
Towards meaningful significance assessments for flora and vegetation in EIA

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Steps towards meaningful significance assessments?

- ~ Understand our role and responsibilities
- ~ Scoping
- ~ Understand the science
- ~ Support

Why am I doing this again?

112. False information

A person who, in purporting to comply with a requirement made by or under this Act to give information to the Authority, the CEO, an authorised person or an inspector or a police officer, gives or causes to be given information that to his knowledge is false or misleading in a material particular commits an offence.

Environmental Protection Act 1986 – Part VIII

CONSTRAINT	LIMITATION
Competency/experience of the consultant conducting the survey	No constraint
Proportion of the flora identified	No constraint
Proportion of the task achieved and further work to be undertaken	No constraint
Timing/weather/season/cycle	No constraint
Intensity of survey (e.g. In retrospect was to intensity adequate)	No constraint
Resources (e.g. degree of expertise available for plant identification)	No constraint
Remoteness and/or access problems	No constraint
Availability of contextual (e.g. bioregional) information for survey area	No constraint

Remoteness and/or access problems	No constraints
Availability of contextual (bioregional) information for the survey area.	No constraints

	LIMITATION
Survey	No constraints
Identified	No constraints
	No constraints
Identified and	No constraints
	No constraints
	No constraints
Surveyed)	No constraints
	No constraints

	LIMITATION
Availability	Nil
ns were	Nil
and	Nil
ork (was	Nil
	Nil
e	Nil
)	Nil
adequate)	Nil
Resources	Nil
Experience levels (e.g. degree of expertise)	Nil

Why are we doing plot-based vegetation surveys?

Significant vegetation (EPA, 2016):

- threatened or priority ecological communities.
- ***restricted distribution.***
- historical impact from threatening processes.
- role as a refuge.
- providing an important function required to maintain ecological integrity of a significant ecosystem.

Scoping, a witches brew of...

- Technical Guidance requirements
- Survey planning
- Informal agency advice
- Formal scoping
- Budgets and competitive tendering
- Government, business, consultant engineers, scientists and managers, all in a scrum.

Much of which feels opaque to a field botanist.

Competitive Tendering

EXAMPLE 1

PRICE QUOTED	NO. OF QUOTES
\$25,000	(Winning bid)
\$25,000 - 30,000	5
\$30,000 - \$40,000	6
\$40,000 - \$50,000	2
\$50,000 - \$60,000	2
\$60,000 - \$70,000	2
\$70,000<	2
\$120,000	(Highest bid)

EXAMPLE 2

PRICE QUOTED	NO. OF QUOTES
\$25,000	(Winning bid)
\$25,000 - 30,000	2
\$30,000 - \$35,000	3
\$35,000 - \$40,000	5
\$40,000 - \$45,000	1
\$45,000 - \$50,000	0
\$50,000 - \$55,000	1
\$53,000	(Highest bid)

Botanists know all the plants, you don't need identification budgets.

Botany is easy.

When I was a botanist, we did 2,000 plots a day.

Oh, *Leucopogon conostephioides*, even I know dis.



