Pupa lateral, dorsal and ventral view

The pupa, measuring 13mm in length, was located below a stem of the host plant. It was attached with silk by the cremaster with the head hanging downwards.

The total time from egg to adult was about one month, with egg duration of 5 days, larval duration 20 days and pupal duration of 7 days.

During September 2006 in cooler conditions I also raised this species from egg to adult resulting in a longer life cycle. The egg duration period was 5 days, larval duration 33 days and a pupal duration of 12 days.

Within the new boundary of the Scenic Rim Regional Shire south of Brisbane, I have records of adults from September to May. In this region the adults appear to be more numerous during spring and summer. However, this may relate to the timing of local rainfall triggering fresh growth of the host plants. At this location there are probably two generations per year.

A mating pair, female at top

Reference:

Braby, M.F. 2000. *Butterflies of Australia – Their Identification, Biology and Distribution.* vol 2. CSIRO Publishing, Melbourne.

Photos Wesley Jenkinson

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The Danaids, Browns and Nymphs of Tasmania (Lepidoptera: Nymphalidae) - an historical perspective - *Peter Hendry*

The butterfly family Nymphalidae is represented in Tasmania by three subfamilies with 14 species in eight genera.

1. The Danaids: Subfamily Danainae

The **Lesser Wanderer**, *Danaus petilia* (Stoll, 1790) was known for more than 100 years as the subspecies *Danaus chrysippus petilia* until Lushai, Zalucki, Smith, Goulson and Daniels (2005) reinstated it as a species based on DNA and morphological characters. *D. petilia* was described and illustrated (Fig. 1) by Caspar Stoll, a Dutchman, in 1790. The Atlas of Living Australia web page (Accessed Oct. 2013) shows an Australian Museum record for this butterfly, collected by G. A. Waterhouse in 1907, from the Meander Valley on Tasmania's northern slopes. However, Couchman and Couchman (1977) state "the authors were able to record a

single specimen in the Australian Museum taken at Zeehan in February-March 1907" (no collector given). I contacted David Britton from the Australian Museum, as both records indicated that there was only one specimen for 1907. Dave kindly replied with the following "The record is for Zeehan, February or March 1907, Waterhouse. It was incorrectly data based, hence the discrepancy with the ALA record. I have corrected the problem, but it will not be reflected on the ALA until they do the next update." In Tasmania, *D. petilia* occurs at irregular intervals but has not been recorded breeding there (McQuillan, 1994).

The **Monarch or Wanderer**, *Danaus plexippus* (Linnaeus, 1758) (Fig. 8) is famous for its 2,000-mile migrations between Southern Canada and the Oyamei fir forests of Mexico, where it overwinters in the millions, then returns in the spring. The first published record of the Monarch in Australia was in the *Brisbane Courier* on the 16th February 1871. It was in a report on the monthly meeting of the Queensland Philosophical Society, held on the 9th of February, at which Mr. Diggles read a paper on the mode in which various insects had become acclimatized in different parts of the world. On the 21st February 1871, W.H. Miskin wrote about the "Occurrence of *Danais Archippus* [sic] (as it was then known) in Queensland". Published in *The Entomologist's Monthly Magazine* Vol VIII, Miskin noted the sudden appearance in large numbers over a wide distribution and stated "the insect haunts localities infested by *Asclepias curassavica* (an introduced plant, but now growing wild in all parts of the bush), upon which the larva evidently feeds". In a footnote the editors of the magazine stated "The occurrence in Queensland tends to the belief that the insect may have gradually made its way across the Pacific from Western America; but its sudden appearance in such numbers has yet to be accounted for." In 2004 Clarke and Zalucki published a paper called "Monarchs in Australia: on the winds of a storm?" where they hypothesize that large numbers of Monarchs were carried to Australia on cyclonic winds, based on the fact that no fewer than three cyclones hit the Queensland coast in early 1870. In Tasmania the earliest record is 1878, which is based on a watercolour by Mary Martin Allport dated 17 February 1878 and titled 'Caterpillar of Cotton Plant'. This is without doubt the larva of *D. plexippus* and is the earliest record of the species in Tasmania (Couchman and Couchman, 1977). *D. plexippus* occurs in Tasmania as a vagrant, appearing most years and occasionally larvae are found (McQuillan, 1994).

2. The Browns: Subfamily Satyrinae

The **Tasmanian Brown**, *Argynnina hobartia* (Westwood, 1851) was originally described by John O. Westwood, in *The Genera of Diurnal Lepidoptera* Vol II 1850-1852 as *Lasiommata hobartia* from a specimen from Van Diemen's Land in the British Museum. In a footnote to his work on *Lasiommata*, Westwood noted, regarding the Australian allied species, "they may, perhaps, however, be regarded as a separate subgenus, under the name of Xenica". Arthur G. Butler (1867) erected the genus *Argynnina*. In this new genus Butler placed both *Lasiommata hobartia* (Westwood, 1851) and *Lasiommata lathoniella* (Westwood, 1851).

