



## BIOLOGICAL CATALOGUE OF NORTH AMERICAN BUTTERFLIES

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The 2008 catalogue of U.S.-Canada butterflies by J. Pelham is an outstanding reference on the names given to those butterflies, and their types and type localities. However, it is a work of ICZN nomenclature, and emphasizes technical details of types and names rather than their biological importance. Thus, many of the names are given the wrong status as synonyms or subspecies or species, the degree of distinctiveness of these names cannot be determined, many names are arranged by geography rather than by biological relationship to other names, and important biological forms are unrecognizably lost in lengthy lists of ICZN-criteria synonyms. So this is a good opportunity to present the first "Biological Catalogue" of North American butterflies.

What is a Biological Catalogue? It is a list of the biological creatures of an area that emphasizes biology first, nomenclature second. The goal is to define the biological units actually existing in nature, and correctly present their status, and then apply the existing names to those units in a way that best represents their biological status. Here are examples of the differences between biology and nomenclature: 1) In a list of names, all the subspecies names within a species are given equal importance, even if some are very weak near-synonyms and others are very distinct almost-species. In a biological catalogue, the subspecies are nested—less-distinctive ssp. are subordinated to more-distinct ssp.—to show their distinctiveness. This distinction is important even politically, as the U.S. government has declared some taxa to be "Endangered Species" that are really barely-valid weak subspecies, and are not "species" at all. (Opposition to the law and depletion of government money has nearly frozen the Endangered Species list, so now there is little similarity between a list of the taxa most deserving of preservation and the list of government Endangered/Threatened Species.) 2) In a list of names, all the species are given equal status, as if they are all equally distinct. In the real world of biology, names were applied rather randomly to natural taxa as a result of historical & geographical accidents of discovery, so some named organisms are weakly distinct or should not have been named at all. About 70% of the names in catalogues are synonyms (95% in Europe). And in some cases, some species are not very distinct from others because those closely-related organisms behave like a pretzel, interbreeding at certain places where the pretzel arms join, and remaining distinct at other places where the pretzel arms do not contact each other, so in a biological catalogue the whole pretzel is called a superspecies (called a "stenchospecies" here, expressing the disappointment lepidopterists feel that those animals fail to fit the desired neat problem-free species concept) and its components that do not hybridize in some regions are called semispecies ("bookkeeping species" here, because local lepidopterists like to treat these as species in their local books). 3) In ICZN nomenclature, all names below the genus category are sorted into available "subspecific" names (validly proposed named for species and subspecies with various requirements for definition and designation of types and museum deposition of types etc.) and unavailable "infrasubspecific" names (proposed for forms or varieties [depending on the date published and technical details of the original description—recent form names are just listed in synonymy or are called *nomina nuda*] or aberrations etc.), and the latter names cannot be used for subspecies or species. Biologically, this sorting is often wrong. Some "subspecies"-status names are really below the status of a biological subspecies (they are forms or aberrations), and some "infrasubspecific" names actually apply to subspecies or even species. Some of those unavailable form names are quite important, even more important than many subspecies. For instance, form *alba* is the white albino female form frequent in *Colias* butterflies, and studies have shown that those albino females produce more eggs, because they reroute the nitrogen that would have gone into producing yellow/orange pigment to adorn the wings like males, into growing more eggs instead, a valuable adaptation in cold inhospitable environments. Perhaps one of these years someone may summon enough energy to rear *Pyrgus communis/albescens*, and just may find that a "species" is really just a valval polymorph. Spring forms are usually very useful for thermoregulation in the cold temperatures of spring. In *Phyciodes*, in a biological catalogue the form *marcia* has darker and more mottled unh evidently to aid thermoregulation in spring, whereas in a catalogue of names *marcia* is a synonym of a subspecies and can't be used at all for describing thermoregulation. 4) Nomenclaturally, aberrations such as *dobra* (*Thorybes*) or *youngi* (*Boloria*) or *orcus* (*Glaucoopsyche*) can satisfy ICZN rules for the naming of a subspecies and be listed as ssp. in a catalogue of names, but

in a biological catalogue they must be demoted as aberrations of little interest. 5) In a catalogue of ICZN names, a cline can have one or two or three or even five or more names, as there is no ICZN rule to limit them. But in a biological catalogue, a cline should have at most two names—one for each end of the cline—which causes problems in applying names to the cline, as the existing names were a result of historical accidents of discovery, so statistically speaking most names are likely to be positioned toward the central regions of the cline rather than at the very end, and the oldest names are often not closest to the ends. When the names nearest the ends are not the oldest names, in a biological catalogue we have to use “pretend type localities” and “jumping subspecies” to apply just two names. For example, these clines have three names: *aeahaja-hilda-aureolus*, *altasierra-palla-eremita*, *oetus-pallescens-alkalorum*, *florus-castro-sangremar*, *massasoit-hughi-chermocki*. It is difficult to nomenclaturally reduce three names such as *aeahaja-hilda-aureolus* to two in the ICZN code, because the middle name *hilda* is older than the name at the end such as *aureolus* that we want to use (because it has the orangest females) but we can’t use because it is a newer name and the principle of priority in the ICZN Code requires the use of older names. So, we just sink the newer name *aureolus* at the end of the cline to the older name *hilda* toward the middle, a process called “jumping subspecies”, as the middle name *hilda* jumps the end name *aureolus* and gets crowned queen *hilda* in a game of nomenclatural checkers; so we now use the name *hilda* for the orangest bugs, and the “pretend type locality” of *hilda* gets assigned the locality of the end name taxon *aureolus*. This sounds absurd (like Alice in Wonderland and her psychedelic mushroom), and it is; but we are forced to do it in order to apply two names to the cline without violating the ICZN rule of priority. 6) Names proposed in or near hybrid/intergradation zones have difficulties in the ICZN code. For example *damei* (*Cercyonis*) is a name applicable to a subspecies, and occurs in an intergrade zone, and would eliminate some names that are desirable to keep because it is older than them, but occurs as a widespread form so it applies to several bookkeeping species. In *Papilio* (N.S.) #19 I kept *damei* the subspecies name in one subspecies, where it is younger than a desirable name so would not eliminate that name, and I invented *damei* the infrasubspecific form in another subspecies and in another bookkeeping species, where a subspecies name *damei* would kill off desirable names we want to keep but an infrasubspecific form name *damei* would cause no harm. This trick works to make the name *damei* usable in all three taxa yet keeps it from eliminating valuable ssp. names; this trick can be called a “schizophrenic taxon”, as the name *damei* has a “split personality”, used in several species/subspecies. 7) A catalogue of names is littered with ancient names of aberrations, homonyms, and synonyms that will rarely if ever be used again. And when a nomenclaturist rediscovers an older name that applies to a critter long-known under another name, he is essentially forced by the ICZN to dredge it up and use it to replace the traditional name (only with extraordinary and unlikely efforts petitioning the ICZN can this process be overruled). A biological catalogue can and should just ignore these worthless names while noting that a petition for their suppression is needed. 8) A catalogue of names tries to obey every ICZN article to the letter, even if it means using old dubious obscure names that have numerous problems (toxotaxa). So a Catalogue of Names is supposed to retain the use of names that are in the process of being suppressed by petition to the ICZN. But biologists are totally disgusted with toxotaxa and the use of the principle of priority to replace good names with bad. Biologists are horrified at the too-frequent resurrection of ancient forgotten names to replace perfectly good often-used names, causing endless confusion (examples are *dumetorum*, *hyllus*, *ruricola*, *castro*, *oregonia*, *balder*, ad nauseum). Therefore, in a Biological Catalogue there should be little tolerance for nomenclatural garbage, so if some name has problems regarding identity or types or type locality etc. that confuse its application—a toxotaxon—it should just be ignored, and only resurrected later if these problems are resolved and ICZN petitions to suppress it fail. 9) A biological catalogue attempts to present only scientific truth, as science is the process of discovering truth. In contrast, a catalogue of ICZN names forces the perpetuation of scientific lies, in the form of inappropriate misleading names such as the name *Plebejus lupini*. That butterfly’s larvae and adults do not go near *Lupinus*, so the name of that species is a blatant lie. Yet the ICZN principle of priority forces its use, in perpetuity, in a horrendous violation of the scientific method and common sense. Thanks to the ICZN, nomenclatural catalogues can never correct this lie. But wait, there is hope. This Biological Catalogue introduces the principle of the *Lapsus Contrarius*, a simple emendation that negates such lies.

A biological catalogue attempts to obey ICZN rules where possible, but emphasizes biology first. Sometimes some trickery may be needed to make those names apply reasonably well to the actual biological units in nature, including the use of form names not regulated by the ICZN (infrasubspecific names or *nomina nuda*). Of course, the best way to apply names to real biological units would be to just ignore ICZN rules and propose new appropriate names for the problem taxa, to best fit their biological status. Maybe in several decades the ICZN rules will incorporate special articles that might make it possible to bypass the principle of priority in special cases to make the names better describe nature. It must be emphasized that the ICZN Code regulates names, using an archaic system started in the 1700s, and has nothing to do with biology, and may not survive in its current archaic state much longer, because DNA-taxonomists and geneticists are belittling the system and calling the traditional species “typological”, and traditional taxonomists are not being hired. In a decade or two when most traditional taxonomists retire or die, big changes will happen.

In this biological catalogue, I list only the names, and their type localities, because those are the only parts of a catalogue of names that have biological value. The types can be ignored. The holotype/lectotype/neotype of a biological taxon can be abnormal, or can be just a leg without a body, or a plaster cast, or a pupal shell, and still be nomenclaturally valid, because only the characterization of the population at the type locality is important. To assign a

population to a subspecies name, we must know the characteristics of the named population. (This biological catalogue assumes that the populations of butterflies at the TL have been properly matched by the Miller/Brown and now the Pelham Catalogue [with corrections of it in *Papilio* {New Series} #19] to the type specimens those populations are purported to have produced.)

Each type locality (TL) listed below is the locality of the holotype, lectotype, or neotype, because the ICZN Code states that the TL is the locality of the holotype, lectotype, or neotype, whichever one of the three has been designated for that taxon. If that type has a vague or absent locality label, or the taxon has only syntypes from multiple localities, authors sometimes defined several different type localities. For those taxa with multiple type localities, the TL listed is the best final determination in the Pelham Catalogue, except for those dozens of TL corrections made in *Papilio* (New Series) #19.

I do not list authors of scientific names here, or the dates they were named or the book/journal in which they were published, as that information has no biological importance. By the way, there have been many shenanigans by authors in the process of naming and cataloging bugs. Some people seem to name critters—sometimes as many as they can—just to try to achieve fame (megalomania has possessed some lepidopterists, who think that all the butterflies belong to them). Some people have provided specimens to others, in exchange for the recipient naming the bug after the donor. Some people name taxa after some other person, as a way of courting favor (praise or financial support), without consideration of the appropriateness of the name for that bug. Often that person whose name is now applied to the bug is totally unknown to the entomological community, as the person is merely a spouse, or friend, or just a roommate, etc., while good appropriate names are ignored. Rarely an author will back-date his publication in order to claim authorship of a bug; for instance Herman Strecker backdated a publication naming *Cercyonis hoffmani*—from the same collected series of the bug named *wheeleri* by W. H. Edwards—in order to claim authorship, but his trickery was caught by his referring to a later paper in the *hoffmani* paper (see note 639 in Miller/Brown catalogue/checklist). Some people have the tendency—unconsciously perhaps—to synonymize bugs named by competitors, just out of spite (*Papilio* [New Series] #12 demonstrates such a case in someone's attempt to synonymize the name *pseudosamuelis* to *melissa*). These shenanigans and more (for example, Herbert Morrison deliberately falsified localities of numerous collected specimens; and Herman Strecker never returned borrowed specimens and should have been imprisoned for felony theft) have occurred in North American butterflies. (These shenanigans occur worldwide among all kinds of creatures, and are tolerated by the ICZN. For instance a Denver newspaper wrote that a herpetologist recently named the world's smallest snake after his obscure wife and then claimed to have “discovered” it, thereby alienating a considerable portion of the entire population of Barbados who were already familiar with the snake they considered to be theirs.) Maybe assigning authorship to ICZN names provides some people the ego-boosting incentive to do taxonomic work, which they otherwise might not do, which helps biology. But these pathetic authorship shenanigans do not concern us here, and can just be partially ignored in a biological catalogue, by ignoring the authors of the names (unfortunately we are stuck with the bad names that they often apply to the taxa).

Some people are lumpers, and some are splitters. Many decisions of status are not clear-cut, as two allopatric taxa may be treated as species by some people based on their opinion that they are “different enough” to be called species, or are equivalent in magnitude of difference to other species pairs currently treated as species (a process of circular reasoning divorced from objective criteria that allows splitting to relentlessly spread across all taxa) while other people may treat them as just subspecies. I try to use the “biological species concept”, so if two bugs seem to interbreed or hybridize extensively I tend to lump them, and I will even lump sympatric allochronic taxa if they are similar enough, because allochrony does not allow a field test of reproductive isolation. A few comments justifying the assigned status of species or subspecies are given below, but to avoid repetition I mostly use the status assigned to problematic names in *Papilio* (New Series) #19 which gives reasons for the status assigned. For some tropical skippers etc. I have not had the time to find and read obscure papers to judge whether taxa have been split into several species for good reasons or just split because of a highly-split species concept, so an alternate species name is given in parentheses. Progress marches on, and lumping versus splitting will always be with us, and opinions change with time. In *Papilio glaucus*, I have always thought that *canadensis* & *rutulus* belong to *P. glaucus* because they interbreed extensively. Most people disagree and just ignore the extensive intergradation, but the latest research shows that there is no reproductive isolation in the *glaucus-canadensis* blend zone (Donovan & Scriber *J. Lep. Soc.* 57:25-35; Scriber & Lederhouse *JRL* 27:222-232), and during the last decade's warming trend in Michigan some *glaucus* genes have traveled north more than 300 km into *canadensis*, leaving their “species” behind (very difficult to do with real species, which are able to retain their genes), and a new “hybrid swarm” in the Battenkill Valley in E.N.Y. is similar to the hybrid swarm *P. glaucus appalachiensis*, as both swarms have taken genes from both *canadensis* & *glaucus*, and continue to exist merely because they have only one obligate-diapausing allochronic flight between the first two generations of nearby *glaucus* (J. Scriber & G. Ordning 2005, *Entom. Exp. et Applicata* 115:247-263)(see also J. Scriber [*J. Res. Lepid.* 27:96-103 & 27:222-232 & *Oecologia* 71:94-103]; Tyler, Brown, & Wilson [1994, *Swallowtail Butterflies of the Americas*]; J. Scott & J. Shepard [*Pan-Pac. Ent.* 52:23-28, which demonstrates intergradation in BC]; L. Brower [*Evolution* 13:40-63, which demonstrates intergradation in Black Hills]).

North America here means U.S. and Canada. The U.S-Mexican border is a historical/military accident of zero significance in biogeography; however it would be too much work to try to separate the Mexican fauna into temperate and tropical faunas, as not enough is known, and the separation would be difficult as hundreds of species transcend the boreal/tropical boundary. (Additionally, the Mexicans have set up financial and legal “permit” barriers to prevent foreigners from studying their fauna).

The goal in a biological catalogue is to emphasize biology over nomenclature, which hopefully means using names that are appropriate, or at least are not inappropriate or misleading. As we have seen, the principle of priority is often an impediment to applying scientific names properly to biological units, and prevents the removal of inappropriate misleading (lying) names. One way to get rid of the principle of priority is to ignore scientific names and use just common names, as most birders have done.

Common names can be changed to make them appropriate, so misleading inappropriate names can just be removed. Because of this flexibility, common names have the potential to better reflect real biological relationships than scientific names, provided that people actually use appropriate names and correct the inappropriate misleading common names. So, perhaps common names should be part of a biological catalogue. Unfortunately the users of common names seem reluctant to replace misleading common names, and seem reluctant to replace bad names with more appropriate names. The common names that should be used are names that have been widely accepted, except the misleading inappropriate ones must be discarded and replaced. Scott (1993; J. Lepid. Soc. 47:170-171) reviewed a book on common names of N.A. butterflies (Common Names of N.A. Butt., ed. Jacqueline Miller, Smithsonian Inst. Press, 177 pp.) and noted numerous inappropriate names. He wrote “Common names should be appropriate names for the common person; they should not be the most common error.” So, a list of common names—inappropriate names deleted and corrected—is provided at the end of this biological catalogue.

Scientific names, in contrast, cannot be changed (at least not now under ICZN rules), even though they are biologically inappropriate or misleading. Many names are grossly misleading. However, one name is so horribly misleading and inappropriate that it cannot be tolerated. That name is *Plebejus lupini*, whose larvae & adults have nothing to do with *Lupinus* plants. I and others have been ranting against that name for decades. *Lupini* is a blazing beacon of badness.

Obviously, we need a fix for inappropriate misleading names, a fix that is applicable to all such names. The best fix for inappropriate misleading scientific names seems to be a deliberate misspelling that works on all such names—a **LAPSUS CONTRARIUS**—by changing the spelling a bit to fix the horrible error. **To form the lapsus contrarius to fix any misleading name, just add a- or an- to the front of the name, and the offensive meaning is negated: a- is added to names starting with a consonant; an- is usually added to names starting with a vowel. If that prefix creates a homonym, the prefix anti- should be used.** For example, I have deliberately emended the name *lupini* to *alupini*, by using the prefix a- (the prefix meaning not-, for example amorphous, apetalous, anhydrous, etc., which mean without form, lacking petals, lacking water), so *alupini* now means NOT-lupini. A Biological Catalogue must treat biology first, nomenclature second, so gross biological errors cannot be tolerated. The lapsus contrarius is new territory of course, as it is not found in the ICZN Code which currently requires the retention of inappropriate misleading names, so the nomenclatural pedants will be completely opposed to it. But the ICZN Code definitely needs a rule or procedure that would allow grossly inappropriate names to be changed, and the lapsus contrarius is the only possible universally-applicable workable solution that I see now. Its time will come. During the evolution of biological creatures, behavior (such as swimming) changes first, and structural evolution (such as flippers) follows. When enough taxonomists change their behavior and reject inappropriate names, a rule permitting their negation or removal will soon be incorporated into the ICZN code.

The Biological Catalogue has an exciting future. Being founded in biology rather than in nomenclature, it attempts to crawl out of the old-name ICZN sewer, and closely track scientific progress. Will the biological catalogue morph into a presentation of DNA relationships, restrained a bit by presumed reproductive isolation? Will it become a summary of DNA fingerprinting results? Will ICZN dictates finally just be ignored? We shall see. But probably none of this will matter, as the human population explosion and the end of cheap oil and the devastation of forests and agricultural soil and water supplies and fisheries and global warming will evidently cause massive starvation and chaos and the collapse of our resource-wasting civilization along with the death of most biota by some time around mid-century (2050).

**Abbreviations:** TL=type locality. = means the following named taxon is a synonym or is so similar that it cannot be distinguished by the ordinary person. => means that the following name is a synonym, but is different enough that it might be a valid weak subspecies to some people, or is intermediate between two other named ssp. thus is invalid, or was suppressed by a jumping subspecies in a 3-name cline. > means that the subspecies is weaker and belongs to the group of subspecies named just above it. >>means that the subspecies is even weaker and is nested in a group that is in turn nested in another >group of ssp. “Stenchospecies”=superspecies. “Bookkeeping species”=semispecies.

## Hesperioidea, Hesperidae, Eudaminae

- Phocides pigmalion okeechobee* TL Marco Is., Collier Co. Fla.  
*Phocides belus* TL Mex.  
*Phocides polybius lilea* TL near Vera Cruz, Veracruz, Mex.  
*Proteides mercurius mercurius* TL French Guiana  
*Proteides mercurius sanantonio* TL Cuba  
*Epargyreus zestos zestos* TL “Suriname”  
*Epargyreus clarus clarus* TL Dayton, Rockingham Co. Va.  
>*Epargyreus clarus huachuca* TL Huachuca Mts., Cochise Co. Ariz.; =*profugus* TL Virgin Mts., Clark Co. Nev.  
>*Epargyreus clarus californicus* TL China Flat, El Dorado Co. Calif.  
*Epargyreus exadeus cruza* TL Cordova, Veracruz, Mex.  
*Polygonus leo arizonensis* TL Florence, Pima Co. Ariz.  
*Polygonus leo histrio* TL “Panama”  
*Polygonus savigny savigny* TL Antilles; =*manueli* TL New Bremen, Santa Catharina, Brasil  
*Chioides (catillus?) albofasciatus* TL Polochic Valley, Guatemala  
*Chioides zilpa* TL Cartago, Costa Rica  
*Typhedanus undulatus* TL?  
*Polythrix mexicanus* TL 7 mi. S Valles, SLP, Mex.  
*Polythrix octomaculata* TL Suriname  
*Aguna asander* TL Tefe, Brasil  
*Aguna metophis* TL Brasil  
*Aguna claxon* TL Atoyac, Veracruz, Mex.  
*Zestusa dorus* TL Mt. Graham, Graham Mts., Graham Co. Ariz.  
*Codatractus alcaeus alcaeus* TL Nicaragua  
*Codatractus arizonensis* TL Baboquivari Mts., Pima Co. Ariz.  
*Codatractus valeriana* TL Mex.; =*mysie* TL Patagonia Mts., Santa Cruz Co., Ariz.  
*Urbanus proteus proteus* TL Cherrypoint, Craven Co. NC?  
*Urbanus belli* TL Salta, Argentina  
*Urbanus pronus* TL Ambato, Ecuador  
*Urbanus esmeraldus* TL Villa Nova, Amazon  
*Urbanus dorantes dorantes* TL Suriname  
*Urbanus teleus* TL?  
*Urbanus tanna* TL Santa Rita, Cauca River, Colombia  
*Urbanus simplicius* TL Suriname  
*Urbanus procne* TL Brasil  
*Urbanus doryssus doryssus* TL Bahia, Brasil  
*Astraptes fulgurator azul* TL near Vera Cruz, Veracruz, Mex.  
*Astraptes egregius egregius* TL?  
*Astraptes alardus latia* TL Costa Rica  
*Astraptes alector hopfferi* TL South America; =*gilberti* TL 7 mi. S Valles, San Luis Potosi, Mex.  
*Astraptes anaphus annetta* TL Tres Rios, Costa Rica  
*Autochton cellus* TL Georgia  
*Autochton pseudocellus* TL Ramsey Can., Huachuca Mts., Cochise Co. Ariz.  
*Autochton cincta* TL Oaxaca, Mex.  
*Achalarus lyciades* TL Georgia  
*Achalarus casica* TL?  
*Achalarus albociliatus albociliatus* TL Colombia  
*Achalarus toxeus* TL Mex.  
*Achalarus (Thessia) jalapus* TL Jalapa, Veracruz, Mex.  
*Thorybes drusius* TL So. Ariz.  
*Thorybes bathyllus* TL Burke Co. Georgia  
*Thorybes pylades pylades* TL Mass.; =*indistinctus* TL Laguna Mts., San Diego Co. Cal.  
*Thorybes pylades albosuffusa* TL Fort Davis, Jeff Davis Co. Tex.  
*Thorybes confusis* TL Tampa, Fla.  
*Thorybes diversus* TL Plumas Co. Calif.  
*Thorybes mexicana mexicana* TL Mex.; =*dobra* TL Fort Grant, Pinaleño Mts., Graham Co. Ariz.; =*nevada* TL Sierra Nevada, Calif.  
*Thorybes mexicana aemilia* TL Fort Klamath, Klamath Co. Ore.  
*Thorybes mexicana blanca* TL Crooked Crk. Lab, White Mts., Calif.

*Cabares potrillo potrillo* TL Cuba  
*Spathilepia clonius* TL Suriname  
*Cogia hippalus hippalus* TL Tucson, Pima Co. Ariz.  
*Cogia outis* TL Round Mtn., Blanco Co. Tex.  
*Cogia caicus moschus* TL Fort Grant, Pinaleño Mts., Graham Co. Ariz.  
*Cogia calchas* TL Rio de Janeiro, Brasil

#### Hesperiidae, Pyrginae, Pyrrhopygini

*Apyrrothrix araxes arizonae* TL Fort Grant, Pinaleño Mts., Graham Co. Ariz.

#### Hesperiidae, Pyrginae, Celaenorrhinini

*Celaenorrhinus fritzgaertneri* TL Volcan de San Miguel, El Salvador  
*Celaenorrhinus stallingsi* TL Monterrey, Nuevo Leon, Mex.

#### Hesperiidae, Pyrginae, Carcharodini

*Arteurotia tractipennis tractipennis* TL Cartago, Costa Rica  
*Nisoniades rubescens* TL Suriname  
*Pellicia arina* TL Atoyac, Veracruz, Mex.  
*Pellicia dimidiata dimidiata* TL. Mex.  
*Windia windi* TL Salada, Colima, Mex.  
*Noctuana stator* TL Mex.  
*Bolla brennus brennus* TL Volcan de Chiriqui, Panama  
*Bolla clytius* TL Tres Marias Is., Nayarit, Mex.  
*Staphylus ceos* TL Fort Grant, Pinaleño Mts., Graham Co. Ariz.  
*Staphylus mazans mazans* TL near Vera Cruz, Veracruz, Mex.  
*Staphylus hayhurstii* TL vic. Sedalia, Missouri  
*Pholisora catullus* TL?  
*Pholisora mejicanus* TL near Vera Cruz, Veracruz, Mex.  
*Hesperopsis libya libya* TL Littlefield, Mohave Co. Ariz.; =>*joaquina* TL McKittrick, Kern Co. Calif.  
*Hesperopsis libya lena* TL Montana; =*confertiblanca* TL N Montrose, Montrose Co. Colo.  
*Hesperopsis alpheus alpheus* TL Colfax Co., New Mex.; =*oricus* TL Carson Valley, Douglas Co. Nev.  
*Hesperopsis alpheus texana* TL Boca Chica, Cameron Co. Tex.  
*Hesperopsis alpheus graciaelae* TL Bennett Wash., near Parker Dam, Calif.

#### Hesperiidae, Pyrginae, Erynnini

*Gorythion begga pyralina* TL Paramaribo, Suriname  
*Sostrata (bifasciata?) nordica* TL Mex.  
*Mylon pelopidas* TL?  
*Grais stigmaticus stigmaticus* TL Chiriqui, Panama  
*Timochares ruptifasciata* TL South America  
*Anastrus sempiternus sempiternus* TL Cartago, Costa Rica  
*Chiomara (asychis?) georgina georgina* TL near Vera Cruz, Veracruz, Mex.  
*Chiomara mithrax* TL Colombia  
*Gesta (gesta?) invisus* TL Cartago, Costa Rica  
*Ephyriades brunnea floridensis* TL Key Largo, Fla.  
*Erynnis (Erynnis) icelus* TL New England  
*Erynnis (Erynnis) brizo somnus* TL Georgiana, Brevard Co. Fla.  
*Erynnis brizo brizo* TL Georgia  
*Erynnis brizo burgessi* TL Mt. Graham, Pinaleño Mts. Graham Co. Ariz.  
*Erynnis brizo lacustra* TL Blue Lakes, Lake Co. Calif.  
*Erynnis (Erynnides) martialis* TL Denison to New Jefferson, Iowa  
*Erynnis (Erynnides) pacuvius pacuvius* TL New Mex.  
*Erynnis pacuvius lilium* TL Kaslo, BC  
*Erynnis pacuvius pernigra* TL Mt. Tamalpais, Marin Co. Calif.  
*Erynnis pacuvius callidus* TL Mt. Wilson, Los Angeles Co. Calif.  
*Erynnis (Erynnides) funeralis* TL Texas  
*Erynnis (Erynnides) zarucco terentius* TL Florida  
*Erynnis zarucco zarucco* TL Cuba

*Erynnis stenchospecies lucilius* (includes *baptisiae*, *lucilius*, *afranius*; needs work)  
*Erynnis (Erynnides) baptisiae* TL Woods Hole, Barnstable Co. Mass.  
*Erynnis (Erynnides) lucilius* TL Schoharie...Bethlehem, N.Y.  
*Erynnis (Erynnides) new ssp. near lucilius?* (boreal Man.-BC)  
*Erynnis (Erynnides) afranius* TL Colorado  
*Erynnis (Erynnides) persius* TL "Mass."; =*borealis* TL mouth North Nahanni R., NWT; =*avinoffi* TL Alaska;  
 =*fredericki* TL near Lead, Black Hills, S.D.  
*Erynnis (Erynnides) juvenalis juvenalis* TL?  
*Erynnis juvenalis clitus* TL Mt. Graham, Pinaleno Mts., Graham Co. Ariz.  
*Erynnis (Erynnides) telemachus* TL Hualapai Mts., Mohave Co. Ariz.  
*Erynnis (Erynnides) propertius propertius* TL Calif.  
*Erynnis propertius meridianus* TL White Mts., Ariz.  
*Erynnis (Erynnides) scudleri* TL Huachuca Mts., Pima Co., Ariz.  
*Erynnis (Erynnides) horatius* TL?  
*Erynnis (Erynnides) tristis tristis* TL: San Francisco, Calif.  
*Erynnis tristis tatus* TL Mt. Graham, Pinaleno Mts., Graham Co. Ariz.

