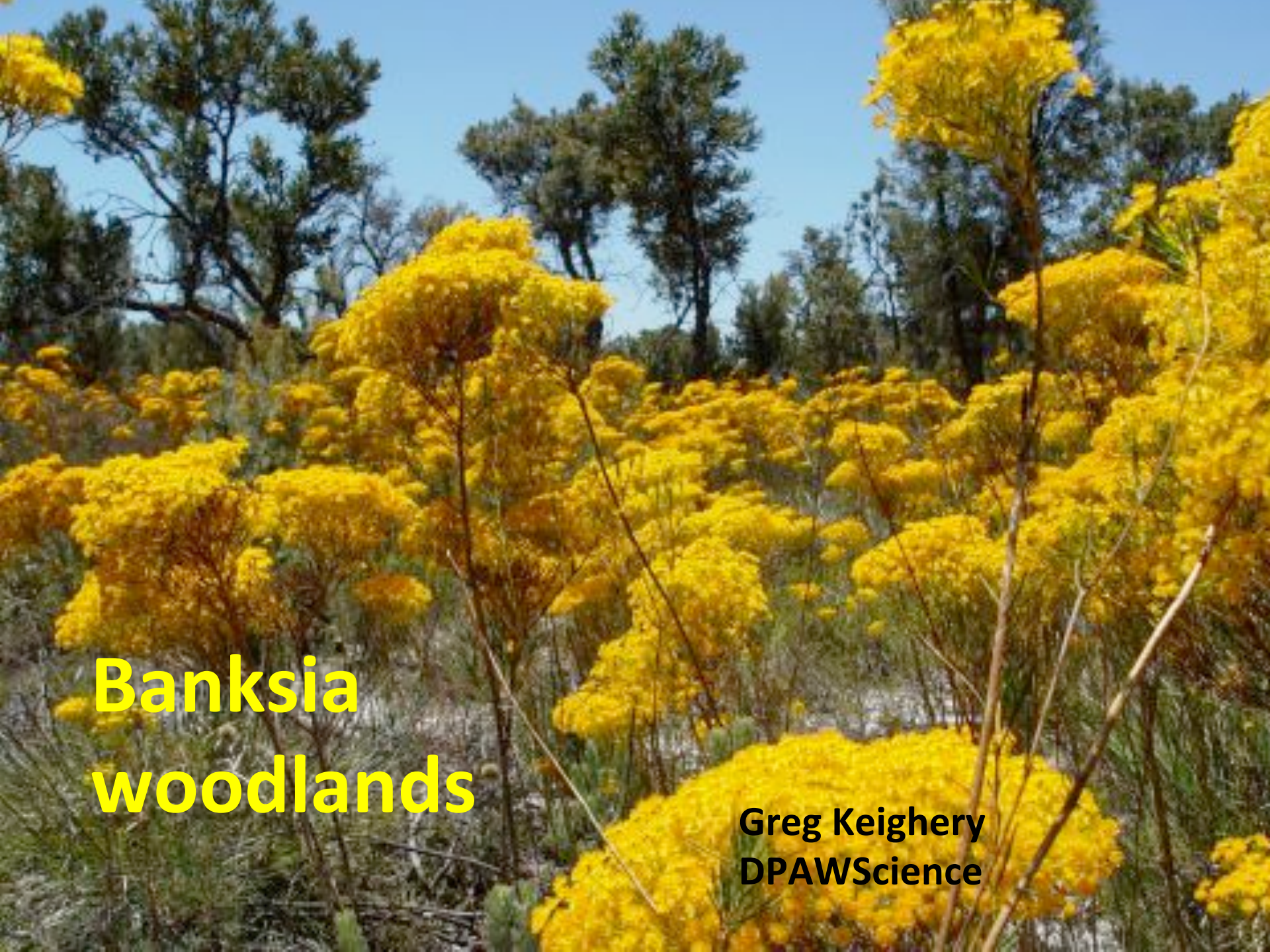


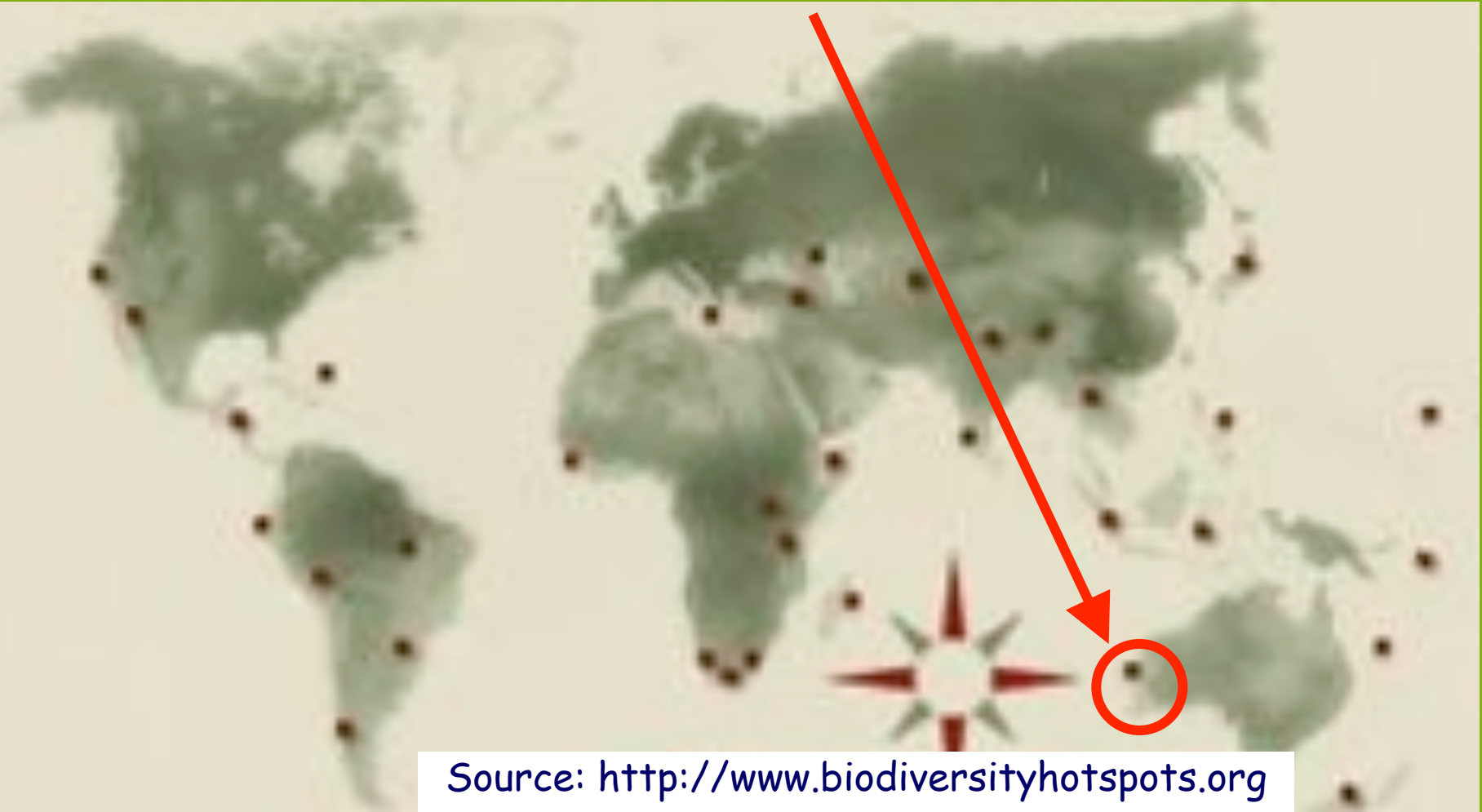


Banksia woodlands

**Greg Keighery
DPAWScience**

World Class Natural Environment

Southwest Western Australia is
one the world's 34 biodiversity hotspots



Source: <http://www.biodiversityhotspots.org>

Banksia Woodlands

- Low woodlands, 4-8 m
- Few dominant trees (9, but mainly *B. attenuata*, *B. prionotes* & *B. menziesii*)
- On deep sands (600-900 mm) & lateritic sands (450-750 mm)
- Understories diverse (range from 30-100 species per 100m²)
- Understories vary greatly (like Kwongan)