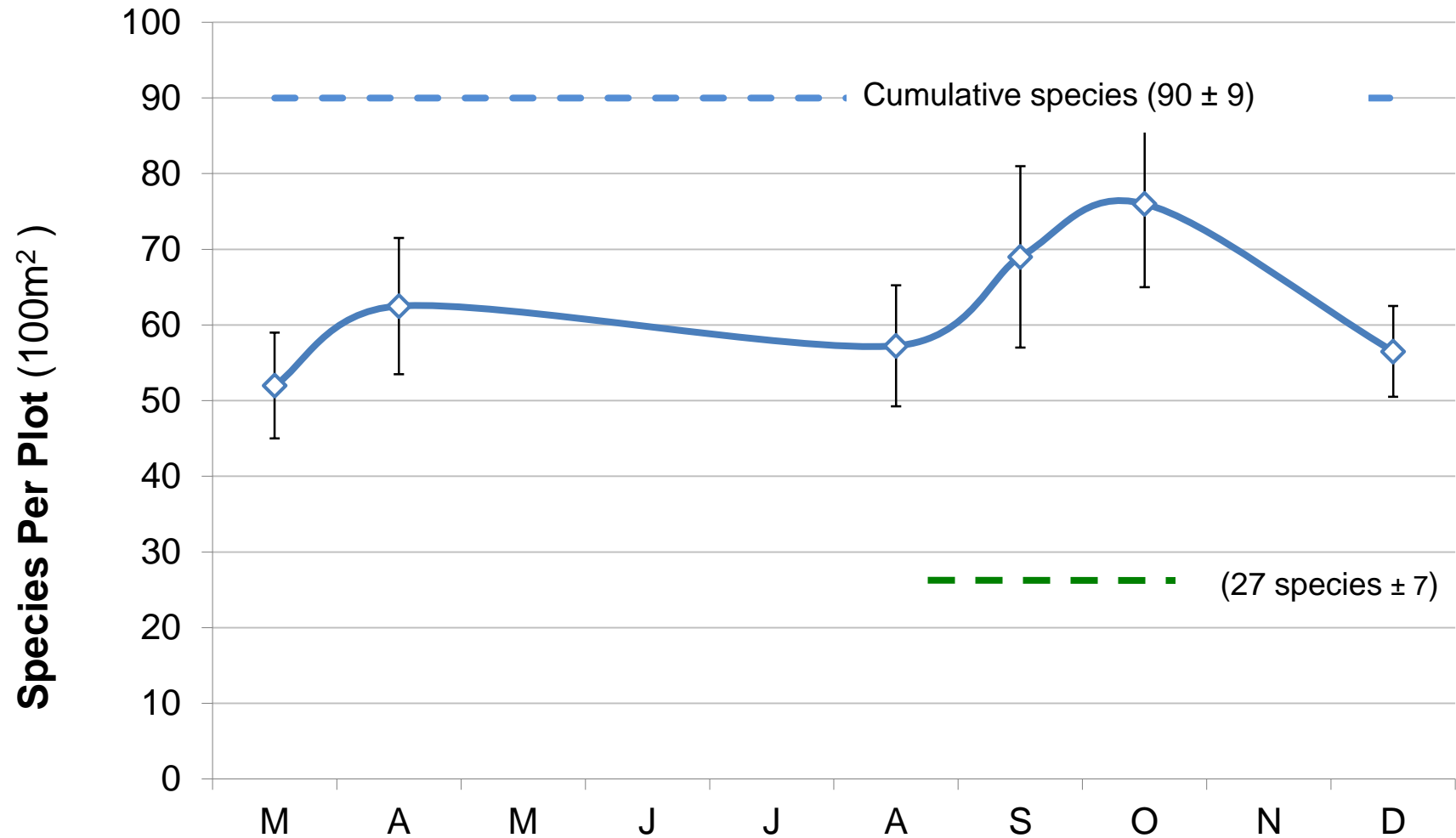
Why did you collect
so many plants?

So many plants,
looks expensive.

I approve of dis
many plants.