### Hesperiidae, Pyrginae, Achlyodini

*Achlyodes pallida* TL Jalapa, Portrero, Veracruz, Mex.; =*selva* TL Jalapa, Veracruz, Mex.  
*Achlyodes (Eantis) mithridates tamenund* TL Norse, Bosque Co. Tex.

### Hesperiidae, Pyrginae, Pyrgini

*Carrhenes canescens canescens* TL Potrero, Veracruz, Mex.  
*Xenophanes tryxus* TL Suriname  
*Antigonus emorsa* TL Cuernavaca, Morelos, Mex.  
*Antigonus erosus* TL?  
*Systasea pulverulenta* TL Orizaba, Veracruz, Mex.  
*Systasea zampa* TL S of Fort Apache, Navajo Co. Ariz.  
*Celotes nessus* TL San Antonio, Tex.  
*Celotes limpia* TL Limpia Can., Davis Mts., Tex.  
*Pyrgus centaureae wyandot* TL Long Island, N.Y.  
*Pyrgus centaureae freija* TL Labrador/Nfld.  
*Pyrgus centaureae loki* TL Long's Peak, Larimer Co. Colo.  
*Pyrgus ruralis ruralis* TL SW Belden, Plumas Co. Calif.; =*ricara* TL vic. Empire, Clear Creek Co. Colo.  
*Pyrgus ruralis lagunae* TL N end of E Laguna, Laguna Mts., San Diego Co. Calif.  
*Pyrgus xanthus* TL Rosita, Wet Mts., Colo.; =*mcDunnoughi* TL Ariz.  
*Pyrgus scriptura* TL Sacramento, Calif.  
*Pyrgus scriptura* spring form *pseudoxanthus*; =*apertorum* TL Cottonwood Pass Rd., Spring Mts., Nev.  
*Pyrgus communis communis* TL Demopolis, Marengo Co. Ala.  
*Pyrgus (communis?) albescens* TL Mex. (may be a dominant/recessive valval polymorph)  
*Pyrgus philetas* TL Davis Mts., Tex.  
*Pyrgus oileus* TL Mex. or U.S.; =*syrictus* TL?  
*Heliopetes (Heliopyrgus) domicella domicella* TL Guyana  
*Heliopetes (Heliopyrgus) sublinea* TL Orizaba, Paso de San Juan, Veracruz, Mex.  
*Heliopetes erictorum* TL E Magalia, Butte Co. Calif.  
*Heliopetes macaira* TL near Vera Cruz, Veracruz, Mex.  
*Heliopetes laviana* TL Nicaragua  
*Heliopetes arsalte* TL probably Guianas

### Hesperiidae, Heteropterinae

*Carterocephalus (palaemon?) mandan* TL Pine Ridge, Manitoba; =*mesapano* TL Norway, Oxford Co. Maine  
*Carterocephalus palaemon skada* TL Kodiak, Alaska; =*magnus* TL Plantation, Sonoma Co. Calif.  
*Piruna pirus* TL Hardscrabble Can., Wet Mts., Colo.  
*Piruna haferniki* TL Green Gulch, Chisos Mts., Tex.  
*Piruna polingii* TL Huachuca Mts., Ariz.  
*Piruna aea mexicana* TL 9 mi. E Queretaro, Queretaro, Mex.  
*Piruna penaea* TL Sierra de Guerrero, Mex.

## Hesperiidae, Hesperinae, Megathymini, Megathymina

*Megathymus yuccae yuccae* TL Aiken Co., S.C.

*Megathymus yuccae coloradensis* TL near Colorado Springs, Colo.; =*stallingsi* TL Caldwell, Sumner Co. Kans.; =*reinthali* TL 2 mi. W Ben Wheeler, Van Zandt Co. Tex.; =*louiseae* TL 16 mi. N Del Rio, Val Verde Co. Tex.; =*winkensis* TL Wink, Winkler Co. Tex.; =*elidaensis* TL SW Elida, Roosevelt Co. New Mex.; =*navajo* TL Fort Wingate, Zuni Mts., New Mex.; =*arizonae* TL Mtn. View, Pima Co. Ariz.; =*browni* TL near Salina, Sevier Co. Utah; =*albasuffusa* TL 5 mi. NW Glen Can. Dam, Coconino Co. Ariz.; =*maudae* TL 21 mi. N Essex, Providence Mts., Calif.; =*martini* TL Little Rock, Los Angeles Co. Calif.; =*harbisoni* TL 1 mi. W Scissors Crossing, San Diego Co. Calif.

*Megathymus yuccae reubeni* TL Hueco Mts., El Paso Co. Tex.

*Megathymus yuccae wilsonorum* TL Victoria, Tam., Mex.

*Megathymus ursus deserti* TL N of Camp Crk., Maricopa Co. Ariz.

*Megathymus ursus ursus* TL Santa Catalina Mts. W Redington, Ariz.

*Megathymus ursus violae* TL Guadeloupe Mts., Carlsbad Caverns NP, New Mex.

*Megathymus cofaqui slotteni* TL Williston, Levy Co. Fla.

*Megathymus cofaqui cofaqui* TL Burke Co., Ga.; =*harrisi* TL Stone Mtn., De Kalb Co. Ga.

*Megathymus (cofaqui?) streckeri texana* TL Kerrville, Kerr Co. Tex.; =>*leussleri* TL near Valentine, Cherry Co. Neb.

*Megathymus (cofaqui?) streckeri streckeri* TL Petrified Forest, Apache Co. Ariz.

*Stallingsia smithi maculosus* TL Kingsville, Kleberg Co. Tex.

## Hesperiidae, Hesperinae, Megathymini, Aegialina

*Agathymus neumoegei neumoegei* TL Prescott, Yavapai Co. Ariz.; =*carlsbadensis* TL head Yucca Can., Guadeloupe Mts., Tex.; =*judithae* TL Hueco Mts., El Paso Co. Tex.; =*diabloensis* TL Diablo Mts., Hudspeth Co. Tex.; =*florenceae* TL Davis Mts., Tex.; =*mcalpinei* TL 5.1 mi. N Marathon, Tex.

*Agathymus neumoegei chisosensis* TL Chisos Basin, Chisos Mts., Tex.

*Agathymus polingi* TL Bavoquivari Mts., Ariz.

*Agathymus (aryxna?) alliae alliae* TL 15 mi. W Cameron, Coconino Co. Ariz.

*Agathymus (aryxna?) alliae paiute* TL Peek-a-boo Can., Las Vegas Range, Nev.

*Agathymus aryxna gentryi* TL Agua Dulce Mts., Pima Co. Ariz.

*Agathymus aryxna freemani* TL near Bagdad, Yavapai Co. Ariz.

*Agathymus aryxna baueri* TL Verde Hot Springs, Yavapai Co. Ariz.

*Agathymus aryxna aryxna* TL W slopes Patagonia Mts., SE Nogales, Sonora, Mex.

*Agathymus evansi* TL Ramsey Can., Huachuca Mts., Ariz.

*Agathymus mariae mariae* TL Frankin Mts., El Paso, Tex.; =*chinatiensis* TL 2.7 mi. S Shafter, Presidio Co. Tex.;

=*lajitaensis* TL 10 mi. W Lajita, Presidio Co. Tex.; =*rindgei* TL 14 mi. N Bracketville, Kinney Co. Tex.; =*gilberti* TL 14 mi. N Bracketville, Kinney Co. Tex.

*Agathymus remingtoni valverdiensis* TL 28 mi. N Del Rio, Val Verde Co. Tex.

*Agathymus stephensi stephensi* TL Mason Valley (La Puerta), San Diego Co. Calif.

## Hesperiidae, Hesperinae, unknown placement

*Erionota thrax* TL Java

*Perichares philetas adela* TL Rio de Janeiro, Brasil

## Hesperiidae, Hesperinae, Thymelicini

*Ancyloxypha numitor* TL E U.S.

*Ancyloxypha arene* TL near Tucson, Ariz.

*Oarisma poweshiek* TL Grinnell, Poweshiek Co. Iowa

*Oarisma garita garita* TL mts. W of Denver, Colo.

*Oarisma edwardsii* TL Hardscrabble Can., Wet Mts., Custer Co. Colo.

*Copaeodes aurantiaca* TL?

*Copaeodes minima* TL Waco, McLennan Co. Tex.

*Adopaeoides prittwitzi* TL Mex.

*Thymelicus lineola lineola* TL Germany

## Hesperiidae, Hesperinae, Calpodini

*Calpodus ethlius* TL Suriname

*Panoquina panoquin* TL Conn.

*Panoquina panoquinoides panoquinoides* TL Key West, Fla.



*Panoquina panoquinoides errans* TL Calif.  
*Panoquina ocola ocola* TL Fla.  
*Panoquina lucas* TL “Americae meridionalis Insulis Dom. V. Rohr”; =*sylvicola* TL Cuba  
*Panoquina hecebolus* TL Tehuantepec, Oaxaca, Mex.  
*Panoquina (fusina?) evansi* TL Pharr, Hidalgo Co. Tex.

#### Hesperiidae, Hesperinae, unnamed tribe

*Synapte (malitiosa) pecta* TL Mex.  
*Synapte salenus* TL Colombia?  
*Synapte (syraces) shiva* TL Dos Arroyas, Guerrero, Mex.  
*Corticea corticea* TL Lagayra, Venezuela

#### Hesperiidae, Hesperinae, unnamed tribe

(*Atrytone* probably belongs with *Nastra* as the larvae are almost identical)

*Amblyscirtes exotera* TL?  
*Amblyscirtes cassus* TL Mt. Graham, Pinaleno Mts., Graham Co. Ariz.  
*Amblyscirtes aenus megamacula* TL WSW Pena Blanca Lake, Santa Cruz Co. Ariz.  
*Amblyscirtes aenus aenus* TL Hardscrabble Can., Wet Mts., Custer Co. Colo.  
*Amblyscirtes aenus aenus* less-spotted form *erna* TL Palo Duro Can., Armstrong Co., Tex.  
*Amblyscirtes aenus linda* TL Hope Hill Farm, Faulkner Co. Ark.  
*Amblyscirtes oslari* TL Chimney Gulch, Jefferson Co. Colo.  
*Amblyscirtes texanae* TL Davis Mts. N Alpine, Tex.  
*Amblyscirtes hegon* TL White Mts., N.H.; =*samoset* TL Mass. & N.H.  
*Amblyscirtes nereus* TL Camp Apache to Gila R., Navajo-Apache Cos. Ariz.  
*Amblyscirtes celia* TL Blanco, Comal, & Nueces Cos. Tex.  
*Amblyscirtes belli* TL Lancaster & 2 mi. W Vickery, Dallas Co. Tex.  
*Amblyscirtes eos* TL Dallas, Tex.  
*Amblyscirtes elissa arizonae* TL ½ mi. W Kino Springs, Santa Cruz Co. Ariz.  
*Amblyscirtes tolteca tolteca* TL Tehuantepec, Oaxaca, Mex.  
*Amblyscirtes tolteca prenda* TL Tucson, Ariz.  
*Amblyscirtes nysa* TL Clifton, Bosque Co. Tex.  
*Amblyscirtes alternata* TL Georgia  
*Amblyscirtes vialis* TL Perryton Twp., Mercer Co., Ill.  
*Amblyscirtes aesculapius* TL?  
*Amblyscirtes reversa* TL Suffolk, Nansemond Co. Va.  
*Amblyscirtes carolina* TL ½ mi. S Hamlet, Richmond Co., N.C.  
*Amblyscirtes phylace* TL south-central Colo.  
*Amblyscirtes fimbriata* TL Mex.; =*bellus* Cochise Co. Ariz.  
*Vidius perigenes* TL Rincon, Guerrero, Mex.  
*Monca crispinus* TL Mex.; =*tyrtaeus* TL Lagayra, Venezuela  
*Nastra lherminier* TL Carolinas  
*Nastra neamathla neamathla* TL central Fla.  
*Nastra neamathla julia* TL Pharr, Hidalgo Co. Tex. (see Butt. Houston)  
*Cymaenes tripunctus* TL Cuba  
*Cymaenes (odilia) trebius* TL Bogota, Colombia  
*Lerodea eufala eufala* TL Indian River, Fla.  
*Lerodea arabus arabus* TL Sabino Can., Santa Catalina Mts. Ariz.  
*Lerodea arabus dysaules* TL Venta de Zopilote, Guerrero, Mex.  
*Lerema accius* TL Georgia  
*Lerema liris* TL Atoyac, Veracruz, Mex.  
*Vettius fantasos* TL Suriname  
*Rhinthon osca* TL Caracas, Venezuela

#### Hesperiidae, Hesperinae, Hesperini

*Decinea perciosius* TL Mex. to Panama  
*Oligoria maculata* TL Edgard, St. John the Baptist Parish, La.  
*Conga chydaea* TL Serpa, Amazonas, Brasil  
*Hylephila phyleus phyleus* TL Antigua, Lesser Antilles; =*eureka* TL Eureka, Humboldt Co. Calif.

*Hylephila phyleus muertovalle* TL Furnace Creek date grove, Death Valley, Calif.  
*Pseudocopaeodes eunus eunus* TL Victorville, San Bernardino Co. Calif.; =*wrightii* TL Victorville, San Bernardino Co. Calif.; =*flavus* TL Stillwater NWR, Churchill Co. Nev.; =>*obscurus* TL Eagle Valley, Carson City, Nev.  
*Pseudocopaeodes eunus alineae* TL Afton, San Bernardino Co. Calif. (extinct at TL)  
*Hesperia uncas tomichi* TL Big Mesa, Gunnison Co. Colo.  
*Hesperia uncas uncas* TL vic. Denver, Colo.  
*Hesperia uncas lasus* TL Cochise or Santa Cruz Cos., Ariz.; =*grandiosa* TL White R. Valley, White Pine Co. Nev.; =*reeseorum* TL Reese R. Valley, Lander Co. Nev.  
*Hesperia uncas fulvapalla* TL Lockes Ponds, Railroad Valley, Nye Co. Nev.; =>*terraclivosa* TL Monitor Valley-Petes Summit Rd., Toquima Range, Lander Co. Nev. (intergrade to *macswaini*)  
*Hesperia uncas macswaini* TL Blancos Corral, White Mts., Calif.  
>*Hesperia uncas giuliani* TL Adobe Hills, Mono Co. Calif.  
*Hesperia juba* TL Calif.  
*Hesperia stenchospecies comma* (includes *manitoba*, *colorado*, *assiniboia*)  
*Hesperia comma laurentina* TL Gaspé, Que.  
*Hesperia comma borealis* TL Nain, Labrador  
*Hesperia comma manitoba* TL Lac la Hache, BC  
*Hesperia comma hulbirti* TL Hurricane Ridge, Olympic Mts., Wash.  
*Hesperia comma colorado* TL evidently Kenosha Pass or Guanella Pass, Colo.  
*Hesperia comma assiniboia* TL Regina, Sask.  
>*Hesperia comma ochracea* TL Platte Can., Jefferson-Douglas Cos. Colo.  
*Hesperia comma idaho* TL Doyle, Lassen Co. Calif.; =>*mojavensis* TL Kyle Can. Ski Area, Spring Mts., Nev. (intermediate to *susanae*); =>*oregonia* TL Trinity Co. Calif. (an intergrade swarm of *idaho*X*hulbirti*X*dodgei*)  
*Hesperia comma susanae* TL Horseshoe Cienega, White Mts., Ariz.  
*Hesperia comma oroplata* TL Spring Creek, Fremont Co. Colo.  
*Hesperia comma harpalus* TL W side Sierra Nevada Mts., W of Carson City, in Calif.; =*cabelus* TL W side Sierra Nevada Mts., W of Carson City, in Calif.; =*yosemite* TL near Yosemite, Calif.  
*Hesperia comma leussleri* TL Warner's Hot Springs, San Diego Co. Calif.  
>>*Hesperia comma tildeni* TL Cherry Flat Res., Santa Clara Co. Calif.  
*Hesperia comma dodgei* TL Santa Cruz, Santa Cruz Co. Calif.  
>*Hesperia comma mattoonorum* TL Low Divide Rd., 2300', Del Norte Co. Calif.  
*Hesperia woodgatei* TL Jemez Mts., Sandoval Co. New Mex.  
*Hesperia ottoe* TL Kansas  
*Hesperia leonardus leonardus* TL Mass.  
*Hesperia leonardus pawnee* TL Glencoe, Dodge Co. Neb.  
*Hesperia leonardus montana* TL Buffalo Creek, Jefferson Co. Colo.  
*Hesperia pahaska pahaska* TL N Harrison, Sioux Co. Neb.  
*Hesperia pahaska williamsi* TL Bavoquivari Mts., Pima Co. Ariz.; =*martini* TL SE Ivanpah, New York Mts., San Bern. Co. Calif.  
*Hesperia columbia* TL Calif.  
*Hesperia viridis* TL Las Vegas, San Miguel Co. New Mex.  
*Hesperia attalus attalus* TL near Waco, McLennan Co. Tex.  
*Hesperia attalus nigrescens* TL vic. Sandy Island Nat. Wildlife Refuge, Horry Co. S.C.  
*Hesperia attalus slossonae* TL Fla.  
*Hesperia metea metea* TL Conn.  
*Hesperia metea licinus* TL near Waco, McLennan Co. Tex.; =>*intermedia* TL Lake Issaqueena, Pickens Co. S.C. (intermediate to *metea*)  
*Hesperia meskei meskei* TL Bastrop Co. Tex.  
*Hesperia meskei straton* TL Indian River, Brevard Co., Fla.  
*Hesperia meskei pinocayo* TL Big Pine Key, Fla.  
*Hesperia dacotae* TL Volga, Brookings Co. S. D.  
*Hesperia sassacus sassacus* TL Cambridge, Mass.; =*manitoboides* TL Nipigon, Ont.  
*Hesperia sassacus nantahala* TL Buck Creek, Clay Co. N.C.  
*Hesperia lindseyi lindseyi* TL Napa Co. Calif.; =*macneilli* TL Laytonville, Mendocino Co. Calif.; =*eldorado* TL Meadow Brook barrens, El Dorado Co. Calif.; =*septentrionalis* TL 4 mi. E Montague, Siskiyou Co. Calif.  
*Hesperia lindseyi mccorklei* TL N Jackson Rd., Douglas Co. Ore.  
*Hesperia miriamae miriamae* TL Mt. Star, Mono Pass, Inyo Co. Calif.  
*Hesperia miriamae longaevicola* TL Mt. Barcroft, White Mts., Calif.  
*Hesperia nevada* TL South Park, Colo.; =*sierra* TL Tahoe Meadows, Washoe Co. Nev.

*Polites (Yvretta) carus* TL Davis Mts., Tex.  
*Polites (Yvretta) rhesus* TL W of Pueblo, Pueblo Co. Colo.  
*Polites sabuleti sabuleti* TL San Francisco, Calif. (& Sacramento also, actually); =>*channelensis* TL Santa Rosa I., Calif.; =*genoa* TL near Genoa, Douglas Co. Nev.; =*alkaliensis* TL Granite Mts., Washoe Co. Nev.; =>*basinensis* TL Reese R. Valley, Lander Co. Nev. (intermediate toward *sinemacula*)  
*Polites sabuleti sabuleti* female form *nigrescens* TL Steptoe Valley warm springs, White Pine Co. Nev. (more of a female form than a ssp.)  
*Polites sabuleti chusca* TL N Mojave Co. Ariz.  
*Polites sabuleti sinemacula* TL 5 mi. W Denio Jct., Humboldt Co. Nev.  
*Polites sabuleti ministigma* TL 8 mi. W Crestone, Saguache Co. Colo.  
*Polites sabuleti tecumseh* TL Little Crabtree Mdw. near Mt. Whitney, Calif.; =*aestivalis* TL SE of Scott Mtn. Summit, Trinity Co. Calif.; =>*albamontana* TL Trail Can., White Mts., Esmeralda Co. Nev. (intermediate to *sabuleti*)  
*Polites draco* TL Twin Lakes, Lake Co. Colo.  
*Polites peckius peckius* TL NE U.S. or SE Canada; =*wamsutta* TL Mass.  
*Polites peckius surllano* TL Green Mtn., Jefferson Co. Colo.  
*Polites mardon* TL Tenino Prairie, Thurston Co. Wash.; =*klamathensis* TL 12 air mi. SE Ashland, Jackson Co. Ore.  
*Polites baracoa baracoa* TL Cuba  
*Polites themistocles themistocles* TL?  
>*Polites themistocles turneri* TL Jesmond, BC  
*Polites origenes origenes* TL?  
*Polites origenes rhena* TL Wet Mts. W of Pueblo, Colo.  
*Polites mystic mystic* TL Hunter, Greene Co. N.Y.  
*Polites mystic dacotah* TL, Georgetown or eastward toward Idaho Springs, Clear Creek Co. Colo.  
*Polites sonora siris* TL Tenino Prairie, Thurston Co. Wash.  
*Polites sonora sonora* TL Sierra Nevada, Calif.  
>*Polites sonora flavaventris* TL Alta Creek Basin, Pine Forest Range, Humboldt Co. Nev.; =>*longinqua* TL Trail Can., White Mts., Esmeralda Co. Nev. (intermediate to *sonora*)  
*Polites sonora utahensis* TL Park City, Summit Co. Utah  
*Polites vibex vibex* TL "mainland", evidently Fla.  
*Polites vibex praeceps* TL Tehuantepec, Oaxaca, Mex.; =*brettoides* TL Davis Mts., Tex.  
*Wallengrenia otho otho* TL Georgia  
*Wallengrenia otho clavus* TL British Guiana; =*curassavica* TL Curaçao  
*Wallengrenia egeremet* TL?  
*Pompeius verna* TL Perryton Twp., Mercer Co. Ill.; =*sequoyah* TL Ark.  
*Atalopedes campestris* TL Sacramento, Calif.; =*tenebricosus* TL Eureka, Humboldt Co. Calif.; =*huron* TL Evanston, Cook Co. Ill.  
*Atrytone arogos arogos* TL?  
>*Atrytone arogos iowa* TL Denison & New Jefferson, Iowa  
*Problema byssus kumskaka* TL Denison, Crawford Co. Iowa  
*Problema byssus byssus* TL Indian River, Brevard Co. Fla.  
*Problema bulenta* TL Georgia  
*Poanes zabulon* TL?  
*Poanes taxiles* TL Oak Creek Can., Wet Mts., Fremont Co. Colo.  
*Poanes hobomok wetona* TL Sand Gulch S Greenwood, Wet Mts., Custer Co. Colo.  
*Poanes hobomok hobomok* TL Mass.  
*Poanes hobomok monofacies* TL Chestnut Mtn., Macon Co., N.C.  
*Poanes aaroni aaroni* TL Cape May, N.J.; =*howardi* TL Georgiana, Indian River, Brevard Co. Fla.  
*Poanes aaroni minimus* TL Bull Swamp, Orangeburg Co. S.C.  
*Poanes aaroni bordeloni* TL Sabine Pass, Jefferson Co. Tex.  
*Poanes viator viator* TL Goose Lake Prairie, Grundy Co. Ill.  
*Poanes viator zizaniae* TL Tinicum Wildlife Preserve, Philadelphia, Penn.  
*Poanes yehl* TL Fla.  
*Poanes massasoit massasoit* TL Carver, Plymouth Co. Mass.; =*suffusa* TL around Philadelphia; =>*hughi* TL Beltsville Md. (intermediate toward *chermocki*)  
*Poanes massasoit chermocki* TL New Bridge, Dorchester Co. Md.  
*Poanes melane melane* TL San Francisco Bay area, Calif.  
*Poanes melane vitellina* TL?  
*Stinga morrisoni* TL Hardscrabble Can., Custer Co. Colo.

*Ochlodes agricola agricola* TL SSE Sausalito, Marin Co. Calif.; =*nemorum* TL near Belden, Plumas Co. Calif.  
*Ochlodes agricola verus* TL Havilah, Kern Co. Calif.  
*Ochlodes sylvanoides orecoasta* TL Cullaby Lake, Clatsop Co. Ore.  
*Ochlodes sylvanoides santacruz* TL Central Valley on Santa Cruz I., Calif.; =>*catalina* TL Toyon Bay on Santa Catalina Is., Calif. (intermediate to *sylvanoides*)  
*Ochlodes sylvanoides sylvanoides* TL near Belden, Plumas Co. Calif.; =*pratincola* TL Broderick, Yolo. Co. Calif.; =*omnigena* TL Kingston Can., Toiyabe Mts., Nev.; =*napa* TL Empire, Clear Creek Co. Colo.  
*Ochlodes sylvanoides bonnevilla* TL Thomas Can., Ruby Mts., Elko Co. Nev.  
*Ochlodes yuma lutea* TL Bowman Crk., Toiyabe Mts., Nev.  
*Ochlodes yuma yuma* TL Darwin Falls, Inyo Co. Calif.; =*sacramentorum* TL Sherman Is., Sacramento Co. Calif.; =*scudder* TL White River, Rio Blanco Co. Calif.  
*Ochlodes yuma anasazi* TL Rio Grande Gorge near Questa, Taos Co. New Mex.  
*Paratrytone snowi* TL Ute Pass, Teller Co. Colo.  
*Anatrytone logan logan* TL Kanawha R., Kanawha Co. W.Va.  
*Anatrytone logan lagus* TL S Colo.  
*Anatrytone mazai* TL Mexcala, Guerrero, Mex.  
*Quasimellana eulogius* TL Mex.  
*Euphyes pilatka pilatka* TL St. Augustine, St. Johns Co., Fla.  
*Euphyes pilatka klotsi* TL Sugarloaf Key, Monroe Co. Fla.  
*Euphyes conspicua conspicua* TL Dansville State Game Area, Ingham Co. Mich.; =*buchholzi* TL Valley, Douglas Co. Neb.  
>*Euphyes conspicua orono* TL Maine  
*Euphyes dion dion* TL Whiting, Lake Co., Ind.  
*Euphyes dion dion* dark form *alabamae* TL Mobile Co. Ala.; =*mcguirei* TL Benbrook Res., Tarrant Co. Tex.  
*Euphyes dion bayensis* TL Bay St. Louis, Hancock Co., Miss. (stigma varies toward *dion* at TL)  
*Euphyes berryi* TL Monticello, Jefferson Co. Fla.  
*Euphyes bimacula bimacula* TL Philadelphia  
*Euphyes bimacula arbogasti* TL near jct. I-26 X hwy. 17A, Berkeley Co. S.C.  
*Euphyes bimacula illinois* TL Denine Crossing, Grundy Co. Ill.  
*Euphyes arpa* TL Georgia  
*Euphyes vestris vestris* TL Meadow Valley, Plumas Co. Calif.; =*harbisoni* TL N slope Tecate Peak, San Diego Co. Calif.; =*californica* TL Calif.; =*kiowah* TL Colo.  
>*Euphyes vestris metacommet* TL Mass.  
*Euphyes dukesi dukesi* TL Mobile Co. Ala.  
*Euphyes dukesi calhouni* TL Cabbage Swamp, Pasco Co. Fla.  
*Asbolis capucinus* TL Cuba  
*Notamblyscirtes simius* TL Pueblo, Colo.  
*Notamblyscirtes simius* form *nigra*  
*Notamblyscirtes simius* form *rufa*  
*Atrytonopsis hianna hianna* TL Quincy & Dorchester, Mass.; =*turneri* TL Barber Co. Kans.  
*Atrytonopsis hianna loammi* TL Jacksonville, Duval Co. Fla.  
*Atrytonopsis hianna deva* TL vic. Tucson, Ariz. (like *hianna* exc. variable stigma)  
*Atrytonopsis vierecki* TL Dry Cañon, Otero Co. New Mex.  
*Atrytonopsis lunus* TL vic. Tucson, Ariz.  
*Atrytonopsis pittacus* TL Fort Grant, Pinaleño Mts., Graham Co. Ariz.  
*Atrytonopsis cestus* TL vic. Tucson, Ariz.  
*Atrytonopsis python* TL TL Fort Grant, Pinaleño Mts., Graham Co. Ariz.; =*margarita* TL Jemez Springs, Sandoval Co. New Mex.  
*Atrytonopsis (ovinia) edwardsi* TL Santa Catalina Mts. nr. Redington, Ariz.  
*Nyctelius nyctelius nyctelius* TL Brasil & Suriname  
*Thespieus macareus* TL?

