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TAXONOMIC NOTES ON SOME NEARCTIC RHOPALOCERA.

2. PAPILIONOIDEA

by CYRIL F. DOS PASSOS

The present paper, like the preceding one on the Hesperioidea (dos Passos, 1960), has as its object to explain the systematic changes which will be in the forthcoming Check List of Nearctic Rhopalocera (*Memoirs lepid. soc.*, no.1).

PAPILIONIDÆ

PARNASSIINÆ

During the past half century BANG-HAAS, BRYK, and EISNER have published extensively in several European periodicals on this subfamily, especially on the genus *Parnassius*. In these publications they have proposed a great number of new names for species and subspecies and a vast quantity of names which they term *nomina collectiva*. These names appear chiefly in *Parnassiana* (1930-39), *Das Tierreich* (1934-35) and "Parnassiana Nova", a serial paper currently appearing in the *Zoologische Mededeelingen* (1954-).

These *nomina collectiva* have not been validated by the International Commission on Zoological Nomenclature, perhaps because no application has been made by those authors for that purpose, and it is believed that they have no standing presently in nomenclature. BROWN (1957, p.140) republished a list of some 66 of these names together with their English equivalents which appeared originally in *Zoologische Mededeelingen* (1955). It has been the practice of some of those authors to link two or more of these names together by plus (+) signs. In some cases these combinations take up more than one printed line and the possibilities are by no means exhausted!

Because these names have often no original description beyond their Latin or Latinized names, no types or type localities, and when multiplied do not comply otherwise with the Règles, it has been deemed best to ignore them in this paper and in the Check List. For those interested in pursuing the matter further, attention is called to a paper by McDUNNOUGH (1936) and an answer (Bryk & Eisner, 1937).

Some of the names proposed by these authors as "forms" were treated later by them as *nomina collectiva*. However, where such names were proposed originally in a valid manner under the Règles as then existing, it is deemed best to retain them in the Check List because they are available for future use. Where such names were not properly written, *i.e.*, in one word, they have been emended to comply with the Règles. In these classes fall all names having an original description, a type, and type locality. All other form names and all *nomina collectiva* have been omitted from the List. They do not meet the requirements of Zoological Nomenclature.

Parnassius evermanni wosnesenskii Ménétrié, 1849. This insect, described from Ochotsk, [Siberia], is treated by BRYK (1934-5, p.140) and BRYK and EISNER (1932, p.93) as a valid subspecies of *evermanni* Ménétrié, 1849 and is omitted from the List. It does not occur in North America.

Parnassius nomion Fischer, 1823-24. This species and its synonym *americanus* Bang-Haas, 1927, have been included in recent Nearctic lists but preceded by an asterisk. EISNER (1957, pp.188-192) does not give any Nearctic locality for the occurrence of this species and it has accordingly been dropped from the List, together with its synonym *americanus*.

Parnassius clodius form *maculata* Bryk & Eisner, 1937. This name is omitted because it was proposed provisionally for a hypothetical insect. Such names have no standing in nomenclature.

Parnassius baldur form *mediorubrocellata* Bryk & Eisner, 1937. This name is omitted also because it was proposed provisionally for a hypothetical insect.

PAPILIONINÆ

Following FORD (1944b) four genera of this subfamily, *Battus* Scopoli, 1777, *Papilio* Linnæus, 1758, *Graphium* Scopoli, 1777, and *Parides* Hübner, "1816" [1819] are recognized as occurring in the Nearctic region.

Battus devilliersi (Godart), "1819" [1824]. This name and its synonym *B. villiersii* (Boisduval & Le Conte), 1829, have been omitted from

the List because there is no authentic record of the capture of this insect in our faunal area.

Papilio Linnæus, 1758. This genus has been restricted to species congeneric in the strict sense with *P. glaucus* the type species.

Papilio polyxenes americanus Kollar, 1850. This name is omitted as a result of BROWN'S (1942, p.291) statement that it does not occur in the Nearctic region.

Papilio glaucus ab. *ehrmanni* McDunnough, 1938. MCDUNNOUGH (1938, p.5) lists this name but the original description by EHRMANN has not been found. There is an ab. *ehrmanni* Ehrmann (1925) listed also by MCDUNNOUGH (*supra*) under *Papilio polyxenes* Linnæus, 1758, so the former name must be ascribed to MCDUNNOUGH and placed as an aberration of *glaucus*.

