

## Life history notes on the Caper Gull, *Cepora perimale scyllara* (Donovan, 1805) Lepidoptera: Pieridae - Wesley Jenkinson



This pretty butterfly, previously known as the Australian Gull is encountered along coastal eastern Queensland and north-eastern New South Wales, including areas west of the Great Dividing Range in these two states. The species is also present in northern Western Australia, Northern Territory and from near Melbourne in Victoria.

In southeast Queensland it is seasonally common and the adults can be found in a varied range of forests and also suburban gardens. The breeding habitat in this region is chiefly dry rainforest and vine scrub where *Capparis* trees or shrubs are growing. Numerous species of *Capparis* are utilised for breeding and the females will often oviposit on host plants in quite exposed locations, resulting in successful adults. Although perhaps not migratory, the adults disperse from their local breeding areas after favourable rainfall.

Whilst actively on the wing, adults can be confused with two other similar looking *Pieridae* species. These are the Caper White (*Belenois java*) and particularly the female Yellow Albatross (*Appias paulina*). *Cepora p.s* is slightly quicker in flight than *B. java* and the adults are usually smaller than *A. paulina*.

Adult flight is fast and strong and they are typically observed flying around forest canopies and margins during sunny periods. Both sexes can be observed imbibing moisture from puddles (mud puddling) during extremely hot conditions. During cloudy or very hot sunny weather the adults settle with their wings closed on the upper surface of leaves in shady forest understorey. This can often occur within one or two metres of the ground. Both sexes are readily attracted to a wide range of native and introduced flowers.

Within Queensland the adults show slight variation in the width of the black marginal band on the wing upperside and the size of the white subterminal spots. The male hindwing underside is variable in colour from yellow to pale orange, while the female is usually pale orange. There is also a dry season form where the underside yellowish orange markings are replaced with brown in both sexes. The sexes can be separated by the width of the black marginal band on the upperside which is narrower in the male in comparison to the female.

Wingspans for the pictured adult upperside specimens are: males 47mm and females 49mm.





*Cepora perimale scyllara*  
(Caper Gull) images  
left to right: upperside  
wet season form  
male and female



*Cepora perimale scyllara*  
(Caper Gull) images  
left to right: underside  
wet season form  
male and female



*Cepora perimale scyllara*  
(Caper Gull) images  
left to right: underside  
dry season form  
male and female

During February 2008, an egg-laying female was fluttering slowly around a host tree in dry vine scrub. She settled and curled her abdomen onto the upper side of a fresh young leaf. An egg was laid singly and the wings remained closed while ovipositing occurred. This egg was collected and raised through to an adult on Scrambling Caper (*Capparis sarmentosa*). When fresh shoots are scarce, several eggs may be laid on either side of a single leaf by different females. Occasionally the eggs are also laid on stems of the host plant.



Two day old eggs

The fresh egg was white later changing to orange, barrel shaped, approximately 0.5 mm wide x 1.1 mm high, with 14 vertical ribs and very fine horizontal lines between these ribs.

Raised in captivity, the first instar consumed the eggshell soon after emergence and later commenced feeding from the outer edge of a small soft leaf. Being raised on the small leaved *C. sarmentosa*, the early instar rested on the upperside along a leaf midrib or on the underside of a leaf next to the midrib. The later larval instar was also observed resting along a stem. The captive larva fed openly during daylight hours, completed five instars and attained an approximate length of 32mm.



1<sup>st</sup> instar larva



2<sup>nd</sup> instar larva





3<sup>rd</sup> instar larva



4<sup>th</sup> instar larva



5<sup>th</sup> instar larva



Pupa on *Caparris arborea*

In captivity the pupa, measuring 21mm in length, was located on the upper side of a leaf of the host plant. It was attached with silk by the cremaster and a central girdle.

The total time from egg to adult was almost three weeks, with egg duration of 3 days, larval duration 14 days and pupal duration of 12 days.

Within the new boundary of the Scenic Rim Regional Shire south of Brisbane, I have records of adults from all months of the year. The adults are more numerous from late spring, through summer until late autumn, being scarce from June to September. However, this generally relates to the timing of local rainfall triggering fresh growth of the host plants. In this location there are several generations per year, further observations are required to determine the exact number.

### References

Braby, M.F., 2000. *Butterflies of Australia – Their Identification, Biology and Distribution*. vol 1. CSIRO Publishing, Melbourne.

Moss, J.T. 2010 (ed.). *Butterfly Host Plants of south-east Queensland and northern New South Wales*. 3<sup>rd</sup> edition, BOIC.

Photos Wesley Jenkinson

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### Tube Spittlebugs (Clastoptera: Machaerotinae) – Ross Kendall

On page 43 of the March edition (#68) of *Metamorphosis Australia* I asked if someone could identify the tube-like structures pictured here.

Soon after the magazine had been posted off, we received a message from Malcolm Tattersall which read: *I have an answer for the second "You Asked" question. I think they are "the calcareous tube homes of a*