#### Papilionoidea, Papilionidae, Parnassiinae, Parnassiini

*Parnassius evermanni thor* TL 800 mi. up. Yukon R., Alaska  
*Parnassius clodius strohbeeni* TL Santa Cruz Mts., Santa Cruz Co. Calif. (extinct)  
*Parnassius clodius clodius* TL Bear Valley, Marin Co., Calif.; =*claudianus* TL W Wash.; =*pseudogallatinus* TL BC; =*incredibilis* TL Mt. St. Elias, Alaska; =*sol* TL Baxters, Placer Co. Calif.; =*baldur* TL Tioga Pass, Mono-Tuolumne Co. Calif.; =*alturus* TL Alturus Lake, near Sawtooth Mtn., Idaho; =*gallatinus* TL Gallatin Co. Mont.; =*shepard* TL Wawawai, Whitman Co. Wash.; =*menetriesii* TL Mt. Nebo, Juab-Utah Cos. Utah.

*Parnassius phoebus apricatus* TL Kodiak I., Alaska; =*elias* Mt. St. Elias, Alaska; =*alaskensis* TL Denali Nat. Park, Alaska; =*golovinus* TL Golovin Bay, NW Alaska  
*Parnassius phoebus smintheus* TL vic. Rock Lake, 22.5 km NW Pocatonton, Alberta; =*yukonensis* TL 5 mi. SW Haines Jct., Yukon; =*magnus* TL Enderby, BC; =*olympianna* TL Hurricane Ridge, Olympic Mts., Wash.; =*xanthus* TL Moscow, Latah Co. Ida.; =*montanula* TL Turah, Missoula Co. Mont.; =*sayii* TL Running Crk. Field Stn., Elbert Co. Colo.; =*utahensis* TL Park City, Summit Co. Utah; =*hollandi* TL La Sal Mts., E Utah; =*dakotaensis* TL Mt. Roosevelt, Black Hills, S.D.; =*rubina* TL above Liberty Lake, Ruby Mts., Nev.  
*Parnassius phoebus maximus* TL Judith Mts., Fergus Co. Mont.  
*Parnassius phoebus hermodur* TL S. Colo. (alpine zone in Sangre de Cristo Mts. or Monarch Pass in Sawatch Range)  
*Parnassius phoebus pseudorotgeri* TL Elwood Pass, Rio Grande Co. Colo.  
*Parnassius phoebus sternitzkyi* TL Castle Lake, Siskiyou Co. Calif.  
*Parnassius phoebus behrii* TL Tioga Pass, Mono-Tuolumne Cos. Calif.

#### Papilionidae, Papilioninae, Leptocircini

*Eurytides (Neographium) marcellus* TL Virginia  
*Eurytides marcellus* summer form *lecontei*  
*Eurytides (Neographium) philolaus* TL Mex.

#### Papilionidae, Papilioninae, Troidini

*Parides eurimedes mylotes* TL Nicaragua  
*Parides alopis* TL Chihuahua/Durango, Mex.  
*Battus philenor philenor* TL?  
*Battus philenor hirsuta* TL Plumas Co. Calif.  
*Battus polydamas polydamas* TL Suriname  
*Battus polydamas lucayus* TL Nassau, Bahamas

#### Papilionidae, Papilioninae, Papilionini

*Papilio (Sinoprinceps) xuthus* TL Canton, China  
*Papilio (Papilio) stenochospecies machaon* (includes *machaon*, *oregonia*, *bairdii*, *joanae*, *brevicauda*, *zelicaon*, *polyxenes*)  
*Papilio machaon aliaska* TL Nulato & below Fort Yukon, Alaska  
*Papilio machaon hudsonianus* TL Kettle Rapids, Nelson R., Man.  
*Papilio machaon hudsonianus* less-yellow form *comstocki*  
*Papilio machaon pikei* TL Dunvegan, Peace River Valley, Alberta  
*Papilio machaon oregonia* TL Heppner, Morrow Co. Ore.  
*Papilio machaon brucei* TL Glenwood Springs, Garfield Co. Calif.; =*dodi* TL Dorothy, Alta.  
*Papilio machaon brucei* less-yellow form *comstocki*  
*Papilio machaon brucei* black form *bairdii*  
*Papilio machaon bairdii* (black form) TL vic. Fort Whipple, near Prescott, Ariz.  
*Papilio machaon bairdii* yellow form *brucei*  
*Papilio machaon bairdii* yellow-abdomen form *hollandii* TL Roaring Forks [Carbondale], Garfield Co. Colo.  
*Papilio machaon bairdii* very-black form *ampliata*  
*Papilio machaon joanae* TL Warsaw, Benton Co. Missouri (mtDNA & eyespot etc. traits of *bairdii*, crosses with *bairdii* in lab)  
*Papilio machaon brevicauda* TL St. John's, Nfld.  
*Papilio machaon gaspeensis* TL Mt. Lyall, Gaspé Co., Que.; =>*bretonensis* TL Baddeck, N.S. (intermediate to *brevicauda*)  
*Papilio zelicaon* (yellow form) TL San Francisco, Calif.; =*gothica* TL Gothic, Gunnison Co. Colo.  
*Papilio zelicaon* narrower-yellow form *comstocki*  
*Papilio zelicaon* black form *nitra* TL Judith Mts., Mont.  
*Papilio zelicaon* very black form *ampliatanitra*  
*Papilio polyxenes asterias* (black form) TL N.Y., Va., & Carolina  
*Papilio polyxenes asterias* very-black form *ampliata*  
*Papilio polyxenes asterias* narrower-banded form *curvifascia*  
*Papilio polyxenes asterias* yellow form *pseudoamericanus*  
>*Papilio polyxenes kahli* (black form) TL Riding Mts., Man. (introgressed toward *hudsonianus*)  
>*Papilio polyxenes kahli* less-yellow form *comstocki*

*Papilio polyxenes coloro* (yellow form) TL Whitewater Hill, Coachella Valley, Riverside Co. Calif.; =*rudkini* TL Ivanpah Mts., San Bern. Co. Calif.

*Papilio polyxenes coloro* less-yellow form *comstocki*

*Papilio polyxenes coloro* black form *clarki*

*Papilio (Papilio) indra indra* TL Mt. Zion, Jefferson Co. Colo.; =*shastensis* TL McCloud Bridge Cgd., Shasta L., Shasta Co. Calif.; =>*phyllisae* TL Butterbredt Peak, Kern Co. Calif. (intermediate toward *pergamus*); =>*nevadensis* TL Jett Can., Toiyabe Range, Nev. (intermediate toward *martini* etc., like *indra* but longer tails, sl. wider bands, & more hw blue)

*Papilio indra* ssp. W Utah (older larva solid black)

*Papilio indra pergamus* TL Devil Can., NNW San Bernardino, Calif.

*Papilio indra martini* TL Gilroy Can., Providence Mts., Calif.; =>*panamintensis* TL Thorndike Cgd., Wildhorse Can., Panamint Range, Calif. (intergrade *martini*X*fordi*); =>*calcicola* TL Muddy Mts., E of Buffington Pockets, Clark Co. Nev. (like *panamintensis*); =>*parvindra* TL Dead Mts. NNW Needles, San Bern. Co. Calif. (like *panamintensis*)

*Papilio indra fordi* TL Granite Mts., N & E Apple Valley, San Bern. Co. Calif.

*Papilio indra kaibabensis* TL Bright Angel Point, S Rim Grand Can., Ariz.

*Papilio indra minori* TL Black Ridge, Mesa Co. Colo.

*Papilio (Heraclides) thoas autocles* TL Guerrero, Mex.

*Papilio (H.) crespontes crespontes* TL?

*Papilio (H.) aristodemus ponceanus* TL Miami, Fla.

*Papilio (H.) andraemon bonhotei* TL Nassau, Bahamas

*Papilio (H.) ornythion* TL Yucatan, Mex.

*Papilio (H.) astyalus pallas* TL Oaxaca, Mex.

*Papilio astyalus bajaensis* TL San Antonio microwave tower, Baja Calif. Sur, Mex.

*Papilio (H.) androgeus epidauros* TL Mex. to Panama

*Papilio (H.) anchisiades idaeus* TL?

*Papilio (H.) rogeri pharnaces* TL Oaxaca, Mex.

*Papilio (H.) stenchospecies glaucus* (includes *alexiares*, *glaucus*, *appalachiensis*, *canadensis*, *rutulus*)

*Papilio (Pterourus) glaucus garcia* TL Monterrey, Mex. (a ssp. of *alexiares*, which is a ssp. of *glaucus*)

*Papilio glaucus glaucus* TL Sandbridge, Virginia Beach, Virginia; =*maynardi* TL Fla.

*Papilio glaucus appalachiensis* TL Buck Creek Serpentine Barrens, Clay Co. N.C.

*Papilio glaucus canadensis* TL St. John's, Nfld.

*Papilio glaucus arcticus* TL Eagle, Alaska

*Papilio glaucus rutulus* TL near Belden, Plumas Co. Calif.; =*arizonensis* TL vic. Fort Grant, Pinaleño Mts., Graham Co. Ariz.

*Papilio (Pt.) eurymedon* TL near Belden, Plumas Co. Calif.; =*albanus* TL near Belden, Plumas Co. Calif.

*Papilio (Pt.) multicaudata multicaudata* TL Mex.; =*pusillus* TL N end Independence Mts., Elko Co. Nev.

*Papilio (Pt.) garamas abderus* TL Mex.

*Papilio (Pt.) menatius victorinus* TL?

*Papilio (Pt.) pilumnus* TL Mex.

*Papilio (Pt.) troilus troilus* TL Middleton Place Plantation, Charleston Co. S.C.; =*ilioneus* TL River Road, Burke Co. Ga.

*Papilio troilus fakahatcheensis* TL vic. Copeland, Collier Co. Fla.

*Papilio (Pt.) palamedes palamedes* TL Carolina.

*Papilio palamedes leontis* TL Monterrey, Mex.

#### Pieridae, Dismorphiinae

*Enantia (melite) albania albania* TL Motagua Valley, Guatemala

#### Pieridae, Coliadinae

*Kricogonia lyside* TL Haiti

*Kricogonia lyside* black bar form *terissa*

*Kricogonia lyside* female upf basal patch missing form *anorbis*

*Kricogonia lyside* female yellow form *unicolor*

*Kricogonia lyside* female black-upf-tip form *fantasia*

*Nathalis iole* TL Mex.

*Nathalis iole* female orange-uph form *felicia*

*Nathalis iole* green-unh winter form *viridis*

*Nathalis iole* white form *pallida*

*Eurema* species reddish-unh winter form *rosa*  
*Eurema दौरa palmira* TL Cuba  
*Eurema दौरa दौरa* TL Virginia; =*eugenia* TL Isla San Jose, Archipelago de las Perlas, Panama; =*sidonia* TL Campeche, Mexico  
*Eurema दौरa* ssp. female white form *alba*  
*Eurema mexicana mexicana* TL Mex.  
*Eurema arbela boisduvaliana* TL Mex.  
*Eurema salome jamapa* TL near Vera Cruz, Veracruz, Mex.  
*Eurema albula celata* TL Potrero, Veracruz, Mex.  
*Eurema (Pyrisitia) proterpia* TL Jamaica  
*Eurema proterpia* tailed winter form *longicauda*  
*Eurema proterpia* white female form *alba*  
*Eurema (Pyrisitia) messalina* TL Cuba  
*Eurema (Pyrisitia) lisa* TL U.S.  
*Eurema (Pyrisitia) nise nise* TL near Millbank, Portland Parish, Jamaica  
*Eurema nise nelphe* TL Potrero, Veracruz, Mex.  
*Eurema (Pyrisitia) dina helios* TL Nassau, Bahamas  
*Eurema dina westwoodii* TL Mex.  
*Eurema (Abaeis) nicippe* TL Virginia  
*Colias* female white form *alba* (occurs in all species, but rare in some, weak in *C. nastes* & *C. behrii*)  
*Colias nastes streckeri* TL vic. Lake Louise, Alta.; =*dioni* TL Plateau Mtn., Alta.  
*Colias nastes nastes* TL Labrador; =*gueneei* TL Southampton Island, Nunavut; =*ferrisi* TL Glacier Creek, Dempster Hwy., Richardson Mts., Yukon; =*aliaska* TL Rampart, Alaska; =*subarctica* TL Bernard Harbour, Nunavut; =*dezhnevi* TL Chaplinske klyuchi, gornaya tundra, Magadan Oblast, Russia  
*Colias nastes moina* TL vic. Eskimo Point, W coast Hudson Bay, Nunavut  
*Colias tyche boothii* TL vic. isthmus of Boothia Pen., Nunavut, Canada; =*chione* TL isthmus of Boothia Pen., Nunavut; =*rossii* TL isthmus of Boothia Pen., Nunavut  
*Colias tyche thula* TL near Meade River, S of Point Barrow, Alaska  
*Colias tyche kolosovae* TL (Siberia, add) (in Alaska?); =*olga* TL 20 km E Ioni Lake, East Chukotka, Russia  
*Colias (tyche?) canadensis* TL mile 209, Alaska hwy., BC  
*Colias hecla aquilonaris* TL Fluss Olenek, Russia; (occurs in Alaska?, valid ssp.?)  
*Colias hecla hecla* TL Greenland; =*glacialis* TL Lady Franklin Bay, Nunavut; =*chrysothemoides* TL vic. Coppermine, Northwest Territories  
*Colias hecla hela* TL vic. Eskimo Point, W coast Hudson Bay, Nunavut  
*Colias meadii johanseni* TL Bernard Harbour, Nunavut, Canada (larva & stigma identical to *meadii*)  
*Colias meadii elis* TL Kicking Horse Pass, Banff NP, Alta.  
*Colias meadii lemhiensis* TL near Meadow Creek Lake, Lemhi Range, Lemhi Co. Ida. (almost intermediate)  
*Colias meadii meadii* TL Mosquito Pass, Park-Lake Cos. Colo.  
*Colias occidentalis kluanensis* TL Haines Jct., Yukon  
*Colias occidentalis krauthii* TL 12 mi. W Custer, Black Hills, S.D.  
*Colias occidentalis christina* TL near Slave River between Fort Smith NWT & Fitzgerald, Alta.  
*Colias occidentalis sacajawea* TL Elkhorn Crk., Lewis & Clark Co. Mont.  
*Colias occidentalis wasatchia* TL W of Strawberry Res., 1.9 mi. S East Portal, Wasatch Co. Utah; =*pseudochristina* TL N fork Provo R., Summit Co. Utah  
*Colias occidentalis sullivanii* TL Alvord Desert Rd., N end Steens Mtn., Harney Co. Ore.  
*Colias occidentalis occidentalis* TL near Port Townsend, Gulf of Georgia, Wash.  
*Colias occidentalis chrysothemas* TL Napa Co. Calif.  
*Colias stenchospecies alexandra* (includes *columbiensis*, *pseudocolumbiensis*, *edwardsii*, *alexandra*, needs work)  
*Colias columbiensis columbiensis* TL Anderson Lake, D'Arcy, BC  
*Colias columbiensis pseudocolumbiensis* TL Hall Creek at hwy. 33, BC  
*Colias edwardsii astraea* TL near Yellowstone Lake, Yellowstone Nat. Park, Wyo.  
*Colias edwardsii edwardsii* TL near Virginia City, Storey Co. Nev.; =*emilia* TL Crump Lake, Lake Co. Ore.  
*Colias edwardsii altiplano* TL Piney Creek, Arapahoe Co. Colo.  
*Colias alexandra alexandra* TL foothills W of Denver, Colo.; =*apache* TL 13 mi. E McCrary, White Mts., Ariz.  
*Colias alexandra altamont* TL Arrow Creek breaks, 19 mi. N Stanford, Fergus Co. Mont.  
*Colias harfordii* TL Contra Costa Co. or Havilah in Kern Co., Calif.  
*Colias eurytheme* TL Sacramento, Calif.  
*Colias eurytheme* spring form *vernalis*=*ariadne*  
*Colias philodice philodice* TL Virginia; =>*hagenii* TL NE corner South Park, Park Co. Colo.

*Colias philodice philodice* spring form *vernalis*  
*Colias philodice eriphyle* TL Lac la Hache, BC (S BC only, often orangish-tinted)  
*Colias philodice vitabunda* TL Denali Nat. Park, Alaska  
*Colias interior* TL mouth Saskatchewan R., vic. Grand Rapids, Man.; =*laurentina* TL Baddeck, Cape Breton I., Nova Scotia  
*Colias palaeno baffinensis* TL Frobisher Bay, Baffin I., Nunavut  
*Colias palaeno chippewa* TL W end Great Slave Lake, NWT  
*Colias pelidne* TL NE coast Labrador  
*Colias (pelidne) minisni* TL Lake Louise, Alta.; =*skinneri* TL Yellowstone NP, Wyo.  
*Colias scudderii inupiat* TL Dalton hwy. mile 323, N slope Brooks Range, Alaska  
*Colias scudderii gigantea* TL W coast Hudson Bay above York Factory, Manitoba  
*Colias scudderii mayi* TL Riding Mts., Man.  
*Colias scudderii harroweri* TL Clear Creek E Green R. Lake, Wind River Mts., Sublette Co. Wyo.  
*Colias scudderii scudderii* TL Hoop Creek, S of Berthoud Pass, Clear Creek Co. Colo.; =*ruckesi* TL Winsor Creek Can., San Miguel Co. New Mex.  
*Colias behrii* TL vic. Tioga Pass, Mono-Tuolumne Cos. Calif.  
*Zerene cesonia cesonia* TL Georgia  
*Zerene cesonia cesonia* red-unh winter form *rosa*  
*Zerene cesonia cesonia* female form *immaculsecunda* (lacks black dogface marks)  
*Zerene eurydice* TL vic. Alpine Dam, Marin Co. Calif.  
*Zerene eurydice* white female form *alba* (rare)  
*Anteos clorinde* TL Brasil  
*Anteos maerula* TL Jamaica  
*Phoebis* species white female form *alba*  
*Phoebis (Aphrissa) statira statira* TL Suriname  
*Phoebis statira floridensis* TL Upper Indian River, Brevard Co. Fla.  
*Phoebis statira* orangish female form *naranja*  
*Phoebis (Aphrissa) orbis orbis* TL Cuba  
*Phoebis sennae sennae* TL possibly Jamaica  
*Phoebis sennae marcellina* TL Suriname  
*Phoebis sennae* reddish-unh winter form *rosa*  
*Phoebis agarithe agarithe* TL Mex.; =*fisheri* TL La Paz, Baja Calif. Sur, Mex.; =>*maxima* TL Upper Indian River, Brevard Co. Fla.  
*Phoebis argante argante* TL Rio de Janeiro  
*Phoebis philea philea* TL Suriname  
*Phoebis philea* male-like female form *alamacho*  
*Phoebis philea* cream female form *crema*  
*Phoebis neocypris virgo* TL Mex., mts. of Oaxaca....; =*intermedia* TL Cartago, Costa Rica

#### Pieridae, Pierinae, Anchocharini

*Anthocharis stenchospecies sara* (includes *browningi*, *julia*, *stella*, *flora*, *sara*, *inghami*, *thoosa* etc.)  
*Anthocharis julia browningi* TL Brighton & City Creek Can., Salt Lake Co. Utah  
*Anthocharis julia julia* TL Beaver Creek near Fairplay, Park Co. Colo.  
*Anthocharis julia columbia* TL Brilliant, near Castlegar, Columbia R., BC; =*nomen nudum sulfuris*  
*Anthocharis julia stella* TL Marlette Peak, Carson Range, Washoe Co. Nev.  
*Anthocharis julia flora* TL Tenino, Thurston Co. Wash.  
 >*Anthocharis julia alaskensis* TL Skagway, Alaska  
*Anthocharis julia sempervirens* TL Bald Hills Rd. 16.3 rd. mi. SE hwy. 101, just W Schoolhouse Peak, Redwood NP, Humboldt Co. Calif.  
*Anthocharis sara sara* TL near Belden, Plumas Co. Calif.  
*Anthocharis sara sara* spring form *reakirtii*  
 >*Anthocharis sara pseudothoosa* TL Jackass Crk., Sweetwater Mts., Douglas Co. Nev.  
*Anthocharis sara inghami* TL Tucson, Ariz.  
*Anthocharis sara coriande* TL 1 mi. SE Glorieta, Santa Fe Co. New Mex.  
*Anthocharis sara colorado* TL McElmo Creek, Montezuma Co. Colo.  
*Anthocharis sara thoosa* TL Mokiah Pass, Mohave Co. Ariz.; =*gunderi* TL Middle Ranch, Santa Catalina I., Calif.  
*Anthocharis cethura pima* TL between Pontano & Tucson, Ariz.; =*mojavensis* TL mouth Bonanza King Mine Can., Providence Mts., Calif.  
*Anthocharis cethura cethura* TL vic. Los Angeles, Calif.; =*catalina* TL head Pebbly Beach Can., Santa Catalina I. Calif.



*Anthocharis cethura cethura* yellow form *caliente*  
*Anthocharis cethura cethura* orangeless form *deserti*  
*Anthocharis cethura morrisoni* TL Kern R., Kern Co. Calif.  
*Anthocharis cethura hadromarmorata* TL S end Swingle Bench, Churchill Co. Nev.  
*Anthocharis (Paramidea) midea midea* TL Wilmington I., near Savannah, Georgia  
*Anthocharis midea annickae* TL West Rock, New Haven, Conn.; =*texana* TL 6 mi. W Buffalo, Freestone Co. Tex.  
*Anthocharis (Paramidea) lanceolata lanceolata* TL hwy 70 at Soda Creek, Plumas Co. Calif.  
*Anthocharis lanceolata australis* TL Arroyo Seco & Millard Cans., San Gabriel Mts., L.A. Co. Calif.; =>*desertolimbus*  
 TL 1 mi. W Scissors Crossing, San Diego Co. Calif. (intermediate to *lanceolata*)  
*Euchloe (hyantis) guaymasensis* TL microwave relay 40 km N Guaymas, Sonora, Mex.  
*Euchloe hyantis lotta* TL Colo., Ariz., Utah, S Cal. (supposedly intergrades with *hyantis* on Kern Plateau)  
*Euchloe hyantis hyantis* TL vic. Ukiah, Mendocino Co. Calif.  
*Euchloe (hyantis) andrewsi* TL Crestline hwy., near Lake Arrowhead, San Bernardino Mts., Calif. (wing pattern similar to *ausonides*)  
*Euchloe ausonides ausonides* TL San Francisco, Calif.  
*Euchloe ausonides* yellowish female form *flavidalis*  
 >*Euchloe ausonides coloradensis* TL Turkey Creek Jct., Jefferson Co. Colo.; =*transmontana* TL Kingston Can., Toiyabe Mts., Nev.; =*palaeoreios* TL Spearfish Can., Black Hills, Lawrence Co. S.D.; =*mayi* TL Riding Mts., Man.  
 >*Euchloe ausonides insulanus* TL Wellington, Vancouver I., BC  
*Euchloe ausonides ogilvia* TL Dempster hwy. mi. 45, Ogilvie Mts., Yukon  
*Euchloe naina jakutia* TL Suntar Mts., Yakutia, Russia  
*Euchloe creusa* TL Rock Lake, 22.5 km NW Pochahontas, Alta.  
*Euchloe olympia* TL Coalburgh, Kanawha Co. W.Va.; =*rosa* TL Wichita Co. Texas

#### Pieridae, Pierinae, Pierini

*Appias (Glutophrissa) drusilla tenuis* TL Tumbes, Peru  
*Appias (Glutophrissa) drusilla neumogenii* TL Indian River, Brevard Co. Fla.  
*Appias drusilla* yellow-uph female form *amarilla*  
*Melete lycimnia isandra* TL Mex.  
*Neophasia menapia menapia* TL vic. Davis Creek Park, Washoe Co. Nev.; =*tehachapina* TL N Slope Double Mtn., Tehachapi Mts. Calif.; =>*magnamenapia* TL Wilson Peak Road, Lincoln Co. Nev. (slightly bigger)  
*Neophasia menapia tau* TL near Port Townsend, Jefferson Co. Wash.  
*Neophasia menapia melanica* TL 6 mi. W Willits, Mendocino Co. Calif.  
*Neophasia terlooti* TL Sierra Madre E Mazatlan, Sinaloa, Mex.  
*Catasticta nimbice nimbice* TL prob. vic. Orizaba, Veracruz, Mex.  
*Pieriballia viardi viardi* TL Mex.  
*Itaballia demophile centralis* TL Quiriqva, Guatemala  
*Leptophobia aripa elodia* TL Mex.?  
*Pieris rapae rapae* TL Sweden  
*Pieris rapae* spring form *metra*  
*Pieris virginianensis* TL Coalburgh, Kanawha R. valley, Kanawha Co. W.Va.; =*hyatti* TL Campbellville, Ont.  
*Pieris stenochospecies napi* (includes *hulda*, *pseudobryoniae*, *angelika*, *marginalis*, *venosa*, *pseudonapi*, *oleracea*).  
 Forms: paler 2<sup>nd</sup>-generation form *napaeae*, brownish ups veins female form *bryoniae*, brownish-yellow ups female form *flava*, greenish-yellow unh form *subflava*, whiter-unh form *subtalba*, pale-yellow ups form *sulphurea*, sharp unh vein border form *acuta* (broader veins form *diffusa*), upf median spotless form *restricta*.  
*Pieris marginalis marginalis* TL near Port Townsend, Jefferson Co. Wash.  
 >*Pieris marginalis reicheli* TL Revelstoke, BC  
*Pieris marginalis pseudonapi* TL Silverton, San Juan Co. Colo.; =*mcdunnoughi* TL Silverton, Colo.; =*ziegleri* TL between West Yellowstone & Big Sky, Gallatin Co. Mont.  
*Pieris marginalis mogollon* TL Mogollon Range, Catron Co. New Mex.  
*Pieris marginalis pallidissima* TL Provo, Utah Co. Utah  
*Pieris marginalis venosa* TL San Mateo, San Mateo Co. Calif.; =*sequoia* TL Prairie Creek Redwood SP, Humboldt Co. Calif.; =*castoria* TL French Camp, San Joaquin Co. Calif.; =*microstriata* TL Eldredge, Sonoma Co. Calif.  
*Pieris hulda hulda* TL Kodiak I., Alaska (also found on Pribilof Islands)  
*Pieris hulda pseudobryoniae* TL Nulato, Alaska; =*shapiro* TL Kikuktok Mtn., Yukon Delta Hooper Bay, Alaska; =*browni* TL Big Creek, Seward Pen., Alaska; =*meckya* TL 8 mi. NE Palmer, Talkeetna Mts., Alaska; =*guppyi* TL Skagway, Alaska (much more work needed on these)  
*Pieris hulda tremblayi* TL Pink Mtn., BC (much more work needed)  
*Pieris hulda angelika* TL Keno, Yukon (much more work needed on relationship)

*Pieris oleracea passosi* TL Palmer, Alaska (syntypes are mixture of *oleracea* & *shapiro* specimens; C. Guppy will fix)  
*Pieris oleracea oleracea* TL N.Y. & Mass.; =? *casta* (species uncertain) TL Great Bear Lake, NWT  
 >*Pieris oleracea frigida* TL Caribou I., Straits of Belle Isle, Labrador  
*Pontia protodice* TL New York City, New York  
*Pontia protodice* spring form *vernalis*  
*Pontia callidice occidentalis* TL vic. Empire, Clear Creek Co. Colo.  
*Pontia callidice occidentalis* spring form *vernalis*=*calyce*  
*Pontia callidice nelsoni* TL St. Michael's, Alaska  
*Pontia sisymbrii* ssp. yellow female ups form *flava*  
*Pontia sisymbrii beringiensis* TL 9 mi. N Atlin, BC  
*Pontia sisymbrii flavitincta* TL Cranbrook, BC  
*Pontia sisymbrii sisymbrii* TL 1 mi. NE Storrie, Plumas Co. Calif.; =*elivata* TL Glenwood Springs, Garfield Co. Colo.;  
 =*nordini* TL Monroe Can., Sioux Co. Nev.; =*transversa* TL Paradise, Chiricahua Mts., Ariz.  
*Pontia sisymbrii nigravenosa* TL 2 mi. N Red Cloud Mine, Spring Mts., Nev.  
*Pontia beckerii* TL Virginia City, Storey Co. Nev.  
*Pontia beckerii* darker-unh spring form *vernalis*  
*Ascia monuste* blackish female form *nigra*  
*Ascia monuste monuste* TL Suriname  
*Ascia monuste phileta* TL Fla.  
*Ascia monuste eubotea* TL Antilles (stray to Fla.)  
*Ascia (Ganyra) josephina josepha* TL Polochic, Guatemala  
*Ascia josephina howarthi* TL Tembabichi Bay, Baja Calif. Sur, Mex.; =*kuschei* TL San Miguel, nr. Los Mochis,  
 Sinaloa, Mex.