Papilio carolinianus George Edwards in Catesby, 1771. HOLLAND (1931, p.321), who used (erroneously) *Papilio ajax* Linnæus, (1758) for this insect suggests that *Papilio carolinianus* should be used instead of *P. marcellus* Cramer "1779" [1777] for the spring form (*gen. vern.*). The name *Papilio ajax* has been suppressed by the International Commission on Zoological Nomenclature (Opinion 286) so the name *carolinianus* would have to be used for the insect except for the fact that Opinion 259 invalidates the work in which it was published. The next available name is *marcellus* Cramer "1779" [1777].

Graphium celadon (Lucas), 1852. This name has been omitted from the List because there is no authentic record of the capture of the insect in our faunal area.

PIERIDÆ (Opinion 500)

DISMORPHIINÆ

Enantia Hübner, "1816" [1819]. *Enantia* has been used for *Papilio melite* Johansson, 1763, instead of *Dismorphia* Hübner, 1816. (See Ford, 1941, p.74).

Enantia melite Johansson, 1763. MCDUNNOUGH (1938, p.7) ascribes this name to JOHANSSON. FORD (1941, p.75) ascribes *melite* to LINNÆUS. It seems to the author that JOHANSSON should be credited with this name. The insect is of doubtful occurrence in the Nearctic region.

PIERINÆ

Appias ilaire (Godart), 1819. This name and its synonyms *A. mysia* (Godart), 1819, described from Brazil, *A. margarita* (Hübner), "1806" [1825] and *A. molpodi* (Hübner), 1823, have been omitted from the

List because the insect does not occur in our faunal area. The author is not unmindful of the record of *ilaire* from Colorado by BROWN (1942, p.82) but he advises (*in litt.*) that he only saw the insect on a flower and that most likely it was what is now called *Appias drusilla* (Cramer), "1779" [1777].

Pieris protodice Boisduval & Le Conte, 1829, and *P. occidentalis* Reakirt, "1866-7" (1866). These insects appear to be conspecific and have been combined under the older name but the latter name retained as a subspecies.

Pieris napi venosa ab. ♀ *flava* Edwards, 1881. The author is aware of the fact that COCKAYNE (1952) claims that this is a *nomen nudum* for lack of a description but it is believed that the words "A large percentage of female *venosa* are yellow on the upper side. . ." (pp.89, 98) together with pl.2, f.7 ♀ comply with the Règles and thus the name should be recognized as a form ♀ of *venosa*.

Pieris napi castoria ab. *flava* Edwards, 1881. EDWARDS mentions (pp.94, 98) a yellow male and female of *castoria* and it is apparent that he applied the name to that aberration. In any event the name is a synonym of ab. *resedæ* Boisduval, 1869.

Pieris ochsenheimer Staudinger, 1886. This name, proposed for specimens from Central Asia, has appeared in several Nearctic Lists on the basis apparently of 2 males, 1 female received by SKINNER (1897, p.156) from STRECKER from Mt. Wrangel, Alaska. VERITY (1911, p.324) does not believe that it is distinct from *P. napi* and it has accordingly been omitted from the List.

Pieris rapæ æstivus Verity, 1913. This name appears to be a synonym and a homonym of *P. rapæ æstiva* Zeller (1847). Both were proposed for Palearctic specimens representing the fourth generation of *rapæ*. They are accordingly omitted from the List.

COLIADINÆ

Colias Fabricius, 1807 (Opinion 146). This genus has given the greatest trouble to present in a systematic manner. There appears to be considerable hybridization between "species" and few students agree where "species" and "subspecies" begin and end. The present arrangement, based somewhat on the food plants of the larvæ when known, is offered with no assurance that it will prove final. Most of the changes in the previous set-up are explained in these notes.

