

TERRESTRIAL SPECIES

Cayman sage *Salvia caymanensis* Millsp. & Uline

Taxonomy and Range

Kingdom: Plantae, Division: Magnoliophyta, Class: Magnoliopsida, Order: Lamiales, Family: Labiatae
Genus: *Salvia*, Species: *caymanensis*

Salvia is a widely distributed genus of over 700 species (Proctor 2009). Cayman sage *Salvia caymanensis* is endemic to Grand Cayman. The last specimen was collected by Martin Brunt in 1967 (No.2061), and stored in the herbarium of the *National Trust for the Cayman Islands* (sheet 712). The original identification of *Salvia serotina*, was revised by George Proctor (May 1969) to *S. caymanensis*. The plant, however, was not seen since, despite repeated surveys. *Salvia caymanensis* was, until 2007, considered potentially extinct.

Status

Distribution: Species endemic to Grand Cayman.

Conservation: Critically endangered CR B1ab(i,ii,iii,iv,v)c(ii,iv)+2ab(i,ii,iii,iv,v)c(ii,iv) (The Red List, Burton 2008a).

Legal: Cayman sage *Salvia caymanensis* currently has no legal protection in the Cayman Islands. Pending legislation, it would be protected under the National Conservation Law (Schedule I). The *Department of Environment* would be the lead body for legal protection.

Natural History

Cayman sage *Salvia caymanensis* is a pungent herb bearing profuse small pale blue flowers. It is most easily confused with *Salvia serotina*, but differs in having densely white-woolly undersides to the leaves, and growing to one metre tall, (*S. serotina* achieves a height of less than 30cm).

Cayman sage was originally recorded from coastal areas, however, thereafter it was not recorded for almost 40 years, despite repeated surveys. Several small colonies were rediscovered at small roadside locations in 2007, in conjunction with the implementation of this SAP.

Associated Habitats and Species for Cayman sage

ASSOCIATED HABITAT PLANS	ASSOCIATED SPECIES PLANS
11. Coastal shrubland 14. Dry shrubland 18. Urban and man-modified areas 19. Roads	<i>Turnera triglandulosa</i>

Current Factors Affecting *Cayman sage*

- *Possible extinction*: with no confirmed records since 1967, Cayman sage *Salvia caymanensis* was rediscovered at a roadside location in 2007.
- *Habitat loss*: clearance and development of beach ridge and shrubland habitat.
- *Lack of protected habitat*: records indicate that natural habitat may have been beach ridge. Currently, several small colonies are known from disturbed roadside locations. None, however, currently exist within protected areas.
- *Adaptive nature*: the adaptive nature of *Salvia caymanensis* encourages predominance in disturbed, roadside habitats.
- *Landscaping potential*: ease of cultivation from seed, hardy nature, and attractive blue flowers make *Salvia caymanensis* suitable for landscaping.

Opportunities and Current Local Action for *Cayman sage*

None.

SPECIES ACTION PLAN for *Cayman sage*

OBJECTIVES	TARGET
1. Determine if <i>Salvia caymanensis</i> is extinct and afford protection if appropriate.	2008
1. REPORT: <i>Salvia caymanensis</i> rediscovered, 2007.	
2. If <i>Salvia caymanensis</i> is extinct, attempt conservation propagation .	2008
2. REPORT: Conservation propagation commenced at QEII Botanic Park Native Tree Nursery, 2007.	
3. If extant, raise IUCN Red list status of <i>Salvia caymanensis</i> to least concern.	2015

