**SoS Site Selection Meeting – 21/05/2018**

Attendees: James Lawson, Michelle Leishman, Rachael Gallagher

*Agenda*

1. Discuss scope of project (gap analysis vs wider decision framework) (2 min)
2. App run-through, comments and feature requests from ML & RG (10 min)
   * Revise the codebase to use AOO instead of raw occurrences
   * Add a statistics tab to the Site Selection section to the expose stats underlying the cluster analysis
3. Quantifying environmental representativeness (10 min)
   * Discuss PAM clustering
   * Developing a ruleset to guide env. variable selection (currently ad hoc)
   * Current cluster analysis approach doesn’t take future climates into account –maximise env. coverage while minimising % change at selected sites?
   * Links with RG / Tony Auld project – what outputs are required for this?
4. What should go in species summary reports? (5 min)
   * How much preamble?
   * How much stats?

Meeting minutes:

**Implementing the full decision framework**

JL – currently the app addresses only the environmental gap analysis part of the Site Selection Decision Framework. To address the entire decision framework, would need to include population sizes, land tenure and connectivity between sites.

ML – ideally the app should address the full decision framework. A full prioritisation may be too complex, but some functionality to filter sites by these properties would be sufficient.

JL – connectivity is likely to be the most challenging aspect.

ML – could use simple distances between sites, although would need to vary the range by taxon.

*JL to look into approaches for incorporating connectivity.*

**App run through and comments from ML & RG**

RG & ML – don’t use blue for occurrence points, hard to see

RG – unclear what the red polygon is (JL – it’s an SoS site)

RG - James Brazill-Boast may have better occurrence data than is available in the BioNet Atlas

RG, ML - a landing tab would be useful which describes the purpose of the app and how to use it

ML – better population data should be available from OEH, although may be difficult to actually collate

**Quantifying environmental representativeness**

JL – there needs to be some rules about which environmental variables are used in the cluster analysis

RG & ML – too much subjective user input is required to select variables for the cluster analysis. Perhaps we should select a set of variables *a priori.*

JL – we don’t want to select variables for the cluster analysis which don’t differentiate between sites, though, because it might bias the analysis. *JL to look into response of cluster analysis to narrow ranged variables.*

ML & RG – there should be more variables available

RG – the bin-size of the histograms shouldn’t be dynamic, should represent the entire range of NSW. Look at nichefinder website for examples of what Stuart has done.

RG – why use categories for rainfall variability?

RG – representation under future climates should to be represented on histograms of current climates

ML& RG – histograms are confusing in the site selection tab. What we really want to know is what environmental conditions the different clusters (RG – call them something else) represent.

ML & RG – Incorporating future climates into the analysis is very important. Ideally we should be able to ask “which sites would be chosen under both current and future climates?”

**Misc.**

ML – JL could go and spend a week embedded in OEH during the testing phase