THE BUTTERFLY TYPES OF W. H. MISKIN IN THE QUEENSLAND MUSEUM (LEPIDOPTERA)

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Notes are provided on the type specimens of the 65 species of Australian butterflies described between 1874 and 1891 by W. H. Miskin. Type specimens, Lepidoptera.

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William Henry Miskin published 19 papers on Australian butterflies between 1871 and 1891. Descriptions of 65 new butterfly taxa were published in 11 papers (Miskin 1874c, 1876, 1884b, 1889a, 1889c, 1889d, 1889e, 1890a, 1890b, 1890c, 1891), whilst a further 8 papers (Miskin, 1871, 1874a, 1874b, 1883, 1884a, 1888, 1889b, 1890d) appeared in which no new taxa were described.

Miskin did not place type or determination labels on his specimens and in most cases the number of specimens used for each description is unknown. Were it not for his meticulous handwritten notebooks, now preserved in the Queensland Museum, in many cases it would be impossible to determine which specimens are in fact types. Fortunately, Miskin applied a species number to each specimen in his collection and this corresponds with those listed for each species in his notebooks. In many cases locality labels are also absent but for those specimens from his own collection the locality appears to be Brisbane. In the list below, numbers given in brackets after the species' citations are those allocated to the species in Miskin's notebooks. Species without a number were not present in his collection.

In July 1910, G. A. Waterhouse (Australian Museum) and C. J. Wild (Queensland Museum) added type labels to many of Miskin's syntypes, but in 2 cases they also added labels to specimens that are not types. A copy of G. A. Waterhouse's notes on the collection made during his 1910 examination is kept at the Australian National Insect Collection, Canberra. Reference to these notes has been made where appropriate. The number of specimens listed for the various species in Miskin's Collection by Waterhouse in 1910 and the number currently located sometimes differ but in at least some cases Waterhouse's lists also include specimens added to Miskin's Collection subsequent to his descriptions.

Of the 65 nominal species described by Miskin, holotype, lectotype or syntype material has been located in the Queensland Museum for 53 species. Seven species were described from the Lucas Collection, 1 from the Australian Museum Collection. Two of the Lucas species are represented by types in the South Australian Museum. Types of 4 species supposedly in the Queensland Museum have not been located. Lectotypes have been designated directly by Sands (1986) and by De Baar & Hancock (1993) and "by inference of Holotype", under the rules of the International Commission on Zoological Nomenclature, by Eliot & Kawazoe (1983), Sands (1980) and Waterhouse (1933, 1937).

Thirty-five taxa remain valid at the species or subspecies level, the remainder are synonyms. Determination labels and Type numbers (QMT12342 to QMT12440) have been added to each specimen by the present author.

TYPE SPECIMENS

Family PAPILIONIDAE

Papilio egipius Miskin, 1876:451 (190)

Described from 3 males and 1 female collected by H. Kuntsler [in late 1875 or early 1876] at Rockingham Bay (= Cardwell), Qld. Only the 2 males from Miskin's Collection have been located; the pair originally deposited in the Queensland Museum (Miskin 1876) was not located by Waterhouse in 1910 and still has not been found.

SYNTYPES: 2 & (QMT12342, QM T12343): H.K. Cardwell/190 & .

CURRENT STATUS: Princeps ambrax egipius (Miskin).

Family PIERIDAE

Delias nigidius Miskin, 1884b:93 (214)

Described from an unknown number of females collected by Miskin at Rockingham Bay and Johnstone River, Qld. Although the original description stated "d", it was actually a female being described; the discussion noted that only females were known. The male was described subsequently (Miskin 1889a: 1515). Two females and a male have been located

SYNTYPES: 29: (QMT12344, QMT12345). -/5/82 Cardwell/214. One 9 subsequently labelled: Misk, Type 9; 28/7/10, GAW, CJW (on reverse).

METALLOTYPE (not an original type): 13 (QM): Johnstone R/214. Subsequently labelled: Misk. Type 3; 28/7/10, GAW, CJW (on reverse)/ L/3011. CURRENT STATUS: Delias ennia nigidius Miskin.

Elodina perdita Miskin, 1889e:263 (44)

Described from an unknown number of specimens collected by Augustus Simson at Port Denison (= Bowen), Qld. Two of the 3 specimens noted by Waterhouse are regarded as types. These were designated Lectotype and paralectotype by De Baar and Hancock (1993). The paralectotype female has the hindwing underside yellow. The third specimen, a female with the hindwing underside white, is labelled "Bowen/184". In Miskin's notebook, species number 184 is listed as *Elodina egnatia* and this specimen cannot be regarded as part of Miskin's original type series.

LECTOTYPE: & (QMT12346), A.S., B. Bowen/ 44. Subsequently labelled: Lectotype &, Elodina perdita Miskin, desig, M. de Baar & D. L. Hancock 1992 [red label].

