

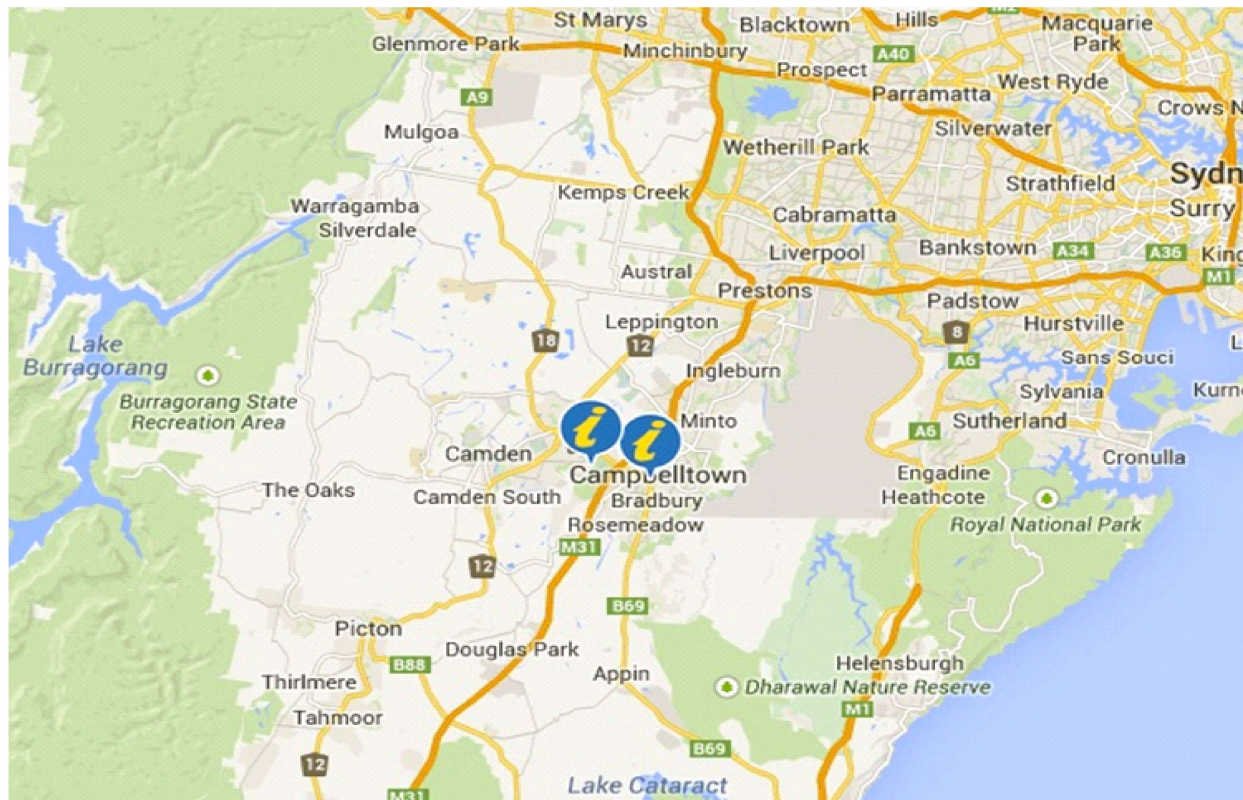
# Macarthur ANOS Native Orchid Survey 2021

## By Ross Morrison and Jim Cootes

### *Introduction*



Macarthur ANOS initiated a year long, local native orchid survey in November 2020, after receiving Local Community Investment Program Grant from the Australian Gas Light Company (AGL). The Survey saw Macarthur ANOS work with the local councils of Liverpool, Campbelltown, Camden and Wollondilly, various community conservation and nature care groups and the wider community and media groups throughout the Region. Apart from developing a final survey, the Grant would also fund the development of promotional brochures – ‘Native Orchids of Macarthur’ for use by local councils.