Colias hecla palamedes Hemming, 1934. HEMMING (1934, p.98) claims that *Colias hecla* var. *pallida* Skinner, 1892, is a homonym of *Colias erate*

Esper ab. ♀ *pallida* Staudinger, 1861, and has proposed the name *Colias hecla palamedes* to replace it. It will be noted that the Staudinger name is a female aberrational name whereas the Skinner name could be either a subspecies, an aberration or a form name. While the Règles at present are silent on this subject, for five years prior to 1958 the presumption was that SKINNER had proposed *pallida* as a subspecific name. In that event, it was not necessary to replace it. Attention is called also to the fact that HEMMING gave the wrong reference for *pallida* Skinner. It is *Ent. news* 3: 49, fig.4; 1892.

The practice of upsetting form names such as *alba*, *pallida*, *flava*, *verida*, *nigra*, etc. in the genus *Colias* is of doubtful usefulness. It is better to use such names for white, yellow, green or black specimens where such forms occur in more than one species. Where such form names are proposed nothing is gained by publishing new names although such procedure may be technically correct. The situation may be different if the homonym is not a descriptive name. In that case a new name may be advisable.

Colias eurythyme Boisduval, 1852, and *C. philodice* Godart, 1819. These names have been combined by some authors such as HOVANITZ (1943, p.1) under *C. chrysothyme* Esper, 1777. Undoubtedly the relationship among all three is very close and interbreeding occurs. Nevertheless, it has been deemed best to treat them as distinct species until further work, especially breeding and the study of the preferred food plants, has been done.

Colias eurythyme keewaydin Edwards, 1869. This name has been removed from the synonymy of *C. eurythyme* Boisduval (1852) and given subspecific standing as the spring form occurring in the [southern] Rocky Mountains. The type locality is restricted to Texas.

Colias eurythyme keewaydin pallida Cockerell, 1888. This is a case where *pallida* is preoccupied by form ♀ *alba* Strecker, 1878.

Colias notatus Clark & Clark, 1941. This name appeared first in an unpublished sales list of some insects from Georgia prepared by MEGERLE in 1803. It was followed by a description sufficient to identify it as the insect subsequently named *Colias philodice* Godart, 1819. CLARK and CLARK in 1941 published this sales list and stated that *notatus* equalled *philodice*. For that reason the name is placed in the synonymy of that insect and ascribed to CLARK and CLARK. Even if *notatus* was validly published by MEGERLE, no change in long established nomenclature should be made without the approval of the Commission.

Colias nastes cocandicides Verity, "1905-1911" [1911]. This insect was named from specimens collected at 114° 30' W. 67° 40' N., while

C. n. subarctica McDunnough, 1928, was named from Bernard Harbor, Northwest Territory, substantially the same locality. In the circumstances these names appear to be synonymous so the oldest one will be used in the Check List.

Eurema nise (Cramer), "1779" [1776]. This controversial name has had a long and complicated history but only recent events need be mentioned in this paper. For lack of specimens MUNROE (1950, pp.180-181) suggested that the type locality Jamaica might be erroneous, but since he wrote, a series agreeing in all respects with CRAMER's figure has been received from that island and commented upon by KLOTS and HEINEMAN (1957, p.198), thus establishing the fact that CRAMER's type locality Jamaica was correct.

Two recognizable subspecies of *nise* occur in North America. The spring brood of the one occurring in Florida resembles the spring brood of the Jamaican insect. However, there are few, if any, second brood specimens from Jamaica, so that it is not known whether that brood resembles the second Florida brood or not. However, it is assumed by the author that such is the case and the Check List therefore treats *nise nise* as occurring in Florida and *n. nelphe* in Texas as a stray from Mexico.

RIODINIDÆ

Two subfamilies are recognized as occurring in the Nearctic region, Euselasiinæ and Riodyninae.

RIODININÆ

Apodemia mormo mormonia (Boisduval), 1869. This name has been given subspecific standing for the population occurring in Washington and Oregon.

Lephelisca Barnes & Lindsey, 1922. There are differences of opinion concerning the proper generic name to be used for the species of which *Erycina virginiensis* Guérin-Méneville, 1831, is typical. *Nymphidia* Boisduval & Le Conte [1833] is the earliest name but FIELD (1948, p.207) claims that it is merely a misspelling or emendation of *Nymphidium* Fabricius, 1807. McALPINE (*in litt.*) contends that *Calephelis* Grote & Robinson, 1869, should be used, but that name is based upon a misdetermined type species and would not seem to be available until the Commission has passed on the problem. Recent authors such as KLOTS (1951, p.122) and BROWN, *et al.* (1955, p.117) use *Lephelisca* and that practice will be followed in the Check List, without, however, desiring to prejudice the question when it may come before the Commission.

