INTERIM RECOVERY PLAN NO. 98

MOUNTAIN PAPER HEATH

(*SPHENOTOMA DRUMMONDII*)

SUMMARY OF ACTIONS

1999-2002

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Photograph: Stephen Hopper

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FOREWORD

Interim Recovery Plans (IRPs) are developed within the framework laid down in Department of Conservation and Land Management (CALM) Policy Statements Nos. 44 and 50.

IRPs outline the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of threatened taxa or ecological communities, and begin the recovery process.

This Interim Recovery Plan will operate from June 1999 to May 2002 but will remain in force until withdrawn or replaced.

This IRP was approved by the Director of Nature Conservation on 26 June 2001. The provision of funds identified in this Interim Recovery Plan is dependent on budgetary and other constraints affecting CALM, as well as the need to address other priorities.

Information in this IRP was accurate at June 1999.

BACKGROUND

Scientific Name: ***Sphenotoma drummondii***
Common Name: Mountain Paper Heath
Family: Epacridaceae
Flowering Period: October–December (occasionally July)
CALM Regions: South Coast and Southern Forest
CALM Districts: Albany and Walpole
Shires: Denmark, Plantagenet, Gnowangerup, Cranbrook and Albany
Recovery Team: Albany District and Southern Forest Region Threatened Flora Recovery Teams (ADTFRT and SFRTFRT)

Illustrations and/or further information: Bentham G. (1869). Flora Australiensis: a description of the plants of the Australian Territory. Vol. 4. Stylidieae to Pedalineae, Reeve, London, p. 263.; Blackall, W.E. and Grieve, B.J. (1981). How to Know Western Australian Wildflowers IIIB, 2nd ed.: 360. University of Western Australia Press, Perth.; Brown, A., Thomson-Dans, C. and Marchant, N. (Eds). (1998). *Western Australia's Threatened Flora*. Department of Conservation and Land Management, Western Australia.; Mueller, F. (1882). Systematic Census of Australian Plants, 109.; Robinson C.J. and D.J. Coates (1995) *Declared Rare and Poorly Known Flora in the Albany District* Wildlife Management Program No. 20. Department of Conservation and Land Management, Western Australia.

Description: *Sphenotoma drummondii* is a shrub 15-30 cm tall with densely crowded leaves that are 5-7 cm in length and spreading on the lower part of the stem, but are shorter (2 cm long) and erect to stem clasping below the inflorescence. The inflorescence is a cylindrical spike of up to 40 white flowers; with each flower subtended by a broadly acuminate brown leaf-like bract to 12 mm long.

Current status: *Sphenotoma drummondii* was declared as Rare Flora in October 1996 and was ranked as CR (Critically Endangered) in November 1998 under World Conservation Union (IUCN) Red List Criterion C2a (IUCN 1994) as less than 250 mature individuals were known at that time and populations were fragmented. Following surveys, more populations have been located and it is currently ranked as EN (Endangered) under Criterion C2a (less than 2500 mature individuals, and all populations in continuing decline and severely fragmented). The main threats are from dieback disease (*Phytophthora cinnamomi*) and inappropriate fire regimes.

Populations have now been found outside the Stirling Ranges on Mt Manypeaks and on several granite outcrops north of Walpole. These populations are not thought to be threatened by dieback. Further populations have also been found in the Stirling Ranges. Due to the change in the species' ranking, it is not now deemed necessary to write a full IRP and this summary has been provided instead.

Habitat requirements: *Sphenotoma drummondii* is known from 16 populations. With the exception of a population north of Walpole and an old record from Bettys Beach, all occur on mountain peaks. All but the Bettys Beach population are in National Parks. The species grows in shallow soil over granite, quartzite, or schist and is commonly located on shear cliff faces or under over-hangs. Habitat consists of montane heath dominated by *Kunzea montana* and *Calothamnus crassus* or woodlands of *Eucalyptus megacarpa* over *Agonis linearifolia*, and *Allocasuarina decussata*.

Table 1: Summary of population information and threats

Pop. No & Location.	District	Land Status	No. of plants.		Condition	Threats
1. Mount Manypeaks	Albany	Waychinicup NP	1994	21	Good	Dieback
2. Bluff Knoll	Albany	Stirling Range NP	1996	40	Poor	Recreational activities, dieback
3. Ellen Peak	Albany	Stirling Range NP	1996	200+	Moderate	Recreational activities, dieback
4. Toolbrunup Peak	Albany	Stirling Range NP	1995	10	Moderate	Recreational activities, dieback
5. Mount Magog	Albany	Stirling Range NP	1995	17	Moderate	Recreational activities, dieback
6. Mondurup Peak	Albany	Stirling Range NP	1995	5	Moderate	Recreational activities, dieback
7. Coyanarup Peak	Albany	Stirling Range NP	1995	10		Dieback
8. Coyanarup Saddle	Albany	Stirling Range NP	1996	5	Moderate	Dieback
9. Wedge Hill	Albany	Stirling Range NP	1996	200+	Healthy	Dieback
10. Mount Success	Albany	Stirling Range NP	1996	20+	Moderate	Dieback
11. Ellen Peak	Albany	Stirling Range NP	1997	6		Dieback
12. Mt Frankland	Walpole	Mt Frankland NP	1997	11(7)	Healthy	Dieback
13. Bettys Beach and Two Peoples Bay	Albany	Shire Reserve	1992	unknown		Dieback
14 Mount Frankland	Walpole	Mt Frankland NP	1997	18	Healthy	Recreational activities, dieback
14 Twin peaks	Albany	Porongurup Range NP	1999	50+	Moderate	Recreational activities
15 Mt Trio	Albany	Stirling Range NP	1996	(2)	Moderate	Dieback
16 Marmabup Peak	Albany	Porongurup Range NP	1996	8	Healthy	Recreational activities

( ) = the number seedlings observed.

1. RECOVERY ACTIONS

Existing Recovery Actions: The following recovery actions have been or are currently being implemented:

1. Aerial spraying of phosphite has been applied to selected populations.
2. Monitoring the effectiveness of phosphite is ongoing.
3. Annual monitoring of all populations is being conducted.
4. Populations 1-11 will be incorporated into the fire management strategy for the Threatened Ecological Community (TEC) 'Montane thicket and heath of the South-West Botanical Province'.
5. Further surveys will be conducted.

3. ACKNOWLEDGMENTS

The following people have provided assistance in obtaining field information that has led to the downgrading of this taxon from CR to EN.

Sara Barrett Conservation Officer, Albany District
Ellen Hickman Previous Conservation Officer, Albany District

4. TAXONOMIC DESCRIPTION (Brown, A. *et al* (1998))

Sphenotoma drummondii is a small shrub to 50 cm tall with spreading 4-8 cm long lanceolate leaves that taper to a pungent point, the margins softly ciliate, at least when young. The upper leaves are small and appressed, giving the last 3-5 cm of the flowering branch the appearance of a peduncle. Flowers rather large, in an ovate-oblong dense simple spike to 2.5 cm long, each flower solitary within the bract and sessile. Bracts broadly lanceolate, acute, ciliate, the upper bracts ovate and mucronate. Bracteoles much shorter, complicate. Sepals long, rather broad, acute. Corolla tube glabrous, as long as the calyx; lobes very broad, nearly as long as the tube, with very prominent longitudinal ridges at the base closing the orifice. Filaments less adnate than in *S. squarrosum.* Anthers 2-lobed at the base. Hypogynous scales small. Ovary glabrous.

5. REFERENCES

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