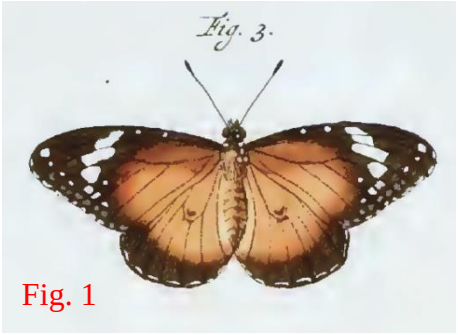


Fig. 1

Fig. 2

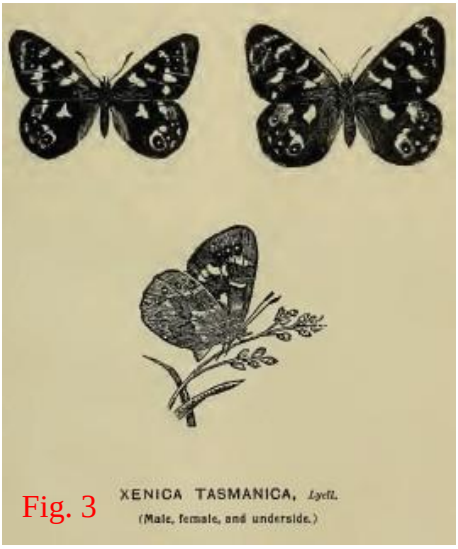


Fig. 3

Fig. 4

Fig. 6

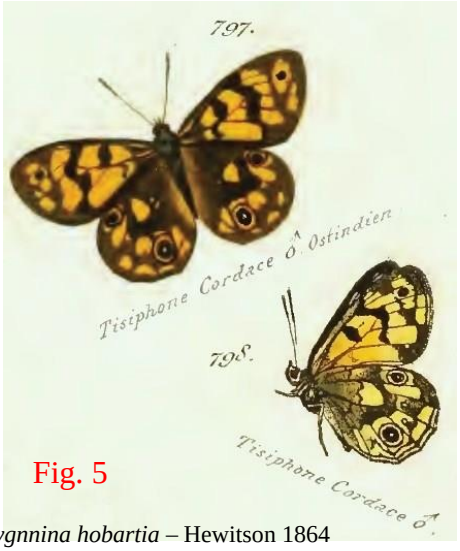


Fig. 5

Fig.1 *Danaus petilia* (Stoll 1790) Fig.2 *Arygnnina hobartia* – Hewitson 1864
Fig.3 *A.h tasmanica* Fig.4 *Geitoneura klugii* Fig.5 *Heteronympha cordace*
Fig.6 *Nesoxenica lepera* Hewitson 1864

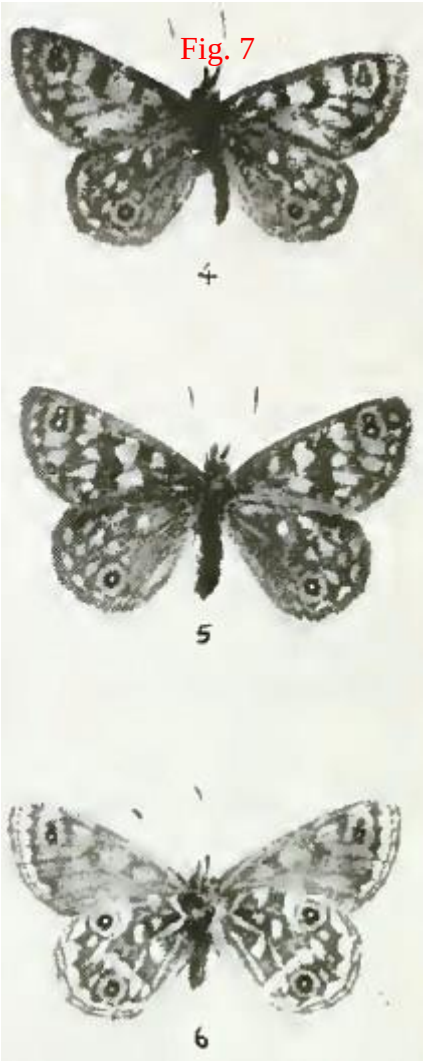
In spite of this, *Argynnina hobartia* was referred to as *Xenica hobartia* during the 1880 and early 1900 until Waterhouse and Lyell revived *Argynnina* in 1914 in their monumental work *The Butterflies of Australia.*

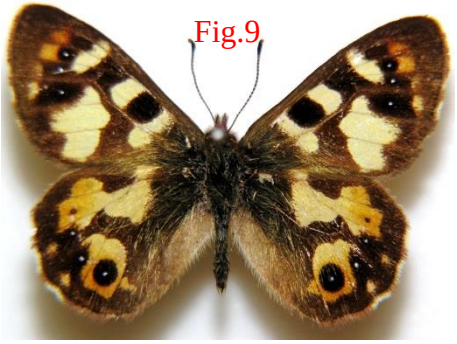
This species is endemic to Tasmania and although Couchman and Couchman (1977) state, "The species was not illustrated until 1914, when Waterhouse and Lyell figured a specimen from Patersonia", it was in fact first figured by Hewitson (1864) under the synonym *Lasiommata lasus*, (Fig. 2). Since the late '70s, *Argynnina hobartia* has been divided into three subspecies, *A. h. hobartia* (Westwood, 1851) (Figs 9 & 10), *A. h. tasmanica* (Lyell, 1900) (Figs 11 & 12) and *A. h. montana* Couchman, 1977. This arrangement must have been a change of heart as Len Couchman himself, in 1948, (as in Common & Waterhouse, 1972) suggested "*A. tasmanica* and *A. hobartia* possibly represent extreme geographical forms of the one species linked by intermediates." Furthermore, (Braby, 2000) seems to have some doubt about the legitimacy of the subspecies *montana* as he states "This subspecies may be transitional between *A. h. hobartia* and *A. h. tasmanica*, although Couchman and Couchman (1977) considered it to be distinct". So the question remains: "Is *A. h. montana* distinct or is it an intermediate between two extreme forms of the species?"

A. h. tasmanica was first described by George Lyell junior from 12 specimens collected at Strahan, Tasmania in October and November. Lyell did not state in what year but I assume it to be 1899 as he read his paper, "Description of a New Australian Butterfly, *Xenica tasmanica*", before the Field Naturalists' Club of Victoria, on the 10th September 1900. It was subsequently published in *The Victorian Naturalist*: The Journal & Magazine of the Field Naturalists' Club of Victoria Vol XVII, 1901 with the illustrations as per (Fig. 3). Described under *Xenica* it was placed in *Argynnina* by Waterhouse and Lyell (1914). In 1950 Couchman and Couchman succeeded in crossing it with *A. hobartia* showing it to be a subspecies thereof.