LYCÆNIDÆ

THECLINÆ

Strymon Hübner, 1818 (Opinion 165). This genus needs revising. With the exception of one or two species that have been removed therefrom and placed elsewhere the species are listed substantially as by McDUNNOUGH (1938).

Strymon eurytulus (Hübner), "1816" [1819]. COMSTOCK and HUNTINGTON (1943, p.87) consider this a Brazilian insect so the name is omitted from the List. Hübner gave no type locality.

Strymon liparops Le Conte, [27 July, 1833]. This name has been ascribed usually to Boisduval & Le Conte, but a glance at the original description (p.99) shows that those authors considered it a Le Conte name, since his name alone is printed after the specific name. When these authors claimed joint authorship the specific name was followed sometimes by "*nobis*".

MR. FRANCIS HARPER, of Mount Holly, New Jersey, has called attention (*in litt.*) to the fact that the name John Eatton Le Conte should be written that way, and not Leconte as is usually done by lepidopterists. He has made a thorough study of this problem and will publish his data.

Strymon lycus Skinner, 1898. COMSTOCK and HUNTINGTON (1943, p.73) have pointed out that it is difficult to tell to which Hübner name SKINNER referred because Hübner does not appear to have published any name with this exact spelling. He did publish *Urbanus celebris lycus* (1807, *Samm. exot. Schmett.* 1: pl.[150]) and *Bethys lydus* ("1816" [1819] *Verz. bekant. Schmett.*: 175, no.753) but these species are quite distinct from *simæthis* Drury, "1770" [1773], in the synonymy of which COMSTOCK and HUNTINGTON place *lycus*. KLOTS (1951) omits this name and has been followed in the Check List.

Strymon salona Hewitson, 1868. McDUNNOUGH (1938, p.24) places this name as a synonym of *S. columella*. COMSTOCK and HUNTINGTON (1943, p. 78) placed it as a synonym of *Thecla bubastus bubastus* (Stoll), "1782" [1784], a non-Nearctic insect, consequently it is omitted from the List.

SPALGINÆ

This subfamily name was proposed by HOLLAND (1931, p.244) to replace Gerydinæ Fruhstorfer (1907) but has not met with general acceptance. By its nutrition from plant lice, the American genus *Feniseca* forms to a certain degree a parallel with the Indian GERYDINI (Seitz

5: 743) and there appears no substantial reason for a new name until more is known about these unusual insects. KLOTS (1951, p.149) used *Gerydinæ* and is followed.

PLEBEJINÆ

Hemiargus catilina Fabricius, 1793. This name is omitted from the List in accordance with the view of COMSTOCK (1944, p.494) that it is the subspecies of *Leptotes cassius* occurring in the Virgin Islands. See also COMSTOCK and HUNTINGTON (1943, p.91).

Hemiargus hanno Stoll, "1791" [1790]. This name has been omitted from the List on the strength of the study by COMSTOCK and HUNTINGTON (1943, p.104) of the species and its synonyms from which it is concluded that the insect was described from Surinam and does not occur in the Nearctic region.

Lycæides argyrognomon kodiak Edwards, "1870-1" (1870). NABOKOV (*in litt.*) advises that he considers *kodiak* to be a subspecies of *Plebejus* (*Icaricia*) *icarioides* (Boisduval), 1852, but it is retained for the present in *Lycæides* because he, NABOKOV ("1943" [1944], p.91), has not excluded it in the only published record found. No type has been discovered.

LIBYTHEIDÆ

LIBYTHEINÆ

Libytheana motya (Boisduval & Le Conte), "1833" [1834]. Although this name is usually ascribed to BOISDUVAL and LE CONTE it is not, in this writer's opinion, a new name but a misdetermination of *Hecæрге motya* Hübner, [1823]. That insect does not occur in our faunal area and consequently the name is omitted from the List.