*Editors note: The original of this map included the boundaries of this report, as follows: Warragamba/Silverdale, across to Cabramatta, to edge of Padstow, down to Lake Cataract, across past Tahmoor and back up to Warragamba.. ( I couldn't reproduce the box shown on the map)*

### **Survey Successes**

The 2020/2021 survey achieved a variety of successes including:

- Eighty-nine orchid species were observed within the Macarthur Region,
- Increased community awareness of native orchids through local media,
- Over sixty community naturalists and MANOS members provided orchid observations,
- Over 890 orchid observations were received across the collection methods,
- Twenty-two orchid species, not previously known to occur in the Macarthur Region, have been observed during the survey period (as of December 2021),
- Twenty-one previously observed orchid species are yet to be seen (as of December 2021).

### **Survey Processes**

The original survey of 1995, coordinated by Ken Jackson and John Riley, highlighted a total of seventy-seven native orchids occurring across Macarthur – sixty-five terrestrial orchids and twelve epiphytes / lithophytes.

The 2021 survey utilised local media outlets – print and digital to highlight the concept and seek public assistance identifying sites of orchids across the region. Regular updates were supplied to media outlets to feature current outcomes and further gain community support.

Options for the collection of orchid observation data utilised a variety of methods:

- Email photos to [Macarthuranos@gmail.com](mailto:Macarthuranos@gmail.com)
- Posting of photos on the [Macarthur ANOS Group Facebook Page](#)
- Posting of photos within the [iNaturalist App](#) – a project within the App named Macarthur Region Orchid Search isolated all observations across the region.

**A special thank you must go to Mat Misdale, Campbelltown City Council, Bushland and Biodiversity Officer for his support during the survey.**

### **Challenges**

Travel restrictions associated with COVID 19 meant that many of the searches were unable to happen at optimal orchid flowering times.

The Macarthur region has vast areas of access restricted lands including Nattai NP, Cataract (both Water Management lands) and Holsworthy Army Reserve. The total area of these lands occupies almost 50% total area of the region, unfortunately no access was permitted during this survey.

Concern often exists in relating exact locations in survey data and for this reason only suburb locations will be given. Macarthur ANOS members are happy to provide further advice on locations to appropriate persons as needed.

### Suburb Locations Used in Survey Data

1 – Moorebank	2 – Holsworthy	3 – Voyager Point	4 – Heathcote Road
5 – Hoxton Park	6 – Macquarie Fields	7 – Ingleburn	8 – Minto Heights
9 – Kentlyn	10 – Airds	11 – St Helens Park	12 – Wedderburn
13 – Appin	14 - Cataract	15 – Douglas Park	16 – Wilton
17 – Thirlmere	18 – Couridjah	19 – Bargo	20 – Nattai
21 – The Oaks	22 – Silverdale	23 - Warragamba	

### Survey Results

For the purposes of this report – older naming species conventions have been used.

**Note:** Occurrence notes relate only to the Macarthur ANOS survey results and not to orchid species occurrences across NSW and nationally.

<b>BOLD</b>	Indicates orchid species observed for the first time and not seen in the 1995 survey.
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Species	Occurrence	Location
<i>Acianthusexsertus</i> (Dark Mosquito Orchid)	Uncommon across limited sites	6,7,8
<i>Acianthusforficatus</i> (Large Mosquito Orchid)	Common / abundant across multiple sites	1/2/3/6/7/8/9/10/11/12 13/14/15/17/19/20/22
<i>Acianthuspusillus</i> (Small Mosquito Orchid)	Uncommon across limited sites	22
<i>Bulbophyllumexiguum</i> (Tiny Strand Orchid)	Uncommon across limited sites	11/12
<b><i>Caladenia alata</i></b> <b>(Fairy Caladenia)</b>	Uncommon across limited sites	13/19
<i>Caladenia caerulea</i> (Blue Caladenia)	Uncommon across limited sites	5/8/9
<i>Caladenia carnea</i> (Pink Fingers Orchid)	Common across multiple sites	6,7,8,9,11,17,20
<i>Caladenia catenata</i> (Lady Fingers Orchid)	Common / abundant across multiple sites	2,3,6,7,8,9,10,11,12,13, 17,19,20
<b><i>Caladenia curtisepala</i></b> <b>(Short Hooded Finger Orchid)</b>	Uncommon across limited sites	6,7,8
<b><i>Caladenia gracilis</i></b> <b>(Musky Honey Caladenia)</b>	Rare at limited sites	13
<i>Caladenia fuscata</i>	Common across multiple sites	6,7,8,9,12,17

