



***Flowering Times of Tasmanian Orchids:
A Practical Guide for Field Botanists***



*Mark Wapstra (Environmental Consulting Options Tasmania)
Nina Roberts (Forest Practices Authority)
Hans and Annie Wapstra*

2nd Edition, revised September 2010

FOREWORD

This document fills a significant gap in the Tasmanian orchid literature. Given the inherent difficulties in locating and surveying orchids in their natural habitat, an accurate guide to their flowering times will be an invaluable tool to field botanists, consultants and orchid enthusiasts alike. *Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists* has been developed by Tasmania's leading orchid experts, drawing collectively on many decades of field experience. The result is the most comprehensive State reference on orchid flowering available.

By virtue of its ease of use, accessibility and identification of accurate windows for locating our often-cryptic orchids, it will actually assist in conservation by enabling land managers and consultants to more easily comply with the survey requirements of a range of land-use planning processes. The use of this guide will enhance efforts to locate new populations and increase our understanding of the distribution of orchid species. The Threatened Species Section commends this guide and strongly recommends its use as a reference whenever surveys for orchids are undertaken.

Matthew Larcombe

Project Officer (Threatened Orchid and Euphrasia)

*Threatened Species Section, Department of Primary Industries, Parks, Water & Environment
March 2008*

DOCUMENT AVAILABILITY

This document is available as a PDF file downloadable from the following websites:

www.fpa.tas.gov.au

www.dpipwe.tas.gov.au

www.ecotas.com.au

It may also be requested directly from the authors (see contact details below).

The authors are aware that the PDF file prints to different qualities on different printers. We suggest printing a test page from a section of the document that shows all hatching and shading types. If you can't distinguish hatching and shading types when printing from the PDF file please contact the authors for the Microsoft Word version.

FEEDBACK

The authors welcome comments and additional information that may inform future versions of this document. Contact details are as follows:

Mark Wapstra

mark@ecotas.com.au

Environmental Consulting Options Tasmania

28 Suncrest Avenue, Lenah Valley TAS 7008

Nina Roberts

nina.roberts@fpa.tas.gov.au

Forest Practices Authority

30 Patrick Street, Hobart TAS 7000

ACKNOWLEDGEMENTS

Staff of the Tasmanian Herbarium provided collection date information for orchids held by their institution.

CITATION

Readers are free to use and distribute this document but please check for the latest version. Please acknowledge use by the following citation:

Wapstra, M., Roberts, N., Wapstra, H. & Wapstra, A. (2010). *Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists*. Self-published by the authors (September 2010 version).

VERSIONS

First edition: April 2008; Second edition: September 2010

BACKGROUND

Tasmania has about 210 species of native orchids. Many of these are listed as threatened on the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. Other species are not listed as threatened but can be of regional significance because of their distribution (e.g. scarce in one part of the State but common elsewhere).

Almost any land use activity may have an effect on orchid species: some may be beneficial while others may be detrimental. The threatened status of many species places legal and policy requirements on landowners, land managers, developers and State and Commonwealth agencies. Recommendations are often made to undertake surveys for certain species to ensure that the proposed activity does not cause harm to a particular population.

There are hardly any constraints on the timing of a survey for perennial plants that can be identified at any time of the year, whether there is fertile material present or not. For example, a survey can be undertaken at any time of the year for *Spyridium vexilliferum* because this low shrub is so distinctive as to be easily detected and its identification does not rely on flowers or fruit. Some other species are trickier because flowering or fruiting material aids in their detection or identification although it may not be critical. For example, a survey for threatened *Epacris* species is certainly easier when they are in full flower in spring-summer although plants can be detected at any time, albeit perhaps somewhat dependent on the skill of the observer.

Although orchids are technically perennial, in that most have tubers from which new growth arises every season, effectively, they are best described as ephemeral "annuals". Although their leaves usually emerge many months before flowering, these are often hard to detect among other vegetation, and they are certainly difficult to identify to species level. Many orchids flower over a short period, usually in the order of weeks. Some individual plants may only flower for a week, some only one or two days. Some species only emerge and flower after certain disturbance events, notably fire. This combination of factors means that it is not a simple matter to survey for orchids.

PURPOSE OF THIS DOCUMENT

We have prepared this document to assist administrators (e.g. those in government agencies that recommend surveys for certain species), landowners, land managers, property developers, forest managers (e.g. those that are told they need to have a survey undertaken) and field botanists (e.g. those actually doing the surveys) in making rational decisions regarding the timing of surveys for orchids. It may also be a handy reference for orchid enthusiasts and botanists who wish to see what is likely to be flowering at any given time during the year.

The flowering times in this document should be taken as a guide only because there are always exceptions to the rules. However, we have drawn on as much published information and expert knowledge as possible.

The main impetus for this document is that current published information is insufficient to allow those unfamiliar with our orchids to make pragmatic decisions regarding the timing of surveys for threatened species. The definitive guide book for Tasmanian orchids, *The Orchids of Tasmania* (Jones *et al.* 1999) notes flowering times for all species and at first glance this would seem to provide a good indication for decision makers. But two examples show why this book should be regarded as general only in its information. The flowering time for *Pterostylis grandiflora* is described as April to August, which suggests a wide survey window of five months, nearly half the year. The reality is that while there are database records or herbarium collections spanning this period, most people familiar with this species would not look for it until late June to mid July. The flowering time of *Burnettia cuneata* is given as October and November. In this case, the period is accurate and is a good guide. However, there is no practical point in undertaking surveys for this species unless there has been a hot summer fire in the preceding season because it only emerges in the season after fire (occasionally a very few plants might flower the second season after fire).

This document is not an identification guide. Field botanists must ensure that they correctly identify the orchids they are searching for. The authors acknowledge that this can be difficult and urge people to exercise caution and rigour in their assessments.

This document is free to all. We simply ask users to acknowledge its use. We will make every effort to keep the guide up-to-date with current nomenclature and taxonomy but users are urged to keep abreast of these subjects themselves.

FORMAT

This guide is presented in a table ordered alphabetically by genus and then species, based on the latest *A Census of the Vascular Plants of Tasmania* (Buchanan 2009) produced annually by the Tasmanian Herbarium.

Orchid taxonomy is fluid and there is an almost constant shifting of names. This will not affect the use of this guide: a name is just a name. But there is also a fairly steady stream of additions, deletions, subsumations, and varietal and subspecific rank creation going on. This sort of taxonomic activity may affect the use of this guide because if a taxon is split, the resulting taxa may have different flowering times.

This guide contains all species, not just threatened species, even though the latter group may be the focus of surveys for various reasons. However, we thought it would be useful to include non-threatened species because sometimes the process of elimination may assist in the identification of a species, threatened or otherwise.

HOW TO USE THIS DOCUMENT

Deciding on whether a survey is warranted for a particular species, and if a survey is warranted, when this should occur, is complex. We recommend the following steps.

1. If the reason for the survey is because of a database record, check its veracity and precision. Be wary of imprecise records and watch carefully for poor precision caused by data translation errors. It may be worthwhile checking with the original collector (if possible) because often records "belonging" to orchid enthusiasts are accompanied by detailed notes on their exact location and a lack of precision in a database does not always translate to a lack of precision on the ground.
2. Check the date of collection carefully because many databases can be misleading to the unwary user. In many older records the date of collection is often only recorded as a month or a year – in these cases some databases automatically superimpose a 1st of the month or 1st of the 1st month of the year. Hence, records with 1 or 1/1 in the date should be treated with caution, as should records that are well outside the expected flowering period (e.g. a winter record for a summer-flowering species).
3. Check the habitat information in sources such as *The Orchids of Tasmania* (note that information in listing statements and information sheets may be a distillation of other sources). It is not sufficient to require a survey for a species just because there is a nearby record – there must be potential habitat. Some habitat descriptions are quite broad and advice from an orchid specialist can often narrow the survey requirements.
4. Check the ecological information in this document and in *The Orchids of Tasmania* to ensure that a survey, if warranted on habitat grounds and database information, is still useful on ecological grounds. For example, there may be little practical point in undertaking a survey for a species that effectively only emerges after a hot summer fire.
5. Be aware that orchids differ from most other flowering plants in that they do not respond to the immediate seasonal conditions such as recent rain. The emergence of spring- and summer-flowering orchids is triggered by autumn and winter rains. In prolonged droughts they may not appear at all, or if leaves do appear they may wither before flowering or the young flower spike may abort. Thus, the failure of finding orchids in drought years does not necessarily mean that they are absent.
6. To determine the best time for a survey, find the target species in the table and check its flowering time, and the notes (e.g. some species flower later in highland habitats, earlier in lowland habitats).
7. Be alert that other significant species may be present at the time of the survey, even though there may not be any records from the vicinity.