Seasonal effect on species richness in SCP *Banksia* Woodland plots

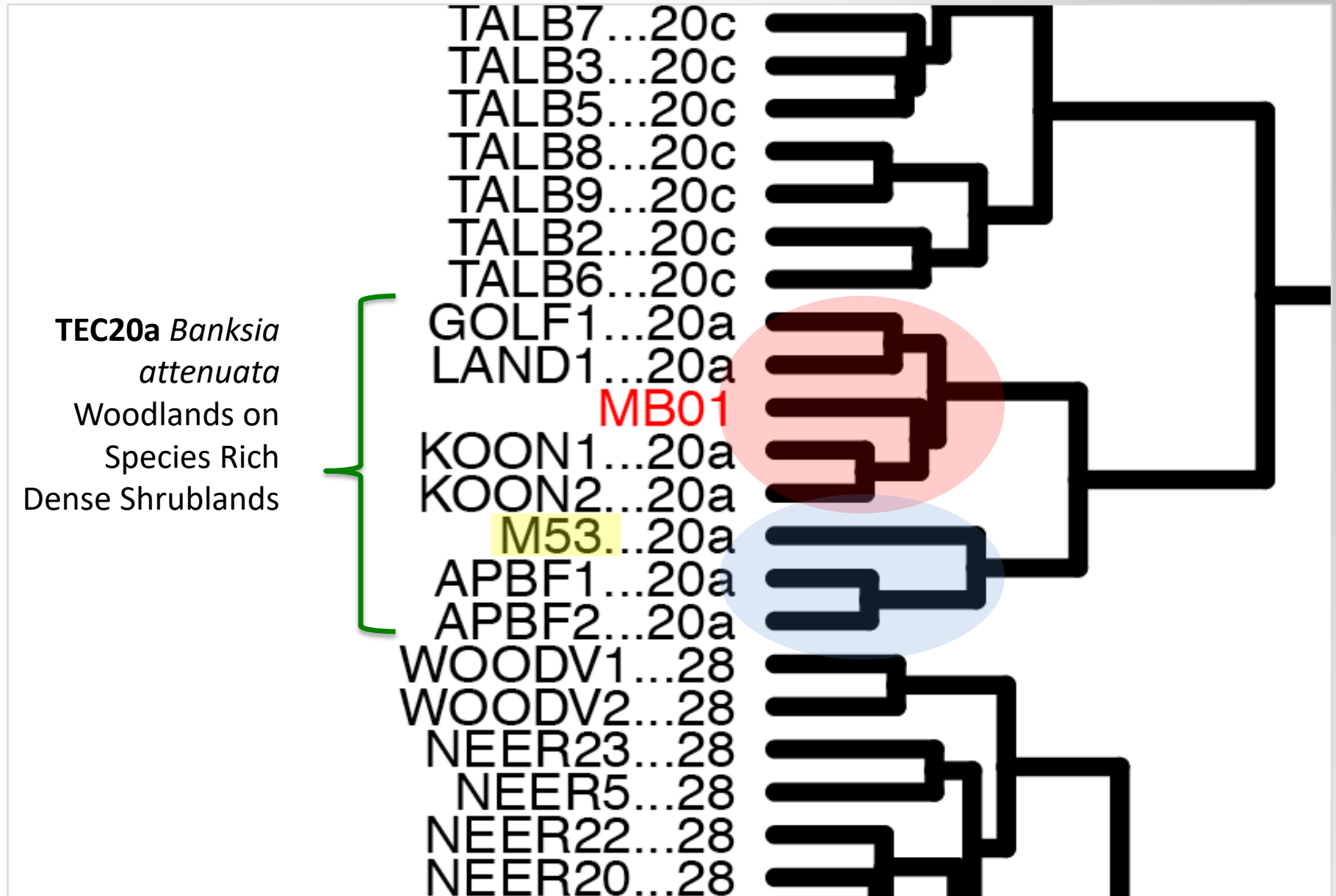


“What we do isn’t science”

Vegetation Association

A detailed classification of a vegetation unit based on:

- Floristics (numerical analysis of plot data, interpretation)
- Structure (lifeform e.g. shrubs, height, cover etc)
- Habitat (soils, landforms etc).