(Dusky Fingers Orchid)		
<i>Caladenia picta</i> (Autumn Finger Orchid)	Uncommon across limited sites	3
<b><i>Caladenia testacea</i></b> <b>(Honey Caps Orchid)</b>	Uncommon across limited sites	13,14,15,17,19
<i>Caleana major</i> (Flying Duck Orchid)	Common across multiple sites	6,7,9,13,17
<b><i>Caleana minor</i></b> <b>(Small Duck Orchid)</b>	Rare at limited sites	13
<b><i>Calochilus campestris</i></b> <b>(Copper Beard Orchid)</b>	Common across multiple sites	1,2,3,6,7,8,9,13,17,19
<b><i>Calochilus gracillimus</i></b> <b>(Slender Beard Orchid)</b>	Uncommon across limited sites	2,3,6,7,8,9
<i>Calochilus paludosus</i> (Red Beard Orchid)	Common / abundant across multiple sites	1,2,3,4,6,7,8,9,10,11,12,13,14,17,19
<i>Calochilus robertsonii</i> (Purple Beard Orchid)	Common / abundant across multiple sites	1,2,3,4,6,7,8,9,10,11,12,13,14,17,18,19
<i>Cestichis reflexa</i> (Dog Orchid)	Common across multiple sites	6,7,8,9,10,11,12,13,17,19
<i>Chiloglottis diphylla</i> (Common Wasp Orchid)	Common / abundant across multiple sites	6,7,8,9,10,11,12,13,17
<i>Chiloglottis formicifera</i> (Common Ant Orchid)	Uncommon across limited sites	6
<i>Chiloglottis seminuda</i> (Turtle Orchid)	Common / abundant across limited sites	7,8,9
<b><i>Chiloglottis trapeziformis</i></b> <b>(Dainty Ant Orchid)</b>	Uncommon across limited sites	9
<i>Corybas conitiflorus</i> (Small Helmet Orchid)	Common across multiple sites	7,8,9,13,22
<i>Corybas fimbriatus</i> (Fringed Helmet Orchid)	Common across limited sites	7,8,9,17,20
<i>Corybas unguiculatus</i> (Small Helmet Orchid)	Uncommon across limited sites	13
<i>Cryptostylis erecta</i> (Bonnet Orchid)	Uncommon across limited sites	13
<i>Cryptostylis hunteriana</i> (Leafless Tongue Orchid)	Uncommon across limited sites	9
<i>Cryptostylis leptochila</i> (Small Tongue Orchid)	Uncommon across limited sites	13
<i>Cryptostylis subulata</i> (Large Tongue Orchid)	Uncommon across limited sites	7,9,13,17,19
<i>Cymbidium suave</i>	Uncommon across limited sites	6,11,20,23