SPECIES BY SPECIES GUIDE TO FLOWERING TIMES

The flowering period of most species is taken from *The Orchids of Tasmania* (Jones *et al.* 1999), indicated as light grey shading. It is noted that *The Orchids of Tasmania* often indicates a longer flowering period for several non-endemic species than typically observed in Tasmanian populations because knowledge from mainland populations was included in that publication. We display this discrepancy by using dark grey shading to indicate the observed peak flowering period in Tasmania, and hatching to indicate mainland-based information. This additional information is from several sources including more detailed published information (such as various species' protologues and more detailed species' accounts), personal knowledge of the authors (sourced from many decades of orchid surveys and photography), information from Tasmanian Herbarium specimens, and information sourced from orchid books covering mainland species such as *Native Orchids of Australia including the Island Territories* (Jones 2006).

Key

	Light grey = potential flowering period (see also notes below each entry)
	Dark grey = peak flowering period (see also notes below each entry)
	Hatching = potential flowering period based on mainland Australian populations (may not be applicable to Tasmanian populations in many situations so use caution in interpretation)
*	* preceding the species name denotes a threatened species on the Tasmanian <i>Threatened Species Protection Act 1995</i> and/or the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (note that the status of species was correct at the time of publication but that users should confirm the status of any species prior to making management decisions)

<i>Genus and Species</i>	SPRING				SUMMER				AUTUMN				WINTER			
--------------------------	--------	--	--	--	--------	--	--	--	--------	--	--	--	--------	--	--	--

Acianthus

The two species are quite conspicuous, although they have small and relatively short-lived flowers. Both species are detectable for many months before and after flowering by the presence of the ground-hugging leaves, often in dense colonies. The leaves can be distinguished from other leaves using the key to orchid leaves in *The Orchids of Tasmania*.

<i>Acianthus caudatus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species often forms quite massive colonies, but not all plants may produce flowers. The species has a wide flowering period but there is a definite peak in early to mid spring (September).

<i>Acianthus pusillus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

While there is no overlap in the main flowering period of the two species, old flowers of *A. pusillus* may still be detectable during the flowering period of *A. caudatus*. However, the two species are so distinct as to make identification easy, even if the two species co-occur (which is common).

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING	SUMMER	AUTUMN	WINTER
-------------------	--------	--------	--------	--------

Burnettia

There is no point searching for this species unless there has been a hot summer fire in the preceding season because this species only emerges as a leafless flowering plant after such a fire, and then often in large numbers. In the second season after the fire an odd few may reappear, but none beyond that.

<i>Burnettia cuneata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Individual flowers of a plant only open for a few days, but plants remain recognisable for some weeks after flowering.

Caladenia

When flowering, species of *Caladenia* are amongst the most conspicuous of Tasmania's orchids. With an obvious peak in flowering in spring-summer, there is a substantial overlap in the flowering period of many species. Detection prior to flowering is possible because *Caladenia* leaves are distinctively hairy. However, distinguishing between species on the basis of leaves is virtually impossible (but see comments under some species such as *Caladenia latifolia* for possible exceptions). Detection of *Caladenia* species can be constrained in some species by very short flowering periods with some populations flowering for less than two weeks before withering to unidentifiable browned leaves and stalks.

The flowering response of caladenias to events such as fire vary from species to species but most respond positively to hot fires during the preceding summer. Some species, especially the small-flowered caladenias, can be reluctant to flower freely until the ground cover is re-established, usually in the second or third flowering season. Having said this, the lack of a fire event is not necessarily a reason not to undertake a survey as many species that respond positively to fire can persist for many years in the absence of fire, albeit usually in lower numbers.

<i>Caladenia alata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

The flowers of individual plants open for a few days only, and local populations usually flower over a three week period only.

<i>Caladenia alpina</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species spans a huge altitudinal range, and local flowering times vary accordingly. The closely related and similar *C. cracens* is typically a lowland species that flowers earlier.

<i>Caladenia angustata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-----------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Peak flowering is in late September and October. Where this species and the closely related and similar *C. gracilis* occur together, as they do at Fingal, *C. angustata* starts flowering about two weeks earlier and is nearly finished when *C. gracilis* begins to flower.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING						SUMMER						AUTUMN				WINTER							
* <i>Caladenia anthracina</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
There is a strong peak in flowering in latter half of October.																								
<i>Caladenia atrata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Peak flowering depends on the coldness of the locality.																								
<i>Caladenia atrochila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The flowers open for only a few days before self-pollinating but finished flowers should be identifiable if dissected.																								
* <i>Caladenia aurantiaca</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The flowering period on the mainland starts earlier but the only Tasmanian collections (Deal Island) were made on 5 November 1992 and 9 October 2004. The flowers of this species last only two to four days before self-pollinating but dissection of finished flowers should enable identification.																								
* <i>Caladenia australis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Flowering period on mainland Australia is September to November. Known only from one collection in Tasmania (9 November 1968, Flinders Island). Late October to early November is likely to be a good time to search for the species here.																								
* <i>Caladenia brachyscapa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Flowering period on mainland Australia is September to November. Known only from one collection in Tasmania (Clarke Island, 7 November 1979, which may be a good time to search for it).																								
* <i>Caladenia campbellii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species appears to have a very short flowering period around 1-15 November.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN						WINTER					
* <i>Caladenia cardiochila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Flowering period on mainland Australia is August to November but collected in Tasmania only once (from somewhere on Flinders Island) in October 1947.																								
<i>Caladenia carnea</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<i>C. carnea</i> is part of a complex of closely related species involving at least <i>C. fuscata</i> in Tasmania, but possibly also <i>C. tonellii</i> . Where <i>C. carnea</i> and <i>C. fuscata</i> grow together (which is in many places), <i>C. carnea</i> usually begins flowering about two weeks after <i>C. fuscata</i> . Field workers should watch for possible hybrids and use the key warily.																								
* <i>Caladenia caudata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
It appears that populations in the south of the State consistently have a peak flowering in late September, while northern populations flower later (October, even early November). This species responds with prolific flowering the first season after a hot fire, diminishing to few or none in subsequent seasons. Despite its size and distinctive appearance, this species can be hard to detect in its often dried-off grassy habitat.																								
<i>Caladenia clavigera</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A relatively early spider-orchid with a distinct peak in the latter half of October.																								
* <i>Caladenia congesta</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
There is a definite peak in flowering in the latter half of November but in colder areas this species may flower into early January. This is a highly distinctive species and finished flowers may be identifiable by dissection because of the highly distinctive labellum.																								
<i>Caladenia cracens</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This lowland species flowers from late October to mid November, while the closely related and similar <i>C. alpina</i> is typically a species of higher altitudes, and flowers later.																								
* <i>Caladenia dienema</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Peak flowering late October to early November appears to be consistent, probably because of the relatively consistent west coast climate.																								
<i>Caladenia dilatata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A late spider-orchid, peaking from late November into early December. Finished flowers maintain their distinct shape and colouring for up to two weeks.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Caladenia echidnachila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Essentially an October-flowering species. Responds strongly to fire and other disturbance such as slashing																								
* <i>Caladenia filamentosa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species is identifiable before flowering from its leaves (reddish base, densely hairy and long) and from finished flowers (because of the distinctive long wispy segments persisting for some time). This species responds strongly to fire, with high numbers one to two seasons after fire, then dwindling to few or none as the undergrowth thickens.																								
<i>Caladenia fuscata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<i>C. fuscata</i> is part of a complex of closely related species involving at least <i>C. fuscata</i> in Tasmania. Where <i>C. carnea</i> and <i>C. fuscata</i> grow together (which is in many places), <i>C. carnea</i> usually begins flowering about two weeks after <i>C. fuscata</i> . Field workers should watch for possible hybrids and use the key warily.																								
<i>Caladenia gracilis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Peak flowering is in mid October and November. Where this species and the closely related and similar <i>C. angustata</i> occur together, as they do at Fingal, <i>C. angustata</i> starts flowering about two weeks earlier and is nearly finished when <i>C. gracilis</i> begins to flower.																								
<i>Caladenia helvina</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species is closely related to <i>C. pallida</i> but <i>C. helvina</i> is a summer species (peaking in latter half of December) whereas <i>C. pallida</i> flowers in spring.																								
* <i>Caladenia lindleyana</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Flowering plants have been seen from mid October to early November in the northern Midlands and mid December in the Lilydale area, with old records from the 1800s in early January from Circular Head where they are now extinct.																								
<i>Caladenia mentiens</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Flowers of <i>C. mentiens</i> usually open for only one or two days before self-pollinating and in cold weather they may self-pollinate without opening.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN						WINTER					
* <i>Caladenia pallida</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Not much is known about this species, which appears to have been more widespread in the 1800s. The few more recent records suggest a peak flowering period spanning November.																								
* <i>Caladenia patersonii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species has a long flowering period but with a distinct peak from October into November, which is probably the best detection window. This spider-orchid responds strongly to hot summer fires with profuse flowering the season after, then quickly diminishing to low numbers in subsequent seasons.																								
* <i>Caladenia prolata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
In Tasmania only known from three collections (1998, Flinders Island; and 30 October and 18 November 2004, Deal Island), suggesting a good search window on Bass Strait islands could be late October to mid November.																								
* <i>Caladenia pusilla</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The flowers of this tiny species may not always open fully before self-pollinating, and may then be very hard to detect in the field, but when detected, the short stiff scape and tiny buds are a give-away.																								
* <i>Caladenia saggicola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Although there is a 9 September record, the peak in flowering is mid September to mid October. This species responds well to disturbance (rabbits and horses) and is likely to respond strongly to fire.																								
* <i>Caladenia sylvicola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species was not seen for many years (after a fire destroying the humus layer) but the time of flowering was well known from several precise observations and was considered as a few days either side of 1 November. At this time the local <i>C. carnea</i> has finished and <i>C. cracens</i> is just starting. In 2009, a single flower was detected at the known site on 25 October but withered a few days later.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN						WINTER					
* <i>Caladenia tonellii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>Poorly known so far and may extend from late October into early December, but most records are from early to late November. Finished flowers of this species are likely to be distinctive because of their stature and arrangement of flowers. This species has one of the longest leaves of the small-flowered caladenias (up to 25 cm tall, green and sparsely hairy) so detection prior to full flowering may be possible. It is part of the <i>C. carnea</i> complex and some of the smaller <i>C. tonellii</i> could be mistaken for that species (although <i>C. carnea</i> tends to flower earlier).</p>																								
<i>Caladenia transitoria</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>Although this species extends from lowland to colder higher altitudes, most records are from early to late November. Detection prior to full flowering is easy because of its distinctive dull greenish cream to greenish yellow buds (no other confusing species), similarly recently finished flowers may also be identifiable from the colour and the highly distinctive labellum. Responds with strong flowering following a hot fire.</p>																								
<i>Caladenia vulgaris</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>This species is part of the <i>C. carnea</i> complex and would previously have been mistaken for that species, despite its very long leaf. Although it has a long flowering period from late October to late December, possibly even into early January in cold locations, it is typically an early summer species, and where it is found the local <i>C. carnea</i> tends to have finished flowering.</p>																								
<p><i>Caleana</i> This species is most easily detected when in full flower (although early buds and fertilised flowers are also unmistakable). The leaf emerges in winter and is fully developed long before flowering time. It looks like a reddish fallen gum leaf and is unmistakable.</p>																								
<i>Caleana major</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>The finished flowers of this summer-flowering orchid maintain their shape and colour for many weeks (detectable as late as March). The wide flowering period indicated for mainland States is unlikely to be applicable to Tasmania.</p>																								
<p><i>Calochilus</i> Beard-orchids are easiest to identify when in full flower but can be recognised many weeks before by their distinctive three-cornered basal leaf. Recently finished flowers can still be identified by the labellum (although dissection is a little awkward because of the fleshy flowers).</p>																								
* <i>Calochilus campestris</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>Poorly known in Tasmania, collected only once, from Clarke Island on 12 November 1979, which coincides with peak flowering of the other Tasmanian beard-orchids.</p>																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING				SUMMER				AUTUMN				WINTER											
<i>Calochilus herbaceus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Often mistaken for the more robust <i>C. campestris</i> , which has never been recorded from mainland Tasmania.																								
<i>Calochilus imberbis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This taxon was not included in <i>The Orchids of Tasmania</i> and is usually regarded as a self-perpetuating peloric form (with a petaloid labellum) of <i>C. platytila</i> . Flowering period above is from mainland Australia but Tasmanian collections are mostly from early to late November.																								
<i>Calochilus paludosus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Where growing together with <i>C. robertsonii</i> (often) this species flowers one to two weeks later.																								
<i>Calochilus platytila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Usually the first beard-orchid to flower. Where it grows together with <i>C. paludosus</i> , which is often the case, <i>C. platytila</i> comes into flower one or two weeks earlier.																								