Lyell had previously published the life history of *Xenica hobartia* in *The Victorian Naturalist* Vol XII, 1896. This was based on notes by Edmund Jarvis from Devondale, Macclesfield, Victoria. This mainland form later became known as the subspecies *A. h. cyrila* (Waterhouse and Lyell, 1914). A. J. Turner (1925) erected *A. h. cyrila* to species status as *A. cyrila.* It therefore follows that any reference to *A. hobartia* on the mainland applies to the species *A. cyrila* and that *A. hobartia* is truly endemic to Tasmania. It must be noted that *A. cyrila* was still referred to as *A. h. cyrila* for some time after Turner's 1925 work. Examples include *What Butterfly is That?*, Waterhouse, 1932 and *Butterflies of Australia and New Guinea*, Barrett and Burns, 1951.

The **Marbled Xenica**, *Geitoneura klugii* (Guėrin-Mėneville,[1830]) (Figs 13,14 & 15) was described from a female specimen taken at Port Jackson, Sydney during the visit of the French corvette La Coquille, on its world tour 1822-1825. It was published in *Voyage autour de Monde* (Voyage around the World) in 1830. Described as *Satyrus Klugii*,[sic] the only part of the written description was the location: "Des environs du Port-Jakson, à la Nouvelle-Hollande".





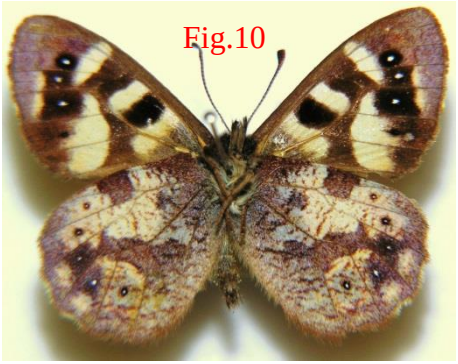


Fig. 7 Male-Female-Male _rev_flynni Fig. 8 *Danaus plexippus*
Fig. 9 *Argynnina hobartia hobartia*, Mossy Marsh 16-Nov-75
Fig. 10 *Argynnina hobartia hobartia*, Mossy Marsh 16-Nov-75, verso

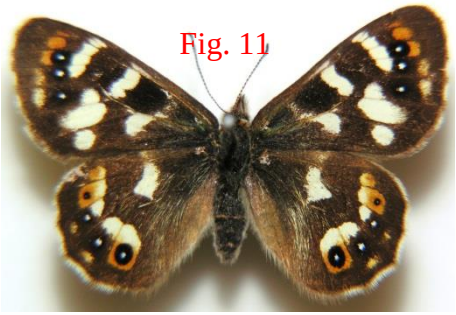
It was accompanied by an illustration see (Fig. 4). The male was later described by Boisduval (1932) as *Satyrus singa*, in *Voyage de decouvertes de l'Astrolabe* Pt 1. It was noted as being collected in "Nouvelle-Hollande" by M. d'Urville. Butler (1867)

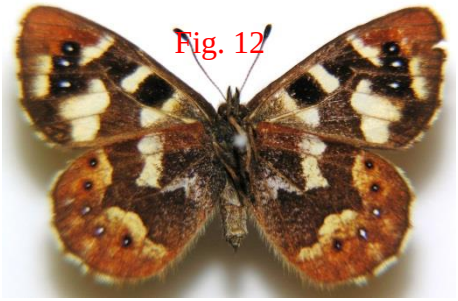
erected the genus *Geitoneura* in which he placed *Satyrus klugii* and *Papilio achanta* (Donovan, 1805). *G. klugii* was for more than 50 years known as *Xenica klugii*. George Semper in his paper "Beitrag zur Rhopaloceren fauna von Australien" (Contribution to Rhopalocera fauna of Australia) published in the *Journal des Museum Godeffroy* issue 14, 1879, was one of the few to use the correct name *Geitoneura klugii*. Until Couchman (1945) pointed out that Butler's *Geitoneura* with *Satyrus klugii* as the type species must take the place of *Xenica,* Australian authors referred to it as *Xenica klugii.* Most of these authors incorrectly spelt *klugii* with only one "i" e.g. Waterhouse and Lyell (1914) and Waterhouse (1932), while Rainbow (1907) spelt it as "kluggi". Barrett and Burns (1951) while placing it in the correct genus also spelt *klugii* with one "i". On the mainland *G. klugii* occurs from the southeast to the southwest, while in Tasmania it is found in the north and east (Braby, 2000).

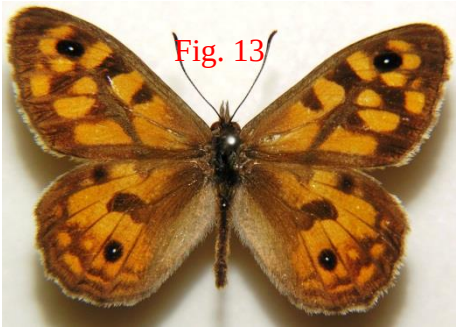
Heteronympha:

Heteronympha was erected by the Swedish entomologist Wallengren (1858). In his new genus Wallengren placed *H. merope* (Fabricius, 1775) and *H. abeona* (Donovan, 1805) (the latter now know as *Tisiphone abeona)* making *H. merope* the type species.