#### Nymphalidae, Libytheinae

*Libythea (Libytheana) carinenta* ssp. wet-weather violet-gray-unh form *kirtlandi*  
*Libythea carinenta mexicana* TL Jalapa, Veracruz, Mex. (stray to Tex.)  
*Libythea carinenta larvata* TL vic. New Braunfels & San Antonio, Tex.; =*streckeri* TL Donna, Hidalgo Co. Tex.  
*Libythea carinenta bachmanii* TL Mahoning Co., Ohio  
*Libythea carinenta motya* TL Cuba (stray to Tex.)

#### Nymphalidae, Danainae, Danaini, Danaina

*Danaus (Danaus) plexippus plexippus* TL Kendall, Orleans Co., N.Y.  
*Danaus (Anosia) gilippus berenice* TL Jamaica  
*Danaus gilippus thersippus* TL Lion Hill, Panama; =*strigosus* TL Guatemala  
*Danaus (Anosia) eresimus montezuma* TL Misantla, Veragua, Veracruz, Mex.  
*Danaus eresimus tethys* TL Fond Parisien, Haiti

#### Nymphalidae, Danainae, Danaini, Itunina

*Lycorea halia* (=“*ceres*”) *demeter* TL Cuba  
*Lycorea halia atergatis* TL Venezuela

#### Nymphalidae, Danainae, Ithomiini

*Dircenna klugii* TL Mex.  
*Pteronymia cotytto* TL Mex. (add)

#### Nymphalidae, Satyrinae, Elymniini

*Lethe (Enodia) portlandia floralae* TL Rock Springs, Orange Co., Fla.  
*Lethe portlandia portlandia* TL Georgia  
*Lethe portlandia missarkae* TL 5 mi. S Fayetteville, Washington Co. Ark.  
*Lethe (Enodia) anthedon* TL Lava, Sullivan Co. N.Y.; =*borealis* TL Hymers, Ont.  
*Lethe (Enodia) creola* TL Opelousas, Evangeline Parish, La.  
*Lethe (Satyrodes) eurydice eurydice* TL Morris Arboretum, Philadelphia Co., Penn.; =*transmontana* TL near Compton,  
 Compton Co. Que.; =*boisduvallii* TL NW part of Mass.  
*Lethe eurydice fumosus* TL a few mi. S Omaha, Sarpy Co., Neb.  
*Lethe (Satyrodes) appalachia appalachia* TL Conestee Falls, near Brevard, Transylvania Co. N.C.  
*Lethe appalachia leeuwi* TL Wakelee, Cass Co. Mich.

## Nymphalidae, Satyrinae, Satyrini

- Coenonympha haydenii* TL Yellowstone Lake, Park Co. Wyo.
- Coenonympha stenchospecies tullia* (includes *tullia*, *kodiak*, *nipisiquit*, *inornata*, *ampelos*, *ochracea*, *california*)
- Coenonympha tullia mcisaaci* TL Doyles Station, Nfld.
- Coenonympha tullia nipisiquit* TL Bathurst, N.B. (nearly identical to *inornata* in wing pattern, despite distinctive relict mtDNA; allochronic to *inornata*)
- Coenonympha tullia inornata* TL lower Saskatchewan River near Lake Winnipeg, Man.; =*quebecensis* TL Chelsea, Ottawa Co. Que.; =*heinemani* Grindstone I., Clayton, Jefferson Co. N.Y.
- >*Coenonympha tullia benjamini* TL Waterton Lakes, Alta.; =*bottineauensis* TL just E of Bottineau, N.D.
- Coenonympha tullia mackenziei* TL Nyarling River, 0.8 mi. from its confluence with Little Buffalo R., NWT
- Coenonympha tullia ochracea* TL Turkey Creek, Jefferson Co. Colo.; =*phantasma* TL Eldora, Boulder Co. Colo.
- Coenonympha tullia pseudobrenda* TL road toward Wilson Peak from Atlanta Road, Wilson Creek Range, Lincoln Co. Nev.
- Coenonympha tullia furcae* TL S Rim Grand Can., Coconino Co. Ariz.
- Coenonympha tullia subfusca* TL White Mts., Ariz.
- Coenonympha tullia mono* TL TL Bridgeport, Mono Co. Calif.
- Coenonympha tullia sweadneri* TL Pine Creek, Shoshone Co. Ida.
- Coenonympha tullia ampelos* TL probably near Goose Lake, Lake Co., Ore.; =*columbiana* TL Aspen Grove, BC; =>*elko* TL Elko, Elko Co. Nev. (intermediate *ampelos*X*sweadneri*)
- >*Coenonympha tullia insulanus* TL Victoria, Vancouver I., BC
- Coenonympha tullia eunomia* TL Wilhoit, Clackamas Co. Ore.
- Coenonympha tullia yontocket* TL 4 km W Fort Dick, Del Norte Co. Calif.
- Coenonympha tullia californica* TL vic. San Francisco, Calif.; =*brenda* TL Los Angeles, Calif.; =>*eryngii* TL Mt. Shasta, Siskiyou Co. Calif. (intermediate toward *ampelos* but very similar to *californica*)
- Coenonympha tullia californica* gray-unh spring form *siskiyouensis*
- Coenonympha tullia kodiak* TL Kodiak I., Alaska; =*yukonensis* TL Dawson, Yukon...Eagle City, Alaska...American Creek; =*mixturata* TL Kamchatka Oblast, Koryakia Autonomous Okrug, Russia
- Cyllopsis pyracmon henschawi* TL vic. Camp Lowell, Pima Co. Ariz.; =*nabokovi* TL Ramsey Can., Huachuca Mts. Cochise Co. Ariz.
- Cyllopsis pyracmon* form *nabokovi* (Aug.-Sept. gen. with ray along M<sub>1</sub>, unh bands farther apart, unh lighter)
- Cyllopsis pertepida dorothea* TL S Rim Grand Can., Ariz.; =*maniola* TL Cochise Co. Ariz.; =*avicula* TL Fort Davis, Davis Mts., Tex.
- Cyllopsis gemma gemma* TL Georgia
- >*Cyllopsis gemma freemani* TL Pharr, Hidalgo Co. Tex.
- Cyllopsis gemma* ssp. dark-uns spring form *inductura*
- Paramacera xicaque allyni* TL Barfoot Park, Chiricahua Mts., Ariz.
- Hermeuptychia hermes hermes* TL Rio de Janeiro, Brasil
- >*Hermeuptychia hermes sosybius* TL?; =*kappeli* TL Lake Okeechobee, S Fla.
- Neonympha stenchospecies areolatus* (includes *areolatus*, *helicta*, *mitchellii*)
- Neonympha areolatus* TL Pine Barrens Road, Chatham Co. Ga.
- Neonympha helicta dadeensis* TL Carde Sound Road, Miami-Dade Co. Fla.
- Neonympha helicta helicta* TL vic. Aiken State Park, Aiken Co. S.C.
- Neonympha helicta septentrionalis* TL Lakehurst, Ocean Co. N.J.
- Neonympha mitchellii* TL 10 mi. from Indiana line, Cass Co. Mich.; =>*francisci* TL Fort Bragg, Cumberland Co. S.C. (ocelli often a bit elongate perhaps due to introgression from *areolatus*)
- Megisto cymela cymela* TL Jacksonboro, Colleton Co., S.C. (work needed on two cohorts ~1 month apart); =*eurysis* TL Goose Creek, Berkeley Co. S.C. (more work needed to prove this is a species)
- Megisto cymela viola* TL Enterprise, Volusia Co. Fla.
- Megisto rubricata rubricata* TL Waco, McLennan Co. Tex.
- Megisto rubricata smithorum* TL Marfa-Alpine, west Tex.
- Megisto rubricata cheneyorum* TL Madera Can., Santa Rita Mts., Pima Co. Ariz.
- Cercyonis pegala pegala* TL vic. Charleston, S.C.; =*abbotti* TL Chipley, Washington Co. Fla.; =*alope* TL Burke-Screven-Bulloch Cos. Region of Georgia (a form in blend zone of *pegala-carolina*, according to Ronald Gatrell)
- Cercyonis pegala carolina* TL Conestee Falls, Transylvania Co. N.C. (pale-yellow patch, W.Va.-Carolina mts.)(may include Salem Uplift bug in Missouri?)
- Cercyonis pegala maritima* TL Oak Bluffs, Dukes Co., Mass., (most of E U.S.; misnamed “*alope*” in numerous works); =>*texana* TL Bastrop, Bastrop Co. Tex.
- Cercyonis pegala nephele* TL W end of North Channel of Lake Huron, Ont.; =*olympus* TL Chicago, Cook Co. Ill.; =*borealis* TL Trumbull Co. Ohio; =*ino* TL Calgary, Alta.; =*incana* TL Olympia, Thurston Co. Wash.; =*paludum*

TL3.7-4.0 mi. W Lamoille Can. Rd., Nevada state hwy. 227, Pleasant Valley, Elko Co. Nev.; =*baronii* TL Mendocino Co. Calif. (lectotype has some unh ocelli); =>*ariane* TL Meadow Valley Rd., 2 mi. S Spanish Ranch, Plumas Co. Calif. (has a little *gabbii* influence); =>*walkerensis* TL 5.4 mi. NW Bridgeport, Huntoon Camp, U.S. hwy. 395, Swanger Creek, Mono Co. Calif. (slightly intergraded to *gabbii*)

*Cercyonis pegala boopis* TL Point Richmond, Contra Costa Co. Calif. (no unh ocelli)

*Cercyonis pegala australosierra* TL N end Linns Valley, WSW Posey, Tulare Co. Calif.

*Cercyonis pegala gabbii* TL Goose Lake, Lake Co., Ore.; =*paucilineatus* TL 3.8 mi. S Orovada, US hwy. 95, Quinn River Valley, Humboldt Co. Nev.=*carsonensis* TL 3.6 mi. S Nevada rd. 207, Scossa Ranch, Carson River Valley, Douglas Co. Nev.; =*pluvialis* TL 1 mi. N Nye Co. line, White River Valley, White Pine Co. Nev.; =*utahensis* TL Benjamin, ~7300S X 2610W, Utah Co. Utah

*Cercyonis pegala stephensi* TL between Lake City & Cedarville, Surprise Valley, Modoc Co. Calif.; =*blanca* TL hwy. 140 at Dufurrena Ranch, Charles Sheldon Antelope Range, Humboldt Co. Nev.

*Cercyonis pegala wheeleri* TL evidently near Owens Lake, Inyo Co. Calif. (extinct)

*Cercyonis stenospecies sthenele* (includes *sthenele*, *meadii*)

*Cercyonis sthenele sthenele* TL San Francisco, Calif. (extinct there); =>*hypoleuca* TL Canada Sauces Oeste, Santa Cruz I., Calif. (intergrade toward *behrii* but nearest *sthenele*)

*Cercyonis sthenele behrii* TL Pan Toll Camp, Mt. Tamalpais, Marin Co. Calif.

*Cercyonis sthenele silvestris* TL 2 air mi. SW Pulga, N fork Feather R. Can., Butte Co. Calif.

*Cercyonis sthenele sineocellata* TL 8.2 mi. N Adel, W side Crump Lake, Lake Co. Ore.

*Cercyonis sthenele paulus* TL vic. Virginia City, Storey Co. Nev.

*Cercyonis sthenele paulus* orangish-fw form *damei* TL Cape Royal, N Rim of Grand Can., Ariz.

>*Cercyonis sthenele masoni* TL Black Ridge breaks, Mesa Co. Colo.

>*Cercyonis sthenele masoni* rare orangish-unf form *damei*

*Cercyonis meadii melania* TL Marfa-Alpine, west Texas; =*mexicana* TL head of Rio Piedras Verdes, Chihuahua, Mex.

*Cercyonis meadii meadii* TL Bailey, South Platte River, Park Co. Colo. (fewer unh ocelli than *melania*)

*Cercyonis meadii alamosa* TL 7.0 mi. N jct. hways. 17 & 112, on hwy. 17, San Luis Valley, Saguache Co. Colo.

*Cercyonis oetus pallescens* TL 4 rd. mi NE Reese R. crossing on Nev. road 722, Reese River Valley, Lander Co. Nev.; =>*alkalorum* TL 1.5-1.7 rd. mi. E Nev. road 376, Northumberland Mine Road, N end Alkali Flat, Big Smoky Valley, Nye Co. Nev. (an extreme of *pallescens*)

*Cercyonis oetus oetus* TL W slope Mt. Judah, SSE Donner Pass, Placer Co. Calif.; =*phocus* TL Lac la Hache, BC

*Cercyonis oetus charon* TL Twin Lakes in Lake Co., to Park Co. Colo.

*Gyrocheilus patrobas tritonia* TL White Mts., Ariz.

*Erebia vidleri* TL mts. above Seton Lake, near Lillooet, near Fraser River, BC

*Erebia rossii ornata* TL Churchill, Manitoba

*Erebia rossii rossii* TL vic. isthmus of Boothia Pen., Nunavut

>*Erebia rossii gabrieli* TL Mt. McKinley Park=Denali NP, Alaska

>*Erebia rossii kuskoquima* TL Bethel, ~20 mi. up Kuskoquim R. at inland edge of coastal tundra, Alaska

*Erebia rossii* ssp. ocelli-less form *brucei*

*Erebia disa steckeri* TL Bethel, ~20 mi. up Kuskoquim R. at inland edge of coastal tundra, Alaska

*Erebia disa subarctica* TL Mackenzie Delta, NWT

*Erebia mancinus* TL Rock Lake, 22.5 km NW Pochontas, Alta.

*Erebia magdalena magdalena* TL alpine zone near Georgetown, Clear Creek Co. Colo.; =*saxicola* TL Adams Lookout, Wilmore Wilderness, 43 km SE Grande Cache, Alta.

*Erebia magdalena mckinleyensis* TL Sable Pass, Denali NP, Alaska

*Erebia fasciata fasciata* TL Winter Cove, Cambridge Bay, NWT

*Erebia fasciata avinoffi* TL Kotzebue Sound, Alaska

*Erebia epipsodea* ocelli-less form *brucei* TL Cashier Valley, Hall Valley, Park Co. Colo.

*Erebia epipsodea* TL Rock Lake, 22.5 km NW Pochontas, Alta.; (=homonym *rhodia*); =*sineocellata* TL Fort Qu' Appelle, Sask.; =*freemani* TL vic. Rivercourse, Alta.; =*remingtoni* TL Dawson, Yukon; =*hopfingeri* TL Black Can. S of Methow, Okanogan Co. Wash.)

*Erebia discoidalis* TL Cumberland House, 54°N, Sask.; =*mcdunnoughi* TL Whitehorse, Yukon

*Erebia stubbendorffii alaskensis* TL American Creek, Eagle City, Alaska (*stubbendorffii* is evidently same sp. as *pawloskii*, see Gorbunov book)

*Erebia stubbendorffii canadensis* TL above Churchill, Man.

*Erebia stubbendorffii ethela* TL Trout Creek, Yellowstone Lake, Park Co. Wyo.

*Erebia stubbendorffii demmia* TL Chicago Basin, San Juan Mts., La Plata Co. Colo.

*Erebia dabanensis youngi* TL mts. between Forty-Mile & Mission Creeks, Alaska

>*Erebia dabanensis herscheli* TL Herschel I., Beaufort Sea, Alaska

>*Erebia dabanensis riley* TL Denali NP, Alaska

*Erebia kozhantshikovi lafontainei* TL Mt. Decoeli, St. Elias Mts., Yukon  
*Erebia occulta* TL Dempster Hwy. km 150, Yukon; =*phellea* TL km 66-68 Council Rd., Seward Pen., Alaska  
*Erebia callias callias* TL Mosquito Pass, Park-Lake Cos. Colo.  
*Erebia callias* ocelli-less form *brucei=sinocho*  
*Neominois ridingsii pallidus* TL 4.8 rd. mi. N Nevada road 359, Larkin Dry Lake Road, Alkali Valley, Mineral Co. Nev.  
*Neominois ridingsii ridingsii* TL Loveland, Larimer Co. Colo.; =>*minus* TL N side Moose Jaw, Sask.  
>*Neominois ridingsii neomexicanus* TL Bluewater Can., Zuni Mts., Cibola Co. New Mex.  
*Neominois ridingsii curicata* TL Big Mesa, Gunnison Co. Colo.  
*Neominois ridingsii wyomingo* TL 6 mi. WNW Midwest, I-25, Natrona Co. Wyo.  
*Neominois ridingsii stretchii* TL Mt. Jefferson, Nye Co. Nev.; =*dionysus* TL 5 mi. N Trumbull, Hurricane Ridge, Mohave Co. Ariz.  
*Neominois ridingsii coloadbiterra* TL 8 mi. NNW Parachute, Garfield Co. Colo.  
*Oeneis* (“*Protoeneis*”) *uhleri uhleri* TL Georgetown or eastward toward Idaho Springs, Clear Creek Co. Colo.; =>*varuna* TL Dacotah Terr. (smaller, little different); =>*reinthali* TL near Gothic, Gunnison Co. Colo. (some dark, but variable, little different)  
*Oeneis uhleri cairnesi* TL White River district, Yukon; =*kluanensis* TL NW Burwash Landing, Quill Creek Area, St. Elias Mts., Yukon  
*Oeneis uhleri nahanni* TL Lone Mtn. (Mt. Tha-on-tha), Nahanni Range, Mackenzie Mts., NWT  
*Oeneis* (*Oeneis*) *nevadensis gigas* TL Vancouver I., BC  
*Oeneis nevadensis nevadensis* TL Little Volcano Mtn., ~7 air mi. SE Quincy, Plumas Co. Calif.  
*Oeneis nevadensis iduna* TL Mendocino Co. Calif.  
*Oeneis* (*nevadensis*) *macounii* TL Lake Nipigon, Ont.  
*Oeneis stenchospecies chryxus* (includes *chryxus*, *calais*, *alberta*)  
*Oeneis chryxus* TL Rock Lake, 22.5 km NW Pochontas, Alta.  
*Oeneis calais strigulosa* TL Gull Lake, (Raggedy Crk.) near Minden, Ont.  
*Oeneis calais calais* TL Rupert House, Hudson Bay  
*Oeneis calais caryi* TL vic. 59°54'N, 111°40'W near W side Slave River, Alta.  
*Oeneis calais altacordillera* TL Baldy Peak, Sangre de Cristo Mts., Custer Co. Colo.  
*Oeneis calais valerata* TL Hurricane Ridge, Olympic Mts., Wash.  
*Oeneis calais stanislaus* TL Deadman Creek, Sonora Pass, Tuolumne/Alpine Cos. Calif.  
*Oeneis calais ivallda* TL summit Freel's Peak & Tallac Mtn., near Lake Tahoe, near Nevada boundary, Placer Co. Calif.  
*Oeneis alberta* unnamed oranger ssp. Peace River, Alta.-BC  
*Oeneis alberta ojibwe* TL Pine Ridge, Man.  
*Oeneis alberta alberta* TL Fish Creek Prov. Park, ~1 mi. W of Bow River, Calgary, Alta.; =*oslari* TL South Park between Kenosha Pass & Fairplay, Park Co. Colo.; =*capulinensis* TL N rim Capulin Mtn., Union Co New Mex.  
*Oeneis alberta daura* TL Mt. Graham, Pinaleno Mts., Graham Co. Ariz.  
*Oeneis bore taygete* TL Hopedale, Labrador; =*gaspeensis* TL Mt. Albert, Gaspé NP, Quebec  
*Oeneis bore hanburyi* TL vic. Coronation Gulf...Grays Bay, NWT; =*mckinleyensis* TL Denali NP, Alaska; =*fordi* TL Bethel, ~20 mi. up Kuskoquim River at inland edge of coastal tundra, Alaska  
*Oeneis bore edwardsi* TL Rio Grande Pyramid, San Juan Mts., Hinsdale Co. Colo.  
*Oeneis jutta alaskensis* TL mts. between Forty-Mile & Mission Creeks, NE Alaska...American Creek, Alaska (European ssp. *jutta* similar but usually? has a tawny spot on upf tornus in cell CuA<sub>2</sub>); =*leussleri* TL 30 mi. SW Aklavik & immediately W of Mackenzie Delta, adjacent to escarpment, NWT; =*harperi* TL Gillam, Man.; =*ascerta* TL West White Pine Truck Trail, Solana State Forest, Aitkin Co. Minn.; =>*chermocki* TL Banff, Alta. (a bit intermediate toward *reducta*); (Note: *balder=balderi* [lapsus calami] is a European toxtaxon synonym of ssp. *jutta* that does not apply to Labrador or N.A., TL Lapland, Norway, & Sweden)(actual Labrador bugs are intermediate *alaskensis*X*terraenovae*)  
*Oeneis jutta terraenovae* TL DoYLES Station, Nfld.  
*Oeneis jutta ridingiana* TL Riding Mts., Man.  
*Oeneis jutta reducta* TL Upper Gallatin Can., Gallatin Co. Mont. (weak unh band)  
*Oeneis alpina excubitor* TL hilltop 4 mi. E Mt. Chambers, Ogilvie Mts., Yukon  
*Oeneis melissa semidea* TL White Mts., N.H.  
*Oeneis melissa melissa* TL Chateau Bay, Labrador coast  
*Oeneis melissa assimilis* TL Repulse Bay, Nunavut; =*arctica=simulans* both TL Bernard Harbour, Nunavut; =*semplei* TL where Little Cape Jones R. discharges into Hudson Bay  
*Oeneis melissa gibsoni* TL Bethel, ~20 mi. up Kuskoquim River at inland edge of coastal tundra, Alaska  
*Oeneis melissa atlinensis* TL Mt. Vaughan, Atlin, BC

*Oeneis melissa beanii* TL alpine peaks near Lake Louise, Banff NP, Alta.  
*Oeneis melissa lucilla* TL Hall Valley, Park Co. Colo.  
*Oeneis stenchospecies polixenes* (includes *norna?*, *polixenes*, *yukonensis*, *philipi*, etc., needs work)  
*Oeneis polixenes polixenes* TL Chateau Bay, Labrador coast  
*Oeneis polixenes katahdin* TL Mt. Katahdin, Penobscot Co. Maine  
*Oeneis polixenes subhyalina* TL vic. isthmus of Boothia Pen., Nunavut; =*peartiae* TL Winter Cove, Cambridge Bay, Victoria I., NWT, Yukon  
 >*Oeneis polixenes beringiensis* TL Chukotka Pen., Magadan Oblast, Chukotka Autonomous Okrug, Russia; =*luteus* TL Pink Mtn., BC  
 >*Oeneis polixenes woodi* TL Herschel I., Yukon  
*Oeneis polixenes yukonensis* TL Klutlan glacier, Yukon  
*Oeneis polixenes brucei* TL Bullion Mtn., Hall Valley, Park Co. Colo.  
*Oeneis (norna?) philipi* TL km 1 Dempster Hwy. at Klondike R., Yukon

#### Nymphalidae, Morphinae, Morphini

*Morpho polyphemus polyphemus* TL Mex.  
*Morpho peleides montezuma* TL --(add)

#### Nymphalidae, Charaxinae, Anaeini

*Anaea troglodyta floridalis* TL Florida City, Miami-Dade Cos. Fla.  
*Anaea aidea* TL Bay of Campeche, SE Mex.; =*morrisonii* Mt. Graham, Pinaleno Mts., Graham Co., Ariz.  
*Anaea andria* TL probably Ill. or Missouri  
*Anaea (Memphis) glycerium glycerium* TL Mex.  
*Anaea (Memphis) pithyusa pithyusa* TL Potrero, Veracruz, Mex.  
*Anaea (Memphis) echemus echemus* TL Cuba  
*Anaea (Memphis) forreri* TL Presidio, Veracruz, Mex.  
*Archaeoprepona demophon centralis* TL---(add)

#### Nymphalidae, Nymphalinae, Limenitidini, Limenitidina

*Limenitis archippus floridensis* TL Apalachicola, Fla.  
*Limenitis archippus watsoni* TL Alexandria, Rapides Parish, La. (intermediate between *archippus* toward *floridensis*, but only upf darker)  
*Limenitis archippus archippus* TL N.Y.  
*Limenitis archippus lahontani* TL Fernley, Lyon Co. Nev.; =>*idaho* TL 3.1 mi. S Jackpot, Elko Co. Nev. (near *lahontani*, intermediate to *archippus*)  
*Limenitis archippus obsoleta* TL at or S of Tucson, Ariz.  
*Limenitis archippus hoffmanni* TL Misantra, Veracruz, Mex.  
*Limenitis stenchospecies arthemis* (includes *artemis*, *astyanax*, *weidemeyerii*, *lorquini*)  
*Limenitis arthemis rubrofasciata* TL Sask.-Man.-Alta.; =*burrisonii* (nomen dubium, O.D. resembles *rubrofasciata*, possible *L. lorquini* ssp., C. Guppy will fix)  
*Limenitis arthemis arthemis* TL N.Y., probably Catskill Mts.  
*Limenitis arthemis astyanax* TL?  
*Limenitis arthemis arizonensis* TL near Tucson, Ariz.  
*Limenitis arthemis* unnamed (redder uns, Nuevo Leon Mex., & intergrading near *arizonensis* in Chisos Mts. Tex.)  
*Limenitis weidemeyerii angustifascia* TL SE McNary, White Mts., Ariz.; =*nevadae* TL Spring Mts., Nev.; =*sinefascia* TL near Prescott, Ariz.; =*siennafascia* TL near Barfoot Park, Chiricahua Mts., Ariz.  
*Limenitis weidemeyerii weidemeyerii* TL Lakewood, Jefferson Co. Colo.; =*oberfoelli* TL Badlands, Slope Co. N.D.  
*Limenitis weidemeyerii latifascia* TL 10 mi. S Pocatello, Mink Crk., Bannock Co. Ida.  
*Limenitis weidemeyerii* orange fw-tip form *fridayi* (intergrades [N Nev.]/hybrids [W Nev.] with *lorquini*)  
*Limenitis lorquini ilgae* TL Bamberton, Jones Crk. road to Oliphant Lake, BC  
*Limenitis lorquini itelkae* TL near Keremeos, BC  
*Limenitis lorquini lorquini* TL hwy 70 at Soda Creek, Plumas Co. Calif.; =*eavesii* TL Virginia City, Storey Co. Nev.  
*Limenitis lorquini powelli* TL San Bernardino Co. Calif.  
*Limenitis lorquini pallidafacies* TL Trail Can., White Mts., Esmeralda Co. Nev.  
*Adelpha fessonia fessonia* TL Honduras  
*Adelpha basiloides* TL Mex.  
*Adelpha eulalia* TL Mex.  
*Adelpha (bredowii?) californica* TL Calif.

