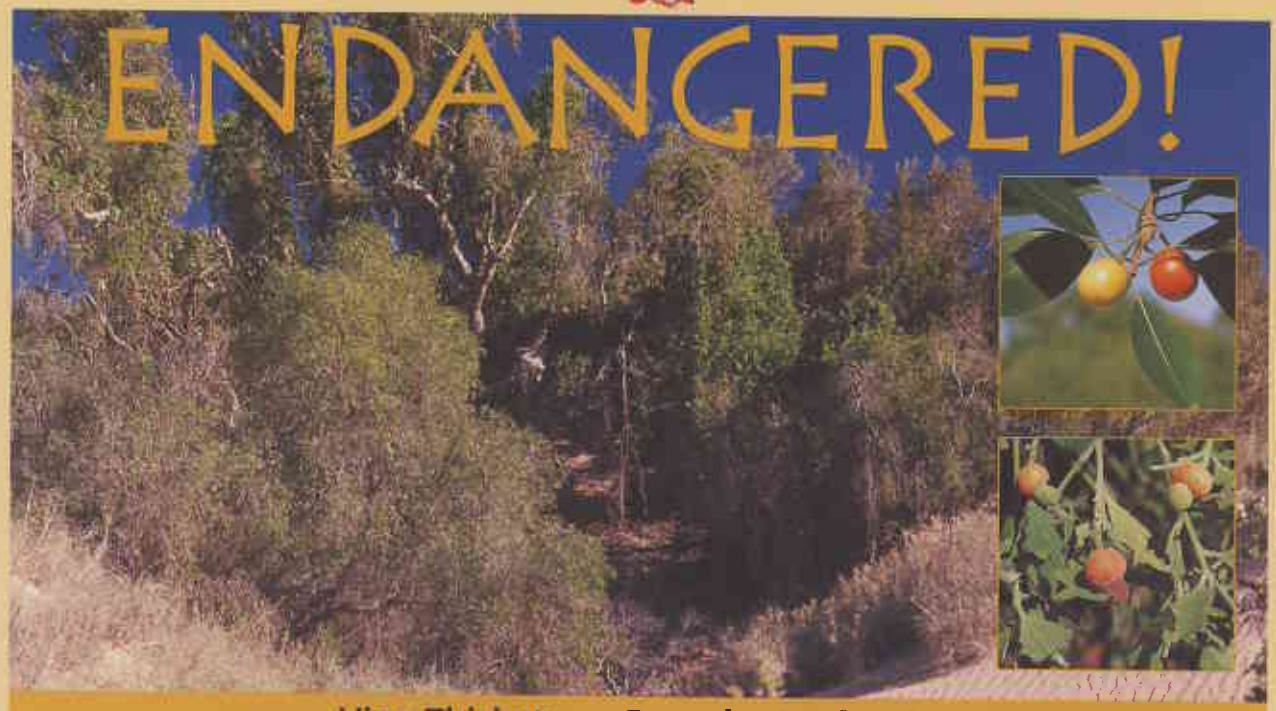
ENDANGERED!



Vine Thickets on Dampier Peninsula

The semi-deciduous vine thickets that occur on the landward slopes of coastal sand dunes on Dampier Peninsula, from Broome to One Arm Point and Goodenough Bay, make up one of the most interesting plant communities in the West Kimberley. Many of the species of trees, shrubs and vines that these thickets contain are at the southern limits of their ranges, and are more typically found in rainforest vegetation associated with rocky sites in wetter more northerly parts of Australasia.

The upper storey of these vine thickets is dominated by one or more evergreen tree species, many of which produce edible fruits and berries, such as the banyan fig (*Ficus virens*) mamajen (*Mimusops elengi*), wild apple (*Syzygium eucalyptoides*), mangarr (*Pouteria sericea*), mistletoe tree (*Exocarpos latifolius*), ebony wood (*Diospyros ferrea* var. *humilis*), and marool or blackberry tree (*Terminalia petiolaris*). They are important traditional food resources for Aboriginal people, and the local Bardi language includes a word for vine thicket—*budan*. The thickets also provide important habitat for animals, such as bats and the rose-crowned fruit pigeon.

