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**SEDGELANDS IN HOLOCENE DUNE SWALES
RECOVERY TEAM**

**ANNUAL REPORT
1999-2000**

By Deanne Pember

For the Sedgeland in Holocene Dune Swales Recovery Team

Department of Conservation and Land Management
Marine and Coastal District
47 Henry Street FREMANTLE WA 6160

Summary

This report summarises work carried out during the year 1999-2000 on behalf of the Sedgelands in Holocene Dune Swales Recovery Team.

Introduction

The Sedgelands in Holocene Dune Swales was assessed as critically endangered during 1996.

The community occurs in linear damplands and occasional sumplands (wetlands) between the Holocene dunes formed over the last 7 000 years. Typical native species in the community include the shrubs *Muehlenbeckia adpressa*, *Acacia saligna* and *Xanthorrhoea preissii*, and the herbs *Baumea juncea*, *Isolepis nodosa*, and *Poa porphyroclados*.

When conserved as a representative unit the range of different ages of the wetlands along the coastal evolutionary sequence, in association with their geomorphic history, provide important opportunities for research on wetland evolution.

The community is located in the following eight wetland sites:

- Becher Point (a suite of parallel ridges)
- Adjacent to Lake Richmond
- Between Lakes Cooloongup and Walyungup
- Lark Hill
- Yanchep National Park
- Industrial Park 14 (near the corner of Ennis and Patterson Roads in Rockingham)
- Land within the rail loop near the grain terminal on the boundary of Rockingham and Challenger
- Preston Beach (a single swale).

The most typical form occurs in the Becher Suite within the Port Kennedy Scientific Park, a class-A nature reserve (Rockingham – Becher plain).

The remaining examples of the critically endangered community are threatened by clearing, disease introduction, changes to hydrological processes, erosion by wind and water, disturbance due to recreational use/maintenance activities, weed invasion, grazing by rabbits, and inappropriate fire regimes.

Since June 1996, the Sedgelands in Holocene Dune Swale Recovery Team has overseen the writing of the Interim Recovery Plan. This report outlines the progress made in the finalisation of the Interim Recovery Plan and in managing the sedgelands during the 1999-2000 financial year.

Recovery Team

The Recovery Team last met during March 1999 with the aim of finalising the Interim Recovery Plan, gaining endorsement at State level and submitting it to Environment Australia before the end of 1999. Since the meeting final comments were gathered in July 1999 and the process was halted whilst the team waited for important comments from the Semeniuk Research Group. In October 1999 it was decided to proceed without the Semeniuk comments. The final meeting before the submission of the Interim Recovery Plan to Environment Australia has been scheduled for November 2000.

Members of the team include:

- Mr Peter Dans (Marine and Coastal District Manager, CALM, chair)
- Mr John Blythe (WA Threatened Species and Communities Unit, CALM)
- Ms Valerie English (WA Threatened Species and Communities Unit, CALM)
- Dr Neil Gibson (Woodvale Research, CALM)
- Dr Jenny Davies (Murdoch University)
- Dr Phil Jennings (Murdoch University)
- Mr John Tucker (City of Rockingham)
- Ms Rezina Shams (Waters and Rivers Commission)
- Ms Deanne Pember (Marine and Coastal District, CALM)

Recovery Actions

This section summarises the progress made on the recovery actions in the draft 1999-2002 Interim Recovery Plan in the Port Kennedy Scientific Park.

Action 3.5.1 - Prevent further clearing or destruction by other means, especially of good examples of the older stages of the wetland, by acquisition, negotiation, and planning.

During April 2000 Department of Land Administration placed a Notice of Intention to include Lot 217 (Crown Land) into Class A Reserve 45041 (Port Kennedy Scientific Park – vested with National Parks and Nature Conservation Authority) then re-describe the reserve and amalgamate the reserve with Class A Reserve 44077. This action has been approved by the National Parks and Nature Conservation Authority (NPNCA) and the Minister for the Environment.

Action 3.5.6 - Design and implement a weed control strategy for the community.

Typha seed heads have been cut, olive trees sprayed.

Action 3.5.8 - Involve local community groups and industry in the recovery of the sedgeland community wherever possible and practical.