(Snake Orchid)		
<i>Cyrtostylisreniformis</i> (Small Gnat Orchid)	Uncommon across limited sites	8,9,13
<i>Dendrobium linguiforme</i> (Tongue Orchid)	Common across multiple sites	3,6,7,8,9,10,11,12,13,14 15,17,23
<i>Dendrobium pugioniforme</i> (Dagger Orchid)	Uncommon across limited sites	17
<i>Dendrobium speciosum</i> (Sydney Rock Orchid)	Uncommon across limited sites	8,9,12,17,20,23
<i>Dendrobium striolatum</i> (Pencil Orchid)	Uncommon across limited sites	10,11,12,13,17
<i>Dipodium punctatum</i> (Blotched Hyacinth Orchid)	Common across multiple sites	2,3,8,9,10,11,12,13,17, 19,
<b><i>Dipodiumroseum</i></b> <b>(Rosy Hyacinth Orchid)</b>	Uncommon across limited sites	9,17
<i>Dipodium variegatum</i> (Variegated Hyacinth Orchid)	Common across multiple sites	1,2,3,6,7,8,9,11,12,17 ,19
<i>Diurisaurea</i> (Golden Doubletail Orchid)	Common across multiple sites	3,4,6,7,9,11,17,19,
<i>Diurismaculata</i> (Spotted Donkey Orchid)	Common / abundant across limited sites	2,3,4,6,7,8,9,10,11,12 13,17,19
<i>Diuris punctata</i> (Purple Doubletail Orchid)	Uncommon across limited sites	3,19
<i>Diurissulphurea</i> (Tiger Orchid)	Common across multiple sites	2,3,4,5,6,7,8,9,10,11,12, 13,17,18,19
<i>Diuris x nebulosa</i> (Clouded Donkey Orchid)	Rare at limited sites	19
<i>Eriochiluspetricola</i> <i>aff. Eriochilusautumnalis</i> (Leafy Parson's Bands)	Rare at limited sites	12
<i>Eriochiluscucullatus</i> (Parson's Bands)	Rare at limited sites	2,3
<i>Erythrorchiscassythoides</i> (Black Bootlace Orchid)	Uncommon across multiple sites	9,10,11
<i>Gastrodiasesamoides</i> (Common Potato Orchid)	Uncommon across limited sites	9
<i>Genoplesiumbaueri</i>	Rare at limited sites <b>(Endangered – OEH Classified)</b>	13
<i>Genoplesiumfiliforme</i> ( <i>Corunastylisfiliforme</i> )	Uncommon across multiple sites	2,3,4,6,12,13,19
<b><i>Genoplesium fimbriata</i></b> <b>(Fringed Midge Orchid)</b>	Uncommon across multiple sites	9,12,13

<i>Genoplesium rufa</i> (Rufous Midge Orchid)	Rare at limited sites	2,3,13
<i>Glossodia minor</i> (Small Wax-Lip Orchid)	Common across multiple sites	2,3,4,6,7,8,9,10,11,12,13
<i>Glossodia major</i> (Large Wax-Lip Orchid)	Common across multiple sites	6,7,8,9,10,12,13
<i>Lyperanthus sauveolens</i> (Brown Beaks Orchid)	Common across multiple sites	2,3,4,6,7,8,9,10,11,12,13
<i>Microtis oblonga</i> (Oblong Onion Orchid)	Rare at limited sites	2,3
<b><i>Microtis unifolia</i></b> <b>(Common Onion Orchid)</b>	Common across multiple sites	2,3,4,6,7,12,13
<i>Microtis parviflora</i> (Slender Onion Orchid)	Uncommon across limited sites	6,12
<i>Orthoceras strictum</i> (Horned Orchid)	Uncommon across limited sites	9,12,13
<i>Plectorhiza tridentata</i> (Tangle Orchid)	Uncommon across limited sites	7,8,9,10,11
<b><i>Prasophyllum australe</i></b> <b>(Southern Leek Orchid)</b>	Uncommon across limited sites	14
<i>Prasophyllum elatum</i> (Tall Leek Orchid)	Uncommon across limited sites	2,3,4,12
<b><i>Prasophyllum flavum</i></b> <b>(Yellow Leek Orchid)</b>	Uncommon across limited sites	14,19
<b><i>Prasophyllum fuscum</i></b>	Rare at limited sites - <b>(Critically endangered – OEH Classified)</b>	16
<i>Pterostylis acuminata</i> (Sharp Greenhood)	Common across multiple sites	2,3,4,5,6,7,8,9,11,12,13,17,18,19,20,21,22,23
<b><i>Pterostylis antennifera</i></b> <b>(Antler Tiny Greenhood)</b>	Rare at limited sites	9
<i>Pterostylis concinna</i> (Trim Greenhood)	Common / abundant across multiple sites	1,2,3,4,6,7,8,9,10,11,12,13,14,17,20,22
<i>Pterostylis curta</i> (Blunt Greenhood)	Uncommon across limited sites	6,7
<i>Pterostylis daintreana</i> (Daintree's Greenhood)	Uncommon across limited sites	13,14
<b><i>Pterostylis erecta</i></b> <b>(Upright Maroonhood)</b>	Common across limited sites	6,7,9,11
<i>Pterostylis grandiflora</i> (Cobra Greenhood)	Uncommon across limited sites	9
<i>Pterostylis hispidula</i> (Small Nodding Greenhood)	Uncommon across limited sites	6,7