Occurring as discrete pockets of dense vegetation, typically a few hectares in size, the total area of the 'vine thickets on coastal dunes' community occupies less than 1,000 hectares. About 90 per cent of this area occurs on Aboriginal reserves and grazing leases and less than 10 per cent in Coulomb Point Nature Reserve and the town of Broome.

Because it occurs in small or very narrow linear patches with high edge-to-area ratios, this vine thicket community is highly vulnerable to disturbance. Degradation and contraction in size can be due to the combined effects of frequent hot wildfire, cattle damage and/or impacts of recreational activities such as off-road driving and camping. Damage from vehicles or cattle (seeking shade) may open the normally closed tree or shrub canopy, permitting weeds and grasses to invade the understorey and, in turn, creating fuel for internal fires. In addition, vine thickets are affected by hot fires in adjacent vegetation. Fire regimes in the Kimberley have changed dramatically and uncontrolled fires now occur annually on the peninsula. With increasing development on the coast, clearing is also becoming an important threat.

Last dry season, under a project jointly funded by the Natural Heritage Trust, CALM's Threatened Species and Communities Unit and West Kimberley District, along with the Broome Botanical Society, conducted survey work on some previously undocumented vine thicket patches. Data were collected on their species composition and the threatening processes affecting them. In addition, the existence of occurrences located from colour aerial photographs was confirmed, in order to establish the full extent of the vine thicket community. Collation of this and pre-existing information has enabled the assessment of the vine thickets on coastal dunes as a threatened ecological community in the 'Vulnerable' category. Decline is continuing and action is necessary to prevent the community becoming Endangered. In the coming year, discussions with local stakeholders will continue, and opportunities to develop and implement conservation management will be investigated.

by Sally Black

Photos by Kevin Kenneally & B J Carter

Winner of the 1998 Alex Harris Medal for excellence in science and environment reporting.

LANDSCOPE

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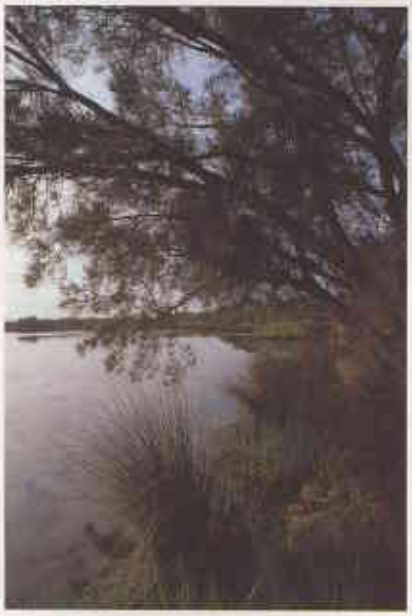
Western Australian botanists are taking part in a global plan to store seed from 10 per cent of the world's flora by 2010. See page 23.

Mushrooms the size of a dinner plate can appear within 48 hours of a fire in the karri forest. Read about forest fungi on page 48.

The Pilbara's numerous islands are rich in history, wildflowers and wildlife, with prolific marine life in the surrounding waters. See page 34.



Discover the rich bird life and tranquillity of the Canning River Regional Park on page 17.

Many of WA's threatened marsupials can be seen in the south-west for the first time in decades. Read about their return to Dryandra Forest on page 10.

FEATURES

REGULARS

COVER

Paradoxically, the stinging tentacles of sea anemones—a group of carnivorous invertebrates that sometimes resemble colourful flowers—can also provide a safe haven for many underwater creatures. Anemonefish gain immunity to the stinging cells and live primarily in sea anemone tentacles. Other animals, such as crabs, carry a protective anemone on their backs. Turn to page 28.

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