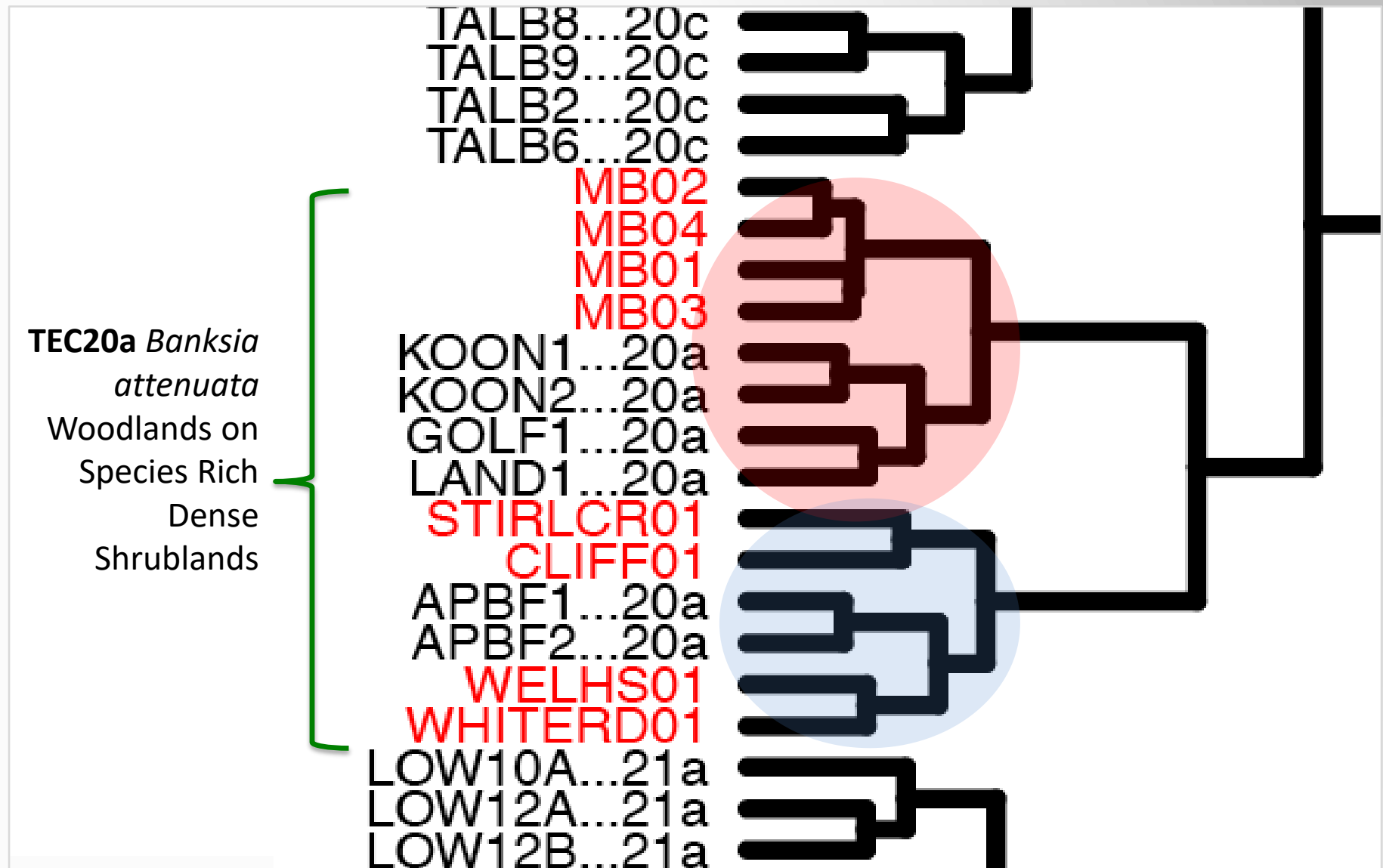
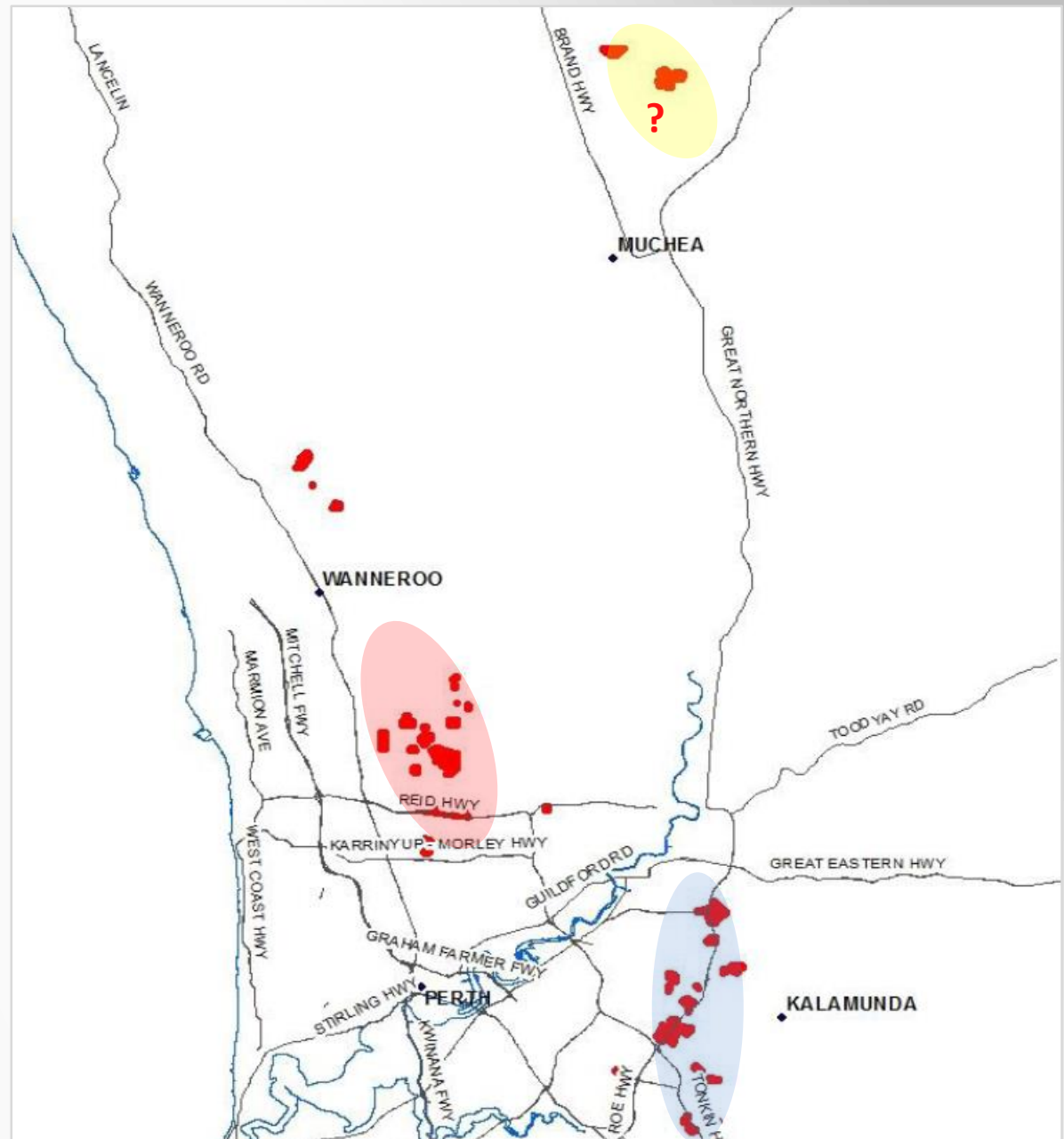


Figure 1: Distribution of *Banksia attenuata* woodlands over species rich dense shrublands (Swan Coastal Plain FCT20a – Gibson *et al.* 1994).



Source: Modified from Department of Parks and Wildlife (2016). *Interim Recovery Plan No. 359. Parks and Wildlife, Kensington.*

If you had a drone, you wouldn't *need* to walk up hills.

There'd better be lasagna tonight.

Where's your hardhat ffs?

You're always in the field...so lucky!

Two things that would make for better significance assessments...

- Counterbalance to competitive tendering.
- Statewide reference plot database for Western Australia.

QUESTIONS?

Never too
many...