The **Bright-eyed Brown**, *Heteronympha cordace* (Geyer, 1832) was originally described as *Tisiphone cordace* by Carl Geyer (1932). It was for a long time attributed to Jacob Hübner, as appeared in Waterhouse and Lyell (1914), Waterhouse (1932) and Barrett and Burns (1951). Jacob Hübner was a co-author of the publication "Zuträge zur Sammlung exotischer Schmettlinge", in which the description was published. The description was accompanied by an illustration (Fig. 5). The type location has always been in doubt as Geyer gave it as East India. Couchman (1954) points out that in the errata to his volume *Catalogue of Diurnal Lepidoptera of the family Satyridae in the collection of the British Museum*, Butler (1886) gives Melbourne as the habitat. Couchman, however, based on his knowledge of the species and the fact that it has not been taken from Melbourne, believes this to be the place of dispatch and not capture. Based on Geyer's figures, Couchman believed the most likely locality of the type to be the mountain ranges of southern New South Wales. Five subspecies of *H. cordace* have been recognized from Australia, with three endemic to Tasmania. For *H. c. comptena* Couchman, 1954 (Fig. 16), the author gives a definition of the name as, "spirit of the dead of the western tribes". This subspecies has a distribution which is restricted to the wet coastal areas of western and southern Tasmania (Braby, 2000). With *H. c. kurena* Couchman, 1954 (Figs 17 & 18), the author named it *kurena*, meaning "little" in the dialect of the eastern tribes of Tasmania, as it is the smallest of the races. *H. c. kurena* is restricted to high rainfall areas of Tasmania's central plateau, at altitudes between 600 and 1030m (Braby, 2000). *H. c. legana* Couchman, 1954, was named *legana*, from the eastern tribes' word for "fresh water". *H. c. legana* occurs in north-eastern Tasmania at altitudes up to 760m, (Braby, 2000).







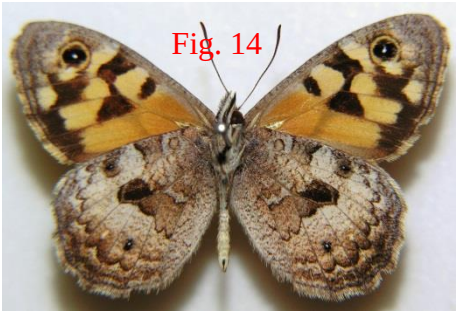


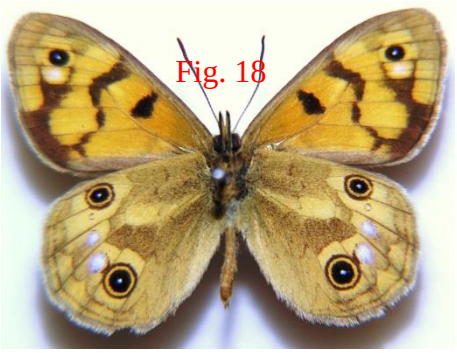
Fig. 11 *Argynnina hobertia tasmanica*, Tim Shea 8-Nov-75
Fig. 12 *Argynnina hobertia tasmanica*, Tim Shea 8-Nov-75, verso
Fig. 13 *Geitoneura klugii klugii* ♂, Kingston 5-Jan-75
Fig. 14 *Geitoneura klugii klugii* ♂, Kingston 5-Jan-75, verso
Fig. 15 *Geitoneura klugii klugii* ♀
Fig. 16 *Heteronympha cordace comptena*, Maydena 19-Jan-76

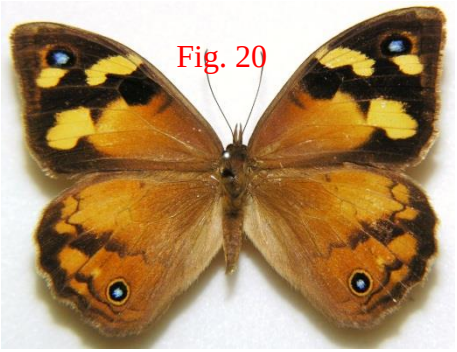
The **Common Brown**, *Heteronympha merope* (Fabricius, 1775) was originally described by the Danish zoologist Johan Christian Fabricius in 1775 and published in his work *Systema Entomologiae, sistens insectorum classes, ordines, genera, species, adiectis synonymis, locis, descriptionibus, observationibus*. Based on the date of the

authorship and the habitat and collector given in the text as Nova Hollandia and Banks respectively, it is easy to see this is one of the earliest named species actually collected from Australia. Many non-endemic Australian lepidopterous species have been named prior to this date but from overseas material. With Banks being involved, it would have to have been collected in 1770, when Cook sailed the east coast of Australia with Joseph Banks on board. Fabricius named several other specimens collected by Banks, including the day-flying moth *Amata annulata*. *H. merope* was originally named *Papilio merope* as, at that time, all Lepidoptera were placed in the one genus *Papilio*. *Heteronympha merope* has three subspecies recognized, with one, *H. m. salazar*, Fruhstorfer, 1911 (Figs 19 & 20), occurring in Tasmania. Butler (1886) referred to the Tasmanian specimens in the British Museum as "Var. Minor ad obscurior". *H. m. salazar* is restricted to Flinders and King Islands, and to the drier northern and eastern parts of Tasmania (Braby, 2000).

The **Shouldered Brown**, *Heteronympha penelope* (Waterhouse, 1937). In a mismatch of males and females dealt with by G.A. Waterhouse (1937) in his paper "On the identity of the butterfly known in Australia as *Heteronympha philerope* Boisduval, 1832", the outcome left *Heteronympha philerope* as a synonym of *Geitoneura klugii* and a *Heteronympha* without a name. To this *Heteronympha* Waterhouse applied the name *H. penelope* and at the same time described five subspecies. The number of subspecies grew to six when Tindale (1952) published his paper "on a new form of *Heteronympha penelope* Waterhouse (Lepidoptera Rhopalocera, family Satyridae)". However (Braby, 2000) only recognized four subspecies. Without going into who sunk what, when and where, the status of the Tasmanian subspecies remains unchanged! In Tasmania there are two subspecies *H. p. diemeni* (Waterhouse, 1937) (Figs 21 & 22) and *H. p. panope* (Waterhouse, 1937) (Figs 23 & 24). *H. p. diemeni* mainly occurs widely throughout the lowlands of north-western, northern and eastern Tasmania (Braby, 2000). *H. p. panope* is restricted to the central plateau, in alpine areas between 610m to 1200m and near sea level between the Pieman River and Strahan on the west coast (Braby, 2000).