PARALECTOTYPE: Q (QMT12347), A.S., C. Bowen/44. Subsequently labelled: Paralectotype Q, *Elodina perdita* Miskin, desig. M. de Baar & D. L. Hancock, 1992.

CURRENT STATUS: Elodina perdita Miskin.

Tachyris asteria Miskin, 1889a:1514

Described from a male from Port Douglas, Qld in the Lucas Collection. Miskin's notebook indicates only 1 specimen; it has not been located.

CURRENT STATUS: Synonym of Applas melania (Fabricius, 1775).

Terias immaculata Miskin, 1889d:258 (84)

Described from an unknown number of specimens collected at Rockhampton, Qld. One of the 4 specimens noted by Waterhouse has been located.

SYNTYPE: 1 & (QMT12348), -/1/75 Rockhampton/84. The following labels were added subsequently: Misk. Type & ?; 27/7/10, GAW, CJW (on reverse)/ L/3013/ ? Terias immaculata. CURRENT STATUS: Synonym of Eurema herla (W. S. Macleay, 1826).

Terias lineata Miskin, 1889d:257

Described from 2 specimens from North Queensland in the Lucas Collection. Not located. CURRENT STATUS; Synonym of Eurema sana (Butler, 1877).

Terias varius Miskin, 1889d:259 (14)

Described from an unknown number of specimens collected at Brisbane and Rockhampton. Three of the 5 specimens noted by Waterhouse have been located. Specimens from Dawson River (Expedition Range, inland from Rockhampton) appear to have been in Miskin's Collection since at least 1875 (see discussion of *Ogyris barnardi*) and the female is therefore included as a syntype.

SYNTYPES: 13 (QMT12349): G.B. [? or G.P.], A. Rockhn./14; 1 3 (QMT12350): 14; 19 (QMT12351): Dawson R./D/14. The unlabelled male is probably from Brisbane.

CURRENT STATUS: Synonym of Eurema smilax (Donovan, 1805).

Family NYMPHALIDAE Subfamily DANAINAE

Euploea amycus Miskin, 1890a:1044 (187)

Described from an unknown number of both sexes collected at Cape York, Qld. Two specimens have been located.

SYNTYPES: 1 & (QMT12352): Cape York/187. Subsequently labelled: Misk, Type & 28/7/10, GAW, CJW (on reverse)/ L/3003/ E. amycus & This specimen was taken for Fig. 18 in "The Butterfiles of Australia", by Waterhouse & Lyell (on reverse). 1 & (QMT12353): F.M. -/5/75, Cape York/187. Subsequently labelled: Misk. Type & 28/7/10, GAW, CJW (on reverse)/ L/3002.

CURRENT STATUS: Synonym of Euploea algea violetta (Butler, 1876) (Dunn & Dunn 1991).

Euploea boreas Miskin, 1890a:1043 (189)

Described from an unknown number of both sexes collected by H. Kuntsler at Cardwell, Qld. Three specimens have been located. Waterhouse's 1910 notes indicate that a further male from Herbert R. best fitted the description of the type but this locality was not mentioned by Miskin (1890a) and the specimen may have been added subsequently.

SYNTYPES: 23 (QMT12354, QMT12355): H.K. Cardwell/189 3, 19 (QMT12356): H.K. Cardwell/189 9. The female subsequently labelled: Misk. Type ♀; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Euploea alcathoe eichhorni Staudinger, 1884.

Euploea crithon Miskin, 1890a;1042 (188)

Described from an unknown number of males collected at Cape York, Qld. Two specimens have been located.

SYNTYPES: 13 (QMT12357): Cape York/188. Subsequently labelled: *E. doriecha*? crithon; This specimen was taken for Fig. 32 in "The Butterflies of Australia", by Waterhouse & Lyell (on reverse). 13 (QMT12358): [no original labels]. Subsequently labelled: Misk. Type 3; 28/7/10. GAW, CJW (on reverse)/ L/3002.

CURRENT STATUS: Form of Euploea sylvester (Fabricius, 1793).

Euploea dardanus Miskin, 1890a:104 (204)

Described from (probably one) male collected at Cape York, Old.

SYNTYPE: 1 d (QMT12359): Cape York/204. Subsequently labelled: Misk, Type d; 28/7/10, GAW, CJW (on reverse)/ L/2998.

CURRENT STATUS: Form of Euploea sylvester (Fabricius, 1793).

Euploea euclus Miskin, 1890a:1045 (203)

Described from an unknown number of both sexes collected at Cape York, Qld. Two specimens have been located.

SYNTYPES: 1 δ (QMT12360): C. York/203; 1 \Im (QMT12361): Cape York/203/6. Both subscquently labelled: Misk. Type δ [or \Im]; 28/7/10, GAW, CJW (on reverse)/ L/2999/ E. chauafa corinna ab. euclus δ [or \Im]; This specimen was used for Fig. 21 [or 23] in "The Butterflies of Australia", by Waterhouse & Lyell (on reverse).