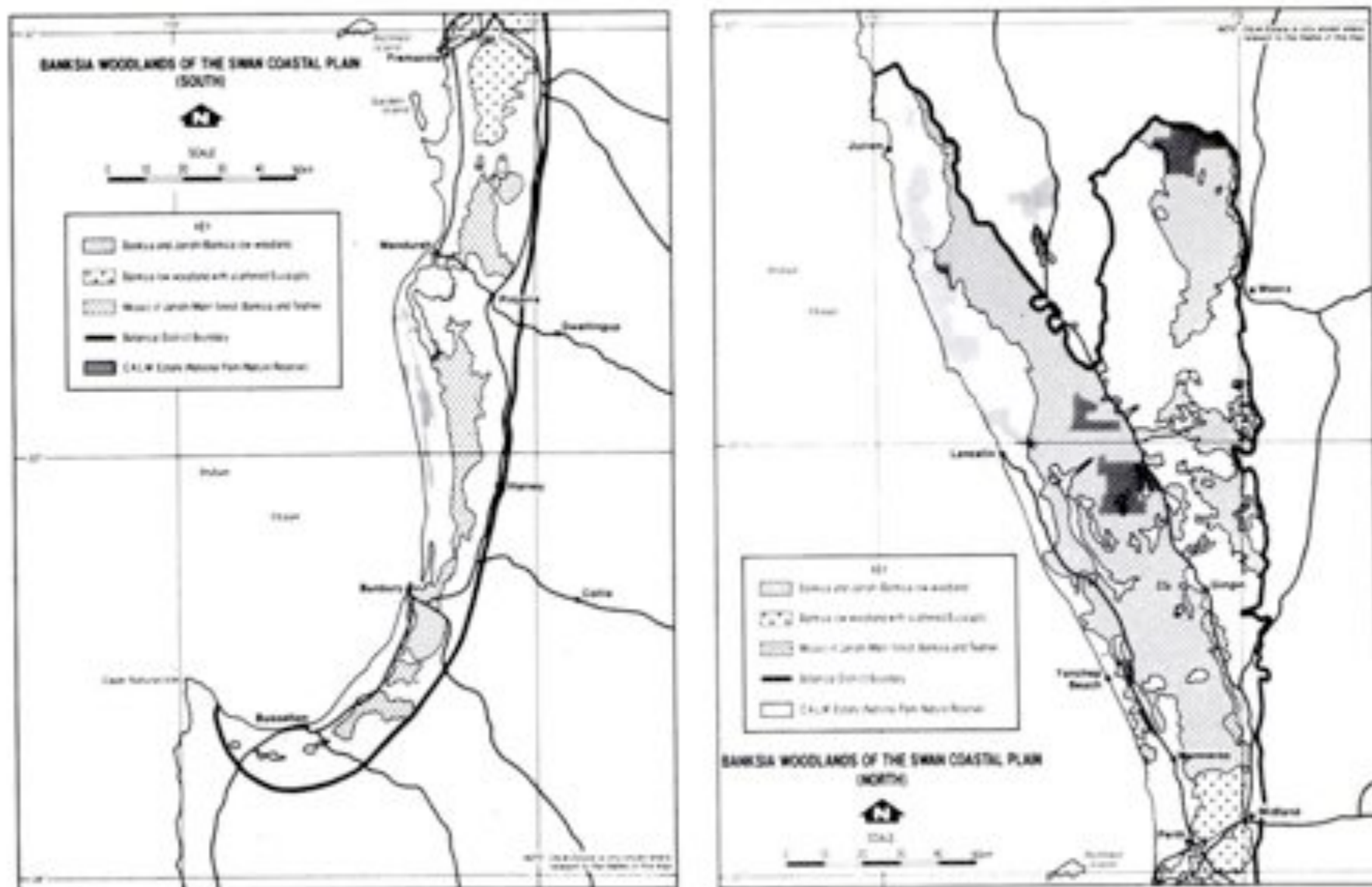


Figure 1 Distribution and extent of *Banksia* woodlands in southwestern Australia.

Perth Banksia woodlands



Photo Mark Brundrett



A Jarrah and this is not Banksia woodland?