NYMPHALIDÆ

CHARAXINÆ

Anæa aidea morrisoni (Edwards), 1883. McDUNNOUGH (1938, p.22) gives HOLLAND as the author of this subspecies and so did HOLLAND (1931, p.173). There is nothing invalid about EDWARDS' publication of this name (1883, p.35) and he should be credited with the authorship.

APATURINÆ

Chlorippe Boisduval, 1870. KLOTS (1951, pp.280, 313) used this name for *Asterocampa pavon* (Latreille), "1811" [1809] but it is a homonym of

Chlorippe Doubleday (1840). It would seem that *pavon* should be included in *Limenitis*. *Apatura Auctorum nec* Fabricius (1807), as well as *Chlorippe* Boisduval *nec* Doubleday, are synonyms of *Asterocampa* Röber (1916).

EURYTELINÆ

ERGOLINÆ vs. EURYTELINÆ. ORFILA (1952, p.103) has called attention to the fact that ERGOLINI and EURYTELINI are based on the genera *Ergolis* Boisduval, 1836, and *Eurytela* Boisduval, 1833, both belonging to the same tribe as defined by MUNROE (1949, p.67). Consequently *Eurytela* having priority, he sank ERGOLINI for EURYTELINI and similar action must be taken when these names are used for subfamilies as contemplated in the Check List.

Hamadryas februa gudula Fruhstorfer, (1916). While this insect was described from the population occurring in western Mexico, the type in the British Museum (Natural History) is labeled "Texas". Consequently this name is included in the Check List.

Evonyma Hübner, "1816" [1819]. DE LA TORRE Y CALLEJAS (1952, p.68) has pointed out that this name has line priority over *Eunica* Hübner, "1816" [1819] and considers apparently that the respective type species are congeneric. He believes that *Eunica* should be retained as a *nomen conservandum*. It has seemed best to treat DE LA TORRE as the first reviser and retain *Eunica* on that theory.

LIMENITINÆ

Limenitis arthemis (Drury), 1773, and *L. astyanax* (Fabricius), 1775. These insects are considered conspecific by KLOTS (1951, p.116) but that opinion is not followed. While it is true that there is a narrow zone between their respective habitats where they interbreed, that fact does not necessarily make them one species. In any event, the problem is a subjective matter and these insects have been treated as distinct species.

Adelpha Hübner, "1816" [1819]. Following CHERMOCK (1950, p.536) *Adelpha bredowii* Geyer, 1837 has been referred to *Limenitis* (*Adelpha*) Hübner, "1816" [1819].

Anartia jatrophae Johansson, 1763. GILLHAM (1957, p.19) has placed all Caribbean subspecies in the synonymy of *jatrophae* but is not followed insofar as the subspecies *quantanamo* Munroe, 1942, and *luteipicta* Fruhstorfer, 1907, occurring in the Nearctic region, are concerned.

Anartia saturata Staudinger, 1884. This name listed by McDUNNOUGH (1938, p.21) as a subspecies of *jatrophae* is omitted on the authority of

MUNROE (1942, p.3) because it does not occur in the Nearctic region. MUNROE considers Port au Prince, Haiti, as the type locality of this insect.

Anartia jatrophae jamaicensis Möschler, 1886. This name listed by MCDUNNOUGH (1938, p.21) as a synonym of *A. j. saturata* Staudinger, 1884, is omitted from the List because, according to MUNROE (1942, p.3), it occurs only in Jamaica and not in the Nearctic region.

VANESSINÆ

Vanessa atalanta italica Stichel, (1909). This name has been used by MATURO (1953, p.154) for what he considers the North American subspecies of *atalanta*. However, it is not believed that a name proposed for the south and central Italian subspecies should be so used and he has not been followed.

Vanessa cardui carduelis (Seba), 1765. This name has been used also by MATURO (1953, pp.150, 154), who ascribes it to Cramer, "1779" [1776], for the North American race of *cardui*. The name appears to have been proposed by SEBA (1765, pp.4, 6). However that may be, it is not deemed desirable to introduce the name in the Nearctic List as a subspecies until some reasons are given for differentiating it from the nominate form.