CURRENT STATUS: Form of Euploea core corinna (W.S. Macleay, 1826).

Euploea hippias Miskin, 1890a:1040 (206)

Described from (probably one) male collected at Cape. York, Old.

SYNTYPE: 13 (QMT12362): E.W. Cape York/206. Subsequently labelled: Misk. Type 3; 28/7/10, GAW, CJW (on reverse)/ L/3000/ E. hirdafa hippias 3; This specimen was taken for Fig. 17 in "The Butterflies of Australia", by Waterhouse & Lyell (on reverse).

CURRENT STATUS: Synonym of Euploea usipeles Hewitson, 1858.

Euploea misenus Miskin, 1890a:1039 (183)

Described from (probably one) male collected at Cape York, Qld. SYNTYPE: 13 (QMT12363): Cape York/183. The following labels added subsequently: Misk. Type 3; 28/7/10, GAW, CJW (on reverse)/ L/3001/ E. misenus 3; This specimen was taken for Fig. 14 in "The Butterflies of Australia", by Waterhouse & Lyell (on reverse).

CURRENT STATUS: Synonym of Euploea alcathoe monilifera (Moore, 1883).

Subfamily NYMPHALINAE

Atella propingua Miskin, 1884b:94 (215)

Described from an unknown number of specimens collected at Rockingham Bay, Qld. Two of the 3 specimens noted by Waterhouse have been located.

SYNTYPES: 13 (QMT12364): Cardwell/ 215; 19 (QMT12365): -/5/82 Cardwell/ 215/Female. The female subsequently labelled: Misk. Type; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Vagrans egista propinqua (Miskin),

Pyrameis lucasii Miskin, 1889a:1515

Described from 1 specimen from Fernshawe, Victoria, in the Lucas Collection. It has not been located. CURRENT STATUS: Synonym of Vanessa kershawi ab. suffusa (Olliff, 1888).

Subfamily SATYRINAE

Epinephile rawnsleyi Miskin, 1876:454 (149)

Described from 1 specimen collected by H. C. Rawnsley at Maroochy River, near Brisbane, Qld, HOLOTYPE: & (QMT12366): Maroochee/HCR. 149. Subsequently labelled: Misk. Type & 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Tisiphone abeona rawnsleyi (Miskin).

Heteronympha digglesi Miskin, 1876:454 (192)

Described from an unknown number of specimens (all males) collected at Brisbane, Qld. Two males have been located.

SYNTYPES: 2 & (QMT12367, QMT12368): 192. One subsequently labelled: Misk. Type & 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Heteronympha mirifica (Butler, 1866).

Mycalesis modestus Miskin, 1890c:29 (198)

Described from an unknown number of specimens collected at Cooktown, Qld. Two of the 3 specimens noted by Waterhouse have been located. SYNTYPES: 18 (QMT12369): D.K. Cooktown/198: 19 (QMT12370): D.M.B. Cooktown/198.

CURRENT STATUS: Synonym of Mycalesis perseus (Fabricius, 1773).

Xenica kershawi Miskin, 1876:452 (200)

Described from an unknown number of both sexes collected by W. Kershaw in Victoria. Two specimens have been located.

SYNTYPES: 18 (QMT12371), 19 (QMT12372): W.K. Victoria/200/8 [or 9]. The male subsequently labelled: Misk. Type 8; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Oreixenica kershawi (Miskin).

Family LYCAENIDAE

Arhopala cyronthe Miskin, 1890c:43 (178)

Described from 2 males collected at Cape York and Bowen.

SYNTYPES: 1 & (QMT12373): Cape York/178. Subsequently labelled Misk. Type &; 28/7/10, GAW, CJW (on reverse)/L/3010. 1 & (QMT12374): Bowen/ 178. CURRENT STATUS: Synonym of Arhopala micale amytis (Hewitson, 1862). The Bowen specimen is referrable on geographical grounds to A. micale amphis Waterhouse, 1942, placed as a synonym of A. m. amytis by Dunn & Dunn (1991).

Arhopala eupolis Miskin; 1890c:42 (136)

Described from an unknown number of both sexes collected at Cape York, Cooktown and Cardwell. Six specimens have been located.

ŠynTypes: 1δ (QMT12375): Cape York/136; 1δ (QMT12376): H.K. Cardwell/136; 2♀ (QMT12377, QMT12378): - /5/82 Cardwell/136; 1♀ (QMT12379): J.H. Cooktown/136; 1♀ (QMT12380): 136. The male and 1 female from Cardwell subsequently labelled; Misk, Type δ [or ♀]; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Arhopala centaurus (Fabricius, 1775).