Chiloglottis

Chiloglottis species usually grow in extensive, often dense, colonies recognisable for most of the year from their paired leaves (but watch for aberrant populations with many plants with one main leaf and a rudimentary second leaf). Identification to species level is possible in buds as well as finished flowers by extracting the labellum. Fertilised flowers are difficult to identify correctly because flower parts tends to become fused (although *C. cornuta* is distinctively green). Fertilised flowers elongate considerably making detection easy but identification difficult.

<i>Chiloglottis cornuta</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species occupies a huge altitudinal range, with flowering peaking in November at sea level, up to late December at high altitudes.																								
<i>Chiloglottis grammata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species is found from low to high altitudes, with flowering peaking in late October and November at lower levels, well into December at higher altitudes and other cold places.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER				AUTUMN						WINTER							
<i>Chiloglottis gunnii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Flowering time depends on altitude and coldness of the locality, with flowering as early as late October at low altitude and as late as January at high altitude.																								
<i>Chiloglottis reflexa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A typical autumn species, locally sometimes extending well into May.																								
* <i>Chiloglottis trapeziformis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Only known from a few sites in Tasmania with a wide range of flowering times, varying from mid August on Flinders Island to early November on mainland Tasmania.																								
<i>Chiloglottis triceratops</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species flowers as early as the first half of October at lower altitudes and as late as late December at higher altitudes and in cold places.																								
<i>Chiloglottis valida</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
In Tasmania only found on King Island (27 October 1998; 20 November 2009).																								
<i>Corunastylis</i>																								
When not flowering, <i>Corunastylis</i> specimens are virtually undetectable because their single thin leaf is often hidden amongst grasses and sedges. Even in flower their short stature and colour makes them hard to detect in their surrounds. The flower stems elongate in the fruiting stage and persist for many months. They may then be more easily spotted but the dried flower parts are rarely useful for identification. Midge-orchids are often spotted in slashed roadsides, which may indicate a liking for disturbance.																								
<i>Corunastylis archeri</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Usually the first midge-orchid to come into flower.																								
* <i>Corunastylis brachystachya</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The few records of this species indicate a peak flowering in March.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Corunastylis despectans</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Historical records indicate that this species may flower as early as October, while recent records suggest a peak in flowering from early January, through to late March at higher elevations.																								
* <i>Corunastylis firthii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The few records indicate this species flowers from mid January to late February. It is restricted to the Freycinet Peninsula, where the closely related and similar <i>C. tasmanica</i> is also in flower then (supporting existing doubts about the taxonomic status of <i>C. firthii</i>).																								
* <i>Corunastylis morrisii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The flowering period of this species extends into March but most collections are from late January through to late February.																								
* <i>Corunastylis nuda</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species extends well into higher altitudes where flowering peaks in February.																								
* <i>Corunastylis nudiscapa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The flowering period of this species is not well known for Tasmania. The date of the type collection (from near Hobart) has been listed as 9 February 1840 but this is now known to be an error and it is more likely that the specimens were collected on 9 October 1840. Another collection of the species from the 1850s from near Oyster Cove is also from October. The species was recently re-discovered in early April and the stage of flowering suggests that the appropriate time of year for detection is from late February through to early April. At one known site, old flowering spikes can be detected as late as July but this may not be the case at other sites and should not be relied upon.																								
<i>Corunastylis pumila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
It appears that peak flowering may be confined to the month of February.																								
<i>Corunastylis tasmanica</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species has a long flowering period, even within a single locality.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING				SUMMER				AUTUMN				WINTER													
<p>Corybas</p> <p>Flowers of <i>Corybas</i> are easily overlooked even though they often tend to grow in dense colonies, usually in the shelter of other vegetation. There are three types of leaves (based on leaf colour) and this can be a rough guide to identification of species: those that are dark green above and purple below (<i>C. aconitiflorus</i>); those that are green on both surfaces (<i>C. diemenicus</i>, <i>C. fimbriatus</i>, <i>C. fordhamii</i>, <i>C. incurvus</i>); and those that are grey-green above and reddish purple below (<i>C. unguiculatus</i>). Provided the field worker can differentiate between <i>Corybas</i>, <i>Acianthus</i> and <i>Cyrtostylis</i>, this difference in leaf colouration within species of <i>Corybas</i> makes identification of vegetative, budding and fertilised specimens possible, especially when combined with habitat features. Leaves are present for most of the year.</p>																										
<i>Corybas aconitiflorus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
Non-flowering plants can be identified from their somewhat leathery, heart-shaped leaves that are dark green above, purplish beneath.																										
<i>Corybas diemenicus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
Although the flowering period of this species is very long, there is a definite peak in late June and July, perhaps somewhat later at higher elevations.																										
<i>Corybas fimbriatus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
A species of northern Tasmania and Bass Strait islands.																										
* <i>Corybas fordhamii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
Flowers from July to October on the mainland but in Tasmania only known from a collection from Flinders Island in September, which is probably the best time to look for it here.																										
<i>Corybas incurvus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
A species with a long flowering period but with a peak around August.																										
<i>Corybas unguiculatus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
Outside the flowering period plants can be identified from their heart-shaped leaves that are grey-green above, reddish purple beneath.																										