Junonia Hübner, "1816" [1819]. HEMMING (1934, p.73) considers the type species of *Precis* Hübner, "1816" [1819], and *Junonia* to be congeneric, but DE LESSE (1952, pp.74-77), who studied the genitalia of most of the species, concluded otherwise and assigns the Nearctic species to *Junonia*. He has been followed in the Check List.

Nymphalis vau-album ([Denis & Shiffermüller]), 1775. GILLHAM (1956, p.27) has used this name for the Holarctic species and placed *V[anessa] j-album* Boisduval & Le Conte, "1833" [1834], and *Aglais j-album watsoni* Hall (1924) in the synonymy. He is not followed insofar as the subspecific synonymy is concerned, it being the author's opinion that both *j-album* and *watsoni* differ sufficiently to be recognized as valid subspecies. This is one of the many subjective matters concerning which the lumpers and splitters will never agree.

Nymphalis antiopa (Linnæus), 1758. ELIOT (1956, p.270) has pointed out that the Southern Palearctic subspecies is double brooded and suggested using the name *N. a. grandis* EHRMANN (1900) for this population. This suggestion he later (1957, p.162) withdrew on the advice of FORBES (*in litt.*) because it was claimed that this name (*grandis*) ". . . is based on characters that are aberrational, not racial". While this is not a valid objection to the use of the name, because between 1948 and 1958

aberrational names have been available as specific or subspecific names, nevertheless there is an earlier name *lintnerii* Fitch, 1858, which can be used for the southern subspecies. This name is given hereby subspecific standing. The type locality is Schoharie, New York.

Nymphalis antiopa ab. *hippolyta* (Lyman), 1898. This name was published conditionally and hence is invalid. It was next used by SKINNER (1898), who wrote it *hippolita* in the text (p.22) and *hippolyta* in the index (p.vii). It is believed best to ascribe the name to SKINNER and to use the text spelling.

Nymphalis antiopa creta (Verity), 1916. This name was used erroneously by CLARK and CLARK (1937, p.88) and CLARK and TRAINER (1941, p.39) for a subspecies of *N. antiopa* occurring in Virginia but described from Tuscany. It has not been included in the List since, as observed above, three names are available for the American subspecies.

Polygonia marsyas (Edwards), "1870-1" (1870). This insect has been given subspecific standing. The examination of a long series appears to establish that it is more than a form of *satyrus* (Edwards), 1875.

Chlosyne lacinia rufescens Cockerell, 1894. This name has been credited usually to Edwards, 1893, but Cockerell is the author. EDWARDS' paper is not very clear. It consists mostly of quotations from letters of COCKERELL wherein he gives descriptions and names to a number of forms of *Chlosyne*. However, for *rufescens* there are two descriptions and EDWARDS did not state to which one the name was applicable. The following year (1894) COCKERELL cleared up this ambiguity, so the authorship of the name must be ascribed to that author.

MELITÆINÆ

Phyciodes (*Phyciodes*) *tharos pulchella* (Boisduval), 1852. The name *pulchella* is recognized as a subspecies of *tharos* (Drury), "1770" [1773], with *pascoensis* Wright, 1905, as a synonym. BOISDUVAL described this insect from California and stated that it inhabits a large part of that State. McDUNNOUGH (1938, p.19) lists *pascoensis* as the Western subspecies of *tharos* but *pulchella* has priority.

Brenthis ænone Scudder and *Phyciodes ænone* Scudder, 1863. These names are so listed by McDUNNOUGH (1938, pp.16, 19). The latter is listed in the Check List under *Melitæa* (*Microtia*) *nycteis*. Both these names represent the same insect, and KLOTS advises (*in litt.*) that *ænone* is a synonym of *nycteis* and is not a *Brenthis* (*Boloria*).

Melitæa Fabricius, 1807. Following FORBES ("1944" [1945], p.140) and KLOTS (1951, p.94) the American species that have been placed usually in this genus have been transferred to the subgenus *Microtia* Bates, 1864. HIGGINS ("1958" [1959], p.161) has proposed *Texola* for some of these species but he does not indicate which species are included or excluded in his new genus beyond specifying that its type is *Eresia elada* Hewitson, 1868. This is not a Nearctic insect.