Arhopala wildei Miskin, 1891:71

Described from 1 male and 1 female collected by C. J. Wild at Caims, Qld. Miskin (1891) consistently misspelt Wild's name as Wilde.

SYNTYPES: 13 (QMT12381), 19 (QMT12382): [no original labels]. Subsequently labelled: L/3006/ Misk. Type 3 [or 9]; 28/7/10, GAW, CJW (on reverse). Female also labelled: Arhopala wildei 9.

CURRENT STATUS: Arhopala wildei Miskin.

Chrysophanus aenea Miskin, 1890c:33 (175)

Described from an unknown number of both sexes collected in Queensland as far north as Bowen. Three of the 4 specimens noted by Waterhouse have been located; the male from Bowen has not been found. SYNTYPES: 1δ (QMT12383), 1 Q (QMT12384): 175. Subsequently labelled: Misk. Type δ [or Ω]; 28/7/10, GAW, CJW (on reverse), 1Ω (QMT12385): Moggill/ 175. All these specimens are probably from Brisbane. CURRENT STATUS: Synonym of *Paralucia pyrodiscus* (Doubleday, 1847) (Edwards 1991).

Danis coelestis Miskin, 1891:50 (239)

Described from an unknown number of both sexes collected by C. J. Wild at Cairns, Qld. Two males have been located. Although the species was described from specimens in the Queensland Museum, the specimen labelled Cairns (from Miskin's own collection) is undoubtedly from the type series since Miskin gave collection number 240 to specimens of Danis serapis described at the same time. Only those species in his own collection were numbered.

SYNTYPES: 13 (QMT12386): Cairns/239; 13 (QMT12387): [no locality data]/Danis coelestis 3 Misk. The latter specimen subsequently labelled: Misk. Type 3; GAW (on reverse).

CURRENT STATUS: Jamides aleuas coelestis (Miskin).

Danis serapis Miskin, 1891:49 (240)

Described from numerous specimens of both sexes collected at Cairns and by H. Kuntsler at Cardwell, Qld. Three of the 4 specimens noted by Waterhouse have been located.

Syntypes: 1♂ (QMT12388), 2♀(QMT12389, QMT12390): H.K. Cardwell/240. One specimen of each sex subsequently labelled: Misk. Type ♂ [or ♀]; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Danis danis serapis Miskin.

Danis syrius Miskin, 1890c:34 (224)

Described from an unknown number of both sexes (actually all males) collected in North Queensland. Two males have been located; one was described as a female.

SYNTYPES: 1 δ (QMT12391): C. York/224. Subsequently labelled: Misk. Type δ ; 28/7/10, GAW, CJW (on reverse). 1 δ (QMT12392): N. Queensd./224. Subsequently labelled: Misk. Type $\delta = a$ male; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Danis danis syrius Miskin.

Deudorix democles Miskin, 1884b:95 (222)

Described from an unknown number of specimens collected at Basilisk Range (Johnstone R.), Qld. Waterhouse (1902) noted there were 2 males; his 1910 notes record the additional data 5/83.

SYNTYPES: 25 (QMT12393, QMT12394): Basilisk Range/222. One subsequently labelled: Misk. Type 5; 27/7/10, GAW, CJW (on reverse); both also labelled: Fig. 276 (upperside) [or 277 (underside)] in "The Butterflies of Australia" by Waterhouse & Lyell was taken from this specimen.

CURRENT STATUS: Virachola democles (Miskin).

Deudorix simsoni Miskin, 1874c:165 (102)

Described from an unknown number of both sexes collected by Augustus Simson at Port Denison (= Bowen) and by Miskin at Brisbane, Qld. Five syntypes have been located. A female in QM labelled "Dovercourt [Miskin's home in Toowong, Brisbane], Ap '74/ 102/ Misk. Type \Im ; 28/7/10, GAW, CIW (on reverse)" is not a type; the original description is dated 18 March 1874, before the specimen was collected.

SYNTYPES: 1 & (QMT12395), 1 & (QMT12396); 102 & [or &]; 1 & (QMT12397), 1 & (QMT12398): 102. The first specimen subsequently labelled: Misk. Type &; 28/7/10, GAW, CJW (on reverse); all these specimens are probably from Brisbane, 1 & (QMT12399): A.S., A. Bowen/ 102.

CURRENT STATUS: Rapala variana simsoni (Miskin).

Holochila albosericea Miskin, 1891:65 (159)

Described from an unknown number of both sexes collected by George Barnard at Expedition Range (= Dawson R.), inland from Rockhampton, Qld. Two of the 3 males noted by Waterhouse have been located. These appear to have been in Miskin's Collection since at least 1875 (see discussion of *Ogyris barnardi*).

SYNTYPES: 28 (QMT12400, QMT12401): Dawson R./159. One subsequently labelled: Misk. Type; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Nesolycaena albosericea (Miskin).