## Nymphalidae, Nymphalinae, Heliconiini, Heliconiina

*Dione moneta poeyi* TL Oaxaca, Mex.  
*Dione (Agraulis) vanillae nigrrior* TL Upper Matecumbe Key, Fla.  
*Dione vanillae incarnata* TL near Durango City, Durango, Mex.  
*Dryas iulia largo* TL Key Largo, Monroe Co. Fla.  
*Dryas iulia moderata* TL Honduras  
*Dryadula phaetusa* TL West Indies  
*Heliconius (Eueides) isabella eva* TL Panama; =*zorcaon* TL Mex., Honduras, Guatemala  
*Heliconius charithonia tuckeri* TL Winter Park, Orange Co. Fla.  
*Heliconius charithonia vazquezae* TL Campeche, Mex.  
*Heliconius erato petiverana* TL Mex., Honduras

## Nymphalidae, Nymphalinae, Heliconiini, Argynnina

*Euptoieta claudia* TL Jamaica  
*Euptoieta hegesia meridiania* TL Espirito Santo, Brasil; =*hoffmanni* TL Escuiñapa, Sinaloa, Mex.  
*Argynnis (Speyeria) diana* TL Jamestown, James City Co., Va.  
*Argynnis (Speyeria) cybele cybele* TL New York City, N.Y.; =*novascotiae* TL White Point Beach, Queens Co., N.S.  
*Argynnis (S.) cybele krautwurmi* TL Les Cheneaux, Mackinac Co. Mich.  
*Argynnis (S.) cybele pseudocarpenteri* TL Sand Ridge, Man.  
*Argynnis (S.) cybele carpenterii* TL near top Taos Peak, Taos Co., New Mex.  
*Argynnis (S.) cybele charlottii* TL Glenwood Springs, Garfield Co., Colo.  
*Argynnis (S.) cybele leto* TL near Carson City, Ormsby Co., Nev.; =*letona* TL City Creek Can., Salt Lake Co. Utah  
*Argynnis (S.) cybele pugetensis* TL Stimson Creek, near Belfair, Mason Co. Wash.; =>*eileenae* TL Bear River Ridge Rd., 7 mi. SE Ferndale, Humboldt Co. Calif. (intergrade near *pugetensis*)  
*Argynnis (Speyeria) aphrodite cullasaja* TL trail to Scaly Mtn., Macon Co. N.C.  
*Argynnis (S.) aphrodite alcestis* TL Galena, Jo Davies Co. Ill.  
*Argynnis (S.) aphrodite aphrodite* TL New York City, N.Y.; =*winni* TL St. Calixte de Kilkenny, 40 mi. from Montreal, Que.  
*Argynnis (S.) aphrodite manitoba* TL Sand Ridge, SE Man.; =*mayae* TL Sand Ridge, Man.  
*Argynnis (S.) aphrodite columbia* TL Lac la Hache & Quesnel Lake, BC  
*Argynnis (S.) aphrodite whitehousei* TL Jaffray, BC; =*ethne* TL near Sheridan, Big Horn Mts., Wyo.  
*Argynnis (S.) aphrodite byblis* TL White Mts., Ariz.  
*Argynnis (Speyeria) nokomis coeruleascens* TL head of Rio Piedras Verdes, Sierra Madre, Chihuahua, Mex.  
*Argynnis (S.) nokomis nitocris* TL White Mts., Ariz.  
*Argynnis (S.) nokomis nokomis* TL “Sneffels Mts.” [alpine mts., so error], Ouray Co. Colo. [possibly Uncompahgre R. near Ridgway, but type was evidently coll. at Beulah, New Mex. by Mrs. T. Cockerell, & sold to E. Osler; bug phenotype is the same in both areas]; =*nigrocaerulea* TL Beulah, Sapello Can., San Miguel Co. New Mex.  
*Argynnis (S.) nokomis apacheana* TL vic. Independence, Inyo Co. Calif.; =*carsonensis* TL Scossa Ranch, Carson Valley, Douglas Co. Nev.  
*Argynnis (Speyeria) idalia idalia* TL West Farms, New York City, N.Y.  
>*Argynnis (S.) idalia occidentalis* TL 1 mi. SE Crete, Will Co., Ill  
*Argynnis (Speyeria) mormonia bischoffii* TL Kodiak I., Alaska  
*Argynnis (S.) mormonia opis* TL Bald Mtn., Cariboo, BC; =*jesmondensis* TL Jesmond, BC  
*Argynnis (S.) mormonia eurynome* TL Fairplay, Park Co. Colo.; =*clio* TL Moose P.O., Jackson Hole, Wyo.; =*washingtonia* TL Paradise Valley, Mt. Rainier, Wash.  
*Argynnis (S.) mormonia kimimela* TL Terry Peak, Black Hills, Lawrence Co. S.D.  
*Argynnis (S.) mormonia erinna* TL Spokane Falls, Spokane Co. Wash.  
*Argynnis (S.) mormonia artonis* TL “Wells” [actually Ruby Mts.], Elko Co. Nev.  
*Argynnis (S.) mormonia mormonia* TL (lectotype mislabeled Lac Sal) Little Valley, W of Washoe Lake, Washoe Co. Nev.; =*arge* TL Monache Meadows, Tulare Co. Calif.; =*obsidiana* TL Sawmill Meadow, Glass Mtn., Mono Co. Calif.  
*Argynnis (S.) mormonia luski* TL White Mts., Ariz.  
*Argynnis (Speyeria) adiate adiate* TL Santa Cruz Mts., Santa Cruz Co. Calif.  
*Argynnis (S.) adiate clemencei* TL Atascadero, San Luis Obispo Co. Calif.  
*Argynnis (S.) adiate atossa* TL valley 4 mi. from Tehachapi, Tehachapi Mts., Calif. (extinct)  
*Argynnis (Speyeria) hydaspae hydaspae* TL Gold Lake, Sierra Co. Calif.; =*viridicornis* TL Greenhorn Mts., Kern Co. Calif.; =*tehama* TL Covelo Road, at Government Flat, Tehama Co. Calif.

*Argynnis (S.) hydaspe purpurascens* TL Soda Springs, Siskiyou Co. Calif.  
*Argynnis (S.) hydaspe davisi* TL McClellan Mtn. peat bog, Humboldt Co. Calif.  
*Argynnis (S.) hydaspe rhodope* TL Caribou Trail, 2500', BC; =*sakuntala* TL Kaslo, BC; =*conquista* TL NW Wyo.  
(mislabeled "Little Tesuque Can., near Santa Fe, New Mex.")  
*Argynnis (S.) hydaspe minor* TL Mt. McLean, near Lillooet, BC  
*Argynnis (Speyeria) callippe macaria* TL Havilah, Kern Co. Calif. (silvered); =*laurina* TL Greenhorn Mts., Kern Co.  
Calif. (unsilvered form)  
*Argynnis (S.) callippe callippe* TL San Francisco, Calif.; =>*comstocki* TL Los Angeles, Calif.  
*Argynnis (S.) callippe rupestris* TL Moore Creek Rd. S of hwy. 120, Mariposa Co. Calif.; =*inornata* TL vic.  
Camptonville, Yuba Co. Calif.; =*hagemani* TL Shingletown, Shasta Co. Calif.  
*Argynnis (S.) callippe juba* TL Downieville, Sierra Co. Calif.; =*laura* TL vic. Downieville, N fork Yuba R., Sierra Co.  
Calif.; =*sierra* TL Gold Lake, Sierra Co. Calif.  
*Argynnis (S.) callippe liliana* TL Bale Station, near Mt. St. Helena, Napa Co. Calif.  
*Argynnis (S.) callippe shasta* TL 8 rd. mi. SE McCloud River Bridge, Shasta Co. Calif.; =*adiasteoides* TL Cahto Peak  
summit, Mendocino Co. Calif.  
*Argynnis (S.) callippe elaine* TL Butte Falls, Jackson Co. Ore.  
*Argynnis (S.) callippe semivirida* TL Aspen Grove, BC  
*Argynnis (S.) callippe chilcotinensis* TL Riske Creek, BC  
*Argynnis (S.) callippe nevadensis* TL Lake Washoe, Washoe Co. Nev.  
*Argynnis (S.) callippe calgariana* TL head of Pine Creek, Alta.; =*gallatini* TL Elkhorn Ranch, Upper Gallatin Can.,  
Gallatin Co. Mont.; =*harmonia* TL Mt. Wheeler, Snake Range, White Pine Co. Nev.  
*Argynnis (S.) callippe meadii* TL Turkey Creek Junction, N Tinytown, Jefferson Co. Colo.  
*Argynnis (Speyeria) atlantis atlantis* TL Hunter, Catskill Mts., Green Co. N.Y.; =*canadensis* TL Doyles Station, Nfld.  
>*Argynnis (S.) atlantis hollandi* TL Riding Mts., Man.  
*Argynnis (S.) atlantis pahasapa* TL Deerfield Res., Pennington Co. S.D.  
*Argynnis (S.) atlantis sorocko* TL 1 mi. NE Mt. Judge, Clear Creek Co. Colo.  
*Argynnis (Speyeria) hesperis beani* TL Banff, Alta.; =>*hutchinsi* TL T2N R1W, Jefferson Co. Mont. (intermediate to  
*tetonia*)  
>*Argynnis (S.) hesperis brico* TL km 23.5 Castle Creek Forest Service Rd., 25 air km S McBride, Cariboo Mts., BC  
*Argynnis (S.) hesperis dennisi* TL Beulah, Manitoba; =*helena* TL Fort Edmonton, Alta.  
*Argynnis (S.) hesperis ratonensis* TL Raton Mesa, Colfax Co. New Mex.  
*Argynnis (S.) hesperis greyi* TL Lamoille Can., Ruby Mts., Elko Co. Nev.  
*Argynnis (S.) hesperis irene* TL Gold Lake, Sierra Co. Calif.; =*hanseni* TL Anthony Peak on Covelo Road, Tehama Co.  
Calif.  
>*Argynnis (S.) hesperis elko* TL Wildhorse Creek Cgd., ~10 mi. S Mountain City, Owyhee R., Elko co. Nev.  
>*Argynnis (S.) hesperis cottlei* TL near Alturas, Modoc Co. Calif.; =*dodgei* TL Diamond Lake, Douglas Co. Ore.;  
= *viola* TL Trail Creek, Sawtooth Mts., Custer Co. Ida.  
*Argynnis (S.) hesperis tetonia* TL Teton Mts. region, Wyo.  
>*Argynnis (S.) hesperis wasatchia* TL Payson Can., Utah Co. Utah (intergrading toward *chitone*)  
*Argynnis (S.) hesperis lurana* TL Harney Peak, Black Hills, S.D.  
*Argynnis (S.) hesperis hesperis* TL Turkey Creek Jct., Jefferson Co. Colo.  
*Argynnis (S.) hesperis electa* TL Twin Lakes, Lake Co. Colo.; =*cornelia* TL Ouray, Ouray Co. Colo.; =*nikias* TL Jemez  
Springs, Sandoval Co. New Mex.  
*Argynnis (S.) hesperis dorothea* TL Sandia Peak and road 2/3 of way down mts. to S, Sandia Mts., New Mex.  
>*Argynnis (S.) hesperis capitaneensis* TL Padilla Point, crest of Capitan Ridge, Lincoln Co. New Mex.  
*Argynnis (S.) hesperis nausicaa* TL Rock Can., Pinaleño Mts., Graham Co. Ariz.  
*Argynnis (S.) hesperis schellbachi* TL Neal Springs, N Rim Grand Canyon, Coconino Co. Ariz.  
*Argynnis (S.) hesperis chitone* TL Cedar Breaks Nat. Mon., Iron Co., Utah  
*Argynnis (Speyeria) egleis tehachapina* TL highest peak in Tehachapi Mts., Kern Co. Calif.  
*Argynnis (S.) egleis egleis* TL vic. Gold Lake, Sierra Co. Calif.  
*Argynnis (S.) egleis oweni* TL Mt. Shasta, Siskiyou Co. Calif.; =*yolaboli* TL South Yolla Bolly Mtn., Tehama Co. Calif.  
*Argynnis (S.) egleis mattooni* TL Dry Lake Mtn., Siskiyou Mts., Siskiyou Co. Calif.  
*Argynnis (S.) egleis moeckii* TL Skookum Mdw., Walker Rim, Klamath Co. Ore.  
*Argynnis (S.) egleis utahensis* TL City Creek Can., Salt Lake Co., Utah; =*toyabe* TL Kingston Can., Toiyabe Mts.,  
Nev.; =*reidi* TL Wheeler Peak Cgd., Snake Range, White Pine Co. Nev.  
*Argynnis (S.) egleis mcdunnoughi* TL Elkhorn Ranch Resort, upper Gallatin Can., Gallatin Co. Mont.  
*Argynnis (S.) egleis secreta* TL perhaps Rabbit Ears Pass, Routt Co. Colo.  
*Argynnis (S.) egleis linda* TL Heyburn Peak, Sawtooth-Boise, Custer Co. Ida.  
*Argynnis (S.) egleis albrighti* TL Highwood Mts., Chouteau Co. Mont.



*Argynnis (Speyeria) zerene sitka* TL Haines, Alaska  
*Argynnis (S.) zerene bremnerii* TL Vancouver, BC  
*Argynnis (S.) zerene hippolyta* TL Oceanside, Tillamook Co. Ore.  
 >*Argynnis (S.) zerene myrtleae* TL San Mateo, San Mateo Co. Calif. (extinct there); =*puntareyes* TL Point Reyes dunes, Marin Co. Calif.; =*sonomensis* TL S end Sonoma Mts., N of Lakeville Hwy. X Rt. 37, Sonoma Co. Calif.  
*Argynnis (S.) zerene behrensii* TL Mendocino, Mendocino Co. Calif.  
*Argynnis (S.) zerene gloriosa* TL W of Selma, Illinois R. Valley, Josephine Co. Ore.  
*Argynnis (S.) zerene zerene* TL hwy. 70 at Chambers Creek, Plumas Co. Calif.; =*conchyliaetus* TL Mt. Shasta, Siskiyou Co. Calif.; =*monticola* TL Hog Ranch, Mather, Tuolumne Co. Calif.  
*Argynnis (S.) zerene gunderi* TL mts. above Davis Creek Ranger Station, N of Alturus, Modoc Co. Calif.; =*cynna* TL Ruby Valley, Elko Co; Nevada  
*Argynnis (S.) zerene picta* TL Aspen Grove, BC; =*garretti* TL Cranbrook, BC  
*Argynnis (S.) zerene platina* TL loc. of Holland's lectotype, perhaps now Ogden, Weber Co., Utah; =*pfoutsii* TL Mt. Loafer, near Payson, Utah Co. Utah  
*Argynnis (S.) zerene sinope* TL Estes Park area, Rocky Mtn. NP, Colo.  
*Argynnis (S.) zerene malcolmi* TL Mammoth, Mono Co. Calif.  
*Argynnis (S.) zerene carolae* TL Charleston Park, Spring Mts., Nev. (nearest *malcolmi*, see *Papilio* [N.S.] #19)  
*Argynnis (Speyeria) coronis semiramis* TL San Bernardino [Mts.], Calif.; =*hennei* TL near summit Mt. Pinos, Frazier Mtn. Park, Ventura Co. Calif.  
*Argynnis (S.) coronis coronis* TL Gilroy, Santa Clara Co., Calif.  
*Argynnis (S.) coronis simaetha* TL Black Can., Cascade Mts., near Brewster, Okanogan Co. Wash.  
*Argynnis (S.) coronis snyderi* TL City Creek Can., Salt Lake Co. Utah  
*Argynnis (S.) coronis halcyone* TL evidently Hartsel to Howbert, Park Co. Colo.  
*Argynnis (Speyeria) edwardsii* TL Empire, Clear Creek Co., Colo.; =*montana* TL Montana  
*Boloria (Boloria) alaskensis alaskensis* TL mts. between Forty-Mile & Mission Creeks, Alaska; =*reiffi* TL BC  
*Boloria alaskensis halli* TL vic. Green River Pass, Wind River Range, Sublette Co. Wyo.  
*Boloria eunomia tricularis* TL Nain, Labrador  
*Boloria eunomia dawsoni* TL Hymers, Ont.  
*Boloria eunomia nichollae* TL N end of Wilcox Pass, Alta. (also occurs Coast Range SW BC)  
*Boloria eunomia denali* TL Denali NP, Alaska  
*Boloria eunomia caelestis* TL Hall Valley, Park Co. Colo.; =*ursadentis* TL Beartooth Pass, ½ mi. S Montana-Wyo. border, Park Co. Wyo.; =>*laddi* TL Snowy Range, Albany Co. Wyo.  
*Boloria (Clossiana) selene terraenovae* TL E part of Nfld. (*selene* is correct name if *myrina* & *selene* intergrade across Eurasia or they are conspecific for other reasons; Gorbunov book lists N America? in his range of *B. selene*)  
*Boloria (selene?) selene atrocotalis* TL Chicoutimi, Quebec; =*albequina* TL White Horse Pass, Yukon  
*Boloria (selene?) selene myrina* TL SE N.Y.; =*marilandica* TL near Beltsville, Md.  
 >*Boloria (selene?) selene sabulocollis* TL Smith Lake, Sheridan Co. Neb.  
*Boloria (selene?) selene nebraskensis* TL Dodge Co., Neb.  
*Boloria (selene?) selene tollandensis* TL Tolland, Gilpin Co. Colo.  
*Boloria epithore epithore* TL Saratoga, Santa Cruz Mts., Santa Clara Co. Calif.  
*Boloria epithore chermocki* TL 2.9 mi. E Dolph, Yamhill Co. Ore.; =*uslui* TL Shingle Creek Road, Keremeos, BC; =*sierra* TL Sentinel Dome, Yosemite NP, Calif.  
*Boloria epithore sigridae* TL Tats Lake, St. Elias Mts., BC  
*Boloria bellona* TL?; =*jenistai* TL vic. Rivercourse, Alta.; =>*toddi* TL St. Margarets River, near or under Lac-Walker Res., Que.  
*Boloria (frigga?) gibsoni* TL Barter I., N Alaska  
*Boloria frigga saga* TL Labrador  
*Boloria frigga sagata* TL Hall Valley, Park Co. Colo.  
*Boloria improba improba* TL Winter Cove & Cambridge Bay, NWT; =*youngi* TL mts. between Forty-Mile & Mission Creeks, NE Alaska (yellow aberration)  
*Boloria improba nunatak* TL alpine zone Torrens River, Alta.  
*Boloria improba harryi* TL ½ mi. NW Mt. Chauvenet, Wind River Mts., Fremont Co. Wyo.  
*Boloria improba acrocnema* TL Mt. Uncompahgre, San Juan Mts., Hinsdale Co. Colo.  
*Boloria alberta* TL Lake Louise (Mt. St. Piran or vic.), Alta.  
*Boloria (tritonina?) astarte* TL alpine zone near Rock Lake, NW Pocahontas, Alberta  
*Boloria (tritonina?, astarte?) distincta distincta* TL Harrington Crk., Yukon  
*Boloria (tritonina?, astarte?) distincta tshukotkensis* TL Magadan Oblast, Chukotka Autonomous Okrug, Russia  
*Boloria polaris polaris* TL Cap Nord, Finmark, Norway; =*homeyeri* TL 74° & 76° in Greenland  
*Boloria polaris stellata* TL Churchill, Man.

*Boloria freija browni* TL Independence Pass, Pitkin Co. Colo.  
*Boloria freija freija* TL Lapp. Liljeblad, W Gulf of Bothnia & Lappland, Sweden  
*Boloria tarquinius tarquinius* TL vic. isthmus of Boothia Pen., Nunavut (in appearance & habitat is same sp. as *natazhati*)  
*Boloria tarquinius nabokovi* TL near Mt. St. Paul, ravine N of Summit Lake, km 621.7 Alaska Hwy., Sentinel Range, BC  
*Boloria tarquinius natazhati* TL N of Mt. Natazhat, SW Yukon; =>*bankslandia* TL Victoria I., NWT  
*Boloria stenospecies titania* (includes *titania*, *grandis*, *chariclea*)  
*Boloria titania montinus* TL summit Mt. Madison, head of Tuckerman's Ravine, White Mts., N.H.  
*Boloria titania grandis* TL Hymers, Ont. (multiple wing traits identical to European *titania*, overwhelming tiny variable valva rod difference); =>*ranieri* TL Paradise Valley, Mt. Rainier, Wash.; (= *boisduvalii* TL east of Europe [doubtfully Labrador] has no valid evidence that it is Nearctic)  
*Boloria titania helena* TL Mosquito Pass, Lake-Park Cos., Colo.; = *ingens* TL Yellowstone Park, Wyo.  
*Boloria titania helena*=*ingens* melanic female form *sangredecristo* (on Beartooth Plateau, prevalent at high altitude)  
*Boloria titania sangredecristo* TL Hermit Pass, Sangre de Cristo Mts., Custer Co. Colo. (all females melanic)  
*Boloria (chariclea) titania arctica* TL Greenland  
*Boloria (chariclea) titania butleri* TL Cape Thompson, Alaska  
*Boloria kriemhild* TL Utah

### Nymphalidae, Nymphalinae, Cyrestini

*Marpesia zerynthia zerynthia* TL "Mexico, Amer. Med. Et. Centr."; = *coresia* TL Brasil; (*lentigera* is nomen dubium due to worthless TL of Colombia...Peru...Texas)  
*Marpesia chiron* TL Jamaica  
*Marpesia petreus petreus* TL Suriname  
*Marpesia eleucea eleucea* TL Havana, Cuba

### Nymphalidae, Nymphalinae, Coeini

*Historis odius odius* TL West Indies  
*Historis odius dious* TL Suriname  
*Historis acheronta acheronta* TL Brasil

### Nymphalidae, Nymphalinae, Apaturini

*Doxocopa pavon theodora* TL Ferdinand De Jagua, Cuba  
*Doxocopa laure laure* TL Bay of Honduras  
*Asterocampa celtis reinthali* TL Ocoee, Orange Co., Fla.  
*Asterocampa celtis celtis* TL Savannah River, Burke Co. Ga.; = *alicia* TL vic. New Orleans, La.  
*Asterocampa celtis jeffermont* TL Indian Gulch, Jefferson Co. Colo.  
*Asterocampa celtis montis* TL Fort Grant & Mt. Graham, Pinaleño Mts., Graham Co. Ariz.  
*Asterocampa celtis antonia* TL vic. Norse, Bosque Co., Tex.  
*Asterocampa leilia* TL Camp Lowell & Sonoita Valley, Santa Cruz Co. Ariz.; = *cocles* TL Hidalgo, Hidalgo Co. Tex.  
*Asterocampa clyton* ssp. black-uph form *geneumbrosa*  
*Asterocampa clyton* ssp. uniformly-gray-unh form *apunctus*  
*Asterocampa clyton flora* TL Palatka, Putnam Co. Fla.  
*Asterocampa clyton clyton* TL Savannah River, Burke Co. Ga.; = *proserpina* TL Denison to New Jefferson, Iowa; = *ocellata* TL Coalburgh, Kanawha Co., W.Va.  
*Asterocampa clyton texana* TL Round Mtn., Blanco Co. Tex.; = *louisa* TL Pharr, Hidalgo Co. Tex.; = *subpallida* TL Baboquivari Mts., Pima Co. Ariz.  
*Asterocampa idyja argus* TL El Progreso, Motagua Valley, Guatemala

### Nymphalidae, Nymphalinae, Biblidini

*Dynamine postverta* (= *mylitta* TL Suriname) *mexicana* TL de Presidio, Veracruz, Mex.  
*Dynamine dyonis* TL Mex.  
*Epiphile adrasta adrasta* TL Mex.  
*Temenis laothoe hondurensis* TL Honduras  
*Hamadryas februa ferentina* TL?  
*Hamadryas glauconome diasia* TL Puerto Rico & Haiti (*amphichloe* is obvious allopatric ssp. of *glauconome*)  
*Hamadryas glauconome grisea* TL Sinaloa, Mex.  
*Hamadryas atlantis lelaps* TL Ventanas, Durango, Mex.

*Hamadryas feronia farinulenta* TL Honduras  
*Hamadryas guatemalena* TL Guatemala  
*Hamadryas iphthime joannae* TL Chiltepec, Oaxaca, Mex. (very doubtful in U.S.)  
*Hamadryas amphinome mexicana* TL Mex.  
*Myscelia ethusa ethusa* TL Mex.  
*Myscelia cyananthe skinneri* TL Bayemena, Sinaloa, Mex.  
*Eunica monima* TL?; =*modesta* TL Guatemala; =*fairchildi* TL Cuba  
*Eunica tatila tatila* TL Mex.  
*Eunica tatila tatilista* TL Rae Town, Jamaica  
*Mestra amymone* TL Nicaragua  
*Biblis hyperia aganisa* TL Mex.

### Nymphalidae, Nymphalinae, Nymphalini

*Smyrna blomfieldia datis* TL west Mex.  
*Hypanartia lethe* TL West Indies  
*Vanessa virginiensis* TL Virginia  
*Vanessa cardui cardui* TL Sweden  
*Vanessa carye annabella* TL W Arroyo Verde Park, Ventura, Ventura Co. Calif. (identical to *Colombia carye* except for a tiny valva point)  
*Vanessa atalanta rubria* TL Mex.  
*Vanessa tameamea* TL Oahu, Hawaii  
*Aglais milberti* TL vic. Philadelphia, Penn.; =*viola* TL Doyles Station, Nfld.; =*subpallida* TL Westcliffe, Custer Co. Colo.; =*pullum* TL Ditch Camp, White Mts., Ariz.  
*Aglais urticae urticae* TL Sweden  
*Roddia l-album j-album* TL N.Y., Philadelphia, New Harmony Indiana (larger uph submarginal yellowish spots than *l-album*); =*watsoni* TL Sicamous, BC; (*vau-album* is nomen nudum)  
*Nymphalis californica* TL Queen Lily Cgd. near Belden, Plumas Co. Calif.; =*herri* TL Buckhorn Mts., Okanogan Co. Wash.  
*Nymphalis antiopa* TL Sweden; =*hyperborea* TL Alaska; =*lintnerii* TL probably Schoharie, Schoharie Co. N.Y.; (these may be weak ssp.)  
*Polygonia interrogationis* TL?  
*Polygonia interrogationis* black-uph summer form *umbrosa*  
*Polygonia comma* TL Mass.  
*Polygonia comma* black-uph summer form *umbrosa*  
*Polygonia satyrus satyrus* TL vic. Empire, Clear Creek Co. Colo.; =*chrysoptera* TL Lake & Mendocino Cos. Calif.; =>*neomarsyas* TL Salmon Meadows, Brewster, Okanogan Co. Wash. (intermediate toward *transcanada* but closer to *satyrus*)  
*Polygonia satyrus transcanada* TL Temiscouata Co. Que.  
*Polygonia progne* TL N.Y.  
*Polygonia progne* black-uph summer form *umbrosa*  
*Polygonia oreas silenus* TL Portland, Multnomah Co., Ore.; =>*threatfuli* TL Kalamalka L. Prov. Park, Vernon, BC (intermediate *oreas*X*silenus*)  
*Polygonia oreas oreas* TL Redwood Park, Contra Costa Co. Calif.  
*Polygonia oreas nigrozephyrus* TL Lump Gulch, Gilpin Co. Colo.  
*Polygonia oreas satellow* TL 8 mi. NE Cedaredge, Delta Co. Colo.  
*Polygonia gracilis gracilis* TL Mt. Washington, Coos Co., N.H.  
*Polygonia gracilis zephyrus* TL Virginia City, Storey Co. Nev.  
*Polygonia faunus* ssp., weakly-marked-uns female form *silvius=orpheus*  
*Polygonia faunus smythi* TL Mt. Rogers (Balsam Mtn.), Grayson Co., Va.  
*Polygonia faunus faunus* TL Hunter, Greene Co. N.Y.  
*Polygonia faunus rusticus* TL Big Trees, Calaveras Co. Calif.; =*silvius* TL Yosemite Valley, Yosemite NP, Calif.; =>*fulvescens* TL Pescadero Crk., near Portola State Park, San Mateo Co. Calif. (reared thus unnaturally paler-unh colored?)  
*Polygonia faunus arcticus* TL base Black Mtn., near Aklavik, NWT  
*Polygonia faunus cenveray* TL Halfmoon Park, Crazy Mts., Sweet Grass Co. Mont.  
*Polygonia faunus hylas* TL S of Berthoud Pass, Clear Creek Co. Colo.  
*Siproeta stelenes biplagiata* TL San Pedro Sula, Honduras  
*Siproeta epaphus epaphus* TL Peru  
*Anartia jatrophae guantanamo* TL San Carlos Estate, Guantanamo, Cuba

*Anartia jatrophae luteipicta* TL San Pedro Sula, Cortes, Honduras  
*Anartia amathea fatima* TL West Indies (intergrades to *amathea* in Darien Panama, K. Brown Lepid. News 1988 #2 p. 39-40); =*venusta* TL Mex.-Guatemala  
*Anartia lytrea chrysopelea* TL Havana, Cuba  
*Hypolimnas misippus* TL Java, Indonesia  
*Junonia coenia* TL E U.S.; =*grisea* TL South Pasadena, LA Co. Calif.  
*Junonia evarete zonalis* TL Bogota-Cuba-Puerto Rico  
*Junonia evarete nigrosuffusa* TL Huachuca Mts.-Baboquivari Mts., Ariz.  
*Junonia genoveva* TL West Indies

### Nymphalidae, Nymphalinae, Melitaeini

*Euphydryas phaeton ozarkae* TL ridge N of Lynch Hollow, Camden Co., Missouri  
*Euphydryas phaeton phaeton* TL N.Y.  
 >*Euphydryas phaeton borealis* TL Lincoln, Penobscot Co., Maine  
*Euphydryas stenchospecies chalcedona* (bookkeeping species *colon*, *chalcedona*, *anicia*, *bernadetta*; see Papilio [N.S.]#12 & #18)  
*Euphydryas colon paradoxa* TL Seton Lake, Lillooet, BC  
*Euphydryas colon wallacensis* TL Wallace, Shoshone Co. Ida.; =>*nevadensis* TL Wildhorse Camp, 10 mi. S Mountain City, Elko Co. Nev.  
*Euphydryas colon colon* TL Columbia River, Kalama, Cowlitz Co., Wash.; =*perdiccas* TL Mt. Hood, Ore.; (*svilhae* is nomen nudum)  
*Euphydryas chalcedona dwinellei* TL McCloud fishing station, Shasta Co. Calif.; =*sperryi* TL Bartle Lumber Camp, Siskiyou Co. Calif.  
*Euphydryas chalcedona chalcedona* TL San Francisco, Calif.; =*cooperi* TL Mt. Tamalpais, Marin Co. Calif.  
*Euphydryas chalcedona hennei* TL Box Can., San Diego Co. Calif. (=“*quino*”)  
*Euphydryas chalcedona sinecat* TL Pine Hill, El Dorado Co. Calif.  
*Euphydryas chalcedona sierra* TL Sierra Nevada (high alt.); =*trinitina* TL Sawtooth Ridge in Trinity Alps, S of Caribou Lake, Siskiyou-Trinity Co. line, Calif.  
 >*Euphydryas chalcedona irelandi* TL Boy Scout Camp, Camp Wolfboro, trail near Alta Peak, Sequoia NP, Tulare Co. Calif.  
*Euphydryas chalcedona corralensis* TL Rock Corral, San Bernardino Co. Calif.  
*Euphydryas chalcedona kingstonensis* TL ¾ mi. SE Horse Thief Springs, Kingston Range, San Bernardino Co. Calif.  
*Euphydryas chalcedona klotsi* TL Roosevelt Lake, Gila Co. Ariz.  
*Euphydryas chalcedona macglashanii* TL vic. Truckee, Nevada Co. Calif.  
*Euphydryas chalcedona olancha* TL vic. Olancha Peak, Tulare-Inyo Cos., Calif.  
*Euphydryas chalcedona* ssp. near “*variicolor*” (Carson Pass, wings like *anicia* “*variicolor*” but valva nearer *chalcedona*)  
*Euphydryas anicia* “*variicolor*” TL ridge S of Sonora Pass, 9600’, Mono Co. Calif. (also found Ebbets Pass) (intergrade thus an invalid name, wings like *wheeleri-sierra-macglashanii*, valva near *anicia*)  
*Euphydryas anicia hermosa* TL southern Ariz.  
*Euphydryas anicia wheeleri* TL mouth Meadow Can., Toquima Range, Nye Co., Nev.  
 >*Euphydryas anicia alena* TL Summit Brian Head, Iron Co. Utah  
 >*Euphydryas anicia wecoeut* TL Coal Mine Point, Black Ridge, Mesa Co. Colo.  
*Euphydryas anicia* (near *colon*?) *maria* TL Park City, Summit Co. Utah (larva a little white-hairy like *colon* & adults dark, maybe due to introgression from *colon*?, valve is *anicia*-like); =*effi* TL Corral Crk., Ketchum, Blaine Co. Ida. (same adults and hostplant as *maria*, similar larva)  
*Euphydryas anicia morandi* TL Kyle Can. on Mt. Charleston Peak, Spring Mts., Nev.  
*Euphydryas anicia hopfingeri* TL Black Can., Methow Valley, Okanogan Co. Wash.  
*Euphydryas anicia anicia* TL Rock Lake, 22.5 km NW Pocahtontas, Alta.; =*howlandi* TL Polaris, Beaverhead Co. Mont.  
*Euphydryas anicia helvia* TL Ramparts, Yukon River, Alaska  
*Euphydryas anicia brucei* TL above treeline at head of Hall Valley or at Whale Mine there, Park Co. Colo.  
*Euphydryas anicia eurytion* TL South Park, probably near Fairplay, Park Co. Colo.; =*carolae* TL 1.3 mi. S Fairplay, Park Co. Colo.; =>*windi* TL Timber Island, Teton Mts., Teton Co. Wyo. (intergrade toward *anicia*)  
*Euphydryas anicia capella* TL Manitou Springs, El Paso Co. Colo.; =*cloudcrofti* TL Pines Cgd., 2 mi. NE Cloudcroft, Sacramento Mts., Otero Co. New Mex.  
 >*Euphydryas anicia chuskae* TL 3-5 mi. NNW Toadlena, Chuska Mts., San Juan Co., New Mex.  
*Euphydryas anicia carmentis* TL Pagosa Springs, Archuleta Co. Colo.  
*Euphydryas anicia magdalena* TL White Mts., Ariz.  
*Euphydryas anicia bakeri* TL Cave Creek, Durkee, Baker Co. Ore.