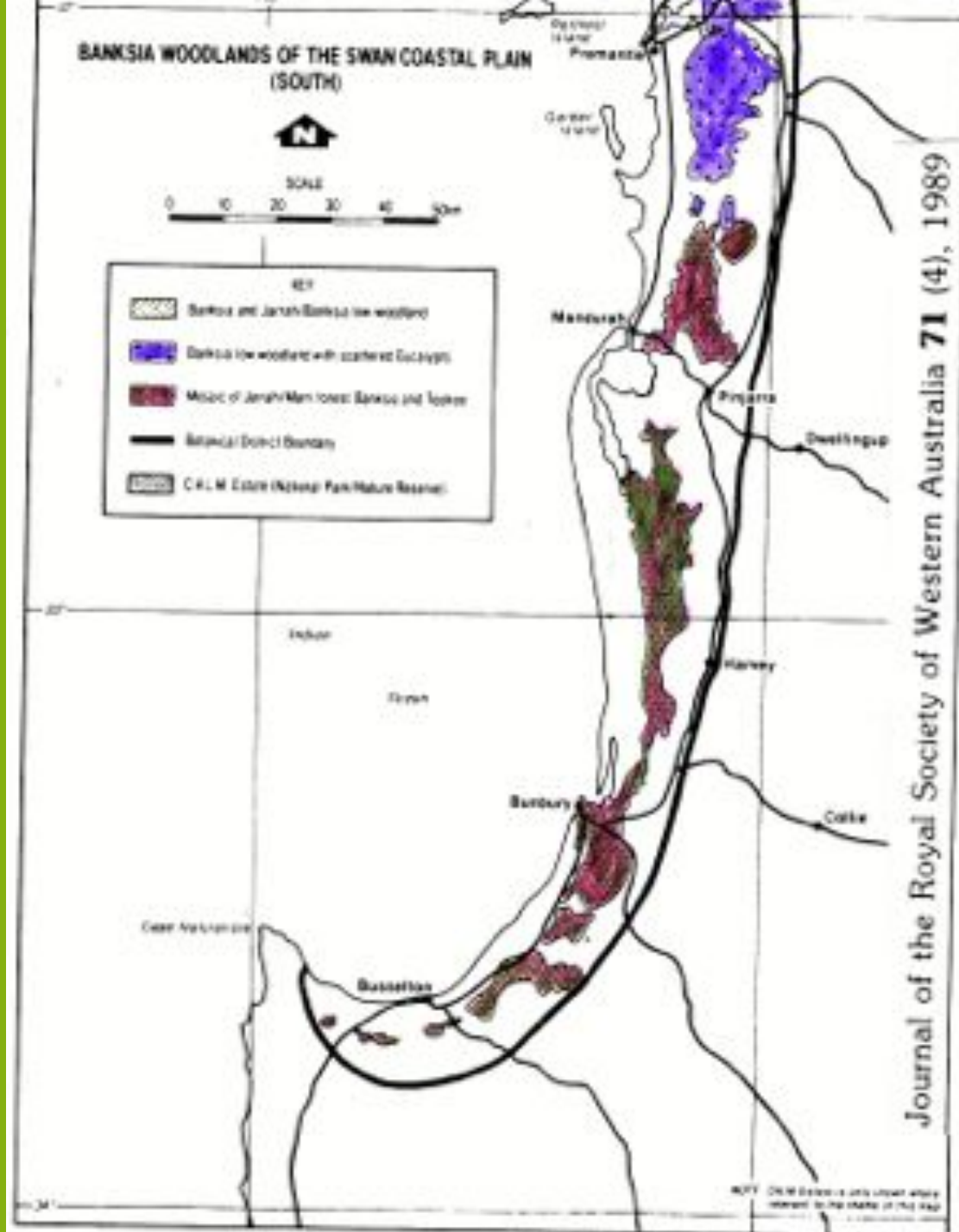
Photo Greg Keighery

Northern population - *Banksia menziesii*



Photos Bronwen Keighery

Three
major
types,
three
mosaics



Geomorphic Classification

Banksia woodlands listed for six categories under 14 complexes, does include mosaics

A photograph of a coastal plain landscape. In the foreground, there are low-lying shrubs and bushes, some with yellow and pink flowers. The middle ground is filled with a dense stand of trees, including several tall, slender trees with light-colored bark and dark green foliage. The background shows a clear blue sky with some light clouds.

Swan Coastal Plain floristic community type 23a
OR SWAFCT 23a
Bassendean – Central and South

Photo Mark Brundrett



SWAFCT 23a in the Bassendean Central and South

Photo Greg Keighery

SWAFCT 28

Central *Banksia attenuata* - *Eucalyptus marginata* woodlands
> 50% quadrats 2 low shrubs, 16 hebs/grasses/sedge

Photo Bronwen Keighery

Banksia Floristics

- Over 600 species recorded in Banksia woodlands on Swan Coastal Plain (over 540 are small shrubs, herbs and sedges) under 10-15 trees
- Ten types north of Moore River
- Twelve types south of Moore River
- Centre floristic diversity Perth area



