

# Conservation Plan for the Cayman Sage, *Salvia caymanensis*



# **Conservation Status**

The Cayman Sage is a flowering herb native exclusively to Grand Cayman. Originally described in 1900 under a different name, and then published as a unique species by Proctor in 1986, it was suspected to have become extinct until rediscovered growing in the road verge on the Queen's Highway in 2007.

Although this wild population has apparently died out, seeds collected from it and grown in the QE II Botanic Park have now generated multiple generations of this plant in very large numbers, planted out in the Botanic Park and elsewhere.

This species is classed as Critically Endangered in the IUCN Red List, and is protected under the National Conservation Act ("NCA"), Schedule 1 Part 1 as protected at all times.

# 1. Ecology and Threats

The Cayman Sage appears to have a variable but generally short life span. It cannot be clearly described as an annual or biannual species, but individuals rarely survive more than a few years. Although the plants flower and seed profusely, populations do not seem to regenerate in one place indefinitely, and it is not known what triggers the seed bank to germinate or how long it can remain dormant.

Very little is understood about the ecology of this plant as a species in the wild, or about any specific threats e.g. from alien pest species. This lack of knowledge impedes planning for restoration to the wild.

Proctor describes Cayman Sage as a species of sandy thickets and clearings, which would suggest it was originally discovered in coastal settings.

Because propagation in the QE II Botanic Park quickly generated thousands of specimens, originating from very large numbers of seeds from the Queen's Highway population, it seems unlikely that current stock is threatened by reduction in genetic diversity. Tracking of individual plants and managing pollination between them is therefore considered unnecessary.

# 2. Conservation objectives

The objective of this Conservation Plan is to restore a self-sustaining population of Cayman Sage in the wild, and to ensure an abundant population in cultivation protects the genetic diversity of the species and serves as a reserve during the restoration phase and beyond.

# 3. Conservation Strategies

## **Cultivation**:

- 1. Continue to propagate large numbers of Cayman Sage plants from plants already in cultivation in the QE II Botanic Park
- 2. Allow the QE II Botanic Park to sell Cayman Sage plants to the public on Grand Cayman only, and encourage planting in gardens in diverse habitats throughout Grand Cayman

## Restoration:

3. Plant out Cayman Sage plants from cultivated stock into selected coastal sand habitats on Grand Cayman, with emphasis on lands under some level of protection or by agreement with the landowner

## Applied Research and Monitoring:

- 4. Monitor the survival and reproduction of the restoration plantings in the wild
- 5. Seek research partnerships with academia to study the biology and ecology of this species in detail, to better inform conservation strategies
- 6. Collate any information gained during propagation and cultivation at the QE II Botanic Park and elsewhere

#### Public Outreach, Education and Awareness:

- Include information on the species and the conservation significance of the cultivated population, when selling Cayman Sage plants to the public
- 8. Publicize restoration plantings in the wild

9. Publicize availability and sale events for this species at the QEI Botanic Park

#### Implementation:

- 10. Mass propagation and sale of Cayman Sage will be led by the QE II Botanic Park using staff, budget and equipment which is currently available to operate the plant nursery.
- 11. Initial attempts to restore Cayman Sage to locations in the wild will be conducted in partnership between the Department of Environment and the QE II Botanic Park.

## 4. Habitat protection

#### a). Critical Habitat

No Critical Habitat is currently proposed for Cayman Sage.

## b). Protected Areas

Restoration of Cayman Sage will be conducted in any suitable protected areas, but at this time habitat for Cayman Sage restoration will not influence selection of new protected areas. This is because optimal habitat for this species is not yet known with any certainty and viability of restoration strategies remain to be developed and tested.

## 5. Additional conservation measures

## a). Control of take

Cayman Sage in the wild, whether discovered naturally in the wild, or after restoration to the wild, is fully protected at all times and may not be used as a source for cultivation or disturbed in any other way without a Permit under the NCA. Any take (as defined in the NCA) of Cayman Sage from the wild without a Permit constitutes an offence under s.33 of the Act.

Cayman Sage already in cultivation at the QE II Botanic Park may be held, propagated, planted out, and given or sold to members of the public on Grand Cayman only. Plants thus entering into private ownership and subsequently being propagated, are all classed as cultivated stock.

Members of the public on Grand Cayman can hold, propagate, plant, buy and sell specimens of cultivated Cayman Sage, but specimens may not be transferred to ownership outside of Grand Cayman. This is intended to retain Cayman Sage's natural distribution as a plant unique to that one island.

# 6. Evaluation and Review

This Conservation Plan will be evaluated periodically by the Department of Environment in consultation with the QE II Botanic Park and at such time that any revision appears to be necessary, the Department will bring proposed revisions to the NCC.

This species could be considered for removal from Part 1 to Part 2 of Schedule 1 of the NCA, at such time as research and monitoring shows that Cayman Sage populations are sustainably re-established in the wild. With widespread adoption of the species as a garden plant, and some clarification of the biology and ecology of this species, removal to Part 2 could potentially be proposed within five years.

Costs to implement this work are moderately low, and within the capacity of existing agencies.