*Euphydryas bernadetta macyi* TL Wildhorse Crk., Alvord Basin, Harney Co. Ore.  
*Euphydryas bernadetta veazieae* TL Jackass Mts., Harney Co. Ore.  
 >*Euphydryas bernadetta wenatchee* TL 8 mi. N Kittitas, ¼ mi. above Colockum Pass Rd., Kittitas Co. Wash.  
*Euphydryas bernadetta bernadetta* TL Monroe Can., N Harrison, Sioux Co. Neb.  
 >*Euphydryas bernadetta rorina* TL Beaver Creek, Grand Co. Colo.  
*Euphydryas editha baroni* TL Mendocino, Mendocino Co. Calif.  
*Euphydryas editha editha* TL Twin Peaks, San Francisco, Calif.; =*bayensis* TL Hillsborough, San Mateo Co. Calif.;  
 =*luestherae* TL Del Puerto Can., 22 mi. W Patterson, Stanislaus Co. Calif.; =*karinae* TL Monkey Rock, 1.5 mi. N  
 Hull Mts., Mendocino Co. Calif.  
 >*Euphydryas editha insularis* TL Santa Rosa I., Calif.  
 >*Euphydryas editha quino* TL San Diego, Calif.; =*wrighti* TL San Diego, Calif.; =*augusta* TL vic. San Bernardino,  
 Calif.  
 >*Euphydryas editha taylori* TL Victoria, Vancouver I., BC  
*Euphydryas editha ehrlichii* TL Ord Mts. at NW end of San Bernardino Mts., W of Victorville, Calif.  
*Euphydryas editha rubicunda* TL Mariposa Co. Calif. (higher altitude above foothills); =>*aurilacus* TL near Gold Lake  
 Camp, Gold Lake, Sierra Co. Calif.  
*Euphydryas editha nubigena* TL W end of Dana Plateau, above Tioga Pass, Mono Co. Calif.; =*tahoensis* TL Tahoe  
 Meadows, Carson Range, Washoe Co. Nev.; =*bingi* TL Emerson Peak, Warner Mts., Modoc Co. Calif.; =*remingtoni*  
 TL Mt. Thielsen (lower altitude), Douglas Co. Ore.; =*augustina* TL San Bernardino Mts., Calif.  
 >*Euphydryas editha lawrencei* TL near timberline of trail between Diamond L. to Mt. Thielsen, Douglas Co. Ore.  
*Euphydryas editha colonia* TL Mt. Hood, Ore.  
*Euphydryas editha beani* TL high alt. near Lake Louise, Banff NP, Alta.  
*Euphydryas editha edithana* TL flats SE of Ash Creek, Ash Valley 14 mi. SE Adin, Lassen Co. Calif.; =*monoensis* TL  
 Rush Creek (below Farmington's ranch), near Mono Lake, Mono Co. Calif.; =*fridayi* TL between June & Silver  
 Lakes, Mono Co. Calif.; =*mattooni* TL 9.4 rd. mi. N Fort Bidwell in Surprise Valley, Modoc Co., Calif.;  
 =*owyheensis* TL Wildhorse Crossing Cgd., Owyhee R. Valley, Elko Co. Nev.  
 >*Euphydryas editha lehmani* TL Lehman Caves Resort, Mt. Wheeler, Snake Range, Nev.; =*koreti* TL ridge S of Bald  
 Mtn., White Pine Co., Nev.; =*gunnisonensis* TL Owl Creek Pass rd. 2 mi. E US 550, 3.4 mi. NE Ridgway, Ouray  
 Co. Colo.  
 >*Euphydryas editha hutchinsi* TL Milligan Can., Jefferson Co. Mont.; =*alebarki* TL ~10 mi. SW Encampment on Battle  
 Lake Rd., Sierra Madre Mts., Carbon Co. Wyo.  
 >>*Euphydryas editha montanus* TL upper slopes Mt. Washburn, Yellowstone NP, Wyo.  
*Euphydryas (Hypodryas) gillettii* TL Yellowstone NP, Wyo.; =*glacialis* Two Medicine Lake, Glacier NP, Glacier Co.  
 Mont.  
*Poladryas minuta minuta* TL Comfort, Kendall Co. Tex.  
*Poladryas minuta arachne* TL vic. Golden, Jefferson Co. Colo.; =*gilensis* TL W fork Gila River, Catron Co., New  
 Mex.; =*expedita* TL 1 rd. mi. W Mountain Springs Summit, Spring Mts., Nev.  
*Poladryas minuta nympa* TL NW Mexico evidently including Sonora Mex. (S Ariz. TL is error, U.S. has only  
 intergrades to this Mex. ssp., and none like lectotype)  
*Poladryas minuta monache* TL Monache Meadows, Tulare Co. Calif.  
*Microtia elva* TL Guatemala & Nicaragua  
*Microtia (Dymasia) dymas dymas* TL San Antonio, Tex.  
 >*Microtia dymas imperialis* TL Palm Springs, Riverside Co. Calif.  
*Microtia dymas chara* TL vic. Tucson, Ariz.  
*Microtia (Texola) elada ulrica* TL San Antonio, Tex.  
*Microtia elada perse* TL Fort Grant & Mt. Graham, Pinaleno Mts., Graham Co. Ariz.  
*Chlosyne janais janais* TL?  
*Chlosyne definitiva definitiva* TL inland from Corpus Christi, Nueces Co. Tex.; =*schausi* TL Paso de San Juan, Veracruz,  
 Mex.  
*Chlosyne definitiva anastasia* TL Durango, Durango, Mex.  
*Chlosyne endeis pardelina* TL La Gloria, S of Monclova, Coahuila, Mex.  
*Chlosyne melitaeoides* TL Mex.  
*Chlosyne eumeda* TL Mochtitlan, Guerrero, Mex.; =*dryope* TL Jalisco, Mex.  
*Chlosyne rosita browni* TL El Salto, San Luis Potosi, Mex.  
*Chlosyne rosita montana* TL Mt. Popocatepetl, Mex./Puebla, Mex.  
*Chlosyne theona thekla* TL vic. old Fort Lowell, near Tucson, Pima Co. Ariz.  
*Chlosyne theona bolli* TL San Antonio, Bexar Co. Tex.  
*Chlosyne chinatiensis* TL Chinati Mts., Presidio Co. Tex.  
*Chlosyne leanira obsoleta* TL near San Rafael, Marin Co. Calif. (extinct)

*Chlosyne leanira leanira* TL hwy 70 at Chambers Crk., Plumas Co. Calif.; =*oregonensis* TL Mt. Ashland, Loop Road, Jackson Co. Ore.; =*daviesi* TL Strawberry Lake, Tuolumne Co. Calif.; =*nebularum* TL Highland Way, 3-4 rd. mi. SE Soquel to San Jose road, Santa Cruz Co. Calif.  
*Chlosyne leanira wrighti* TL San Bernardino, San Bernardino Co. Calif.; =*elegans* TL Oso Flaco Sand Dunes, vic. Oso Flaco Lake, San Luis Obispo Co. Calif.; =>*cerrita* TL edge of Mojave Desert, Calif. (intergrades to *alma*)  
*Chlosyne leanira alma* TL NW Mohave Co., Ariz.; =*basinensis* TL Nevada road 338, 1 mi NE Calif. state line, Sweetwater Mts., Lyon Co. Nev.; =*flavodorsalis* TL Comb Ridge, 4 mi. W Bluff, San Juan Co. Utah  
*Chlosyne leanira pariaensis* TL Cockscomb Ridge, 61 rd. km E Kanab, Kane Co. Utah (3 traits like *leanira*, 3 like *fulvia*)  
*Chlosyne leanira fulvia* TL Davis Mts., Tex.  
*Chlosyne leanira coronado* TL summit Redington Pass, Santa Catalina Mts., Ariz.  
*Chlosyne cyneas* TL mts. of Oaxaca, Mex.  
*Chlosyne nycteis pastoron* TL Jones Knob, Macon Co., N.C.  
*Chlosyne nycteis nycteis* TL middle states of U.S. [E of the Great Plains]  
*Chlosyne nycteis reversa* TL Riding Mts., Man.  
*Chlosyne nycteis drusus* TL Turkey Creek Junction, Jefferson Co. Colo.  
*Chlosyne gorgone* TL Burke Co. Ga.; =*carlota* TL Cedar Hill, Jefferson Co. Mo.  
*Chlosyne gorgone* larva form *rufa*  
*Chlosyne gorgone* larva form *bicolor*  
*Chlosyne gorgone* larva form *nigra*  
*Chlosyne lacinia* ssp. larva form *rufa*  
*Chlosyne lacinia* ssp. larva form *bicolor*  
*Chlosyne lacinia* ssp. larva form *nigra*  
*Chlosyne lacinia crocale* TL NE of Fort Apache, Navajo-Apache Cos. Ariz.  
*Chlosyne lacinia adjutrix* TL Tex.  
*Chlosyne californica* TL "Colorado Desert of SE Cal.", San Bernardino Co.? Calif.  
*Chlosyne harrisii harrisii* TL Maine, N.H., Mass.; =*albimontana* TL White Mts., N.H.; =*liggetti* TL Slippery Rock, Cook Forest, Clarion Co. Penn.  
*Chlosyne harrisii hanhami* TL Man. or Minn.  
*Chlosyne stenchospecies palla* (includes *whitneyi*, *gabbii*, *sterope*, *acastus*, *neumoegeni*, *palla*)  
*Chlosyne whitneyi whitneyi* TL N slope Mt. Dana, Mono Co. Calif.; =*malcolmi* TL high alt. near Mammoth Camp, Mono Co. Calif.  
*Chlosyne whitneyi altalus* TL Nigel Pass, Banff NP, Alta.  
*Chlosyne whitneyi windriver* TL near Bears Ears Mtn., Wind River Mts., Fremont Co. Wyo.  
*Chlosyne whitneyi damoetas* TL mts. N or NW of South Park [most likely Hall Valley, Park Co. Colo.]...Williams River Range [most likely W Berthoud Pass, Grand Co. Colo.]  
*Chlosyne gabbii gabbii* TL La Tuna Can., Verdugo Mts., LA Co. Calif.  
*Chlosyne gabbii atrifasciata* TL La Cascada, Santa Cruz I., Santa Barbara Co. Calif.  
*Chlosyne sterope sterope* TL Tygh Valley, Wasco Co. Ore.  
*Chlosyne sterope dorothyi* TL Durkee, Baker Co. Ore. (perhaps intermediate *sterope*X*acastus* thus invalid)  
*Chlosyne sterope acastus* TL Provo Can., Utah Co. Utah; =*waucoba* TL ½ mi. N Cerro Gordo, Inyo Mts., Inyo Co. Calif.  
*Chlosyne sterope arkanyon* TL Poncha Crk., hwy. 285, S of Poncha Springs, Chaffee Co. Colo.  
*Chlosyne sterope sabina* TL Sabino Can., Santa Catalina Mts., Ariz.  
*Chlosyne sterope neumogeni* TL Virgin River Valley, Washington Co. Utah  
*Chlosyne sterope vallismortis* TL Tuber Can. spring, Panamint Mts., Death Valley NM, Inyo Co. Calif. (introgressed with *palla*); =*robusta* TL Kyle Can. Cgd., Spring Mts., Nev.  
*Chlosyne palla australomontana* TL Kennedy Meadows Rd., Tulare Co. Calif. (introgressed with *neumoegeni*)  
*Chlosyne palla palla* TL hwy. 70 at Chambers Crk., SW Belden, Plumas Co. Calif. (has some cream females, thus nearer *eremita* than *altasierra*); =>*eremita* TL Lake Co., Calif. (an extreme of *palla* with most females cream)  
*Chlosyne palla altasierra* TL Fallen Leaf Lake, El Dorado Co. Calif.  
*Chlosyne palla flavula* TL Glenwood Springs, Garfield Co. Colo.  
*Chlosyne palla calydon* TL Turkey Creek Junction, Jefferson Co. Colo.; (*blackmorei* is nomen nudum)  
*Chlosyne hoffmanni segregata* TL Crater Lake, Klamath Co. Ore.; =*manchada* TL Drury, Tumwater Can., Chelan Co. Wash.  
*Chlosyne hoffmanni hoffmanni* TL Gold Lake, Sierra Co. Calif.  
*Phyciodes (Tegosa) luka* TL Tamazunchale, San Luis Potosi, Mex.  
*Phyciodes (Anthanassa) frisia frisia* TL Cuba  
*Phyciodes frisia tulcis* TL central valleys of Guatemala

*Phyciodes (Anthanassa) ptolyca ptolyca* TL Chisoy Valley, Guatemala  
*Phyciodes (Anthanassa) texana texana* TL New Braunfels, Comal Co. Tex.  
*Phyciodes texana seminole* TL Bainbridge, Decatur Co. Ga.  
*Phyciodes (Anthanassa) argentea* TL Choctum, Guatemala  
*Phyciodes* species, whiter-mottled-unh spring form *marcia*  
*Phyciodes (Phyciodes) graphica vesta* TL New Braunfels, Comal Co. Tex.  
*Phyciodes (Phyciodes) mylitta mylitta* TL Stanyan Hill, San Francisco, Calif.; =*epula* TL San Francisco, Calif.  
*Phyciodes mylitta arizonensis* TL Ariz.  
*Phyciodes pallida pallida* TL Flagstaff Mtn., Boulder Co. Colo.  
*Phyciodes pallida barnesi* TL Glenwood Springs, Garfield Co. Colo.  
*Phyciodes orseis orseis* TL Mt. St. Helena, Napa Co. Calif.  
*Phyciodes orseis herlani* TL Glenbrook Creek, 7000', Douglas Co. Nev.  
*Phyciodes stenchospecies tharos* (includes *tharos*, *cocyta*, *diminutor*, *incognitus*, *batesii*)  
*Phyciodes tharos ricolorado* TL Moab, Grand Co. Utah  
*Phyciodes tharos tharos* TL Van Courtland Park, New York City, N.Y.; =*euclea* TL New York City & vicinity;  
 =*distincta* TL Calexico, Imperial Co. Calif.  
*Phyciodes tharos orantain* TL below Barr Lake, Adams Co. Colo.  
*Phyciodes cocyta cocyta* TL Black Rock, Cape Breton, N.S.; =*arctica* TL Table Mtn., Port au Port, Nfld.  
*Phyciodes cocyta selenis* TL Grosky Rd., The Pas, Man.; =*marcia* TL Kanawha River (town of Coalburgh, later  
 renamed Cabin Creek), Kanawha Co. W.Va.; =*pascoensis* TL Pasco, Franklin Co. Wash.  
*Phyciodes cocyta arenacolor* TL Warm Springs, Steptoe Valley, White Pine Co. Nevada  
*Phyciodes diminutor diminutor* TL NE Conger, Freeborn Co., Minn.  
*Phyciodes diminutor incognitus* TL Duncan Ridge Rd., Union Co., Georgia  
*Phyciodes batesii batesii* TL Winchester, Frederick Co. Va.; =>*maconensis* TL Jones Knob, Macon Co., N.C.  
*Phyciodes batesii lakota* TL Pine Ridge, Sioux Co. Neb.  
*Phyciodes batesii saskatchewan* TL Halfway Lake (N of Edmonton near Clyde), Alberta  
*Phyciodes batesii apsaalooke* TL Hidden Basin Cgd., Bighorn Co. Wyo.  
*Phyciodes batesii anasazi* TL near Gateway, Mesa Co. Colo.  
*Phyciodes pulchella tutchone* TL Nickel Creek, 4000', SW Yukon  
*Phyciodes pulchella owimba* TL Pattee Can., Missoula Co. Mont.  
*Phyciodes pulchella pulchella* TL San Francisco Calif.; =*pratensis* TL Old Cemetery, San Francisco Calif.; =*campestris*  
 TL Old Cemetery, San Francisco Calif.; =>*inornatus* TL Clear Creek, 2.9 mi. E Grass Valley Rd., Sonoma Range,  
 Pershing Co. Nev. (intermediate *pulchella*X*camillus* [& *Xmontana*])  
*Phyciodes pulchella deltarufa* TL Willow Slough just N Davis, Yolo Co. Calif.  
*Phyciodes pulchella montana* TL Tuolumne Meadows, Tuolumne Co. Calif.; =*orsa* TL Gold Lake, Sierra Co. Calif.;  
 =>*vallis* TL Nevada road 338 at Garden Can., Sweetwater Mts., Lyon Co. Nev. (intermediate *montana*X*pulchella*  
 [& *Xcamillus*])  
*Phyciodes pulchella camillus* TL Fairplay, Park Co. Colo.  
*Phyciodes pulchella sacramento* TL 1 mi. E Cloudcroft, Sacramento Mts., Otero Co. New Mex.  
*Phyciodes pulchella shoshoni* TL Humboldt R. N Battle Mtn., Elko Co. Nev.  
*Phyciodes pallescens* TL Puebla, & Morelos (region of Cuernavaca), Mex.  
*Phyciodes picta picta* TL North Platte, Lincoln Co. Neb.  
*Phyciodes picta canace* TL vic. Tucson, Ariz.  
*Phyciodes phaon phaon* TL San Simon (=St. Simons) Is., Glynn Co, Georgia  
*Phyciodes phaon jalapeno* TL Mesa, Maricopa Co., Ariz.

#### Lycaenidae, Riordininae, Riordinini, Riordinina

*Calephelis borealis* TL Hudson R. near Upper Coldenham, Orange Co. N.Y.  
*Calephelis muticum* TL Willis, Washtenaw Co., Mich.  
*Calephelis virginensis* TL Virginia; =*louisiana* TL Opelousas, Evangeline Parish, La.  
*Calephelis nilus perditalis* TL San Benito, Cameron Co. Tex.  
*Calephelis nemesis* TL vic. Tucson, Ariz.; =*australis* TL San Antonio, Bexar Co. Tex.; =*guadeloupe* TL vic. New  
 Braunfels & San Antonio, Tex.; =*dammersi* TL Blythe, Riverside Co. Calif.; =*californica* TL Riverside, Riverside  
 Co. Calif.  
*Calephelis rawsoni rawsoni* TL Lacey's Ranch ~7 mi. SW Kerrville, Kerr Co. Tex.  
*Calephelis rawsoni freemani* TL 12 mi. NW Alpine, Davis Mts., Tex.  
*Calephelis rawsoni arizonensis* TL Brown Can., Baboquivari Mts., Pima Co. Ariz.  
*Calephelis wrighti* TL Coachella Valley, S Calif.  
*Caria ino melicerta* TL Paso de San Juan, Veracruz, Mex.

*Lasaia maria maria* TL Ajijic, Jalisco, Mex.  
*Lasaia sula peninsularis* TL Piste, Yucatan, Mex.  
*Melanis pixe pixe* TL Mex.

### Lycaenidae, Riordininae, Riordinini, Emesiina

*Emesis zela cleis* TL Fort Grant, Pinaleño Mts., Graham Co., Ariz.  
*Emesis ares* TL Fort Grant, Pinaleño Mts., Graham Co., Ariz.  
*Emesis emesia* TL Nicaragua  
*Emesis tenedia* TL Nova Granada, near Bogota, Colombia  
*Apodemia stenchospecies mormo* (includes *mormo*, *cythera*, *virgulti*, *deserti*, *mejicanus*, *duryi*, *dialeuca*, *mojavelimbus*)  
*Apodemia mormo pueblo* TL S of Security, El Paso Co. Colo.  
*Apodemia mormo mormo* TL Washoe Co. Nev.; =*parva* TL N Eureka, W slope Diamond Mts., Eureka Co. Nev.;  
= *autumnalis* TL 2 rd. mi. N Red Cloud Mine, Spring Mts., Nev.  
*Apodemia mormo langei* TL Antioch dunes, Contra Costa Co. Calif.  
*Apodemia (mormo?) cythera cythera* TL 9 mi W Lone Pine, Inyo Co. Calif.  
>*Apodemia (mormo?) cythera tuolumensis* TL Grand Can. of the Tuolumne R., Yosemite NP, Calif.  
*Apodemia virgulti virgulti* TL La Tuna Can., Verdugo Mtns., LA Co. Calif.; = *arenaria* TL El Segundo sand dunes, LA  
Co. Calif.; = *nigrescens* TL Colton, San Bernardino Co. Calif. (Papilio [N.S.]#18 reviews the “*mormo*” ssp.)  
*Apodemia virgulti deserti* TL La Puerta Valley, San Diego Co. Calif.  
*Apodemia virgulti mejicanus* TL Sonora, Mex., or S Ariz.  
*Apodemia virgulti duryi* TL 5 mi. E Mesilla, Organ Mts., Dona Ana Co. New Mex.  
*Apodemia dialeuca davenporti* TL Walker Pass, Kern Co. Calif.; = *pratti* TL Holcomb Valley, San Bernardino Mts.,  
Calif.  
*Apodemia dialeuca mojavelimbus* TL Ord Mts., 6 air mi. ESE Hesperia, N slope San Bernardino Mts., San Bernardino  
Co. Calif.  
*Apodemia dialeuca dialeuca* TL 5 mi. NE La Encantada, Sierra San Pedro Martir, Baja Calif. Norte, Mex.;  
= *dialeucoides* TL Sugarloaf Mtn., San Bernardino Mts., San Bernardino Co. Calif.  
*Apodemia (dialeuca?) peninsularis* TL NE edge El Prado Meadow, Laguna Mts., San Diego Co. Calif.  
*Apodemia nais nais* TL Prescott, Yavapai Co. Ariz.  
*Apodemia nais chisosensis* TL Chisos Mts., 5400', Big Bend NP, Tex.  
(*Apodemia phyciodoides* TL Sonora Mex. [mis-labeled Chiricahua Mts. {including Paradise} Ariz., thus not in U.S.])  
*Apodemia palmerii palmerii* TL St. George, Washington Co. Utah; = *arizona* TL Ariz. road 90, 10.8 mi. N road 82,  
Cochise Co. Ariz.  
*Apodemia palmerii marginalis* TL Acme, Calif.  
*Apodemia hepburni hepburni* TL Pinos Altos, Chihuahua, Mex.  
*Apodemia walkeri* TL Acapulco, Guerrero, Mex.  
*Apodemia multiplaga* TL Rinconada, Veracruz, Mex.

### Lycaenidae, Miletinae, Miletini

*Feniseca tarquinius* TL?; = *novascotiae* TL S Milford, N.S.

### Lycaenidae, Lycaeninae, Lycaenini

*Lycaena (Lycaena) phlaeas* (all ssp.) blue-spotted form *caeruleopunctata*  
*Lycaena phlaeas hypophlaeas* TL vic. Boston, Mass.; = *americana* TL Mass.  
*Lycaena phlaeas hypophlaeas* melanic form *fasciata*  
*Lycaena phlaeas arethusa* TL head of Fish Creek, W or SW of Calgary, Alta.; => *weberi* TL Sweet Grass Hills, Liberty  
Co. Mont.  
*Lycaena phlaeas arctodon* TL E side Beartooth Pass, Carbon Co., Mont.  
*Lycaena phlaeas alpestris* TL N slope Mt. Dana, Mono Co. Calif.  
*Lycaena phlaeas feildeni* TL W side Smith Sound, SE Ellesmere I., Nunavut  
*Lycaena cupreus cupreus* TL Tioga Pass, Mono/Tuolumne Co. Calif.; = *lapidicola* TL Tioga Pass, Mono Co. Calif.  
*Lycaena cupreus artemisia* TL The Potholes, Teton Co. Wyo.  
*Lycaena cupreus snowi* TL Gray's Peak, Clear Creek (perhaps Summit) Co. Colo.; = *henryae* TL Caribou Pass, BC  
*Lycaena (Epidemia) mariposa mariposa* TL Calif.; = *penrosae* TL Lake Eleanor, Yellowstone NP, Wyo.  
*Lycaena mariposa charlottensis* TL Queen Charlotte I., BC  
*Lycaena (Epidemia) nivalis warnermontana* TL Dismal Swamp, Warner Mts., Modoc Co. Calif.  
*Lycaena nivalis nivalis* TL Gold Lake, Sierra Co. Calif.  
*Lycaena nivalis bichroma* TL summit Mt. Eddy, Siskiyou Co. Calif.



*Lycaena nivalis browni* TL Snowslide Can 8 mi. from Montpelier, Idaho; =*praetexta* TL Wildhorse Crossing Cgd., Owyhee R. Valley, Elko Co. Nev.

*Lycaena stenospecies helloides* (includes *helloides*, *florus*, but evidently not *dorcas*)

*Lycaena (Epidemia) helloides* TL San Francisco; (= *castro* TL Denver, Denver Co. Colo. if 2<sup>nd</sup> lectotype is *helloides*)

*Lycaena helloides* unnamed darker ssp. (S BC)

*Lycaena (Epidemia) florus arcticus* TL Mayo Lake Road, Yukon

*Lycaena florus sangremar* TL NE Taos Ski Basin, Taos Co. New Mex.

*Lycaena florus florus* TL Garnett's Ranch, near Lundbreck, mouth of Crow's Nest Pass, Alta.; =>*castro* TL Empire, Clear Creek Co. Colo. (*castro* is near-*florus*, amount of orange more similar to *florus* than to *sangremar*) (*castro* is a nomen dubium as the Ferris lectotype might be *L. helloides*) (I have petitioned ICZN to suppress the name *castro*)

*Lycaena florus megaloceras* TL 5-Spring Creek, Big Horn Co., Wyo. (cream female upf, unh grayer)

*Lycaena florus near-megaloceras* (cream female upf but unh like *florus* in color, C Mont.)