Holochila androdus Miskin, 1890c: 41 (164)

Described from an unknown number of both sexes from Cape York and Cooktown, Qld. Two specimens have been located.

SYNTYPES: 18 (QMT12402): Cape York; Cockerell, My '73 (on reverse)/164; 19 (QMT12403): Cooktown/164. Both subsequently labelled: Misk. Type 8 [or 9]; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Candalides helenita (Semper, 1879).

Hypochrysops apollo Miskin, 1891: 85 (243)

Described from a supposed female (actually a male) collected by Rowland Turner at Herbert River, Qld. It is in poor condition, having been flattened between the pages of a book. HOLOTYPE: d (QMT12404): R.T. Herbert R./243. Subsequently labelled: Misk. Type $\hat{Y} = d$; 28M/10, GAW, CJW (on reverse)/ L/3004/ Specimen photog. for CHECKLIST AUST LEP Film 186/11. CURRENT STATUS: Hypochrysops apollo Miskin.

Hypochrysops epicurus Miskin, 1876:455 (114)

Described from an unknown number of both sexes collected at Brisbane, Qld. Two specimens have been located. These were designated Lectotype and paralectotype by Sands (1986), with the collection number recorded incorrectly as 124.

LECTOTYPE: & (QMT12405): 114. Subsequently labelled: Misk. Type &: 27/7/10, GAW, CJW (on reverse)/ Lectotype Hypochrysops epicurus Miskin, 1876, designated 1986, D. P A. Sands (red label). PARALECTOTYPE: 1 & (QMT12406): [label glued to insect and number not visible]. Subsequently labelled: Misk. Type &: 27/7/10, GAW, CJW (on reverse)/ Paralectotype Hypochrysops epicurus Miskin, 1876, designated 1986, D. P. A. Sands (blue label).

CURRENT STATUS: Hypochrysops epicurus Miskin.

Hypochrysops euclides Miskin, 1889a: 1517

Described from an unknown number of both sexes. from Gippsland, Victoria in the Lucas Collection. The type locality is evidently erroneous (Sands 1986) since this taxon occurs only in North Queensland. Syntypes not located; believed destroyed (Waterhouse 1903). CURRENT STATUS: Hypochrysops pythias euclides Miskin.

Hypochrysops hecalius Miskin, 1884b:94 (218)

Described from (probably one) female collected by W. Kershaw in Victoria, designated Lectotype by Sands (1986). Miskin (1889a: 1516) subsequently described the male from the Lucas Collection.

LECTOTYPE: Q (QMT12407): W.K. Victoria/218. Subsequently labelled: Misk. Type Q; 27/7/10. GAW, CJW (on reverse)/ Lectotype Hypochrysops hecalius Miskin, 1884, designated 1986, D. P. A. Sands (red label).

CURRENT STATUS: Hypochrysops byzos hecalius Miskin.

Hypochrysops olliffi Miskin, 1889a:1518 (237)

Described from a single male collected by A. S. Olliff. The original description gave the type locality as both Newcastle, NSW and Fremantle, WA. The Holotype was stated to be in the Australian Museum (Miskin 1889a) but Waterhouse and Lyell (1914) noted that no specimens from Newcastle were present there and restricted the type locality to SW Western Australia. A specimen without locality data (KL 23213) in the Australian Museum is possibly the holotype (Sands 1986). The locality Newcastle must be considered an error, although Miskin (1889a:1520) evidently believed the species occurred in eastern coastal Australia. It is possible that the locality Fremantle was intended as a correction rather than an addition.

In the QM Collection are 2 specimens (13,12), labelled "Olliffi, NSW/237". These are specimens of typical *H. ignitus ignitus* (Leach) and were evidently added to Miskin's collection after his description of *H. olliffi*, since he noted (1889a) that the female was unknown.

CURRENT STATUS: Hypochrysops ignitus olliffi (Miskin).

Ialmenus eubulus Miskin, 1876: 457 (91)

Described from an unknown number of specimens from Rockhampton, Qld. Three specimens have been located. The Dawson River males appear to have been in Miskin's Collection since at least 1875 (see discussion of *Ogyris barnardi*) and are regarded as syntypes. The Rockhampton female probably came from further inland, since this taxon is not known from coastal areas (Common & Waterhouse 1981); like the Dawson R, specimens, it may have been collected by George Barnard.

SYNTYPES: 19 (QMT12408): G.P. [? or G.B.], A., Rockhampton/91, Subsequently labelled: Misk. Type 9; 28/7/10, GAW, CJW (on reverse), 28 (QMT12409, QMT12410): Dawson R./91.

CURRENT STATUS: Jalmenus evagoras eubulus Miskin.

Ialmenus itonus Miskin, 1890c: 41 (152)

Described from an unknown number of males collected at Cape York, Qld. Waterhouse's 1910 notes list 2 males; 1 has been located.