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING	SUMMER	AUTUMN	WINTER
-------------------	--------	--------	--------	--------

Cryptostylis

When flowering, species of *Cryptostylis* are relatively easily spotted (except perhaps in denser sedgy habitats). This is one of the few evergreen orchid genera in Tasmania and the erect leathery leaves are distinctive although difficult to detect amongst dense vegetation.

* <i>Cryptostylis leptochila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species is only known from Flinders Island, with all Tasmanian Herbarium collections from late January.

<i>Cryptostylis subulata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Detectable in bud stage as buds are large and show colour early.

Cyrtostylis

When flowering, species of *Cyrtostylis* are easily detected (often quite abundant). However, the genus is easily recognised during the non-flowering period by the distinctive ground-hugging leaves. Confusion with *Acianthus* is unlikely as their leaves are purplish below. Experience is needed to distinguish this genus from *Corybas* species with similarly rounded green ground-hugging leaves. The leaves of *Cyrtostylis* species are sparkling dewy beneath with prominent veins (but experience is needed).

<i>Cyrtostylis reniformis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This is the more widespread of the two species. Where the two species co-occur, *C. robusta* tends to begin flowering about two weeks earlier than *C. reniformis*. However, differentiation is easy because of their distinctive leaves: *C. reniformis* has dull grey-green leaves and *C. robusta* has bright green (and often larger) leaves. This character is so consistent and obvious that identification is possible many weeks before and after flowering.

* <i>Cyrtostylis robusta</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

See comments under *C. reniformis* and also note the earlier peak and overall shorter flowering period, which can be a further aid to identification. It is an extremely coastal species, often confined to a few hundred metres from the shoreline.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING	SUMMER	AUTUMN	WINTER
--------------------------	--------	--------	--------	--------

Dipodium

The single Tasmanian species is a summer-flowering leafless epiparasite.

<i>Dipodium roseum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

In full flower, this spectacular species is unmistakable and easily spotted. However, plants can already be detected in late spring by their fleshy dark purple flowering stems that look like asparagus spears. After flowering, the sturdy stems with withered flowers persist for many weeks.

Disa

This genus is represented by a single species in Australia and Tasmania. It is native to South Africa. It is a highly distinctive species, most easily recognised when flowering but also detectable prior to this from the clump-forming light green tuft of fleshy leaves (which dies down in summer and re-emerges in spring).

<i>Disa bracteata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-----------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Only recently recorded in Tasmania, from sometime in November (near Bridport) and mid November 2009 (Latrobe).

Diuris

Diuris species have long, narrow grass-like leaves that may be nearly lax on the ground (so very hard to detect, especially in grassy vegetation) or erect in tufts (just as hard to detect in the absence of flowers, except perhaps in recently burnt areas). Flowering plants are easily detected due to their often large brightly coloured flowers. Some species have spectacular floral displays as a response to hot fires the preceding summer. Flowers wither quickly but are often still identifiable a week or two after flowering finishes.

<i>Diuris chryseopsis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A typical Midlands grassland species where flowering occurs two weeks either side of 1 October, but a little later in other habitats elsewhere.

* <i>Diuris lanceolata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
----------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A species from the North West, where most flowering occurs in November.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN						WINTER					
<i>Diuris monticola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A highland species, hence flowering later than the other Tasmanian species.																								
<i>Diuris orientis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A coastal and near-coastal species flowering for a short period with flowers generally gone by mid November.																								
* <i>Diuris palustris</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A coastal species with quite a few early and late records but mostly peaking around October.																								
<i>Diuris pardina</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A mainly inland species, flowering in early spring.																								
<i>Diuris sulphurea</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A mainly inland species, flowering when <i>D. pardina</i> has largely finished.																								

Dockrillia

Dockrillia is detectable at any time of the year because the distinctive epiphytic patches of succulent leaves are present all year round. There is no doubt that detection is aided by the presence of the bright yellow flowers but these are certainly not critical, except for separation of subspecies.

<i>Dockrillia striolata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Both subspecies flower at the same time, perhaps slightly into November for subsp. <i>striolata</i> .																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING	SUMMER	AUTUMN	WINTER
-------------------	--------	--------	--------	--------

Eriochilus

This genus is represented in Tasmania by two species: *E. cucullatus* is widespread and the most familiar species, and *E. magenteus* is recently described and its distribution and status is still uncertain. The single leaf is only partly developed at flowering time. After the flower has withered, the characteristic ovate ground-hugging (or semi-erect) dark green leaf develops fully and remains present through winter and early spring.

<i>Eriochilus cucullatus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species has a huge altitudinal range, with flowers first appearing in late January in lowland, much later at high altitudes. The recent recognition of *E. magenteus*, however, means that some higher elevation records may refer to that species, although *E. cucullatus* does also occur at higher elevations.

<i>Eriochilus magenteus</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A newly recognised species, predominantly of higher elevations. On the mainland, the species flowers between December and March but until more formal collections are made in Tasmania, its flowering time in this State is largely unknown (it is very difficult to determine the two species based on herbarium specimens). The type specimen was collected on 12 February (ACT).

Gastrodia

The brown leafless stems of these saprophytic orchids are hard to see in their surrounds until the flowers are developed.

<i>Gastrodia procera</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

After fertilisation specimens of *G. procera* remain visible for many weeks, particularly obvious because of the massively swollen ovaries.

<i>Gastrodia sesamoides</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species flowers well before *G. procera*. Unlike that species, fertilised specimens rarely persist because of the weaker scape, which withers rapidly and falls to the ground (sometimes the scape with fallen flower head looks like a "stick" of bracken).

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING	SUMMER	AUTUMN	WINTER
-------------------	--------	--------	--------	--------

Glossodia

Tasmania has a single species of *Glossodia*, which is unmistakable when in flower, and also easily detected from leaves. The single hairy leaf develops in winter and is fully grown at flowering time.

<i>Glossodia major</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This is one of the earliest orchids to appear in spring.

XGlossadenia

This is a rarely encountered intrageneric hybrid between *Glossodia major* and *Pheladenia deformis*. Technically, both parents would need to be in flower in an area for this entity to be present but this does not always seem to be immediately obvious.

<i>XGlossadenia tutelata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

The flowering period appears to be mid September to October. Flowers are most likely to be found in the first few years after a fire.

Hydrorchis

A single Tasmanian species in this genus formerly included in *Microtis*. Leaves are virtually impossible to detect in swampy grasslands and herbfields, but although the flowers are small, flowering plants are surprisingly easy to detect.

* <i>Hydrorchis orbicularis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Although there are Tasmanian Herbarium records from as late as January, there is a strong peak in flowering in November.

Leptoceras

Leptoceras is unmistakable when in flower, and also easily detected from leaves, often in colonies. The distinctive ground-hugging, bright green leaf is well developed before flowering and has a small ligule-like growth at the base.

<i>Leptoceras menziesii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species flowers mainly after fire although leaves may be found from late winter regardless of fire.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING	SUMMER	AUTUMN	WINTER
--------------------------	--------	--------	--------	--------

Lyperanthus

This genus has one representative in Tasmania. The single leathery leaf is fully developed by flowering time in spring. Although distinctive, leaves are almost impossible to find in the dense vegetation in which the plants tend to grow. The distinctive flowers are also surprisingly difficult to detect amongst the vegetation because of their dull colour that blends in.

<i>Lyperanthus suaveolens</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

These orchids can be identified well after flowering because the stiff plants remain intact and the flowers maintain their shape for a long time.

Microtidium

A single *species* in this genus formerly included in *Microtis*. Despite being of very short stature, this species is relatively easy to detect because the whole plant is yellowish green.

* <i>Microtidium atratum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Finished plants are distinguishable from other onion-orchids because the flower spike and withered leaf turn black.

Microtis

The green onion-like leaf is readily detected prior to flowering. Often fields of leaves are produced in open grassy or recently burnt sites. Plants are detectable for many weeks after fertilisation because the flower spike with dried capsules remains intact (if not mown down) although identification to species level will rarely be possible. Often occurs together with *Prasophyllum* species but these have a red leaf base (green in *Microtis*).