<i>Pterostylis longifolia</i> (Common Leafy Greenhood)	Common / abundant across multiple sites	2,3,4,6,7,8,9,10,11,12,13,17,19,20,21,22,23
<i>Pterostylis nutans</i> (Nodding Greenhood)	Common / abundant across multiple sites	2,3,4,6,7,8,9,10,11,12,13,17,19,20,21,22,23
<i>Pterostylis rufa</i> (Red Rustyhood)	Rare at limited sites	15
<i>Pterostylis saxicola</i> (Sydney Plains Rustyhood)	Rare at limited sites <b>(Endangered – OEH Classified)</b>	6,7
<b><i>Pterostylis uliginosa</i></b>	Rare at limited sites	13
<i>Sarcochilus australis</i> (Butterfly Orchid)	Rare at limited sites	12
<i>Sarcochilus hillii</i> (Myrtle Bells)	Uncommon across limited sites	7,8,11,12
<i>Spiranthes australis</i> (Ladies Tresses)	Uncommon across limited sites	13,14
<b><i>Thelymitra brevifolia</i></b> <b>(Peppertop Sun Orchid)</b>	Uncommon across limited sites	2,8,9
<i>Thelymitra carnea</i> (Pink Sun Orchid)	Common across limited sites	2,3,9
<b><i>Thelymitra cyanea</i></b> <b>(Veined Sun Orchid)</b>	Uncommon across limited sites	14
<i>Thelymitra raixioides</i> (Dotted Sun Orchid)	Common across multiple sites	2,3,4,7,8,9,11,12,13,17,19,22
<b><i>Thelymitra nuda</i></b> <b>(Scented Sun Orchid)</b>	Uncommon across limited sites	13
<i>Thelymitra pauciflora</i> (Slender Sun Orchid)	Common across multiple sites	1,2,3,4,6,7,8,9,17,18
<b><i>Thelymitra peniculata</i></b> <b>(Trim Sun Orchid)</b>	Common across multiple sites	1,2,3,4,6,7,8,9

### Search Continues

Due to the nature of habitats across the region it is highly likely the following species are yet to be observed – *Pterostylis hilda*, *Rimacola elliptica*, *Papillilabium (Plectorhiza) beckleri*, *Pyrorchis nigricans*.

The list below highlights orchids observed in the 1995 survey that are yet to be seen in the 2021 survey period. Macarthur ANOS has decided to keep the project running within the [iNaturalist App](#) and allow for future observations to be recorded.

### Previously Found Macarthur Orchid Species Not Observed

<i>Acianthuscaudatus</i> (Mayfly Orchid)	<i>Gastrodiaprocera</i>	<i>Pterostylisbrinsleyi</i> (Pleasure Point Rustyhood)
<i>Corybasfordhamii</i> (Banded Helmet Orchid)	<i>Genoplesiumdensa</i> (Dense Midge Orchid)	<i>Pterostylislongipetala</i> (Curved Greenhood)
<i>Corybashispida</i> (Bristly Helmet Orchid)	<i>Genoplesiumnublingii</i> ( <i>Corunastylisnublingi</i> )	<i>Pterostylisobtusa</i> ( <i>Diplodiumobtusa</i> )
<i>Corybaspruinosa</i> (Toothed Helmet Orchid)	<i>Genoplesiumnudiscapa</i>	<i>Pterostylisophioglossa</i> (Snake Tongue Greenhood)
<i>Dendrobium aemulum</i> (White Feather Orchid)	<i>Genoplesiumsagittifera</i>	<i>Pterostylis parviflora</i> (Tiny Greenhood)
<i>Dendrobium cucumerinum</i> (Cucumber Orchid)	<i>Prasophyllumbrevilabre</i> (Short Lipped Leek Orchid)	<i>Pterostylisreflexa</i> (Late Autumn Greenhood)
<i>Diurisaequalis</i> (Buttercup Donkey Orchid)	<i>Pterostylisbicolor</i> (Black-Tip Greenhood)	<i>Pterostylistruncata</i> (Brittle Greenhood)