The **Tasmanian Xenica**, *Nesoxenica leprea* (Hewitson, 1864) was described by William Chapman Hewitson in his paper "New Species of Diurnal Lepidoptera" and published in *The Transactions of the Entomological Society of London* 3rd series vol 2 1864 -1866. It was described under the name *Lasiommata leprea* from specimens in his own collection. The description was accompanied by an illustration (Fig. 6). The habitat was given as Australia, particular locality unknown. Like the other Australian Satyrinae named in the genus *Lasiommata*, it was originally treated in the genus *Xenica* until Waterhouse and Lyell (1914) erected the genus *Nesoxenica* and made Hewitson's *Xenica leprea* the genotype, giving Mt. Wellington, Tasmania as the type location. They also divided *N. leprea* into two subspecies, the nominal race *N. l. leprea* (Hewitson, 1864) (Figs 25 & 26) from Mt Wellington and *N. l. elia* (Waterhouse and Lyell, 1914) (Fig. 27) from Mt Dundas and Mt Magnet.





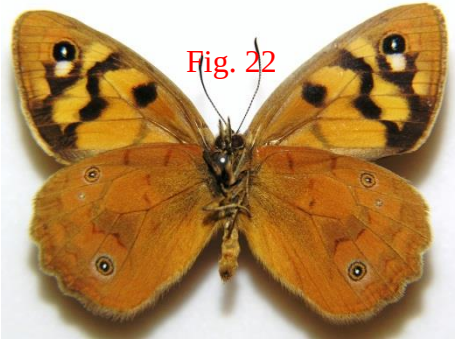


Fig. 17 *Heteronympha cordace kurena*, Mossy Marsh 17-Jan-76
Fig. 18 *Heteronympha cordace kurena*, Mossy Marsh 17-Jan-76, verso
Fig. 19 *Heteronympha merope salazar* ♂, Kingston 11-Jan-75
Fig. 20 *Heteronympha merope salazar* ♀, Kingston 11-Jan-75
Fig. 21 *Heteronympha penelope diamani*, Tarraleah 31-Jan-75
Fig. 22 *Heteronympha penelope diamani*, Maydena 31-Jan-76, verso

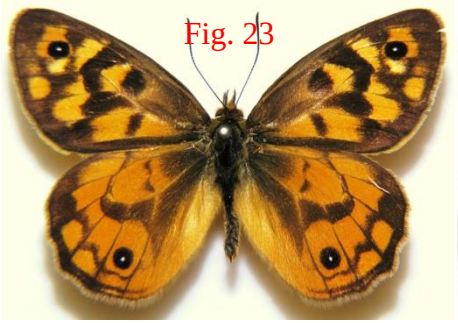
I note that the distribution maps in Braby (2000) and Braby (2004) have the legends for the subspecies the wrong way round. In correspondence with Michael Braby, he believes this was first picked up in a review by Kelvyn Dunn. *N. leprea* is endemic to Tasmania.

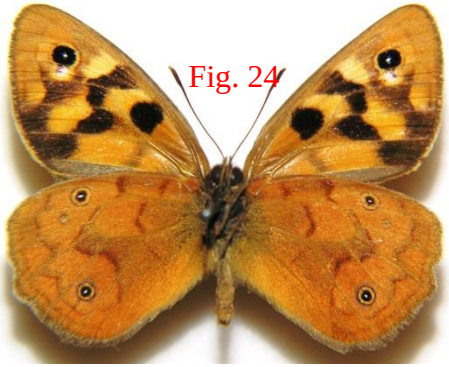
Note: The accompanying map of Tasmania shows the collection points of all of the Satyrinae imaged, except for *Nesoxenica leprea elia* which was collected from Twin Creeks which is N.N.E of King River roughly halfway between there and the coast and the female of *Geitoneura klugii klugii* which is of a mainland specimen.

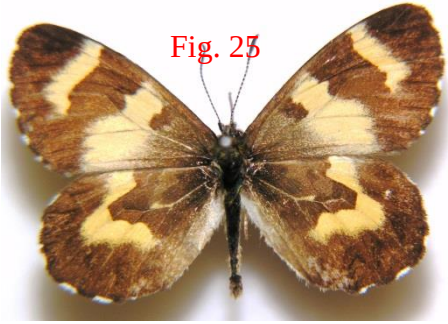
Oreixenica:
The genus *Oreixenica* was erected by Waterhouse and Lyell (1914), the type specimen being designated as *Oreixenica lathoniella* (Westwood, 1851), a species Westwood had previously described under the genus *Lasiommata*.

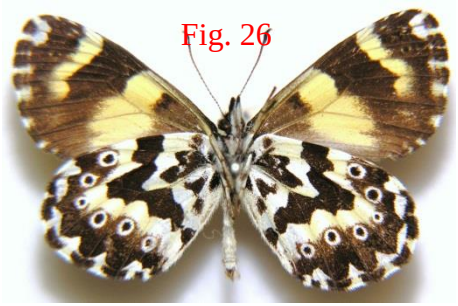
The **Silver Xenica**, *Oreixenica lathoniella* (Westwood, 1851). At the time of placing *O. lathoniella* in their new genus as the genotype, Waterhouse and Lyell described three other subspecies, one of which, *O. l. latialis* from above 5000ft on Mt Kosciusko, is now recognized as a distinct species. Turner (1925) described another and Braby (2000) recognized all four. Apart from the mainland subspecies, *O. l. herceus*, all are restricted to Tasmania. *O. l. lathoniella* (Figs 29 & 30) was named by John O. Westwood in 1851 along with *Argynnina hobartia* under the genus *Lasiommata*. It was described from a specimen from Van Diemen's Land. *O. l. lathoniella* occurs in northern, eastern and south-eastern Tasmania, from sea level to about 760 m (Braby, 2000). *O. l .barnardi* was described by A.J. Turner from near Cradle Mountain, Tasmania, which Couchman and Couchman (1977) corrected to being from the Daisy Dell area, a few kilometers further north. I can only assume it was named in honor of Mr. W. B. Barnard, of Toowoomba, Queensland, who accompanied Turner on a six week tour of Tasmania in January and February 1925, as Turner does not give the origin of the name. It is found from the Middlesex Plains across the plateau to the Great Lakes and along the western shores, between altitudes of 760 and 1065 m (Couchman and Couchman, 1977). *O. l. laranda*, Waterhouse and Lyell, 1914 (Fig. 28), is found in Western Tasmania. It occurs later in the season than the eastern race and is most common through March into early April (Couchman and Couchman, 1977).