A Greencorps team and the Warnbro Senior High School Bushrangers have been involved with the brushing of the eroded dunes, widening of the firebreak tracks and removal of internal fencing.

Peter Leafé (Eco Services Manager in the Calix Group) has applied for 2001 Coastcare and 2001 Industry Specific Training funding to complete management recovery actions from this plan with the help from indigenous Australian landcare/horticultural trainees, local primary school and high school students. The Calix group serves the unemployed and disadvantaged

within the Western Australian community. The Eco Services division is responsible for completing a range of land care, conservation and land management projects. These are funded via beneficial funds, fundraising, donations and sponsorship. The projects are currently performed on land in the metropolitan and southwest areas. Port Kennedy is a geographic area of interest to Peter Leafe.

Taylor Woodrow (the developer of the adjacent Kennedy Park residential subdivision) has showed interest in providing corporate sponsorship and support to the Port Kennedy Scientific Park. The recent proposals include providing an interpretive information shelter and small car park along the northern boundary adjacent to the development.

Michelle Hogan from Livewire Promotions (acting for Taylor Woodrow) has included articles regarding the significance and importance of conserving the Port Kennedy Scientific Park in their newsletter that is distributed to Kennedy Park residents.

Port Kennedy Scientific Park brochures (full colour) were produced and distributed to outlets in the local community during March 2000. The brochure provides information on the importance and significance of the area including the critically endangered wetlands, formation of the dune and swale system, and an insight into the various native plants and animals. Feral predators and threats to the Scientific Park and endangered wetland community were also highlighted. People were encouraged to enter the park through the specially constructed pedestrian access gates that were recorded on a map in the brochure. The brochures were produced utilising funds from the Bankwest LANDSCOPE Visa Card grant.

An article published in the local Sound Telegraph (May 2000) highlighted the work that the Greencorps team had completed and the variety of work that the community could assist with. The local community were asked to join the newly established Port Kennedy Volunteer Team.

The Port Kennedy Volunteer team has a starting membership of 5 people from the local area.

Action 3.9 - Agree on location, and install vermin proof fence such that wetland areas are protected and not impacted.

Regular patrols have been carried out along the fence line at Port Kennedy Scientific Park. Numerous padlocks have been replaced on the vehicle access gate at track A1. Two large panels that were cut from the vermin fence have also been replaced.

It was also observed that vehicles are accessing the beach and the park from the southern boundary and the northern boundary where the fence line is not completed. A further three kilometres of vermin proof fence is required to complete the northern boundary and enclose the reserve to the beach. Port Kennedy Resorts was to supply the funding for this final three kilometres by the end of 1999.

Vehicles are accessing the beach on the southern boundary from a council track leading of Siracusa Court and from the firebreak track inbetween the Port Kennedy Youth Camp

Action 3.11.2 - Ensure maintenance of strategic firebreaks on occurrences or construction of new strategic fire breaks on surrounding lands to help prevent fire spreading to the community.

All nominated firebreaks have been regularly mowed or slashed during the year.

Three small fires were lit during 1999-2000. The firebreak assisted with the containment of two fires, each burnt less than one hectare of bush. The third fire burnt approximately one hectare of bush within a fire cell. Quick response from the Rockingham fire brigade ensured that the fire was put out before it spread further.

Action 3.15.1 - Ensure that the development of any tourist information centres does not impact on the swale community, and that they provide information on the significance of the wetland areas, the need to conserve them, and how this is being done.

A colonial information shelter has been purchased and four estate interpretive information panels are being developed highlighting the flora, fauna, and the formation and significance of the wetlands. This project funded by the Bankwest LANDSCOPE Visa Card grant will be located next to a wetland close to the pedestrian access gate without impacting on the threatened community.

Action 3.17 - Monitor and manage weeds.

A weed map for Bridal Creeper in the Port Kennedy Scientific Park has been produced and update during the year. During this year the District has commenced creating maps for the remaining weed varieties in the Scientific Park.

Acknowledgements

The Recovery Team wishes to acknowledge the work undertaken by Ian Gale in the management of the sedgeland and for his contribution to the preparation of the Interim Recovery Plan. Ian resigned from the Department of Conservation and Land Management (CALM) in April 2000 and his role at Port Kennedy Scientific Park and on the Recovery Team has been taken by Deanne Pember.