*Lycaena florus dospassosi* TL Bathurst, N.B.

*Lycaena (Epidemia) dorcas dorcas* TL The Pas, Man.

*Lycaena dorcas michuron* TL Fenton Road, Livingston Co. Mich.

*Lycaena dorcas claytoni* TL Springfield, Penobscot Co. Maine

*Lycaena (Epidemia) epixanthe epixanthe* TL N.J.

*Lycaena epixanthe phaedrus* TL Dublin Shore, Lunenburg Co., N.S.; =*amicetus* TL Avalon Pen., near St. John, Nfld.; =*michiganensis* TL Proud Lake, Oakland Co. Mich.

*Lycaena (Epidemia) thoe* TL N.A.; (this is not *hyllus* TL Smyrna, Turkey, which evidently belongs to *Lycaena thersamon* or *L. alciphron* and is nomen dubium)

*Lycaena (Chalceria) gorgon gorgon* TL vic. Cresta, Butte Co. Calif.

>*Lycaena gorgon micropunctata* TL Lower Rock Crk., Mono Co. Calif.

*Lycaena gorgon jacquelinae* TL Pine Creek Can., Warner Mts., Modoc Co. Calif.; =*dorothea* TL 3 mi. W Selma, Josephine Co. Ore.

*Lycaena heteronea gravenotata* TL Plainview, just N of Coal Creek, Jefferson Co. Colo.; =>*submaculata* TL Warner Valley, at S edge Lassen NP, Plumas Co. Calif. (intermediate to *heteronea*)

*Lycaena heteronea heteronea* 2 air mi. SSE Sausalito, Marin Co. Calif.; =*rutila* (invalid homonym) TL Wilson Peak Road, Wilson Creek Range, Lincoln Co. Nev.; =*rava* TL Lamoille Can., Ruby Mts., Nev.; =>*klotsi* TL Broadwater Co. Mont.

*Lycaena heteronea northi* TL North Trinity Mtn., Humboldt Co. Calif.

*Lycaena (Chalceria) heteronea clara* TL Tehachapi Pass, Kern Co. Calif.

*Lycaena (Chalceria) rubidus rubidus* TL 5 mi. E Lakeview, Lake Co. Ore.; =*duofacies* TL Bogus Basin, Boise Co. Ida.; =*perkinsorum* TL 1 mi. E The Dalles, Wasco Co. Ore.; =*monachensis* TL Monache Meadows, Tulare Co. Calif.; =*incana* TL Trail Can., White Mts., Esmeralda Co. Nev.; =*longi* TL canyons N Harrison, Sioux Co. Neb.

*Lycaena rubidus sirius* TL vic. Twin Lakes, Lake Co. Colo.

*Lycaena rubidus ferrisi* TL 13 mi. E McNary, Apache Co. Ariz.

*Lycaena (Chalceria) dione* TL Denison & New Jefferson, Iowa

*Lycaena stenospecies xanthoides* (includes *xanthoides*, *editha*)

*Lycaena xanthoides obsolescens* TL Hunter Mtn. E of Nelson Range, Death Valley NM, Inyo Co. Calif.

*Lycaena xanthoides xanthoides* TL Sacramento, Calif.

*Lycaena xanthoides nigromaculata* TL W of Meridian, Colusa Co. Calif.

*Lycaena xanthoides editha*X*xanthoides*=>"*pseudonexa*" TL Railroad Park, Dunsmuir, Shasta Co. Calif. (intermediate thus invalid)

*Lycaena xanthoides editha* TL near Carnelian Bay of Lake Tahoe, Placer Co. Calif.

*Lycaena xanthoides obscuramaculata* TL 4 km S Jarbidge, Jarbidge Mts., Elko Co. Nev.; =homonym *nevadensis* TL 4 km S Jarbidge, Jarbidge Mts., Elko Co. Nev.

*Lycaena xanthoides vurali* TL Broadwater Co. Mont.; =homonym *montana* TL Broadwater Co. Mont.

*Lycaena (Hermelycaena) hermes* TL vic. San Diego, Calif.

*Lycaena arota arota* TL hwy. 70 at Soda Creek, Plumas Co. Calif.

>*Lycaena (Tharsalea) arota nubila* TL Griffith Park, Los Angeles, Calif.

*Lycaena arota virginienensis* TL Virginia City, Storey Co. Nev.; =*schellbachi* TL Bright Angel Trail near North Rim, Grand Can., Ariz.

### Lycaenidae, Lycaeninae, Theclini, Theclina

*Hypaurotis crysalus crysalus* TL Palmer Lake, El Paso Co. Colo.

*Hypaurotis crysalus citima* TL Mt. Nebo, Juab-Utah Cos., Utah; =>*intermedia* TL Highland Spring, Highland Range, Lincoln Co. Nev. (intermediate toward *crysalus*)

*Habrodais grunus grunus* TL hwy. 70 at Chambers Crk., Plumas Co. Calif.; =*lorquini* TL Mt. Diablo, Contra Costa Co. Calif.

*Habrodais grunus herri* TL McKenzie (Sister's) Pass, Lane-Deschutes Co. Ore.

### Lycaenidae, Lycaeninae, Theclini, Eumaeina

*Eumaeus atala* TL Cuba; =*florida* TL Miami, Fla.

*Eumaeus toxea* TL Guatemala; (not "minijas")

*Atlides halesus halesus* TL Virginia; =*corcorani* TL Riverside, Calif.

*Atlides halesus dolichos* TL Georgia; =*juanita* TL Palatka, Putnam Co. Fla.

*Rekoa palegon* TL Suriname

*Rekoa marius* TL?

*Arawacus jada* TL Mex.

*Satyrium (Satyrium) fuliginosa fuliginosa* TL Norden, El Dorado Co. Calif.; =*tildeni* TL Siskiyou Mts., Siskiyou Co. Calif.

*Satyrium fuliginosa albolineatum* TL Boardman Ridge, S of Hull Mtn., Lake Co. Calif.

*Satyrium (fuliginosa?) semiluna* TL Half Moon Ranch, Jackson Hole, Teton Co. Wyo.; =*maculadistinctum* TL W slope East Sister, Sweetwater Mts., Lyon Co. Nev.

*Satyrium behrii behrii* TL Mono Lake, Mono Co. Calif.; =*columbia* TL Fairview, BC

*Satyrium behrii crossi* TL Nederland, Boulder Co. Colo.

*Satyrium liparops fletcheri* TL Manitoba

*Satyrium liparops aliparops* TL Glenwood Springs, Garfield Co. Colo.

*Satyrium liparops strigosa* TL Blue Hill, Norfolk Co., Mass

*Satyrium liparops liparops* TL Millhaven Plantation near Briar Crk., Screven Co. Ga.

*Satyrium liparops floridensis* TL Withlacoochee State Forest, Citrus Co. Fla.

*Satyrium kingi* TL Savannah, Chatham Co. Ga.

*Satyrium caryaevorus* TL Merivale, Ont.

*Satyrium calanus calanus* TL? (obviously Fla.); =*wittfeldii* TL vic. Georgiana, Brevard Co. Fla.

*Satyrium calanus falacer* TL Philadelphia, Penn.; =*boreale* TL Britannia Park, Ottawa, Ont.

*Satyrium calanus godarti* TL Rosemont, Teller Co. Colo.

*Satyrium calanus albidus* TL NW Hayden, Routt Co. Colo.

*Satyrium calanus* ssp. white-uns form *heathii*

*Satyrium edwardsii edwardsii* TL Queenstown, Ont.

>*Satyrium edwardsii meridionale* TL S boundary Aiken SP, Aiken Co. S.C.

*Satyrium auretteorum auretteorum* TL near Belden, Plumas Co. Calif.

*Satyrium auretteorum spadix* TL Tehachapi Pass, Kern Co. Calif.

*Satyrium auretteorum fumosum* TL Malibu Lake, LA Co., Calif.

*Satyrium saepium saepium* TL near Belden, Plumas Co. Calif.; =*okanogana* TL Peachland, BC; =*fulvescens* TL Havilah, Kern Co. Calif.; =*chalcis* TL Isabel Crk., Santa Clara Co. Calif.; =*chlorophora* TL San Diego, Calif.;

=*provo* TL Provo, Utah Co. Utah; =*rubrotenebrosus* TL San Bruno Mts., San Mateo Co. Calif.; =*obscurifuscum* TL ½ mi. S Bonanza Gulch, Jarbidge Mts., Elko Co. Nev. (may be weak ssp.)

*Satyrium saepium caliginosum* TL Baywood Park, San Luis Obispo Co., Calif.

*Satyrium saepium latalinea* TL Leeds Crk., Pine Valley Mts., Washington Co. Utah; =*subaridum* TL Hunter Mtn. E of Nelson Range, Inyo Co. Calif.

*Satyrium tetra* TL Arroyo Bayo, Santa Clara Co. Calif.; =*adenostomatis* TL Tehachapi Pass, Kern Co. Calif.

*Satyrium sylvinus dryope* TL Santa Clara Co. Calif.

*Satyrium sylvinus megapallidum* TL Elko, Elko Co. Nev.

*Satyrium sylvinus sylvinus* TL near Belden, Plumas Co. Calif.; =*desertorum* TL Oak Creek, Kern Co. Calif.

*Satyrium sylvinus putnami* TL Mt. Nebo, Juab-Utah Cos. Utah; =*itys* TL Prescott, Yavapai Co. Ariz.

*Satyrium sylvinus nootka* TL Wellington, Vancouver I., BC

*Satyrium californica californica* TL Capell Crk., NNE Napa, Napa Co. Calif.; =*borus* TL hwy. 70 at Chambers Crk., ~6 road mi. SW Belden, Plumas Co. Calif.; =*cygnus* TL 3 mi. SW Virginia City, Storey Co. Nev.

>*Satyrium californica obscurafacies* TL Baker Crk. Cgd., Snake Range, White Pine Co. Nev.

*Satyrium californica wapiti* TL near Oliver, Gunnison Co. Colo.

*Satyrium californica brashor* TL Mica Crk, near Osoyoos, BC

*Satyrium acadica* TL near London, Ont.; =*coolinensis* TL NE N. Amer. or Great Plains (mislabelled Coolin Ida.);

=*montanensis* TL Mont.

*Satyrium (Harkenclenus) titus titus* TL Millhaven Plantation, Screven Co. Ga.

*Satyrium titus watsoni* TL Kerrville, Kerr Co. Tex.; =*campus* TL vic. Defiance, Shelby Co. Iowa; =*winteri* TL Sherborn, Middlesex Co. Mass.; =>*occidentalis* TL Star Creek Can., Humboldt Range, Pershing Co. Nev. (possible weak ssp.)

*Satyrium titus immaculosus* TL Provo, Utah Co. Utah

*Satyrium (Fixsenia) favonius favonius* TL Georgia

*Satyrium favonius ontario* TL Port Stanley, Ont.

*Satyrium favonius autolyucus* TL Dallas, Tex.; =*violae* TL Folsom, Union Co., New Mex.

*Satyrium favonius ilavia* TL Tex. (easily derived from *autolyucus*, whereas *polingi* is much different in pattern & stigma & wing shape)

*Satyrium (F.) polingi* TL Sunny Glen Ranch near Alpine, Brewster Co. Tex.; =*organensis* TL Finley Can., Organ Mts., Dona Ana Co. New Mex.

*Phaeostrymon alcestis alcestis* TL Dallas, Tex.

*Phaeostrymon alcestis oslari* TL Tucson, Ariz.

*Ocaria ocrisia* TL Ecuador

*Chlorostrymon simaethis simaethis* TL St. Christopher, Lesser Antilles

*Chlorostrymon simaethis sarita* TL Comal Co. Texas

*Chlorostrymon maesites maesites* TL Cuba

*Chlorostrymon maesites telea* TL Amazon

*Callophrys (Cyanophrys) goodsoni* TL Tegucigalpa, Honduras

*Callophrys (Cyanophrys) herodotus* TL?

*Callophrys (Cyanophrys) miserabilis* TL Rincon, Guerrero, Mex.

*Callophrys (Callophrys) stenchospecies affinis* (includes *apama*, *affinis*, *perplexa*)

*Callophrys affinis apama* TL Fort Grant, Pinaleno Mts., Graham Co. Ariz.; =>*albipalpus* TL 10 mi. N Ruidosa, Sacramento Mts., Lincoln Co. New Mex. (intermediate to *homoperplexa*)

*Callophrys affinis homoperplexa* TL Golden, Jefferson Co. Colo.

*Callophrys affinis affinis* TL vic. Fort Bridger, Uinta Co. Wyo.

*Callophrys affinis washingtonia* TL Alta Lake, Okanogan Co. Wash.

*Callophrys affinis oregonensis* TL Kusshi Crk., Yakima Co. Wash. (not sympatric with *washingtonia*)

*Callophrys affinis perplexa* TL San Diego, Calif. (very similar to *homoperplexa*)

*Callophrys affinis superperplexa* TL Big Pine Crk., Inyo Co. Calif.

*Callophrys (Callophrys) stenchospecies sheridanii* (includes *comstocki*, *lemberti*, *viridis*, *pseudodumetorum*, *sheridanii*)

*Callophrys sheridanii comstocki* TL Providence Mts., San Bernardino Co. Calif.; =>*interrupta* TL S end Stillwater Mts. W Frenchman, Churchill Co. Nev. (intermediate to *lemberti*)

*Callophrys sheridanii paradoxa* TL Dolores River W Uravan, Montrose Co. Colo.

*Callophrys sheridanii lemberti* TL W above Tioga Pass, Tuolumne Co. Calif.

*Callophrys sheridanii viridis* TL San Francisco, Calif.; =*dumetorum* TL San Francisco (conspecific with *sheridanii* in A. Warren Butt. Ore.) (I have petitioned ICZN to suppress the name *dumetorum* and protect the name *sheridanii* from the older name *viridis*)

*Callophrys sheridanii pseudodumetorum* TL Ruth Res., Trinity Co. Calif.

*Callophrys sheridanii newcomeri* TL Mill Creek, Yakima Co. Wash.

*Callophrys sheridanii neoperplexa* TL Eureka, Juab Co. Utah.

*Callophrys sheridanii sheridanii* TL near Sheridan, Sheridan Co. Wyo.

*Callophrys sheridanii sacramento* TL Cloudcroft, Sacramento Mts., New Mex.

*Callophrys stenchospecies gryneus* (includes *sweadneri*, *gryneus*, *siva*, *loki*, *thornei*, *muiri*, *nelsoni*)

*Callophrys (Mitoura) gryneus sweadneri* TL St. Augustine, St. Johns Co., Fla.

*Callophrys gryneus gryneus* TL Aiken Co. S.C.; =*castalis* TL near Waco, McLennan Co. Tex.; =>*smilacis* TL near Fort Pulaski, Chatham Co. Ga. (like *gryneus* but unh line sl. straighter, evidently intermediate toward *sweadneri*)

*Callophrys gryneus gryneus* less-orange summer form *arufa*

*Callophrys gryneus siva* TL Fort Wingate, McKinley Co. New Mex.; =*clenchi* TL Pinery Can., Chiricahua Mts., Ariz.

*Callophrys gryneus chalcosiva* TL S. Willow Creek, Stansbury Mts., Utah

*Callophrys gryneus juniperaria* TL Mint Can., LA Co. Calif. (5 traits are intermediate *siva*X*loki*)

>*Callophrys gryneus mansfieldi* TL 7 mi. W Simmler, San Luis Obispo Co. Calif.

*Callophrys gryneus loki* TL Mt. Springs, San Diego Co. Calif.

*Callophrys gryneus thornei* TL Little Cedar Can., Otay Mtn., San Diego Co. Calif.

*Callophrys gryneus muiri* TL Mendocino Co. Calif.

*Callophrys gryneus nelsoni* TL 6 rd. mi SW Belden, Plumas Co. Calif.

*Callophrys gryneus rosneri* TL 2 mi. S Kaslo, BC; =*plicataria* TL Cameron Lake, Vancouver I., BC; =*barryi* TL Union Mills, Clackamas Co. Ore.; =*byrnei* TL 5.6 mi. S Emida, Benewah Co. Ida.

*Callophrys (Mitoura) hesseli hesseli* TL Lakehurst, Ocean Co. N.J.

*Callophrys hesseli angulata* TL near Aiken State Park, Aiken Co. S.C.  
*Callophrys (Cisincisalia) spinetorum spinetorum* TL Gold Lake Lodge, Sierra Co. Calif.; =*minus* TL 1 mi. E Kenosha Pass, Park Co. Colo.  
(*Callophrys spinetorum millerorum* TL vic. El Encarnacion, Hidalgo, Mex. Not in U.S., just a variant in New Mex.)  
*Callophrys (Cisincisalia) johnsoni* TL BC  
*Callophrys (Xamia) xami xami* TL near Vera Cruz, Veracruz, Mex.  
*Callophrys xami texami* TL Corpus Christi, Nueces Co., Tex.  
*Callophrys (Sandia) mcfarlandi* TL La Cueva Can., W of Sandia Mts., Bernalillo Co. New Mex.  
*Callophrys (Incisalia) fotis fotis* TL NW Mohave Co., Ariz.  
*Callophrys fotis mojavensis* TL 2 mi. N Red Cloud Mine, Spring Mts., Nev.  
*Callophrys (Incisalia) mossii schryveri* TL Chimney Gulch, Jefferson Co. Colo.  
*Callophrys mossii mossii* TL Esquimault, Vancouver I., BC  
*Callophrys mossii bayensis* TL San Bruno Mts., San Mateo Co. Calif.,  
*Callophrys mossii doudoroffi* TL Big Sur, Monterey Co. Calif.  
*Callophrys mossii windi* TL Placer Co. Calif.; =*hidakupa* TL Stoddard Can., San Gabriel Mts., Calif. (or weak ssp.);  
=>*marinensis* TL SW of Lagunitas, Marin Co. Calif. (intermediate to *bayensis*)  
*Callophrys (Incisalia) augustinus augustinus* TL Fawcett, Alta.; =*croesioides* TL Lakehurst, Ocean Co. N.J.; =*helenae*  
TL Doyles Station, Nfld.; =*concava* TL 1.3 mi. E Jacks Crk. Cgd., Independence Mts., Elko Co. Nev.  
*Callophrys augustinus iroides* TL Hwy. 70 at Soda Creek, Plumas Co. Calif.; =*annetteae* TL New Mex.  
*Callophrys augustinus* unnamed ssp. dark-uns BC  
*Callophrys (Incisalia) polios* TL Lakewood, Ocean Co., N.J.; =*obscurus* TL Lookout Mtn., Jefferson Co. Colo.;  
=*maritima* TL S end of Lake Earl, Del Norte Co. Calif.  
*Callophrys (Incisalia) irus irus* TL Camden or Burlington Cos. N.J.; =*arsace* TL Virginia or Georgia  
*Callophrys irus hadros* TL near Houston, Harris Co. Tex.  
*Callophrys (Incisalia) henrici henrici* TL Penn.; =*turneri* TL Cowley Co. Kans.  
*Callophrys henrici viridissima* TL Bodie Is. lighthouse, Dare Co. N.C.  
*Callophrys henrici margaretae* TL 8 mi. E De Land, Volusia Co. Fla.; =>*yahwehus* TL vic. Bull Swamp, Orangeburg  
Co. S.C. (intermediate to *henrici*)  
*Callophrys henrici solatus* TL Blanco Co. Tex.  
*Callophrys (Incisalia) lanoraieensis* TL Lanoraie, Quebec  
*Callophrys (Incisalia) nippon nippon* TL Fla.; =*clarki* TL Constance Bay, Ottawa region, Ont.  
*Callophrys (Incisalia) eryphon eryphon* TL hwy. 70 at Soda Creek, Plumas Co. Calif.; =*pallescens* TL Jett Can.,  
Toiyabe Mts., Nev.  
*Callophrys eryphon sheltonensis* TL Shelton, Mason Co. Wash.; =*purpurascens* TL Samoa, Humboldt Co. Calif.  
*Callophrys eryphon fusca* TL Schulz Pass Rd., San Francisco Peaks, Coconino Co. Ariz.  
*Allosmaitia strophius* TL Brasil; =*pion* TL Dueñas, Polochic Valley, Guatemala  
*Ziegleria guzanta* TL Jalapa, Orizaba, Veracruz, Mex.  
*Electrostrymon hugon* TL Brasil; =*sangala* TL Venezuela; =*cyphara* TL Panama  
*Electrostrymon joya* TL Loja, Ecuador; =*canus* TL Chilpancingo, Guerrero, Mex.  
*Electrostrymon angelia angelia* TL Cuba  
*Calycopis cecrops cecrops* TL Savannah, Chatham Co. Ga.  
*Calycopis cecrops isobeon* TL Cartago, Costa Rica (intergrades to *cecrops*, see Butt. Houston)  
*Strymon melinus melinus* TL Georgia; =*humuli* TL Mass.; =*franki* TL Lawrence, Douglas Co. Colo.; =*pudica* TL  
Contra Costa Co. Calif.  
*Strymon melinus atrofasciata* TL Wellington, Victoria I., BC; =*setonia* TL Seton Lake, Lillooet, BC  
*Strymon (melinus?) avalona* TL Avalon, Santa Catalina Island, Calif.  
*Strymon rufofusca* TL?  
*Strymon albata* TL Venezuela  
*Strymon alea* TL Nayarit & Veracruz, Mex.; =*laceyi* TL Devils R. N of Del Rio, Val Verde Co. Tex.  
*Strymon bebrycia* TL Mex.; =*buchholzi* TL Pharr, Hidalgo Co. Tex.  
*Strymon yojoa* TL near Vera Cruz, Veracruz, Mex.  
*Strymon cestri* TL near Vera Cruz, Veracruz, Mex.  
*Strymon martialis* TL Cuba  
*Strymon acis bartrami* TL Miami, Fla.  
*Strymon bazochii bazochii* TL Brasil  
*Strymon istapa modesta* TL Key West, Monroe Co. Fla.  
*Strymon istapa istapa* TL near Vera Cruz, Veracruz, Mex.; =*clenchi* TL Blythe, Riverside Co. Calif.  
*Strymon limenia* TL Jamaica  
*Strymon serapio* TL Mex., Panama

*Tmolus echion echiolus* TL Mex.  
*Ministrymon leda* TL near Prescott, Yavapai Co. Ariz.  
*Ministrymon leda* winter form *ines*  
*Ministrymon clytie* TL San Antonio, Tex.  
*Ministrymon azia* TL Mex.  
*Strephonota tephraeus* TL Venezuela?  
*Oenomaus ortygnus* TL Suriname  
*Parrhasius m-album* TL Georgia  
*Hypostrymon critola* TL Guaymas, Sonora, Mex.; =*festata* TL near San Jose del Cabo, Baja Calif. Sur, Mex.  
*Hypostrymon critola* spring form *ines*  
*Erora laeta laeta* TL near London, Ont.  
*Erora laeta quaderna* TL Tancitiro, Michoacan, Mex.; =*sanfordi* TL White Mts., Ariz. (valid ssp.?)

### Lycaenidae, Lycaeninae, Polyommataini

*Lampides boeticus* TL Algeria  
*Leptotes cassius theonus* TL Cuba  
*Leptotes cassius cassidula* TL Honduras; =*striata* TL San Antonio, Tex.  
*Leptotes marina* TL Orizaba, near Vera Cruz, Veracruz, Mex.  
*Brephidium exilis exilis* TL Sacramento, Calif.  
*Brephidium exilis pseudofea* TL Key West, Monroe Co. Fla. (intergrades with *exilis*, see Butt. Houston; intermediate between *exilis* & *insularis* except for antenna)  
*Brephidium exilis insularis* TL Rt. 21 near Beaufort, Beaufort Co. S.C. (antenna club brown not orange)  
*Zizula cyna* TL San Antonio, Tex.  
*Zizina otis otis* TL--(add)(in Hawaii)  
*Cupido (Everes) comyntas comyntas* TL? (obviously E U.S.); =*texana* TL near San Antonio, Tex.; =*sissona* TL Sisson [Mount Shasta City], Siskiyou Co. Calif. (type & lowland Calif. bugs are like E U.S. *comyntas*)  
*Cupido comyntas pacnowe* TL Adair Village, Benton Co. Ore.  
*Cupido amyntula valerianae* TL near Lead, Black Hills, S.D.; =*herri* TL Huachuca Mts., Ariz.  
*Cupido amyntula montanorum* TL Tahoe Meadows, Carson Range, Washoe Co. Nev.  
*Cupido amyntula amyntula* TL 2 mi. W Quincy, Plumas Co. Calif.; =*nesiotes* TL China Camp, Santa Rosa I., Calif.  
 >*Cupido amyntula albrightii* TL Kings Hill, Meagher Co. Mont. (may be just a form in Mont.-BC)  
*Cupido amyntula immaculata* TL Oak Creek, Yakima Co. Wash.  
*Cupido amyntula maritima* TL Jacquet River, N.B.  
*Celastrina stenchospecies argiolus* (includes *neglecta*, *echo*, *nigrescens*, *lucia*, *ladon*, *pseudargiolus*, *idella*, *argentata*, *serotina*, *humulus*, doubtfully *neglectamajor*)  
*Celastrina neglecta neglecta* TL Hunter, Greene Co. N.Y.; =>? *argentata* TL Cartwright etc. in S Man., & SE Sask. (needs investigation)  
*Celastrina neglecta echo* TL San Francisco, Calif. (placed into *C. neglecta* based on appearance habitat voltinism etc.)  
*Celastrina neglecta cinerea* TL vic. Fort Grant, W foot Pinaleno Mts., Graham Co. Ariz.  
*Celastrina* species form *violacea* (unh has only small dots)  
*Celastrina* species form *marginata* (unh has only dark margin & small dots)  
*Celastrina* species form *lucia* (unh has only central patch & small dots)  
*Celastrina* species form *lucimargina* (unh has central patch + dark margin & small dots)  
*Celastrina lucia lucia* TL Cumberland House, Sask.; =*marginata* TL Orono, Penobscot Co. Maine (b/w photo of lectotype looks like it applies to *C. "lucia Auctorum"*, but ups appears silvery like real *lucia*); =*quesnellii* TL Ahbau Lake, 35 mi. NW Quesnel, BC (perhaps a valid ssp.)  
*Celastrina lucia* bluer ssp. in NE U.S. (= "*lucia Auctorum*") (*pseudoargiolus* could be applied to this if suitable neotype were designated)  
*Celastrina lucia nigrescens* TL Kaslo, on Kootenay Lake, British Columbia  
 >*Celastrina lucia bakeri* TL Baker City, Baker Co. Ore.  
*Celastrina lucia lumarco* TL Surface Creek NNE Cedaredge, Delta Co. Colo.  
*Celastrina lucia sidara* TL Manitou Springs, El Paso Co. Colo.  
*Celastrina ladon* TL Patuxent River, Anne Arundel Co., Md.; =*violacea* TL Kanawha River nr. Coalburgh, Kanawha Co., W. Va.; =? *pseudargiolus* TL E U.S. (requires neotype to fix this taxon)  
*Celastrina idella* TL 2.2 km S Chatsworth, Burlington Co. N.J.  
 (?*Celastrina argentata argentata* TL Cartwright etc. in S Man., & SE Sask. [?same sp. as *humulus* & *serotina* with later-spring univoltine flight?, needs work])  
*Celastrina (argentata?) serotina* TL Great Swamp, near West Kingston, Washington Co. R.I.  
*Celastrina (argentata?) humulus* TL Red Rocks, Jefferson Co. Colo.