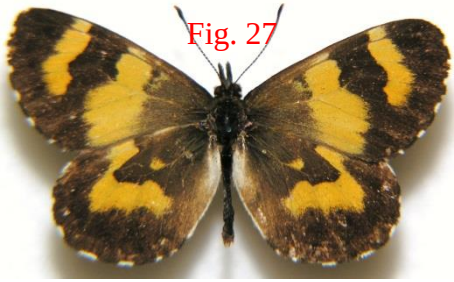
The **Spotted Alpine Xenica,** *Oreixenica orichora* (Meyrick, 1885) has two subspecies *O. o. orichora* from Mainland Australia and *O. o. paludosa* (Figs 31 & 32) from Tasmania. *Oreixenica orichora* was described by Edward Meyrick in his paper "An Ascent of Mount Kosciusko", published in *The Entomologist's Monthly Magazine* in 1885.











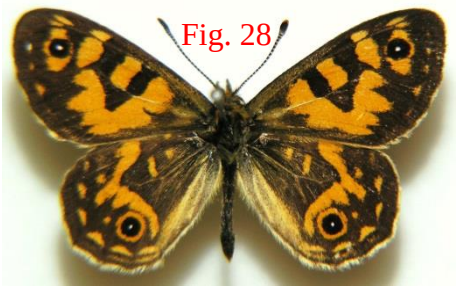


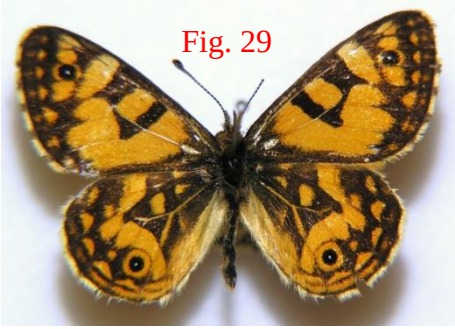
Fig. 23 *Heteronympha penelope panope*, Bronte 17-Feb-75
Fig. 24 *Heteronympha penelope panope*, Mossy Marsh 3-Feb-76, verso
Fig. 25 *Nesoxenica leprea leprea*, Hartz Mts 21-Jan-75
Fig. 26 *Nesoxenica leprea leprea*, Hartz Mts 21-Jan-75, verso
Fig. 27 *Nesoxenica leprea elia*
Fig. 28 *Oreixenica lathoniella laranda*, King River 10-Mar-79

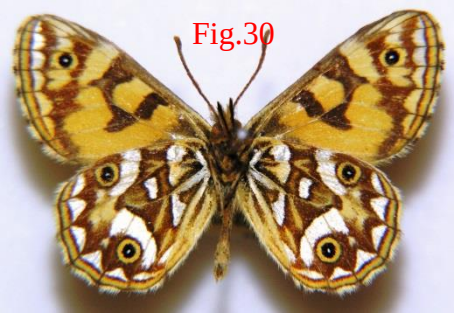
It was described as *Xenica orichora* from a specimen taken on Mount Kosciusko, about 6000 feet, in January 1885 and noted as being common in “flowery valleys”. The origins of the latter subspecies name are more complex but nonetheless quite interesting! *Oreixenica paludosa* was named in 1892 by Dr. Thomas P. Lucas under

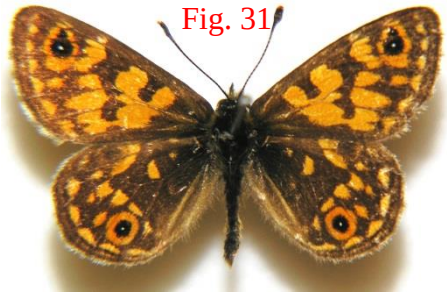
the name *Xenica paludosa*, in his paper "New Species of Australian Lepidoptera" published in the *Proceedings of the Royal Society of Queensland* Vol 8. It was described from a specimen collected by a member of the aforementioned Barnard family, somewhere near Launceston, Tasmania. Lucas (1892) noted that it was allied to *X. orichora* and *X. correae* but was smaller and differently marked. Waterhouse and Lyell (1914), who erected the genus *Oreixenica* [under *Oreixenica lathoniella* (the genotype)], noted that *O. lathoniella* "has developed no fewer than four races. Dr. Lucas described a fifth from Tasmania but, in the absence of his type of *paludosa,* we are unable to say whether this differs from the eastern Tasmanian race, which we consider typical *lathoniella*". Nearly 40 years later, L.E. Couchman (1953), went into great (but complex!) detail on the confusion surrounding *O. paludosa,* stating that he accepted Lucas's description as valid for the species (although exact locality of collection unknown) and he also associated *latialis* (from Mt Kosciusko) and the new forms he found at Nimmitabel, NSW and Mount Buffalo, Vic, as subspecies of *paludosa*. Couchman then went on to describe *Oreixenica paludosa nama* and *Oreixenica paludosa theddora,* which have now reverted to *Oreixenica latialis latialis* and *Oreixenica latialis theddora* respectively.