Melitæa (Microtia) palla calydon (Strecker), 1878. This name has been ascribed usually to MEAD. But the 1875 mention of the name is a *nomen nudum*. It was next used by STRECKER (1878, p.126) who wrote: "*Calydon* = some one of the forms of *palla*", which would appear to constitute him the author. In the Check List it is treated as the subspecies of *palla* occurring in the Rocky Mountains, the type locality being Turkey Creek Junction, Colorado.

Melitæa (Microtia) dymas (Edwards), 1871, and *M. (M.) chara* (Edwards), 1883. HIGGINS ("1958" [1959], p.161) in proposing *Texola* states: "It appears that EDWARDS' name *dymas* 1877 should replace the more familiar name *chara* Edwards, 1883", but McDUNNOUGH (1938, p.18) treats them both as subspecies and is followed.

Melitæa (Microtia) mayi Gunder, 1929. This record requires confirmation but the name is retained for the present. The insect cannot be separated from *Melitæa ambigua niphona* Butler, 1878, which occurs along the Amur River. The specimens upon which GUNDER based the name may have been mislabeled. They were purchased from a dealer.

Melitæa (Microtia) britomartis Assman, 1847. This species is reported from the high mountains of Montana and Alberta by VERITY (1935) but that is believed to be a misdetermination so the name is not included in the List. Possibly the insects examined by VERITY were mislabeled.

Euphydryas Scudder, 1872. In this genus the classification of GUNDER (1929), with a few corrections, has been followed, although it is realized that much work remains to be done with the western species.

Euphydryas chalcedona klotsi dos Passos, 1938. When this subspecies was described, GUNDER (1929, p.16) had placed *hermosa* Wright as a subspecies of *anicia*. That proved later to be an error because it is a subspecies of *chalcedona* and comes from substantially the same locality as *klotsi*. Consequently, the latter name is sunk as a synonym.

Euphydryas chalcedona sierra ab. *umbrobasana* J. A. Comstock, 1925. This name has been ascribed usually to GUNDER with the date 1926 but it was published the prior year by COMSTOCK on plate 35, fig.5 of the *Butterflies of California* (1927, p.105). Hence the authorship is corrected. This plate was issued two years before the book.

ARGYNNINÆ

Boloria (Clossiana) euphrosyne (Linnæus), 1758. This species, its synonym *morrisii* Reakirt, 1866, and subspecies *B. e. andersoni* (Dyar), 1904, are of doubtful North American occurrence. *B. euphrosyne* is European. *B. morrisii* has been omitted from the List on the strength of STRECKER's statement (1878, p.118) that it was described from an example of *Argynnis euphrosyne* (Linnæus), which REAKIRT received from LORQUIN, with "California" erroneously given as the locality. None of these names will appear in the Check List.

Boloria distincta (Gibson), 1920. This rare Arctic insect, described as a species by its author, seems better placed as a subspecies of *B. astarte* (Doubleday & Hewitson), "1846-50" [1847]. GREY advises (*in litt.*) that the genitalia are of a similar type to those of *B. astarte*.

Boloria (Clossiana) titania montinus (Scudder), 1862. This subspecific name is written "*montina*" by KLOTS (1951, pp.91, 112, 311), apparently under the mistaken belief that it is an adjective and thus should agree with *Boloria* in gender. But *montinus* is a noun and should be so written.

Speyeria zerene carolæ (dos Passos & Grey), 1942. Since the description of this insect GREY has received more material, and he advises (*in litt.*) that he is now convinced that we erred in referring it to *S. coronis* (Behr), 1864; hence the new combination.

DANAIDÆ

Dircenna klugii (Geyer), 1837. This name has been omitted from the List because the insect does not occur in the Nearctic region. (Klots 1951, p.276).

Ithomia anaphissa Herrich-Schäffer, 1864. This name, sometimes credited to the Nearctic fauna, has been omitted from the List because the insect does not occur in that region (Klots 1951, p.276).

Dynothea lycaste negreta Reakirt, 1864. This name has been omitted from the List because the insect does not occur in the Nearctic region. Many of REAKIRT's species of Danaidæ were taken in Panama but mislabeled California.

Mechanitis californica Reakirt, 1865. This name has been omitted from the List because the insect does not occur in the Nearctic region. It is not cited by J. A. COMSTOCK (1927), and HOLLAND (1931, p.71) states that it is very doubtful that this insect occurs in California.