<i>Microtis arenaria</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A robust species favouring coastal lowland, often hard to distinguish from *M. unifolia*.

<i>Microtis oblonga</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Tends to flower somewhat later than the other species.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING						SUMMER						AUTUMN				WINTER			
--------------------------	--------	--	--	--	--	--	--------	--	--	--	--	--	--------	--	--	--	--------	--	--	--

<i>Microtis parviflora</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
----------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Extends into higher altitudes, hence has an extended flowering period.

<i>Microtis unifolia</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

The most widespread species. It displays much variation and may prove to be a complex of species. Often encountered in disturbed places. The fields of leaves so often seen in slashed grassy playgrounds, parks and road verges invariably turn out to be *M. unifolia*.

Orthoceras

A genus with a single species. A tuft of long grass-like leaves is well developed before flowering time (summer) but is impossible to detect among the dense sedgy vegetation in which this species grows. Despite the highly distinctive appearance and colour of the flowers, flowering plants are also difficult to spot, as they simply blend in.

* <i>Orthoceras strictum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

The flowering period indicated is quite indicative but the specific flowering time may differ throughout the State (e.g. east to west, with some evidence that west coast plants may flower a little later).

Paracaleana

A genus with one species in Tasmania. A single thin reddish leaf is fully developed long before flowering time but is virtually undetectable among other vegetation.

<i>Paracaleana minor</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Recently fertilised flowers can be readily detected and identified.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING	SUMMER	AUTUMN	WINTER
-------------------	--------	--------	--------	--------

Pheladenia

When flowering, this is a highly distinctive species (once included in *Caladenia*) because of its bright blue flowers and distinctive labellum. The leaves are indistinguishable from those of small-flowered *Caladenia* species.

<i>Pheladenia deformis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-----------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Typically an early spring species with a peak in flowering in September.

Prasophyllum

The single leaf is produced in early winter and is similar to that of onion-orchids but is reddish at the base rather than green. The flower spike emerges several weeks after the leaf is fully formed. With experience, the emergent leaves may be detected prior to flowering but identification of species requires flowers. Fertilised leek-orchids are difficult to identify with certainty. Emergence and flowering of many leek-orchids is highly dependent on fire.

<i>Prasophyllum alpinum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A typical high altitude species, usually 1000 m and over. Does not like fire.

* <i>Prasophyllum amoenum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A high altitude species (600 m at Snug Tiers, 1100 m Mt Wellington), appears to like disturbance but not necessarily fire.

* <i>Prasophyllum apoxychilum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Widespread in lowland areas (more common than initially thought), appears to like disturbance such as slashing and fire.