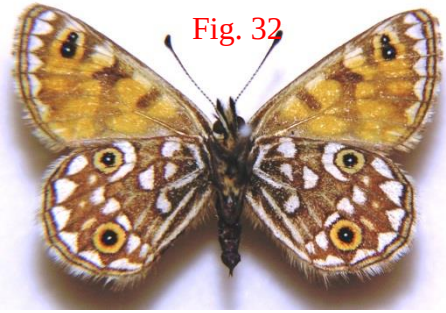
Prior to this, G.H. Hardy (1916) described and illustrated (Fig. 7) *Oreixenica flynni*. It was named after the collector Prof. T. T. Flynn who collected one specimen at Cradle Mountain, Tasmania, at Christmas 1915. Over 60 years later, Couchman and Couchman (1977) rediscovered Lucas's *paludosa* in a swampy alpine area (as its name implied) near Launceston, and moreover in an area now known to have been visited by the Barnard family. They recognised that it was conspecific with *O. flynni*. Thus they state "there is every justification for applying this prior name to the insect, as its author (Lucas) stated in his original description (as) 'allied to *Xenica orichora'* ". Therefore *O. orichora paludosa* replaced *O. flynni* in Tasmania and *O. latialis* replaced *O. paludosa* on the mainland.

The **Ptunarra Xenica**, *Oreixencia ptunarra* (L.E. Couchman, 1953) (Figs 33 & 34) is endemic to Tasmania and has been listed as vulnerable under the Tasmanian Threatened Species Protection Act 1995. The Threatened Species Listing Statement was prepared by Phil Bell in April 1998. When Couchman described the species in 1953, he included three subspecies: *Oreixencia ptunarra ptunarra*, ["Ptunarra" = frigid, in the dialect of the western tribes of Tasmania], *O. p. roonina*, ["Roonina" = grass, in the dialect of the Big River tribe of central Tasmania] and *O. p. angeli*, after S. Angel a collector of the time. However, these subspecies were sunk by McQuillan and Ek in a biogeographical analysis of the species, published in 1996. Although McQuillan and Ek noted that the populations from the montane grasslands of north-western Tasmania (unknown to Couchman) should be recognized as a new subspecies, none was forthcoming. Braby (2000) agreed with McQuillan and Ek and did not recognize Couchman's subspecies though Bell (1998) refers to them. *O. ptunarra* is restricted to open plains and poorly drained areas bordering mountain lakes and swamps, (Braby, 2000).









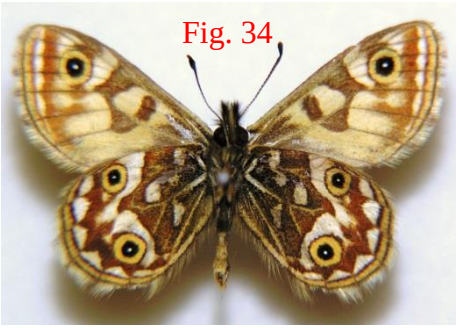


Fig. 29 *Oreixenica lathoniella lathoniella*, The Springs Mt Wellington 14-Feb-76
Fig. 30 *Oreixenica lathoniella lathoniella*, The Springs Mt Wellington 14-Feb-76, verso
Fig. 31 *Oreixenica orichora paludosa*, Great Lakes Jan-76
Fig. 32 *Oreixenica orichora paludosa*, Great Lakes Jan-76, verso
Fig. 33 *Oreixenica ptunarra*, Steppes Tas 12-Mar-76
Fig. 34 *Oreixenica ptunarra*, Steppes Tas 12-Mar-76, verso

3. The Nymphs: Subfamily Nymphalinae

The **Meadow Argus**, *Junonia villida* (Fabricius, 1787) was named by J.C. Fabricius in 1787, as *Papilio villida*. It was published in *Mantissa Insectorum sistens species nuper detectas*. The genus *Junonia* was erected by Jacob Hübner in 1816 and published in *Verzeichniss bekannter Schmettlinge*. A number of subspecies have been recognized. Only *J. v. calybe* (Godart, 1819) (Fig. 35) occurs in the Australian subregion (Braby, 2000). *J. v. calybe* was described by the Frenchman Mr. Godart, a former headmaster of High School Bonn who had one of the finest collections of Lepidoptera in Paris. It was published in *Encyclopédie Methodique*, 1819. *J. v. calybe* was described as *Vanessa calybe* from a specimen from "Nouvelle-Hollande". Rainbow (1907) referred to this species as *Junonia villida*. Waterhouse and Lyell (1914) under the genus *Precis* noted, "We have followed Butler and Aurivillius in merging *Junonia* in this genus". By 1932 it was being referred to as subspecies *Precis villida calybe*, as in Waterhouse (1932) and Barrett and Burns (1951). In 1952 H. de Lesse in his paper "Note sur les genres *Precis* Hb. et *Junonia* Hb. (Lep. Nymphalidae)" published in the French journal, the *Bulletin de la Société entomologique de France*, based on his study of genitalia, maintained that *Precis* (type octavia) and *Junonia* (type lavinia) are distinct. Edwards (1977) noted this and referred to the genus as *Junonia* in his paper on *Junonia erigone* being recorded from Australia. Common and Waterhouse (1981) maintained this, referring to the Meadow Argus as *Junonia villida calybe*. *J. v. calybe* is widespread in Tasmania and specimens from the south-west are somewhat darker, (McQuillan, 1994).

Vanessa:
The genus *Vanessa* was erected by Fabricius in 1807 in the last of his works *Systema Glossatorum*. At the same time he erected the genus *Cynthia* which later became a synonym of *Vanessa*. The Red Admiral (*Vanessa atalanta*), found in temperate Europe, Asia and North America was designated as the type species by Lareille in 1810. The same butterfly was designated as the type for Hübner's genus *Pyrameis* of 1819, by S.H. Scudder (1875). *Pyrameis* was used in Australian literature by Rainbow (1907), Waterhouse and Lyell (1914), Waterhouse (1932) and Barrett and Burns (1951). By 1981 Common and Waterhouse were using the name *Vanessa* and noted that the Australian species can be separated into two subgenera *Cynthia* Fabricius, 1807 and *Bassaris* Hübner, 1821, as resurrected by Field (1971).