SYNTYPE: 13 (QMT12411); Cape York/152. Subsequently labelled: Misk. Type 3; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Jalmenus eichhorni Staudinger, 1888.

Lycaena canescens Miskin, 1890c:35 (163)

Described from (probably one) specimen collected by (?) Charles French in Tasmania.

SYNTYPE: 1 d (QMT12412); C.F. Tasmania/163. Subsequently labelled: Misk, Type d; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Candalides acastus (Cox, 1873).

Lycaena gracilis Miskin, 1890c:37 (162)

Described from an unknown number of both sexes collected from Brisbane to Cooktown, Qld. Two specimens (from Rockhampton and Brisbane) of the 7 noted by Waterhouse have been located,

SYNTYPES: 13 (QMT12413): Rockhⁿ/162; 19(QMT12414): Toowong, Mar. '73/162.

CURRENT STATUS: Synonym of Famegana alsulus (Herrich-Schaeffer, 1869).

Lycaena hobartensis Miskin, 1890c:38 (223)

Described from an unknown number of specimens collected by Gervase F. Mathew at Hobart, Tasmania, Waterhouse's 1910 notes list a pair but only the male has been located.

SYNTYPE: 13 (QMT12415): G.F.M. Hobart/ 223. Subsequently labelled: Misk. Type 3; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Neolucia hobartensis (Miskin).

Lycaena mackayensis Miskin, 1890c:35 (230)

Described from (probably one) male collected at Mackay, Qld. Waterhouse's 1910 notes also record the data R. T[urner], 2/89.

SYNTYPE: 18 (QMT12416): Mackay/230. Subsequently labelled: Misk. Type 8; 28/7/10, GAW, CJW (on reverse)/ L. mackayensis Misk. 230.

CURRENT STATUS: Synonym of Prosotas dubiosa (Semper, 1879).

Lycaena mathewi Miskin, 1890c:38 (89)

Described from (probably one) specimen collected by Gervase F. Mathew at Sydney, NSW. Waterhouse's 1910 notes record the additional data 12/82,

SYNTYPE: 1♀ (QMT12417): G.F.M. Sydney/89. Subsequently labelled: Misk. Type ♀;28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Neolucia mathewi (Miskin).

Lycaena nigra Miskin, 1890c:36 (216)

Described from an unknown number of "females" collected at Cardwell, Qld. Waterhouse's 1910 notes list a pair but only the male (described as a female) has been located.

LECTOTYPE: δ (QMT12418): -/5/82 Cardwell/216, Subsequently labelled: Misk, Type $\mathfrak{P} = \delta$: 28/7/10, GAW, CJW (on reverse). Called Holotype by Eliot and Kawazoe (1983), thereby designated as Lectotype "by interence of Holotype" under the rules of the ICZN, CURRENT STATUS: Megisbe strongyle nigra (Miskin).

Lycaena sulpitius Miskin, 1890c:37 (181)

Described from (probably one) specimen collected at Rockhampton, Qld.

SYNTYPE: 1 & (QMT12419): Rockhⁿ./181 [red ink]. Subsequently labelled: Misk. Type &; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Theclinesthes sulpitius (Miskin).

Lycaena tenella Miskin, 1891:63

Described from (probably one) female collected by C. J. Wild at Caims.

LECTOTYPE: \$ (QMT12420): [no locality data]/ Lyc. tenella n. sp. 9. Subsequently labelled: Misk. Type 9; 28/7/10, GAW, CJW (on reverse). Called Holotype by Eliot and Kawazoe (1983), thereby designated as Lectotype "by inference of Holotype" CURRENT STATUS: Udara tenella (Miskin).

Lycaenesthes tasmanicus Miskin, 1890c:40 (195)

Described from (probably one) male collected by Sylvester Diggles supposedly in Tasmania. The type locality was doubted by Miskin (1891) who recorded the species from Cairns. Waterhouse's 1910 notes indicate a male from "Cape York or Tasmania". The type-locality is evidently erroneous.

SYNTYPE: 13 (QMT12421): S.D. 22/11/75 Tasmania/195. Subsequently labelled: Misk. Type o; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Erysichton palmyra tasmanicus (Miskin).

Lycaenesthes turneri Miskin, 1890c:39 (180)

Described from an unknown number of both sexes collected at Cape York, Cardwell and Mackay (1 pair). Four specimens have been located, at least one collected by Rowland Turner at Mackay.

SYNTYPES: 13 (QMT12422): Cape York/180; 19(OMT12423): -/5/82 Cardwell/180; 18 (QMT12424): Mackay/180; 1 2 (QMT12425): R.T. Mackay/180. The Mackay specimens subsequently la-belled: Misk. Type & [or 9]; 28/7/10, GAW, CJW (on reverse).