HERBS

247 taxa, 40%



Haemodoraceae



Photos Bronwen Keighery

SWAFCT 21b only south of Perth



Photo Bronwen Keighery

Banksia ilicifolia a severely declining
Banksia woodland

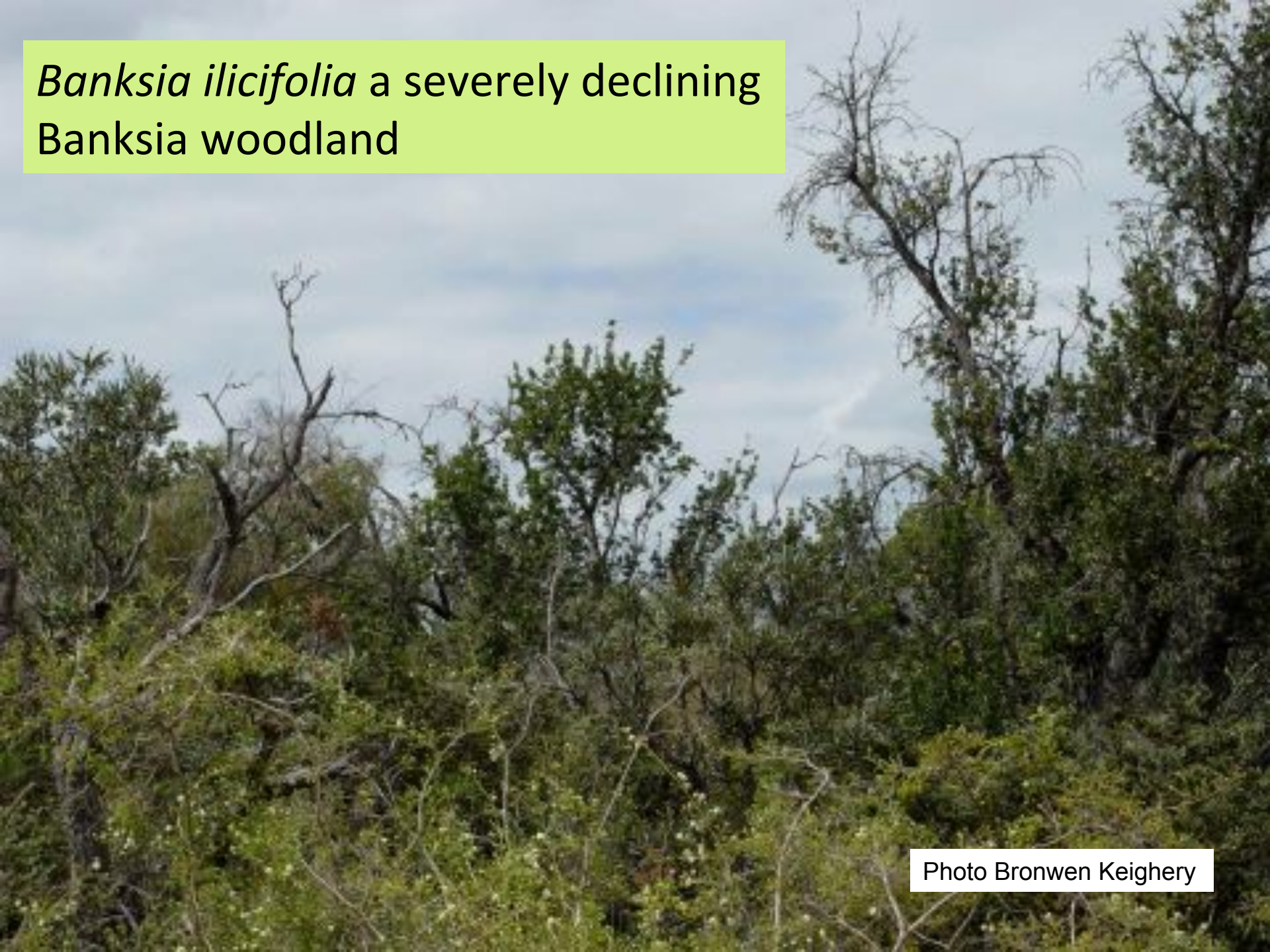


Photo Bronwen Keighery

Genetic variation - *Banksia ilicifolia*



- South coast: short thick leaves, low compact trees, more flowers in a head.
- Swan Coastal Plain: long thin leaves, medium open trees, less flowers in head

Genetic differences tested



Photos Bronwen Keighery



Banksia littoralis recorded in 11 of 28
wetland communities (9 in Perth)



Photo Bronwen Keighery

Banksia prionotes/*Xylomelon angustifolium* woodland
at Quairading: a rare community



Photos Bronwen Keighery

Darling Plateau Banksia woodland



Photo Bronwen Keighery



WHICHER SCARP

Yellow sands in the valleys and lower slopes with Woodlands dominated by Mountain Marri and *Banksia attenuata*

Photo Bronwen Keighery

Issues

- Fire
- Fragmentation (understory loss)
- Weeds
- Nutrient enrichment
- Hydrological Change
- *Phytophthora*
- Genetic Issues
- Climate change

Native grasses after fire

Photo Bronwen Keighery



Photos Bronwen Keighery



Photos Greg Keighery

SWAFCT 28, Cottlesloe - Central and South,

Road verge plantings

Photo Greg Keighery



THANK YOU

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