The **Yellow Admiral** *Vanessa itea* (Fabricius, 1775) (Fig. 36) was named by J.C. Fabricius in 1775 under the name *Papilio itea*, from a specimen collected by Banks in Nova Zelandia (New Zealand). Common and Waterhouse (1981), following Field (1971), placed it in the subgenus *Bassaris*. In Tasmania it is widespread up to 1000m but rarely common, (McQuillan, 1994).

The **Australian Painted Lady**, *Vanessa kershawi* (McCoy, 1868) (Fig. 37) was originally named under *Cynthia kershawi* by Professor Frederick McCoy in 1868 in his paper "The Australian Representative of *Cynthia cardui*" and was published in

The Annals and Magazine of Natural History series 4 vol. 1 1868. He named it *kershawi* after Mr. W. Kershaw, a collector he had employed, first pointed out the difference between the Australian and European forms. McCoy noted the differences as follows "The Australian species differs from the European one, in having the centres of the three lower round spots on the posterior wings bright blue, and having two other blue spots on the posterior angles of the same wings, the corresponding parts of the European form being black". It is widespread in Tasmania with open forest and grassy woodland being favoured habitats, (McQuillan, 1994).

Fig. 35 *Junonia villida calybe*

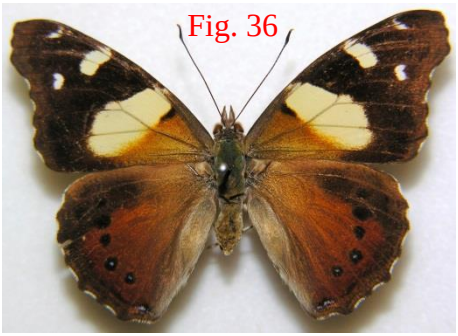


Fig. 36 *Vanessa itea*

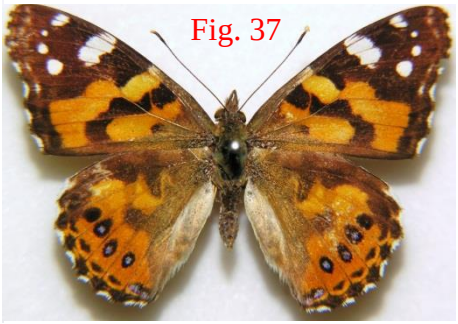


Fig. 37 *Vanessa kershawi*

Notes:
The common names herein are from Braby (2000). Images, Figs 1-7, were taken from original publications, all but two of the remaining images were photographed from Jak Guyomar's collection, the exceptions being *Danaus plexippus* and *Nesoxenica leprea elia* which were photographed from specimens in the late Jim Pickering's collection in my care. With the exception of the female *Geitoneura klugii klugii*, all of the images in the Satyrinae subfamily are of specimens collected in Tasmania. All others are imaged from mainland specimens.

Acknowledgements:
I am indebted to Jak Guyomar for access to his collection of Tasmanian butterflies, which was once in the care of Garry Sankowsky (unfortunately the names of the original collectors are unrecorded). John Moss helped with corrections and additions to the manuscript and Margaret Greenway helped with access to some papers. I am also indebted to Michael Braby and Dave Britton for their prompt replies to my

queries. Thanks go to the online Biodiversity Library and the Smithsonian Institute for access to historical works.

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Photos Peter Hendry

Amendments to The Genus *Acraea* (Lepidoptera : Nymphalidae)

Published in Metamorphosis Australia, Issue No. 70, September 2013 – *Peter Hendry*

I have had the privilege of having my article on the genus *Acraea* being read by a world expert on the subject, Dominique Bernaud. Dominique has studied the *Acraea* for over 30 years and together with J. Pierre was responsible for resurrecting the name *terpsicore* to the newly arrived butterfly in Australia. He has published many papers, many of which are available on his website www.acraea.com.

Dominique points out that the listing of the tribe Acraeini, by Niklas Wahlberg, I referred to is based on old and out of date data. He has contacted Niklas, who has put a warning on his website and referred viewers to Dominique's website.

In my paper I state, in regards to *Acraea buettneri*, that "Nothing is published on its early stages or host plants". Dominique, himself, has in fact discovered and published the host plant in his paper, "Ecologie des Acraea du parc de la Sangba (République Centrafricaine) (Lepidoptera Nymphalidae)" published in Revue D'entomologie Generale, Lambillionea, Supplément au N° 4, décembre 2000. *Acraea buettneri* hosts on the plant *Caloncoba glauca* [Achariaceae (Flacourtiaceae)], feeding on seedlings up to 1 metre.

In my explanation of plate ii from Eltringham's monograph, I noted *Acraea arabica* as being the current name for *A. doubledayi arabica*. this should in fact be *A. d. azvaki* Carcasson & Ackery, 1981

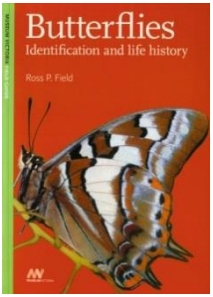
I thank Dominique for taking the time to make me aware of my errors.

P.S. Dominique has sent me an updated checklist of the *Acraea* with synonyms, forms and aberration names. If you would like a copy, please email me at bevyjoy93@gmail.com.

BOOK REVIEW

Field Guide - *Butterflies: Identification and life history* –

reviewed by *Kelvyn Dunn*



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For centuries, butterflies have captured the attention of naturalists – in Europe, since the late 1500s and in Australia, since its discovery in 1770. The proliferation of books on butterflies worldwide is testimony to their ongoing fascination among many observers, keen and casual alike. This field guide now joins the ranks of those others dealing with Australia or