, it makes an excellent charcoal and in Somalia is over-exploited. The species doesn't appear to be threatened at present and it is therefore rated as Least Concern, but it is

believed that conservation measures should be considered, as forest habitat in the areas where the species occurs is degraded and fragmented, and the exploitation of the species might lead to a serious population decline in the near future.

Reason(s) for Change in Red List Category from the Previous Assessment:

- Genuine Change
  - Genuine (recent)
  - Genuine (since first assessment)
- Nongenuine Change
  - New information
  - Knowledge of Criteria
  - Incorrect data used previously
  - Taxonomy
  - Criteria Revisio
  - Other
- No Change
  - Same category and criteria
  - Same category but change in criteria

Current Population Trend: Decreasing

Date of Assessment: 18/11/2009

Name(s) of the Assessor(s): Contu, S.

Evaluator(s):

Notes:

% population decline in the past:

Time period over which the past decline has been measured for applying Criterion A or C1 (in years or generations):

% population decline in the future:

Time period over which the future decline has been measured for applying Criterion A or C1 (in years or generations):

Number of Locations:

Severely Fragmented:

Number of Mature Individuals:

### Bibliography

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