Cayman sage PROPOSED ACTION	LEAD	PARTNERS	TARGET	MEETS OBJECTIVE
Policy & Legislation				
PL1. Pass and implement the National Conservation Law.	CIG	DoE	2006	1,2,3
PL2. Implement the Endangered Species (Trade & Transport) Law.	DoE	CIG	2006	1,2
PL3. If extant, protect <i>Salvia caymanensis</i> under Schedule I of the National Conservation Law, through establishment of conservation regulations.	DoE	CIG	2006	1,2,3
PL3. REPORT: <i>Salvia caymanensis</i> rediscovered, 2007.				
PL4. Reduce the threat of a catastrophic loss of the remaining populations, through involvement with the <i>Millennium Seedbank Project</i> .	DoE RBGK	QEII BP	2010	3
PL4. REPORT: Full seed collection lodged with Kew, 2007.				
PL5. Promote amendment of the Planning Law, to facilitate rapid imposition of stop-orders on illegal developments and provide a responsive and effective enforcement mechanism.	DoP	DoE CIG	2010	1,2
PL6. Strengthen the <i>Development Plan</i> on Grand Cayman, incorporating a long-term vision for the environmental, social, and economic development of the Islands.	DoP CPA	CIG MP DoE	ongoing	1,2
Safeguards & Management				
SM1. Determine location / status of herbarium specimens of <i>Salvia caymanensis</i> , and obtain any available seed to attempt conservation propagation.	RBGK	NT DoE	2008	2,3
SM1. REPORT: Natural wild seed source identified, 2007.				
SM2. Collect seeds under <i>Millennium Seedbank Project</i> protocol and bank at Kew, with replicate collection for local conservation propagation.	DoE RBGK QEII BP		2012	3
SM2. REPORT: Millennium Seedbank collection of 10,000 seeds lodged with Kew, 2007. Collection of 3,000 seeds for local propagation at QEII BP, 2007.				
SM3. Establish local conservation propagation programme and introduce <i>Salvia caymanensis</i> to private gardens and landscaping schemes through the Native Tree Nursery.	QEII BP DoE	RBGK	2008	1,3
SM3. REPORT: <i>Salvia caymanensis</i> growing from seed, 2007. <i>Salvia caymanensis</i> sold from Native Tree Nursery, 2008.				
SM4. Implement associated HAPs.	DoE		2015	1,2,3
Advisory				
A1. Liaise with developers and Roads Authority towards establishing <i>Salvia caymanensis</i> as a staple in large-scale landscaping projects.	DoE NRA		2012	1,3
A2. Promote use of native plants in landscaping, through maintenance of existing vegetation and use of	DoP	DoE	2009	1,2,3

<i>Recommended Planting Palette</i> in new developments.				
A3. Targeted awareness of the need for the National Conservation Law and the Endangered Species (Trade & Transport) Law.	DoE	CIG NT	2006	1,2,3

Cayman sage PROPOSED ACTION	LEAD	PARTNERS	TARGET	MEETS OBJECTIVE
Research & Monitoring				
RM1. Survey remaining natural habitat for <i>Salvia caymanensis</i> .	DoE		2008	1
RM1. REPORT: Completed 2007.				
RM2. Survey modified habitat through public “backyard” survey for <i>Salvia caymanensis</i> .	DoE	MP	2007	1
RM2. REPORT: Public competition with C\$1,000 prize launched in Darwin Initiative Newsletter and local media, 2007. Results in rediscovery of <i>Salvia caymanensis</i> at six locations around Grand Cayman.				
RM3. Collect seed under <i>Millennium Seedbank Project</i> protocol, including voucher specimens and <i>in situ</i> habit images, and transpose into searchable electronic format, linked to <i>Field Collections Database</i> .	DoE	RBGK QEIBP	2010	3
RM3. REPORT: Collection of 10,000 seeds submitted to MSB, 2008. Confirmation of viability required.				
RM4. Reassess IUCN Red List status of <i>Salvia caymanensis</i> locally.	DoE		2015	3
RM4. REPORT: In response to rediscovery, Red List status amended to <i>Critically endangered</i> , 2007.				
Communication & Publicity				
CP1. Raise awareness of the unique nature of <i>Salvia caymanensis</i> and other endemic flora and fauna.	DoE NT QEIBP	MP CN GC OS SB LCN	2008	1,2,3
CP1. REPORT: ONGOING JUN 07. Media associated with competition launch and rediscovery of <i>Salvia caymanensis</i> . <i>Salvia caymanensis</i> featured in Red List of Flora (Burton 2008a).				
CP2. Raise awareness of the value of native landscaping, and promote the use of <i>Salvia caymanensis</i> .	DoE DoP NT QEIBP	MP CN GC OS SB LCN	2010	1,2,3
CP3. Utilise native flora and fauna, and associated preservation efforts, in the international promotion of the Cayman Islands.	CIG	DoE DoT NT MP QEIBP	2010	1,2,3

REFERENCES and FURTHER READING for *Cayman sage*

Burton, F. (2007). *Wild Trees in the Cayman Islands* (2nd edition). International Reptile Conservation Foundation, USA. ISBN 978-1-4276-2168-9

Burton, F.J. (2008a). *Threatened Plants of the Cayman Islands: The Red List*. Royal Botanic Gardens Kew: Richmond, Surrey UK.

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Proctor, G.R. (1984). *Flora of the Cayman Islands*. Kew Bulletin Additional Series XI. Royal Botanic Gardens, Kew. Her Majesty's Stationary Office. London. ISBN 0-11-242548-8.

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