* <i>Prasophyllum atratum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Little is known of this species but it has been in full flower on Three Hummock Island in the first two weeks of November, which is probably the best time to search for it. It appears to like slashing and probably fire.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING						SUMMER						AUTUMN						WINTER					
<i>Prasophyllum australe</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A lowland summer species from damp heathlands. Responds well to hot fires the preceding season.																								
<i>Prasophyllum brevilabre</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Widespread in forests over a range of altitudes. Responds dramatically to hot fires, with high numbers appearing where there were none before. A swamp form of this species tends to flower from late December to early January, and in the absence of fire.																								
* <i>Prasophyllum castaneum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
An early summer species from damp coastal heath in southern Tasmania (so far). Likes disturbance. Can be confused with <i>P. concinnum</i> .																								
<i>Prasophyllum concinnum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A widespread species of peaty heath in the southern half of Tasmania (apparently replaced by <i>P. rostratum</i> in the north). Thrives on hot summer fires with sometimes thousands appearing in the first season where there were few before. Numbers decline rapidly in subsequent seasons.																								
<i>Prasophyllum crebriflorum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A species of highland grasslands, with all collections so far in the latter part of December and flowers withered after mid January.																								
<i>Prasophyllum elatum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A widespread coastal lowland species, identifiable well before and after flowering due to its stature. Likes disturbance such as slashing and especially hot fires. Black plants resembling burnt teatree stems are often seen in recently burnt scrub.																								
* <i>Prasophyllum favonium</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A species from windswept wet heath in northwestern Tasmania. Likes fire.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING						SUMMER						AUTUMN				WINTER							
<i>Prasophyllum flavum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A summer species of forest and woodland margins at lower altitudes.																								
* <i>Prasophyllum incorrectum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A northern Midlands grassland species with a very short flowering peak around mid October. Likes disturbance, specifically slashing, and would most likely respond strongly to grassland fires.																								
<i>Prasophyllum incurvum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A highland species (above 1000 m in Central Highlands but 600 m at Snug Tiers) often growing amongst dense sedges, sometimes from cushionplants. Has a delayed fire response with plants most numerous a few years after, while vegetation is still fairly open. Surprisingly, it can flower as late as end April at Snug Tiers, even though this area is a much lower altitude than the Central Highlands.																								
* <i>Prasophyllum limnetes</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Only known so far from a shrubby swamp in northern Tasmania, where it was in full flower in mid December. Responds strongly to fire.																								
<i>Prasophyllum lindleyanum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A lowland species, characterised by its overall bright green appearance and strong fragrance. Responds well to fire.																								
* <i>Prasophyllum milfordense</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A lowland species of open <i>Eucalyptus viminalis</i> forest, with an apparently very restricted distribution in southern Tasmania. Likes disturbance (e.g. rabbit diggings) but may not like fire.																								
<i>Prasophyllum mimulum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A high altitude species from above 700 m, with flowering depending on actual altitude.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING						SUMMER						AUTUMN						WINTER					
* <i>Prasophyllum aff. montanum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A poorly known high altitude species with few collections, mostly from montane grasslands. Best available evidence suggests late December and January as the flowering period but given the uncertainty over taxonomy, further collections are needed to refine this.																								
* <i>Prasophyllum olidum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A northern Midlands grassland species with a very short flowering period, beginning when <i>P. incorrectum</i> at the same site has largely finished.																								
* <i>Prasophyllum perangustum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Only known from a grassy open forest near Hobart. Appears to be stimulated by fire.																								
* <i>Prasophyllum pulchellum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A lowland species of peaty heath, more widespread than first thought. Responds strongly to fire.																								
* <i>Prasophyllum robustum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Only known so far from a grassy <i>Eucalyptus obliqua</i> forest near Latrobe where it flowers in early November.																								
<i>Prasophyllum rostratum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A northern species of coastal heath (apparently replaced by <i>P. concinnum</i> in southern Tasmania), with the bulk of records in November.																								
* <i>Prasophyllum secutum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A northern species from grassy dune swales. Emergence and flowering is highly dependent on a hot summer fire the preceding season, so much so that chances of finding plants in the absence of fire are extremely low.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN						WINTER					
<i>Prasophyllum sphacelatum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Somewhat similar in appearance to <i>P. rostratum</i> , but a species of high altitude grasslands, flowering in December near Mathinna (800 m) and early January in the Central Highlands (1100 m).																								
* <i>Prasophyllum stellatum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Available evidence suggests that this is a late summer to early autumn species with most collections from the Storys Creek area in mid to late February. There is some confusion in the records of this species from other sites (e.g. Cluan Tiers) suggesting an earlier flowering time but this requires resolution.																								
* <i>Prasophyllum tadgellianum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Known from a handful of places in the Central Highlands, flowering in January around 700 m altitude but a month later in higher and more exposed places.																								
* <i>Prasophyllum taphanyx</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A small grassland leek-orchid found in the northern Midlands, where it was in full flower on 20 October (3 plants only) and in fruit 2 weeks later, indicative of a very brief flowering period.																								
<i>Prasophyllum truncatum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The confused taxonomy of the <i>P. truncatum</i> complex and its occurrence in various habitat types at a range of elevations perhaps explains the very wide flowering period of this species.																								
* <i>Prasophyllum tunbridgense</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A grassland species with restricted distribution in the northern Midlands.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING				SUMMER				AUTUMN				WINTER											
<p><i>Pterostylis</i></p> <p><i>Pterostylis</i> species may grow as solitary individuals reproducing solely from seed, or form colonies by vegetative reproduction. At some stage in their life cycle all species produce a rosette of leaves, which may be present at the time of flowering in some species, while in others the rosette may form after flowering and wither again before the next season. The presence or absence of a rosette at flowering is an important character when searching for greenhoods and also aids in identification. Some rosettes are large and easy to spot (e.g. <i>P. cucullata</i>) and such plants can be counted even in the absence of flowers, while in other species rosettes are tiny and difficult to detect (e.g. <i>P. aphylla</i>). To the experienced eye the size, arrangement, colour and texture of rosette leaves are sufficient for identification of the species, or at least groups.</p>																								
<i>Pterostylis alata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This is one of Tasmania's true winter greenhoods. Flowering plants without rosettes but rosettes of non-flowering plants present at the time.																								
<i>Pterostylis aphylla</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The species in the complex comprising <i>P. aphylla</i> , <i>P. parviflora</i> , <i>P. atriola</i> and <i>P. uliginosa</i> can be identified by floral features but also by a combination of fleshiness of the plants, habitat and flowering time. Flowering plants generally without rosettes but these appearing shortly after. <i>P. aphylla</i> is a summer greenhood with a long flowering period centred around November to mid January.																								
<i>Pterostylis atrans</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A summer greenhood flowering late January at the higher end of its altitudinal range. Flowering plants without rosettes but rosettes of non-flowering plants present at the time. Sometimes confused with <i>P. decurva</i> .																								
* <i>Pterostylis atriola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The species in the complex comprising <i>P. aphylla</i> , <i>P. parviflora</i> , <i>P. atriola</i> and <i>P. uliginosa</i> can be identified by floral features but also by a combination of fleshiness of the plants, habitat and flowering time. Flowering plants generally without rosettes but these appearing shortly after. <i>P. atriola</i> is an autumn greenhood with a short flowering period. Finished flowers of <i>P. atriola</i> can be readily differentiated from <i>P. parviflora</i> (which can start flowering in March) by close examination of the hood to check for little bumps (<i>P. atriola</i> is scabrid, <i>P. parviflora</i> is not).																								
* <i>Pterostylis commutata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A midsummer greenhood of grasslands in the northern Midlands, usually in full flower around Christmas time, when the surrounding vegetation has dried off. A rosette is present at flowering although usually withering.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Pterostylis concinna</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>A late winter/early spring species forming clonal colonies. Rosettes present at flowering time. This species can be identified from recently finished flowers if the distinctly notched labellum apex can be dissected out. Can hybridise with <i>P. alata</i> to produce what is loosely known as <i>P. Xtoveyana</i> (although strictly this entity is described from closely related mainland species), typified by the leafy stem and slightly notched labellum.</p>																								
* <i>Pterostylis cucullata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>A late spring species that forms massive colonies but is surprisingly difficult to detect because plants can occur amongst dense grass and beneath low coastal scrub. Once found, however, even in the absence of flowering plants, the distinctive rosettes can be easily counted. There is a peak in flowering between mid October and mid November but often within one colony there are plants from early bud through to fully fertilised flowers.</p>																								
<i>Pterostylis curta</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>This is an early spring species, forming clonal colonies. Rosettes present at flowering time.</p>																								
<i>Pterostylis decurva</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>A summer/autumn greenhood with a large altitudinal range and flowering period. Flowering plants without rosettes but rosettes of non-flowering plants present at the time. Sometimes confused with <i>P. atrans</i>.</p>																								
<i>Pterostylis dubia</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>A high altitude leafy greenhood forming small clonal colonies, flowering in summer.</p>																								
* <i>Pterostylis falcata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>There is confusion between <i>P. falcata</i> and <i>P. furcata</i>, which were for some time considered synonymous, exacerbated by the new <i>P. lustra</i> (a small lookalike of <i>P. falcata</i>). The well-known occurrences of <i>P. falcata</i> in the North West proved to be <i>P. lustra</i>. Examination of herbarium specimens confirmed the presence of <i>P. falcata</i> from northern Tasmania. On the mainland, <i>P. falcata</i> is regarded as flowering between September and January. Based on herbarium records, there may be a peak in late December into January in Tasmania.</p>																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Pterostylis foliata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A late spring greenhood but with an extended flowering period as it occurs from lowland up to 1000 m altitude.																								
<i>Pterostylis furcata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
There is confusion between <i>P. falcata</i> and <i>P. furcata</i> , which were for some time considered synonymous, exacerbated by the new <i>P. lustra</i> (a small lookalike of <i>P. falcata</i>). <i>P. furcata</i> is now considered to be a species of higher altitudes and cold river basins, and is known from Woods Lake area, the northeastern highlands and North Esk River basin. The plants flower from early December at lower elevations through to the end of January at higher altitudes.																								
* <i>Pterostylis grandiflora</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A true winter greenhood with a peak flowering period spanning June and July. Flowering plants without rosettes but rosettes of non-flowering plants present at the time. Withering flowers are readily identifiable because of the highly distinctive cobra-like large hood. This species is adversely affected by fire until dense undergrowth is re-established.																								
<i>Pterostylis Xingens</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
An apparent natural hybrid between <i>P. nutans</i> and <i>P. falcata</i> , which assumes that it occurs where both parents flower at the same time. Oddly, <i>P. nutans</i> rarely flowers as late as December, when <i>P. falcata</i> is in flower (see also comments under <i>P. falcata</i> and <i>P. furcata</i>). The only two confirmed collections are from December, both from the East Tamar where <i>P. falcata</i> has never been recorded. The indicated flowering period is from the mainland where the taxon is better known.																								
<i>Pterostylis lustra</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This new species was described in 2006 and is a small lookalike of <i>P. falcata</i> . The well-known occurrences of <i>P. falcata</i> in the North West proved to be <i>P. lustra</i> and there is now doubt that <i>P. falcata</i> actually occurs in Tasmania. Confirmed plants of <i>P. lustra</i> flowered in early November.																								
<i>Pterostylis melagramma</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This is one of four species in the <i>P. longifolia</i> complex in Tasmania, comprising <i>P. melagramma</i> , <i>P. stenochila</i> , <i>P. tunstallii</i> and <i>P. williamsonii</i> . They are characterised by spreading linear stem leaves and the absence of rosettes at flowering time. They flower from winter to early spring, and are easily distinguished by the colour and shape of the mature labellum. Recently fertilised flowers can be dissected and the labellum examined to make an identification.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING								SUMMER				AUTUMN				WINTER									
<i>Pterostylis mutica</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
<p>A species of uncertain status in Tasmania with two possible collections from 23 October and 11 November but on the mainland it apparently flowers from September through to December. Species in the <i>P. mutica</i> complex (<i>P. mutica</i>, <i>P. rubenachii</i>, <i>P. wapstrarum</i>) and <i>P. cycnocephala</i> complex (<i>P. pratensis</i>, <i>P. ziegeleri</i>) are similar in general appearance and require close examination of the labellum appendage. They are short fleshy plants with small flowers and a withering rosette at flowering time. The species of lowland grassy habitats can occasionally occur.</p>																										
<i>Pterostylis nana</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
<p>A spring greenhood forming clonal colonies, with rosettes present at flowering time.</p>																										
<i>Pterostylis nutans</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
<p>This species has one of the longest flowering periods of <i>Pterostylis</i> in Tasmania, often flowering during winter and spring. It forms extensive clonal colonies, but only some of the plants produce flowers in any one season.</p>																										
<i>Pterostylis parviflora</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
<p>The species in the complex comprising <i>P. aphylla</i>, <i>P. parviflora</i>, <i>P. atriola</i> and <i>P. uliginosa</i> can be identified by floral features but also by a combination of fleshiness of the plants, habitat and flowering time. Rosettes often already forming on flowering plants later in the flowering period. <i>P. parviflora</i> is an autumn greenhood. Finished flowers of <i>P. parviflora</i> can be readily differentiated from <i>P. atriola</i> (which can still flower in March) by checking the hood for little bumps (<i>P. parviflora</i> is smooth, <i>P. atriola</i> is scabrid).</p>																										
<i>Pterostylis pedoglossa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
<p>A lowland autumn greenhood forming clonal colonies with rosettes present at flowering.</p>																										
<i>Pterostylis pedunculata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	J	J	A	A
<p>A distinctive small greenhood forming clonal colonies with rosettes present at flowering. Flowering time starts late winter near the coast, early spring further inland.</p>																										