CURRENT STATUS: Synonym of Anthene lycaenoides godeffroyi (Semper, 1879).

Ogyris barnardi Miskin, 1890b:27 (174)

Described from an unknown number of both sexes collected by George Barnard at Dawson River (= Expedition Range), Qld. Two specimens have been located. These appear to have been in Miskin's Collection since at least 1875, since collection numbers up to 200 appear for species described by Miskin (1876) and species numbers 187 (Euploea amycus) and 195 (Lycaena tasmanicus) were collected in May and November 1875 respectively.

SYNTYPES: 13 (QMT12426), 19 (QMT12427): Dawson R./174. Both subsequently labelled: Misk. Type of [or 9]; 28/7/10, GAW. CJW (on reverse). Male also labelled: Specimen photog. for CHECKLIST AUST LEP Film 186/12; female also labelled: L/3009. The female has lost its hindwings.

CURRENT STATUS: Ogyris barnardi Miskin.

Pseudodipsas brisbanensis Miskin, 1884b:95 (202)

Described from (probably one) female collected at Brisbane, Qld.

LECTOTYPE: 9 (QMT12428): 202. Subsequently labelled: Misk. Type ₽; 28/7/10, GAW, CJW (on reverse)/ T6193, Type [red label]/ Specimen photog, for CHECKLIST AUST LEP Film 186/10. Called Holotype by Sands (1980), thereby designated Lectotype "by inference of Holotype".

CURRENT STATUS: Acrodipsas brisbanensis (Miskin),

Pseudodipsas fumidus Miskin, 1889c:264

Described from an unknown number of both sexes from Brisbane, Qld, in the Lucas Collection. Not located.

CURRENTSTATUS: Synonymof Pseudodipsas cephenes Hewitson, 1874.

Pseudodipsas innotatus Miskin, 1874c:165 (98)

Described from an unknown number of both sexes collected by Miskin at Brisbane, Qld. None of the original specimens has been located; the 2 males and 1 female listed by Waterhouse in his 1910 notes may have been added subsequently. It is species number 98 in Miskin's notebook.

This species was treated as a synonym of P. ilias (Felder) by Miskin (1891).

CURRENT STATUS: Philiris innotata (Miskin).

Family HESPERIIDAE

Apaustus minimusMiskin, 1889c: 153 (227)

Described from an unknown number of specimens collected in Victoria and Western Australia. None of the 4 males listed by Waterhouse in his 1910 notes (where he recorded the type as a Victorian male) has been located, although Waterhouse (1937) called a specimen from Western Australia (then in QM) the Holotype, thereby designating the Lectotype "by inference of Holotype". The species is numbered 227 in Miskin's notebook.

CURRENT STATUS: Synonyms of Taractrocera papyria papyria (Boisduval, 1832) (Victorian specimens) and T. papyria agraulia (Hewitson, 1868) (WA specimens, including Lectotype). This synonymy was also suggested by Miskin (1891: addenda).

Hesperilla atromacula Miskin, 1889c: 148 (234)

Described from an unknown number of males collected in Victoria. Two have been located. Waterhouse's 1910 notes also list a female; this was presumably added later to Miskin's Collection.

LECTOTYPE: & (QMT12429): Victoria/234. Subsequently labelled: Misk. Type & ; 27/7/10, GAW, CJW (on reverse). Called the Holotype by Waterhouse (1937), thereby designated as Lectotype "by inference of Holotype".

PARALECTOTYPE: 18 (QMT12430): Victoria/234.

CURRENTSTATUS: Synonym of Signeta flammeata (Butler, 1882).

Hesperilla croceus Miskin, 1889c:150 (130)

Described from an unknown number of both sexes collected from Brisbane to Cooktown. Two specimens have been located.

LECTOTYPE: & (QMT12431): G.J.M. Cooktown/130. Subsequently labelled: Misk. Type & ; 27/7/10, GAW, ClW (on reverse)/ Neohesperilla crocea (Miskin). Called the Holotype by Waterhouse (1937), thereby designated as Lectotype "by inference of Holotype". PARALECTOTYPE: 1 & (QMT12432): 130. This speci-

men is probably from Brisbane.

CURRENT STATUS: Neohesperilla crocea (Miskin) (Lectotype) and synonym of Neohesperilla xanthomera (Mcyrick & Lower, 1902) (Paralectotype).

Hesperilla fulgidus Miskin, 1889c:151 (137)

Described from (probably one) female (actually a male) collected at Brisbane, Qld, Not located although Waterhouse (1937) recorded it (then in QM) as the Holotype male, thereby designating it as Lectotype "by inference of Holotype". A female in QM labelled "Mackay/ 137" is mentioned in Miskin (1891) but not in the original description (Miskin 1889c) and is not a type. Waterhouse's 1910 notes list 3 further males which presumably were also added later.