Danaus (Danaus) plexippus nigrippus Haensch, 1813. This name, representing the southern subspecies, was added to the Nearctic List

by CLARK and CLARK (1938, p.179) but is believed to be a misdetermination of *D. p. plexippus*. Accordingly it has not been incorporated in the List.

Danaus jamaicensis Bates, 1864. This insect has been reported from Florida by CLARK (1941, p.540) but the evidence appears too slight to include the name in the List. The specimen is an old one in the Barnes collection, possibly a subspecies of *D. gilippus* Cramer, "1779" [1776].

SATYRIDÆ

SATYRINÆ

Megisto Hübner, "1816" [1819]. The species listed by McDUNNOUGH (1938, p.11) under this name have been transferred to *Euptychia* Hübner, "1816" [1819].

Satyrodes Scudder, 1875. This generic name, used by McDUNNOUGH (1938, p.12) for *eurydice* Johansson (1763, p.406), has been omitted and the species transferred to *Lethe* Hübner, "1816" [1819].

Euptychia pyracmon (Butler), 1866. This name was added to the List by NABOKOV ("1942" [1943], p.70) and removed by R. L. CHERMOCK (1947, p.196). The insect is not believed to occur in the Nearctic region, so it is omitted from the List.

Cænonympha Hübner, "1816" [1819]. Since DAVENPORT's revision (1941) of this genus there have been several revisions in whole or in part of the Nearctic species, notably by BROWN (1955), with which the author is not in complete agreement. In the Check List six species, counting *mixturata* Alphéraky, 1897 and *haydeni* (Edwards), 1872, are recognized.

Cænonympha pamphilus (Linnæus), 1758. This name, together with its synonym *C. pamphiloides* Reakirt, 1866, on North American check lists for many years, is omitted as not occurring in the Nearctic region. The former is a European insect, and so apparently is the latter, both probably mislabeled.

Cercyonis sthenele (Boisduval), 1852. This name is retained in the List, although the insect is believed to be extinct.

Eneis Hübner, "1816" [1819]. The arrangement of the species and subspecies in this genus has been altered considerably as a result of the author's preliminary studies of the genitalia for a revision. They are arranged in the Check List in accordance with the characters of the male genitalia.

Eneis norna (Thunberg), 1791. This name is omitted from the List because the insect is not believed to occur in the faunal area.

Ceneis alberta Elwes, 1893. This name is ascribed to ELWES rather than ELWES and EDWARDS since the latter is responsible only for the figures in their joint paper.

Ceneis polixenes brucei (Edwards), 1891. There is a name in the literature which has priority over this well known name but it has not been used for about seventy years. In the circumstances it seems best to use the well known name *brucei* until application is made to the International Commission on Zoological Nomenclature for the suppression of the older name.

Erebia epipsodea sineocellata Skinner, 1889. This name was proposed as "*sine-ocellata* nov. var." and in the next line SKINNER wrote that it "... is a var. of *Epipsodea* Butler . . .". The type locality is Fort Qu'Appelle, Northwest Territory. EHRLICH (1954, p.27) described *Erebia epipsodea freemani* from Lloydminster, Alberta, a town actually on the Alberta-Saskatchewan boundary and about 350 miles northwest of Fort Qu'Appelle but in the same general type of country. The descriptions are fairly similar. In a later paper EHRLICH (1955, p.184) placed *sineocellata* in the synonymy of *freemani* on the theory that it is an aberrational name but thereby conceding that they are synonymous. However, *sineocellata* was not proposed as an aberrational name but as a subspecific name, so it must be used for the population that EHRLICH deemed worthy of recognition.

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SUPPLEMENTAL NOTE TO PART 1 (HESPERIOIDEA)

EVANS (1952, p.132) places *Thorybes uvidixa* Dyar, 1915 as a synonym of *Thorybes valeriana* Plötz, 1882, or "Possibly a sub-species". An examination of the single specimen of *uvidixa* in the American Museum of Natural History and a photograph of the type kindly furnished by Mr. W. D. FIELD of the United States National Museum convinces me that these are distinct species. Since *uvidixa* has only been recorded from Mexico, it is omitted from the Check List.