

Report to NRM South on ANU Bud Survey - 2022

RESULTS AT A GLANCE:

- Bud surveys undertaken at 6 SPIBAs
- Light bud across most areas (especially *E. ovata*)
- Bruny Island, Tasman Peninsula and Eastern Tiers are predicted to be the main flowering regions in 2022.

Search Area

We selected the search area based on the likely future accessibility for follow on work for NRM South, and with a focus on locations within their remit.

We focused our bud surveys on the following swift parrot important breeding areas:

1. The Southern Forests (focal areas for the survey included the southport region, the area around Tylers Hill at Dover, the Kermandie region near Geeveston, the Franklin forest block)
2. The Eastern Tiers (focal areas for survey included the Lake Leake region and southward to the Tooms Lake area, the coastal area around Little Swanport)
3. The Wielangta region (including Kellevie, Nelson's Tier, Buckland and surrounds, the Three Thumbs Reserve, Rheban, Bremer Bay and Bream Creek)
4. The Channel (including Echo Sugarloaf, Snug Tiers, and the lowland coastal areas of the channel region)
5. Bruny Island (north and south)
6. The Hobart region (Fern Tree, Wellington Reserve, the Meehan Range, Tinderbox).

Methods

Each region was visited by Dejan Stojanovic. Key sites (which form part of the annual monitoring program) were surveyed in each survey region, focusing on areas that are known to either support historical nesting sites, or important areas of foraging habitat.

We did not attempt to exhaustively survey all sites from the annual monitoring program, but instead focused on visiting a subset of sites that would achieve good spatial coverage of the survey areas. Sites were accessed both by vehicle and on foot. At each site, both blue *Eucalyptus globulus* and black gums *E. ovata* were checked with binoculars to identify the presence/absence and (if present) abundance of flower buds. At each site, we assessed all trees within 50m of the observer for bud (stopping at >10 locations in each region) and then calculated the average proportion of budded trees per region. The presence/absence of pre-breeding swift parrots was also recorded.

Results

We present the results of our bud counts in the attached excel spreadsheet 'Bud survey results 2022.xlsx'. We predict that in the 2022 breeding season Bruny Island, Tasman Peninsula and the Eastern Tiers regions are likely to have the largest aggregation of nesting swift parrots suitable for the interventions proposed by NRM South. Table 1 summarizes the regional results of bud surveys and provides an evaluation of the likelihood that swift parrots might settle to breed at each area.

Table 1. Results of the bud surveys and predicted likelihood of breeding settlement by swift parrots.

Region	Description of the availability and abundance of flower buds of blue and black gums	Predicted likelihood of settlement by swift parrots in 2020
Southern Forests	4.3% <i>E. globulus</i> budded at survey points 73% <i>E. ovata</i> budded at survey points	Low likelihood (No swift parrots present in Dover and Southport areas, ~15 parrots observed in Port Huon).
Eastern Tiers	63% <i>E. ovata</i> budded at survey points	High likelihood of at least some nesting.
Wielangta and surrounds	24% <i>E. globulus</i> budded at survey points 92% <i>E. ovata</i> budded at survey points	Low likelihood of nesting but ~20 parrots observed at Rheban on coastal paddock trees
The Channel	4.1% <i>E. globulus</i> budded at survey points 86% <i>E. ovata</i> budded at survey points	Low likelihood, but several parrots already present at Taroona/Kingston and further south.
Bruny Island	North Island: 37% <i>E. globulus</i> budded at survey points on Roberts Hill South Island: 57% <i>E. globulus</i> budded at survey points	High likelihood that nesting may occur on Bruny (both islands) and parrots were detected at multiple locations.
Meehan Range	33.3% <i>E. globulus</i> budded at survey points	Low-moderate likelihood of nesting - hilltops have bud, but lowlands less so
Tasman Peninsula	59% <i>E. globulus</i> budded at survey points	High likelihood of some nesting. No parrots observed but most regular sites have bud.