CURRENT STATUS: Synonym of Parnara amalia (Semper, 1879).

Hesperilla humilis Miskin, 1889c:150 (150)

Described from an unknown number of both sexes collected at Brisbane, Qld. None located, although Waterhouse's 1910 notes list 2 males and 1 female. Waterhouse (1937) recorded the Holotype male (then in QM), thereby designating it as Lectotype "by inference of Holotype". It is number 150 in Miskin's notebook.

CURRENT STATUS: Synonym of Toxidia parvula (Plotz, 1884),

Hesperilla senta Miskin, 1891:85

Described from 1 female collected by C. J. Wild at Herberton, Qld.

HOLOTYPE: Q (QM12433): Herberton, ii. 1891, C. J. Wild/Hesperilla senta Miskin. Subsequently labelled: Misk. Type 9; 27/7/10, GAW, CJW (on reverse)/ L/3016.

CURRENT STATUS: Neohesperilla senta (Miskin).

Hesperilla tasmanicus Miskin, 1889c: 149 (128)

Described from an unknown number of "females" collected in Tasmania. Waterhouse's 1910 notes list 2 specimens; only a male (described as a female) has been located.

LECTOTYPE: δ (QMT12434): G.B. Tas[mania] [label torn off]/128. Subsequently labelled: Misk. Type \Im ; 27/7/10, GAW, CJW (on reverse). Called Holotype by Waterhouse (1937), thereby designated Lectotype "by inference of Holotype".

CURRENT STATUS: Pasma tasmanica (Miskin),

Pamphila albifascia Miskin, 1889c:148 (43)

Described from (probably one) male collected at Herbert River, Qld. Waterhouse's 1910 notes indicate that this species was evidently added at a late stage to the Miskin Collection, being placed early in the notebook to fill a vacant number. Miskin (1891) placed this species as a synonym of *Carystus caesina* Hewitson. LECTOTYPE: δ (QMT12435): Herbert R./43. Subsequently labelled: Misk, Type δ ; 27/7/10, GAW, CJW (on reverse). Called Holotype by Waterhouse (1937), thereby designated as Lectotype "by inference of Holotype".

CURRENT STATUS: Sabera caesina albifascia (Miskin).

Pamphila autoleon Miskin, 1889c:147 (226)

Described from an unknown number of "males" in the Miskin Collection and females in the Lucas Collection, both collected at Cardwell, Qld. Waterhouse's 1910 notes list 2 females from Cardwell, 7/84, in the Miskin Collection; only one (described as a male) has been located.

LECTOTYPE: \Im (QMT12436): Cardwell/ 226. Subsequently labelled: Misk. Type $\eth = \Im$; 27/7/10, GAW, CIW (on reverse). Called Holotype by Waterhouse (1937), thereby designated as Lectotype "by inference of Holotype".

CURRENT STATUS; Sabera dobboc autoleon (Miskin).

Pamphila fuliginosa Miskin, 1889c:147 (197)

Described from an unknown number of females collected at Cardwell, Qld. Waterhouse's 1910 notes list 2 females from Cardwell; only 1 has been located. The male was described subsequently by Miskin (1891: 76) from Cairns.

LECTOTYPE: Q (QMT12437): D.M.B. Cardwell/ 197. Subsequently labelled: Misk. Type Q; 27/7/10, GAW, CJW (on reverse). Called Holotype by Waterhouse (1937), thereby designated as Lectotype "by inference of Holotype".

CURRENT STATUS: Sabera fuliginosa (Miskin).

Tagiades gamelia Miskin, 1889c:146 (127)

Described from an unknown number of both sexes collected at Cape York, Qld. Three specimens have been located.

LECTOTYPE: & (QMT12438): Cape York/127. Subsequently labelled: Misk, Type &; 27/7/10, GAW, CJW (on reverse)/ L/3015. Called Holotype by Waterhouse (1937), thereby designated as Lectotype "by inference of Holotype".

PARALECTOTYPES: 1 Q (QMT12439): Cape York/127, Subsequently labelled: Misk, Type Q; 27/7/10, GAW, CJW (on reverse)/ LJ3015. 1 Q (QMT12440): Cape York.

CURRENT STATUS: Synonym of Tagiades japetus janetta Butler, 1870.

Trapezites idothea Miskin, 1889c:152

Described from I specimen from Victoria in the Lucas Collection. The Holotype female is deposited in the South Australian Museum (Waterhouse 1933, 1937). CURRENT STATUS: Hesperilla idothea (Miskin).

Trapezites phillyra Miskin, 1889c: 153.

Described from an unknown number of both sexes from Victoria in the Lucas Collection. Waterhouse (1937) recorded the Holotype male at the South Australian Museum, thereby designating the Lectotype "by inference of Holotype".

CURRENT STATUS: Synonym of Trapezites phigalia (Hewitson, 1868).

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