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Pterostylis plumosa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The larger of two distinctive greenhoods with yellow plumose labellum (the other is <i>P. tasmanica</i>) and a rosette at flowering time.																								
* <i>Pterostylis pratensis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A highland greenhood similar to the lowland <i>P. ziegeleri</i> but flowering later because of the altitude. Species in the <i>P. mutica</i> complex (<i>P. mutica</i> , <i>P. rubenachii</i> , <i>P. wapstrarum</i>) and <i>P. cycnocephala</i> complex (<i>P. pratensis</i> , <i>P. ziegeleri</i>) are similar in general appearance and require close examination of the labellum appendage. They are short fleshy plants with small flowers and a withering rosette at flowering time.																								
* <i>Pterostylis rubenachii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A species of restricted distribution in the North West, with a short peak in flowering. <i>P. ziegeleri</i> occurs in the same general area but in extremely coastal grassland only. Species in the <i>P. mutica</i> complex (<i>P. mutica</i> , <i>P. rubenachii</i> , <i>P. wapstrarum</i>) and <i>P. cycnocephala</i> complex (<i>P. pratensis</i> , <i>P. ziegeleri</i>) are similar in general appearance and require close examination of the labellum appendage. They are short fleshy plants with small flowers and a withering rosette at flowering time.																								
* <i>Pterostylis sanguinea</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A winter greenhood from the North East and Bass Strait islands distinguished by its large red flowers and leafy stem, but rosettes absent at flowering time.																								
<i>Pterostylis scabrada</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A short sturdy greenhood from mainly higher altitudes, forming clonal colonies with rosettes present at flowering. Flowering time depends on altitude and can be as late as early February at high elevations.																								
* <i>Pterostylis squamata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A midsummer greenhood with reddish flowers and a rosette that is withering at flowering time, growing in dry sands or gravels.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Pterostylis stenochila</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>This is one of four species in the <i>P. longifolia</i> complex in Tasmania, comprising <i>P. melagramma</i>, <i>P. stenochila</i>, <i>P. tunstallii</i> and <i>P. williamsonii</i>. They are characterised by spreading linear stem leaves and the absence of rosettes at flowering time. They flower from winter to early spring, and are easily distinguished by the colour and shape of the mature labellum. Recently fertilised flowers can be dissected and the labellum examined to make an identification.</p>																								
<i>Pterostylis tasmanica</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>The smaller of two distinctive greenhoods with yellow plumose labellum (the other is <i>P. plumosa</i>) and a rosette at flowering time. It has a coastal distribution.</p>																								
* <i>Pterostylis tunstallii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>This is one of four species in the <i>P. longifolia</i> complex in Tasmania, comprising <i>P. melagramma</i>, <i>P. stenochila</i>, <i>P. tunstallii</i> and <i>P. williamsonii</i>. They are characterised by spreading linear stem leaves and the absence of rosettes at flowering time. They flower from winter to early spring, and are easily distinguished by the colour and shape of the mature labellum. Recently fertilised flowers can be dissected and the labellum examined to make an identification. <i>P. tunstallii</i> is only known from the eastern Bass Strait islands.</p>																								
<i>Pterostylis uliginosa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>The species in the complex comprising <i>P. aphylla</i>, <i>P. parviflora</i>, <i>P. atriola</i> and <i>P. uliginosa</i> can be identified by floral features but also by a combination of fleshiness of the plants, habitat and flowering time. Flowering plants generally without rosettes but these appearing shortly after. In Tasmania <i>P. uliginosa</i> is a summer greenhood with a short flowering period.</p>																								
* <i>Pterostylis wapstrarum</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>A lowland greenhood of inland grassy habitats and sometimes co-occurring with <i>P. ziegeleri</i>. Species in the <i>P. mutica</i> complex (<i>P. mutica</i>, <i>P. rubenachii</i>, <i>P. wapstrarum</i>) and <i>P. cycnocephala</i> complex (<i>P. pratensis</i>, <i>P. ziegeleri</i>) are similar in general appearance and require close examination of the labellum appendage. They are short fleshy plants with small flowers and a withering rosette at flowering time.</p>																								
<i>Pterostylis williamsonii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>This is one of four species in the <i>P. longifolia</i> complex in Tasmania, comprising <i>P. melagramma</i>, <i>P. stenochila</i>, <i>P. tunstallii</i> and <i>P. williamsonii</i>. They are characterised by spreading linear stem leaves and the absence of rosettes at flowering time. They flower from winter to early spring, and are easily distinguished by the colour and shape of the mature labellum. Recently fertilised flowers can be dissected and the labellum examined to make an identification.</p>																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING				SUMMER				AUTUMN				WINTER			
-------------------	--------	--	--	--	--------	--	--	--	--------	--	--	--	--------	--	--	--

* <i>Pterostylis ziegelerei</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species now includes both coastal populations (e.g. Cape Portland) and inland populations (which used to be known as *P. cycnocephala*) and occasionally co-occurs with *P. wapstrarum*. Species in the *P. mutica* complex (*P. mutica*, *P. rubenachii*, *P. wapstrarum*) and *P. cycnocephala* complex (*P. pratensis*, *P. ziegelerei*) are similar in general appearance and require close examination of the labellum appendage. They are short fleshy plants with small flowers and a withering rosette at flowering time.

Pyrorchis

This genus is represented by a single species in Tasmania. The name refers to the very strong response to fire. The leaves and flowers are most noticeable in burnt habitats, sometimes densely occupying vast areas of ground laid bare by fire.

<i>Pyrorchis nigricans</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-----------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A distinctive spring orchid flowering profusely after hot fires, sporadically in other years. In the absence of flowers, colonies are easily detected by the large, leathery, blotched, round leaves that already appear in autumn.

Sarcochilus

This is a genus of epiphytic evergreen orchids, represented by a single species in Tasmania. While it is easier to detect the plants when in full flower, non-flowering plants are easy to find by looking for the dark green lanceolate leaves growing in the shape of a star and clinging to the bare trunks of the host. The long stems and roots adhering closely to the host are also good pointers. The plants are often at about eye level so scanning the canopy is not required.

<i>Sarcochilus australis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species occurs in moist gloomy gullies and forests with high humidity. A very long flowering time is indicated although most would consider the species to flower mainly in November, perhaps early December. There have been recent reports of the species still in flower in later March (24-26) in northeast Tasmania.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING	SUMMER	AUTUMN	WINTER
-------------------	--------	--------	--------	--------

Spiranthes

This genus is represented in Tasmania by two species: *S. australis* is the widespread lowland and most familiar species, and *S. alticola* is recently described and its distribution and status is still uncertain but it occurs at higher elevations. Unless in flower (the bright pink spiral inflorescence is unmistakable), the plants are virtually impossible to detect because the basal tuft of narrow leaves is usually hidden amongst similarly coloured grasses, sedges and rushes. While the plants can be evergreen, some may become leafless and dormant in dry years.

<i>Spiranthes australis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species grows in the margins of lowland ephemeral swamps and marshes and is best searched for in the flowering period (but fertilised inflorescences remain standing and recognisable for some weeks after).

<i>Spiranthes alticola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-----------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A newly recognised species, predominantly of higher elevations. On the mainland, the species flowers between December and March but until more formal collections are made in Tasmania, its flowering time in this State is not well known. It is very difficult to determine the two species based on herbarium specimens but higher elevation collections of *Spiranthes* in Tasmania have been made in late January and early February (e.g. Woods Lake). The type specimen was collected on 20 February (ACT).

Thelymitra

Thelymitra species are generally mid spring to early summer flowerers, a little later at higher altitudes. All species have a single basal leaf that appears months before flowering but leaves are rarely of assistance in identification. The species can be identified by examination of the column but this requires some experience. The columns of young buds are usually not helpful as they are often not fully developed and lack colour. All species open their flowers in response to warm sunny weather, some readily, others tardily. In poor weather, quite a few self-pollinate without ever opening. Once fertilised, *Thelymitra* plants can persist well into the next season with brown empty capsules but identification at this stage is impossible. Many species respond well to fire (slashed fire breaks and road verges are also a good environment to search).

<i>Thelymitra aggericola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
-------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A pale-blue species, typically from rocky ground in the North West wet heathlands.

* <i>Thelymitra antennifera</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

One of the few yellow sun-orchids, characterised by the distinctive "ears" on the column. In other States it may flower from July through to December but in Tasmania a week either side of 1 October is a good guideline for surveys. Fire promotes flowering the following spring.

