Landnote

THE OCCURRENCE OF VASCULAR PLANTS ON A GRANITE OUTCROP IN SERPENTINE NATIONAL PARK

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INTRODUCTION

Although the flora of southwest of Western Australia is relatively well known, there is limited published information on the habitats of individual species.

In this regard I have been surveying the vascular plants occurring on granite outcrops in the northern part of the Darling Escarpment. This paper reports the results of a survey conducted on a granite outcrop in Serpentine National Park, situated 50 kilometres south of Perth on the South Western Highway.

THE SURVEY AREA

The vegetation of the park is open forest of jarrah and marri, with buttergum (Eucalyptus laeliae) occurring on scarp slopes. Granite outcrops are frequent.

Average annual rainfall is 1140 mm and has ranged from 1000 mm to 1150 mm over the past four years. 80 percent of the annual rainfall occurs in the months of May to September inclusive. Summers are hot and dry.

The granite outcrop surveyed is located on the southern boundary of the park. Its slopes vary from mild to steep, and have a westerly aspect.

The survey was conducted in October 1986.

SURVEY RESULTS

39 species of vascular plants representing 23 families were identified on the outcrop. Of these, eleven species were exotics and two were ferns (see table 1).

TABLE 1

LIST OF PLANTS LOCATED IN SURVEY

(Exotics marked with an asterisk)

FAMILY	SPECIES	COMMON NAME
APIACEAE	Hydrocotyle callicarpa	Small pennywort
ASTERACEAE	Angianthus humifusus	Procumbent angianthus
	Helipterum cotula	Mayweed sunray
	*Hypochoeris glabra	Smooth catsear
	Quinetia urvillei	Quinetia
	Rutidosis multiflora	Small wrinklewort
CYPERACEAE	Schoenus sp.	Bog rush
CENTROLEPIDACEAE	Aphelia cyperoides	
	Centrolepis aristata	Pointed centrolepis
	Isolepis sp.	
CRASSULACEAE	Crassula colorata	Dense stonecrop
CARYOPHYLLACEAE	*Silene gallica	French catchfly
DROSERACEAE	Drosera glanduligera	Scarlet sundew
GRAMINEAE	*Aira caryophyllea	Silvery hairgrass
	*Briza maxima	Blowfly grass
	*Briza minor	Blowfly grass
	*Vulpia myuros	Ratstail fescue
HYACINTHACEAE	*Lachenalia reflexa	
JUNCACEAE	Juncus bufonius	Toad rush
LILIACEAE	Borya nitida	
	Caesia parviflora	
	Laxmannia squarrosa	
	Thysanotus patersoni	Twining fringelily
LOGANIACEAE	Mitrasacme paradoxa	
LAMIACEAE	Hemigenia incana	Velvety hemigenia
MIMOSACEAE	Acacia pulchella	Western prickly moses
MYRTACEAE	Verticordia huegelii	
ORCHIDACEAE	Thelymitra crinita	Blue lady orchid
PORTULACACEAE	*Caladrinia calyptrata	Pink purslane
PROTEACEAE	Hakea sp.	
PHILYDRACEAE	Pritzelia pygmaea	
POLYPODIACEAE	Chielanthes austrotenuifolia	Rock fern
	C. distans	Bristly cloak fern
PAPILIONACEAE	*Trifoluim tomentosum	Woolly clover
STYLIDIACEAE	Levenhookia pusilla	Midget stylewort
	Stylidium bulbiferum	Circus triggerplant
	Stylidium sp.	
SCROPHULARIACEAE	*Parentucellia latifolia	Common bartsia
	*Bellardia trixago	Trixago bartsia

DISCUSSION

The dominant plants on the outcrop were lichens, and mosses forming dense swards up to 4 cm deep in places.

Vascular plants showed distinct patterns of distribution. The moss swards, where soil and humus was scarce or absent, were colonised by small annuals alone.

Large annuals and perennial species were confined to crevices and depressions where soil and humus had accumulated.

The small annuals in moss swards were short-lived species with a winter-spring growth pattern enabling them to take advantage of the highly seasonal rainfall.

Moisture availability at the time of the survey had become limited and patchy. Development of the small annual species was correspondingly varied, ranging from mature, dead plants in the moss swards, to green immature specimens on seepages and sites with some soil or humus.

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