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING				SUMMER				AUTUMN				WINTER											
<i>Thelymitra arenaria</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>One of the species in the <i>T. pauciflora</i> complex and still poorly known. A rather sturdy species flowering a little later than other species in the same location. Note that the species (incorrectly) described in <i>The Orchids of Tasmania</i> under this name is now <i>T. viridis</i>.</p>																								
<i>Thelymitra aristata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>The tallest and sturdiest species in Tasmania, with numerous large flowers. This species is easily identified by the distinct column hood. Responds well to fire, although often those plants are shorter than usual. It has a fairly long flowering period but with an apparent peak in November, perhaps a little later in western areas. This is one of the few species where a reasonably positive identification can be made based on fertilised specimens because of their stature and remnants of the column.</p>																								
<i>Thelymitra atronitida</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>One of the species in the <i>T. pauciflora</i> complex and only recently recorded for Tasmania. So far early November appears to be the best survey window. The species is close to <i>T. malvina</i>, which also has pink brushes, and some specimens are hard to distinguish from it.</p>																								
* <i>Thelymitra benthamiana</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>Impossible to confuse with any other Tasmanian species. Recorded from two colonies on Flinders Island only, where they begin flowering in the first week of November.</p>																								
* <i>Thelymitra bracteata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>One of the species in the <i>T. pauciflora</i> complex and still poorly known. The main known Tasmanian site had fully flowering specimens in the first week of November.</p>																								
<i>Thelymitra brevifolia</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>One of the species in the <i>T. pauciflora</i> complex and still poorly known. It is one of the few species that can be identified with reasonable certainty from the scabrous, wide flat leaf with purplish tinge.</p>																								
<i>Thelymitra carnea</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
<p>An uncommon species often confused with <i>T. rubra</i>, distinguished from it by the erect and slender column arms.</p>																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN						WINTER					
<i>Thelymitra circumsepta</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A late flowering species with a wide elevation range (sea level to 700 m). Highland populations flower later in the indicated period.																								
<i>Thelymitra cyanea</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the later flowering species in Tasmania, sometimes confused with <i>T. erosa</i> although the column is distinctive. Where the two species grow together, <i>T. cyanea</i> starts flowering when <i>T. erosa</i> is just about finished. Flowering is stimulated by fire.																								
<i>Thelymitra erosa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the later flowering species in Tasmania, sometimes confused with <i>T. cyanea</i> although the column is distinctive. Where the two species grow together, <i>T. cyanea</i> starts flowering when <i>T. erosa</i> is just about finished. Flowering is stimulated by fire.																								
<i>Thelymitra exigua</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the species in the <i>T. pauciflora</i> complex and still poorly known. Tasmanian records show a peak in flowering in the first half of November.																								
<i>Thelymitra flexuosa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the few Tasmanian species with yellow flowers. Reasonably positive identification can be made from fertilised specimens because of the thin and wiry zigzagging flower stem. Strongly stimulated by fire.																								
* <i>Thelymitra holmesii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A later flowering species in the <i>T. pauciflora</i> complex, distinguished by dark blue flowers and cream or yellow hair tufts. Searching for this species can be difficult as the flowers only open on very warm sunny days.																								
<i>Thelymitra imbricata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Largely known from grassy habitats in the northern Midlands but may occur elsewhere. A field character is that the flower segments are broad and overlapping, causing advanced buds and half-closed flowers to have a swollen appearance.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING						SUMMER						AUTUMN				WINTER							
<i>Thelymitra improcera</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
An as yet poorly known species from Victoria and King Island, with two Tasmanian records from the first half of November.																								
<i>Thelymitra inflata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the species in the <i>T. pauciflora</i> complex and still poorly known, with Tasmanian records from late November to mid December.																								
<i>Thelymitra Xirregularis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
Described as a natural hybrid between <i>T. ixiooides</i> and <i>T. carnea</i> , but the name is also applied to very similar hybrids involving <i>T. juncifolia</i> and <i>T. rubra</i> .																								
<i>Thelymitra ixiooides</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species has been a dumping ground for any spotted sun-orchid, especially <i>T. juncifolia</i> , but they can be separated by column details. <i>T. ixiooides</i> has sturdy stems and usually numerous large flowers.																								
* <i>Thelymitra jonesii</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The broad flowering period indicated is based on the old concept of <i>T. azurea</i> , from which the endemic <i>T. jonesii</i> has been segregated. The few records of this rare orchid indicate a narrow search window of about a week either side of 1 November. The column is unmistakable and can be used to identify immature and recently finished flowers. This species also has distinctive buds, a character that can be used to determine numbers without dissecting additional plants. This species responds strongly to hot fires and emergence is more sporadic in subsequent years.																								
<i>Thelymitra juncifolia</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This species was previously included in <i>T. ixiooides</i> , but is more common and widespread. It has thinner and more wiry stems, and fewer, slightly smaller flowers but can only be positively identified by column structure.																								
<i>Thelymitra longiloba</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A poorly known species with an apparent flowering peak spanning November.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

<i>Genus and Species</i>	SPRING				SUMMER				AUTUMN				WINTER											
<i>Thelymitra lucida</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the species in the <i>T. pauciflora</i> complex and still poorly known from Tasmania with the only flowering record in the first week of November.																								
* <i>Thelymitra malvina</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
At least at Coles Bay this species is somewhat difficult to distinguish from the closely related <i>T. atronitida</i> . Most flowering records are from the first half of November.																								
<i>Thelymitra Xmerraniae</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This occasional cross between <i>T. ixioides/juncifolia</i> and <i>T. nuda</i> is poorly known from Tasmania, with just a single record from early November.																								
* <i>Thelymitra mucida</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
The presence of this species in Tasmania has only recently been confirmed with a collection from the Arthur-Pieman Conservation Area on 10 November 2009. Based on Victorian and Tasmanian records, November appears to be the best time to look for this species.																								
<i>Thelymitra nuda</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A large-flowered species with freely opening flowers, often confused with members of the <i>T. pauciflora</i> complex.																								
<i>Thelymitra pauciflora</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A small flowered, tardily opening species. <i>T. pauciflora</i> has for a long time been a dumping ground for any blue, non-spotted, small-flowered sun-orchids that weren't <i>T. nuda</i> . Several new species have been described within the <i>T. pauciflora</i> complex in 2004 and field workers will have to familiarise themselves with these.																								
<i>Thelymitra peniculata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
One of the species in the <i>T. pauciflora</i> complex and still poorly known from Tasmania, where most records are from November.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING				SUMMER				AUTUMN				WINTER											
<i>Thelymitra polychroma</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A species with a distinctive and more colourful column than other species. Flowering strongly stimulated by fire.																								
<i>Thelymitra rubra</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A common and widespread species. It is easily recognised by its bright pink flowers but watch for <i>T. carnea</i> , from which it is distinguished by the toothed column arms. Flowering strongly stimulated by fire.																								
<i>Thelymitra silena</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A species as tall and sturdy as the well-known <i>T. aristata</i> but easily distinguished by the distinctive column.																								
<i>Thelymitra simulata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A highland species known in Tasmania from Mathinna Plains, where it flowers in early December.																								
<i>Thelymitra spadicea</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A poorly known species, so far only recorded in the North West, where it flowered in the first half of November.																								
<i>Thelymitra sparsa</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
A spotted high altitude species with sparse hair tufts, so far only known from Snug Tiers and Mt Wellington, where it flowers around early January.																								
<i>Thelymitra Xtruncata</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
This is a natural hybrid between members of the <i>T. ixioides</i> complex (probably mostly <i>T. juncifolia</i> in Tasmania) and the <i>T. pauciflora</i> complex (several species potentially involved) and appearing with a wide array of different columns, depending on the parents. Flowering is likely to match that of its local parents.																								

Flowering Times of Tasmanian Orchids: A Practical Guide for Field Botanists

Genus and Species	SPRING				SUMMER				AUTUMN				WINTER			
-------------------	--------	--	--	--	--------	--	--	--	--------	--	--	--	--------	--	--	--

<i>Thelymitra viridis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A small species with a distinctive light green overall colour, including its typically short swollen buds, widespread in swamp margins and wet coastal heath. Note that this species was (incorrectly) described in *The Orchids of Tasmania* under the name *T. arenaria*.

Thynninorchis

A genus of two species, both leafless saprophytes that reproduce only from seed. The tiny tubers are dormant during late winter and spring and flowering occurs in summer. The species are highly cryptic and extremely difficult to detect during routine surveys even at the right time of year.

* <i>Thynninorchis huntiana</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
---------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

The long flowering period indicated is based on Australian mainland information, where it is largely a highland, even alpine species. The single Tasmanian record is from a small lowland site on Flinders Island on 3 January 1972, but it has not been seen there since. Any searches should probably be conducted two weeks either side of New Years Day.

* <i>Thynninorchis nothofagicola</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

This species is known from one site in wet forest in the South West, where it has only been seen in three seasons since its discovery in 1994. The core flowering period seems to be the month of February, probably the earlier part. However, the plants are so difficult to spot in the gloomy light conditions that it is hard to believe that they might not have been overlooked elsewhere in similar habitats. Any searches should probably start late January and be repeated two or three weeks later.

Townsonia

A genus with two species, one in New Zealand, the other endemic to Tasmania. They are evergreen orchids, forming loose groups by vegetative reproduction. Non-flowering plants have a leaf held above the litter or moss level by a short stalk, while flowering plants have a sheathing leaf halfway up the stem.

<i>Townsonia viridis</i>	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A
--------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A summer-flowering high altitude orchid (but to lower levels in western Tasmania), with local flowering time depending much on altitude. In searches for this species, the bright green leaves are often spotted first, as the small flowers are dull and blend into the background.