*Celastrina neglectamajor* TL Coalburgh, Kanawha Co. W.Va.  
*Celastrina nigra* TL Coalburgh, Kanawha Co. W.Va.; =*ebenina* TL Coalburgh, Kanawha Co. W.Va.  
*Udara (Vaga) blackburni* TL mtn. pass on Oahu, Hawaii  
*Hemiargus (hanno) ceraunus antibubastus* TL Georgia  
*Hemiargus (hanno) ceraunus gyas* TL Tucson, Ariz.; (*astenidas* [TL?] is nomen dubium)  
*Philotes sonorensis sonorensis* TL La Tuna Can., LA Co., Calif.  
*Philotes sonorensis extinctis* TL upper San Gabriel wash, LA Co. Calif. (extinct)  
*Philotiella speciosa speciosa* TL Havilah, Kern Co. Calif.; =*septentrionalis* TL Fort Churchill Rd., Lyon Co. Nev.  
*Philotiella speciosa purissima* TL Harris Grade N of Lompoc, Santa Barbara Co. Calif.  
*Philotiella speciosa bohartorum* TL Briceburg, Mariposa Co. Calif.  
*Philotiella speciosa leona* TL mile 226 US hwy 97, Klamath Co. Ore.  
*Euphilotes stenchospecies battoides* (includes *bernardino*, *allyni*, *battoides*, *ellisii*, *baueri*, *glaucon*, *centralis*)  
*Euphilotes bernardino bernardino* TL San Gabriel Mts., Calif.; =>*inyomontana* TL ridge above Wood Can., Panamint Range, Calif. (intermediate to *martini*)  
*Euphilotes bernardino martini* TL Oatman, Mohave Co. Ariz.  
*Euphilotes bernardino minuta* TL Baking Powder Flat, 1 mi. S Blind Spring, Spring Valley, White Pine Co. Nev.  
*Euphilotes bernardino allyni* TL El Segundo, LA Co. Calif.  
*Euphilotes battoides battoides* TL nr. Mono Pass, Inyo Co. Calif.  
*Euphilotes battoides* unnamed ssp. Ore. high Cascades on *Eriog. marifolium*  
*Euphilotes battoides vernalis* TL Coxey Meadow, San Bernardino Co. Calif.  
*Euphilotes battoides (ellisii) anasazi* TL Aztec, San Juan Co. New Mex.  
*Euphilotes battoides (ellisii) ellisii* TL West Creek, Unaweep Can., Mesa Co. Colo.  
*Euphilotes battoides (ellisii) basinensis* TL 3-4 mi. SE Dayton, Pine Nut Mts., Lyon Co. Nev.  
*Euphilotes battoides (ellisii) euromojavensis* TL Macedonia Can., Mid Hills, San Bernardino Co. Calif.; =*avawatz* TL 5 km W Old Mormon Spring, Avawatz Mts., San Bernardino Co. Calif.  
*Euphilotes battoides (baueri) baueri* TL W side Gilbert Pass, Inyo Co. Calif.  
*Euphilotes battoides (baueri) orientis* TL 12.5 mi. N Pioche, Bristol Mts., Lincoln Co. Nev.  
*Euphilotes glaucon oregonensis* TL Crater Lake, Klamath Co. Ore.  
*Euphilotes glaucon glaucon* TL nr. Virginia City, Storey Co. Nev.; =*mazourka* TL NW edge Badger Flat, Inyo Mts., Inyo Co. Calif.; =*panamintensis* TL Wildrose Can., Panamint Range, Inyo Co. Calif.; =*fusimaculata* TL Peavine Crk. Cgd., Toiyabe Mts., Nye Co. Nev.; =>*australoglaucon* TL Independence Crk., Inyo Co. Calif. (intermediate to *argocyanea*)  
*Euphilotes glaucon argocyanea* TL E end Nelson Range, Inyo Co. Calif.  
*Euphilotes glaucon hadrochilus* TL 6 km S of Westgard Pass, Inyo Co. Calif.  
*Euphilotes glaucon comstocki* TL Tehachapi Mts., Kern Co. Calif.  
*Euphilotes glaucon intermedia* TL Shasta Co. Calif. (presumably vic. Castella)  
*Euphilotes (glaucon) centralis* TL Salida, Chaffee Co. Colo.  
*Euphilotes stenchospecies enoptes* (includes *mojave*, *enoptes*, *dammersi*, *langstoni*, *ancilla*)  
*Euphilotes mojave mojave* TL Randsburg, Kern Co. Calif.  
*Euphilotes mojave virginensis* TL Cabin Can., Virgin Mts., Clark Co. Nev.  
*Euphilotes enoptes enoptes* TL near Belden, Plumas Co. Calif.; =*aridorum* TL Peavine Peak Rd. at hwy 395, Washoe Co. Nev.  
*Euphilotes enoptes bayensis* TL China Camp, near Point San Pedro, Marin Co. Calif.; =*tildeni* TL Del Puerto Can., 22 mi. W Patterson, Stanislaus Co. Calif.  
>*Euphilotes enoptes arenacola* TL Marina Beach dunes, 5 mi. N Monterey, Monterey Co. Calif.  
*Euphilotes enoptes smithi* TL Burns Creek, hwy. 1, Monterey Co. Calif.  
*Euphilotes enoptes cryptorufes* TL S facing slopes of Pyramid Mtn., San Jacinto Mts., Riverside Co. Calif.  
*Euphilotes enoptes dammersi* TL Snow Creek, Riverside Co. Calif.; =*opacapulla* TL Grapevine Can., Newberry Mts., Clark Co. Nev.  
*Euphilotes enoptes langstoni* TL 6 rd. mi. S Sherwin Summit, Mono Co. Calif.; =*primavera* TL Penrod Can., 9 rd. mi. S Schurz, Wassuk Range, Mineral Co. Nev.  
*Euphilotes (ancilla) columbiae* TL Columbia R. near Brewster, Okanogan Co. Wash.  
*Euphilotes ancilla pseudointermedia* TL Castle Peak near Donner Pass, Nevada Co. Calif.  
*Euphilotes ancilla ancilla* TL Eureka, Juab Co. Utah.  
>>*Euphilotes ancilla gilvatunica* TL Nev. road 341, 3.3 mi. E US 395, Washoe Co. Nev.  
*Euphilotes ancilla giulianii* TL ridge 0.8 mi. SE Wahguyhe Peak, Grapevine Mts., Nye Co. Nev.  
*Euphilotes ancilla purpura* TL Willow Creek, Spring Mts., Clark Co. Nev.; =*cryptica* TL Cold Creek, Spring Mts., Nev. (allochronic); =*shieldsi* TL Trail Can. road, 9.5 rd. mi. W Nev. road 264, White Mts., Esmeralda Co. Nev.  
*Euphilotes rita coloradensis* TL 7 mi. S Kendrick, Lincoln Co. Colo.

*Euphilotes rita rita* TL Ramsey Can., Huachuca Mts., Ariz.  
*Euphilotes rita pallescens* TL Little Granite Mtn., Dugway Proving Ground, Tooele Co. Utah (intermediate to *rita* in Washington Co. Utah); =*arenamontana* TL Sand Mtn., US 50, Churchill Co. Nev.  
*Euphilotes rita mattonii* TL 4 air mi. W Charleston Res., SW of Jarbidge Mts., Elko Co. Nev.  
*Euphilotes rita emmeli* TL summit of road to 12 mi. E Little Flat Top, 10-11 mi. SE Utah Hwy. 24, Emery Co. Utah  
*Euphilotes rita ricei* TL just W Sand Pass, 15 mi. NW Winnemucca, Humboldt Co. Nev.; =*calneva* TL WSW Calneva RR stop, SE Honey Lake Valley, Lassen Co. Calif. (less extreme than *ricei*)  
*Euphilotes rita elvirae* TL 3.5 mi. SW Pearblossom, LA Co. Calif.; =>*confusa* TL Rest Spring, Cottonwood Mts., Death Valley NM, Inyo Co. Calif. (intermediate to *pallescens*)  
*Euphilotes spaldingi spaldingi* TL Provo, Utah Co. Utah  
*Euphilotes spaldingi pinjuna* TL Shilling's Spring, Conejos Co. Colo.  
*Glaucopsyche piasus umbrosa* TL slope E Big Laguna Lake, Laguna Mts., San Diego Co. Calif.  
*Glaucopsyche piasus sagittigera* TL Glendale, LA Co., Calif.; =*gabrielina* TL WNW Windy Gap, ridge E from Mt. Islip, San Gabriel Mts., LA Co. Calif.  
*Glaucopsyche piasus daunia* TL Turkey Creek, Jefferson Co. Colo.; =*toxema* TL Garnett Valley, Summerland, BC; =*nevada* TL Bob Scott Cgd., Lander Co. Nev.; =>*excubita* TL Four Jeffrey Cgd., vic. Andrews Camp, Bishop Crk., Inyo Co. Calif.  
*Glaucopsyche piasus piasus* TL hwy 70 at Soda Crk., Plumas Co. Calif.; =*viaca* TL Lake Tahoe, Placer Co. Calif.  
*Glaucopsyche lygdamus lygdamus* TL Burke Co. Ga.; =*nittanyensis* TL Bear Meadows, near State College, Centre Co. Penn.; =>*jacki* TL Barber Co. Kans. (intermediate to *oro*)  
*Glaucopsyche lygdamus couperi* TL Anticosti I., Gulf of St. Lawrence, Que.; =*mildredae* TL island off Baddeck, Cape Breton I., N.S.  
*Glaucopsyche lygdamus afra* TL Brandon, Man.  
*Glaucopsyche lygdamus arizonensis* TL White Mts., Ariz.  
*Glaucopsyche lygdamus oro* TL Fairplay, Park Co. Colo.  
>*Glaucopsyche lygdamus deserticola* TL Cottonwood Pass Road, Spring Mts., Nev.  
>*Glaucopsyche lygdamus minipunctum* TL Cabin Can., Virgin Mts., Clark Co. Nev.  
*Glaucopsyche lygdamus australis* TL Pasadena, LA Co. Calif.; =>*sabulosa* TL dunes W Palm Ave X Lake Drive, Monterey Co. Calif. (intermediate to *incognitus*); =>*palosverdesensis* TL Rancho Palos Verdes, LA Co. Calif. (intermediate to *incognitus*)  
>*Glaucopsyche lygdamus pseudoxerces* TL Acapulco Can., Santa Rosa I., Calif. (black pupils a bit smaller on unh)  
*Glaucopsyche lygdamus xerces* TL San Francisco, Calif. (often no black dots in uns postmedian white spots, form *xerces*)(extinct)  
*Glaucopsyche lygdamus xerces* form *polyphemus*=*antiacis*=*behrii* (usual form, small to moderate black dots in white spots)  
*Glaucopsyche lygdamus xerces* form *mertila* (like *polyphemus* but adds white dash in unf cell)  
*Glaucopsyche lygdamus incognitus* TL Alum Rock Park, Santa Clara Co. Calif.  
*Glaucopsyche lygdamus columbia* TL Port Columbia, Brewster, Okanogan Co. Wash.; =aberration *orcus* TL Storey Co. Nev.  
*Glaucopsyche lygdamus kurnakovi* TL Omsukchanky Mts. & town Seimchan, Magadan Province, Russia  
*Echinargus (Cyclargus) thomasi bethunebakeri* TL Miami, Fla. (is it really a separate genus from *Hemiargus*?)  
*Echinargus (Cyclargus) ammon* TL Cuba, Mex.  
*Echinargus isola* TL near Vera Cruz, Veracruz, Mex.; =*alce* TL Larkspur, Douglas Co. Colo.  
*Polyommatus icarus* TL Saxony, Germany  
*Plebejus (Lycaeides) stenospecies idas* (includes *anna*, *vancouverensis*, *scudderii*, *atrapraetextus*, *fridayi*, *annetta*, *samuelsis*, *pseudosamuelsis*, *melissa*)  
*Plebejus anna anna* TL Truckee, Sierra Nevada, Nevada Co. Calif.; =*ricei* TL vic. Big Cultus Lake, Deschutes Co. Ore.; =*frechini* TL Paradise Valley, Mt. Rainier, Wash.  
*Plebejus anna lotis* TL Mendocino, Mendocino Co. Calif. (extinct)  
>*Plebejus anna azureus* TL White Rock, 10 mi. S Wildwood, Trinity Co. Calif. (intermediate *lotis*X*anna* but bluer female ups)  
*Plebejus anna vancouverensis* TL Cream Lake, Strathcona Park, Vancouver I., BC  
*Plebejus (Lycaeides) scudderii scudderii* TL Sask.; =*subarcticus* TL Fairchild Point, Great Slave Lake, NWT  
*Plebejus scudderii aster* TL Avalon Peninsula, Nfld.; =>*empetri* TL Baddeck, N.S.  
*Plebejus scudderii nabokovi* TL forest road 122, Lake Co. Minn.  
*Plebejus atrapraetextus alaskensis* TL Fort Yukon, Alaska (legume feeder)  
*Plebejus atrapraetextus atrapraetextus* TL Priest River, Bonner Co. Ida. (wide-border upf male form frequent); =*sweadneri* TL Uranus Peak, Shoshone Co. Ida.; =>*ferniensis* TL Fernie, BC (wide-border form infrequent)  
*Plebejus atrapraetextus benwarner* TL Cedar Pass, Warner Mts., Calif.

*Plebejus atrapraetextus fridayi* TL [high mts. near] Mammoth, Mono Co. Calif.  
*Plebejus atrapraetextus annetta* TL high Wasatch Mts. E Salt Lake City, Utah  
*Plebejus atrapraetextus sublivens* TL Tomboy Road E Telluride, 10000-12000', San Miguel Co. Colo.  
*Plebejus atrapraetextus longinus* TL Jackson Hole, Teton Co. Wyo.  
*Plebejus (atrapraetextus?) samuelis* TL Center (=Karner), Albany Co. N.Y.  
*Plebejus melissa pseudosamuelis* TL Red Mtn. Inn, hwy. 82, Lake Creek, E of jct. of North Fork & South Fork of Lake Creek, Lake Co. Colo.  
*Plebejus melissa melissa* TL Tinytown, Jefferson Co. Colo.; =*alateres* TL Logandale, Moapa valley, Clark Co. Nev.; =*inyoensis* TL Olancho, Inyo Co. Calif.  
*Plebejus melissa paradoxa* TL Tehachapi Mts., Kern Co. Calif.  
*Plebejus melissa* ssp. (smaller orange spots, S BC)  
*Plebejus (Albulina) optileta yukona* TL mts. between Mission & Forty-Mile Creeks, Alaska  
*Plebejus (Plebejus) saepiolus hilda* TL head of S fork of Santa Ana R., San Bernardino Mts., Calif.; =>*aureolus* TL SW Big Pines Ranger Station, San Gabriel Mts., LA Co. Calif. (an extreme of *hilda*, invoking pretend TL & jumping ssp.)  
*Plebejus saepiolus aehaja* TL Tioga Pass, Mono Co. Calif.  
*Plebejus saepiolus rufescens* TL Gold Lake, Sierra Co. Calif.  
*Plebejus saepiolus saepiolus* TL Bear Valley, near Olema, Marin Co. Calif.; => *maculosus* TL Snake Creek, Great Basin NP, Snake Range, Nev. (topotype series lacks large dots)  
*Plebejus saepiolus littoralis* TL sand dunes N end Lake Earl, Del Norte Co. Calif.  
*Plebejus saepiolus gertschi* TL Cedar Breaks, near Cedar City, Iron Co. Utah; =*albomontanus* TL E of Barcroft lab, White Mts., Calif.; =>*whitmeri* TL near Woodland Park, Rampart Range Rd., Teller Co. Colo. (intermediate toward *saepiolus*=*maculosus*)  
*Plebejus saepiolus amica* TL Fort Smith, NWT; =*insulanus* TL Victoria, Vancouver I., BC  
*Plebejus saepiolus* (unnamed ssp. fewer unh dots, Saratoga Beach, Vancouver I., BC)  
*Plebejus saepiolus kodiak* TL "Kodiak", evidently Sitka, Alaska  
*Plebejus (Icaricia) icarioides pheres* TL San Francisco, Calif. (extinct in San Francisco); =*parapheres* TL Pt. Reyes dunes, Marin Co. Calif.; =>*missionensis* TL Twin Peaks, San Francisco, Calif. (intermediate toward *pardalis*)  
*Plebejus icarioides pardalis* TL Lake Chabot, Alameda Co. Calif.; =*mintha* TL Marin Co. Calif.; =*atascadero* TL Atascadero, San Luis Obispo Co. Calif.  
*Plebejus icarioides icarioides* TL hwy 70 at Soda Creek, Plumas Co. Calif.; =*helios* TL Fawn Lodge, Trinity Co. Calif.; =*daedalus* TL Vogelsang Pass, Yosemite NP, Calif.; =*phileros* TL slope above Donner Pass, Placer Co. Calif.; =>*eosierra* TL ~5 mi SW Olancho, Inyo Co. Calif. (intergrade of *fulla* & *icarioides* & *albihalos*)  
>*Plebejus icarioides fenderi* TL 6 mi. SE McMinnville, Yamhill Co. Ore.  
*Plebejus icarioides evius* TL La Crescenta, LA Co. Calif.; =*santana* TL Yaeger Mesa above Trabuco Can., Orange Co. Calif.; =>*inyo* TL Side Hill Spring, Inyo Mts., Inyo Co. Calif. (intermediate *evius*X*albihalos*)  
*Plebejus icarioides moroensis* TL Moro Beach, San Luis Obispo Co. Calif.  
*Plebejus icarioides fulla* TL Sonora Pass, Mono Co. Calif.; =*ardea* TL vic. Virginia City, Storey Co. Nev.  
*Plebejus icarioides pembina* TL Lost Horse Road, Bitter Root Mts., Ravalli Co. Mont.; =*montis* TL Mt. McLean, near Lillooet, BC  
*Plebejus icarioides lycea* TL Gregory Can., Boulder Co. Colo.  
*Plebejus icarioides panamintina* TL between Mahogany Flats & Arcane Meadows, Panamint Range, Inyo Co. Calif.  
*Plebejus icarioides albihalos* TL E of Campito Mtn., White Mts., Calif.; =*austinorum* TL Kyle Can. Ski area, Spring Range, Nev.; =>*argusmontana* TL Mtn. Springs Can., Argus Mts., Inyo Co. Calif. (intermediate *albihalos*X*fulla*)  
*Plebejus icarioides buchholzi* TL White Mts., Ariz.  
*Plebejus icarioides blackmorei* TL Goldstream, Vancouver I., BC  
*Plebejus (Icaricia) shasta shasta* TL slope S above Donner Pass, Placer Co. Calif.; =*comstocki* TL Glacier Point, Yosemite NP, Calif.; =*calchas* TL Mono Lake, Mono Co. Calif.  
*Plebejus shasta minnehaha* TL Heart River, Grant Co. N.D.; =*browni* TL Powder River Pass, Johnson Co. Wyo.; =*pallidissima* TL vic. Stella Lake, Snake Range, Nev.  
*Plebejus shasta charlestonensis* TL Lee Can. near ski tow, Spring Range, Nev.  
*Plebejus shasta pitkinensis* TL Snowmass Lake, Pitkin Co. Colo.  
*Plebejus shasta platazul* TL Hermit Pass, Sangre de Cristo Mts., Custer Co. Colo.  
*Plebejus stenchospecies acmon* (includes *acmon*, *texanus*, *lutzi*, *alupini*, *chlorina*)  
*Plebejus (Icaricia) acmon* TL San Francisco, Calif.  
*Plebejus (Icaricia) alupini dedeckera* TL N-facing slope of Coldwater Can., W side White Mts., Mono Co. Calif. (spelling corrected to *alupini*, a lapsus contrarius)  
*Plebejus alupini texanus* TL 1 mi. S Hillside, Yavapai Co. Ariz.; =*alpicola* TL Barney Lake, Mono Co. Calif.  
*Plebejus alupini lutzi* TL Snowslide Can., 8 mi. from Montpelier, Bear Lake Co. Ida.



*Plebejus alupini cotundra* TL Hall Valley, Park Co. Colo.  
*Plebejus alupini spangelatus* TL Gray Wolf Range, Olympic Mts., Wash.  
*Plebejus alupini* unnamed ssp. (wider upf male border, high mts from Mt. Shasta to Cascades of Deschutes Co. Ore.,  
*Eriog. pyrifolium* var. *coryphaeum*)  
*Plebejus alupini alupini* TL Gold Lake, Sierra Co. Calif.; =*goodpasturei* TL Timber Creek, Schell Creek Range, White  
Pine Co. Nev.  
*Plebejus (Icaricia) chlorina chlorina* TL above Tehachapi, Kern Co. Calif.; =*carolyna* TL 5 mi. from Tehachapi, 5000',  
Tehachapi Mts., Calif.  
*Plebejus chlorina monticola* TL Upper Arroyo Seco, mts. vic. Pasadena, Calif.; =*argentata* TL W jct. Saline Valley Rd.  
& Hunter Mtn. Rd., E end Nelson Range, Inyo Co. Calif.  
*Plebejus (Icaricia) neurona* TL Doble, San Bernardino Co. Calif.  
*Plebejus (Plebulina) emigdionis* TL San Emigdio Can., Kern Co. Calif.  
*Plebejus (Agriades) stenchospecies glandon* (includes *glandon*, *aquilo*, *rustica*, *cassiope*, *podarce*)  
*Plebejus glandon (aquilo) labrador* TL Smokey Mtn., Labrador City, Labrador  
*Plebejus glandon (aquilo) franklinii* TL vic. isthmus of Boothia Pen., Nunavut; =*suttoni* TL Southampton I., Hudson  
Bay, Nunavut; =*bryanti* TL Black Mtn., 30 mi. SW Aklavik, NWT  
*Plebejus glandon (aquilo) lacustris* TL Norway House, Man.  
*Plebejus glandon (aquilo) megalo* TL Mt. McLean, Lillooet, BC  
>*Plebejus glandon (aquilo)* ssp. Canadian Great Plains (looks like *megalo*X*rustica*)  
*Plebejus glandon (aquilo) rustica* TL vic. Empire, Clear Creek Co. Colo.  
*Plebejus glandon (aquilo) punctatus* TL below Greens Peak, White Mts., Ariz.  
*Plebejus (Agriades) cassiope* TL S Dicks Pass, Lake Tahoe region, El Dorado Co. Calif.  
>*Plebejus cassiope kelsoni* TL SE above Caribou Lake, Trinity Alps, Calif.  
*Plebejus (Agriades) podarce podarce* TL Summit Valley, S end Lake Van Norden, Donner Pass, Placer Co. Calif.;  
= *cilla* TL E Tioga Pass, Mono Co. Calif.  
*Plebejus podarce klamathensis* TL Waterdog Lake, N Trinity Mtn., Humboldt Co. Calif.

## PAPILIO BONUS

The Principle of Priority is the springboard into the Old-Name Sewer.

## COMMON NAMES OF NORTH AMERICAN BUTTERFLIES

The common names herein have been devised by a committee of butterfly experts called INTEBA, for International Butterfly Association. INTEBA is a currently-informal grouping of people available to anyone in the world interested in the advancement of butterfly study, who agree to adhere to the principles of a biological catalogue, specifically including common names that are usable by the common person but can never be inappropriate or misleading. These names are expected to supplant those of NABA (North American Butterfly Association). In my book *Butterflies of North America...*, I corrected and improved more than 100 of the common names, but unfortunately most subsequent authors did not care and ignored the corrections and just used the old bad common names. So, the names accepted here are mostly those accepted widely including by NABA, and used in the Brock/Kaufman *Butterflies of N.A.* book (reviewed in *Papilio* [N.S.] #19) (evidently the most popular current butterfly book, which mostly uses the NABA common names) and the *Butterflies through Binoculars* books, and only the worst offenders among the misleading inappropriate names are corrected. (Some names accepted by NABA are so inappropriate & misleading, that they absolutely must be corrected, and one sarcastically wonders whether in those cases the organization stands for No Added Brain Assist.)

I considered providing common names for each species along with the entries in the Biological Catalogue. But the Biological Catalogue is supposed to be a scientific work, and scientific papers on butterflies have generally used only scientific names. But that could change, and Common Names have the potential to be more appropriate than scientific names because they can be corrected, whereas scientific names that are grossly misleading cannot be corrected (except by the *lapsus contrarius*, which has yet to gain widespread acceptance). Of course, it does not matter biologically what the bug is called, for instance *Celastrina humulus* could be called the Spotted Hopazul without offending biologists, just as the word *fritillary* is rather silly but is now so entrenched and beloved that no one would think of calling *Argynnis* (*Speyeria*) anything else, or the blue could be given the scientific name of a goat seen eating the hostplant, and the biological facts would not change. Luckily, there are no rules governing common names, so the bad ones can be easily changed and corrected, so theoretically they could better describe actual characteristics of the bugs in nature (even though in actual practice there is a dismaying laziness and recalcitrance displayed by most butterfly enthusiasts who seem willing to keep using misleading names). Technically, readers can use whatever common names they like. The only exception is inappropriate misleading names. Biology is a search for truth, like all the sciences, therefore lies such as misleading inappropriate names cannot be tolerated in any biology-inspired list, and must automatically be corrected wherever found. The worst offenders are listed next, and then the common names of all the butterflies are placed in a separate list from the scientific names. If the common names become accepted by scientists and supplant the scientific names as they have among birds, then common names will enter the regular Biological Catalogue.

### Notable Corrected Common Names

*Cogia caicus*. Gold-costa Skipper is a much better name.

*Autochton cincta*. White-Banded Skipper is a much better name.

*Autochton pseudocellus*. Little Golden-Banded Skipper is a much better name.

*Thorybes mexicana*. The main range is in US, so Mountain Cloudy Wing is a much better name.

*Thorybes bathyllus*. Southern Cloudy Wing is wrong as the range is farther north than *T. confusus*. Use Eastern Cloudywing.

*Thorybes diversus*. Western Cloudywing suggests *T. mexicana*, so use California Cloudywing.

*Heliopetes ericetorum*. Northern White-Skipper is a much better name.

*Celotes limpia*. Scarce Streaky Skipper is wrong as it is common. Use Chisos Streaky Skipper.

*Oligoria maculata*. Twin Spot Skipper is wrong there are 3 spots. Use Three-Spot Skipper.

*Cymaenes tripunctus*. Use Dingy Dotted Skipper as it has many more than 3 spots.

*Panoquina panoquinoides* is less obscure than *P. panoquin*. Use Estuary Skipper

*Panoquina panoquinoides errans*. Wandering Skipper is an error as it is not migratory. Use Estuary Skipper.

*Hesperia columbia*. Chaparral Skipper is a much better name.

*Polites sonora*. Sonoran Skipper is an error as it is not in Sonora. Use Western Long Dash.

*Notamblyscirtes simius*. It does not use roadsides or gullies. Use Hilltop Little Skipper.

*Lerodea arabus*. Blotchy Gray Skipper is a much better name.

*Atrytonopsis ovinia edwardsi*. Sheep Skipper is an error as the sheep are in NE Ariz. Use Rounded Dusted Skipper.

*Papilio xuthus*. Asian Swallowtail is a much better name.

*Eurema nicippe*. Sleepy Orange is a gross error as flight is fast and erratic, and deriving the word sleepy from a tiny black upf dash is ridiculous. Use Erratic Orange.

*Eurema nise*. Blacktip Sulfur is a much better name.

*Colias philodice*. Clouded Sulfur is an error as the wings are clear, not cloudy. Use Common Sulfur.

*Cercyonis oetus*. Dark Wood Nymph is an error in Nev. where the unh is pale gray. Use Small Wood Nymph as does NABA.

Cercyonis sthenele. Scrub Wood Nymph is a much better name.  
 Erebia stubbendorffii. Theano Alpine is an error as the scientific name has changed. Use Red-striped Alpine.  
 Myscelia ethusa. Blue Wave is a much better name.  
 Hamadryas feronia. Variable Cracker is misleading as it is not especially variable. Use Blue Cracker.  
 Vanessa carye (annabella). West Coast Lady is bad because bug occurs all over W N.A. to the tropics. Use Western Lady.  
 Polygonia progne. Gray Comma is an error which describes the color of *P. gracilis*. *P. progne* has uns dark-gray, so use Dark-Gray Comma.  
 Aglais milberti. Fire-Rim Tortoiseshell is a much better name.  
 Boloria selene. Silver-Bordered Fritillary is an error as the spots are silver all over unh. Use Silver Meadow Fritillary.  
 Boloria tarquinius natazhati. Beringia Fritillary is an error as bug does not occur in Siberia (Beringia is supposed to be a Pleistocene refuge on/near the Bering Strait as it was made dry land by 100 m of sea-level drop.) Use the earlier better name Pleistocene Fritillary.  
 Phyciodes batesii. Tawny Crescent is an error as the upf is usually darker than *P. tharos* & *P. cocyta*. Use Bates' Crescent.  
 Lycaena phlaeas. American Copper is an error as it is holarctic & African, and ssp. americana has been synonymized to ssp. hypophlaeas. Use the European name Small Copper.  
 Lycana arota. Tailed Copper is a much better name.  
 Atlides haesus. Great Purple Hairstreak is an error as it is not purple. Use Great Blue Hairstreak.  
 Strymon rufofusca. Reddish Hairstreak is an error as it is not reddish. Use Red-Crescent Hairstreak.  
 Eroria laeta. Early Hairstreak is an error as 2<sup>nd</sup> gen. is July. Use Turquoise Hairstreak which perfectly fits the unh.  
 Celastrina nigra. Dusky Azure is an error as the wings are sooty, not blue. Use Spring Sooty.  
 Plebejus acmon. Acmon Blue is an error as nomenclatural shenanigans have spoiled the name acmon, which in past publications applies to multiple species. Use Bob Pyle's name Silver-Studded Blue.  
 Plebejus alupini. Lupine Blue is a gross error as larvae & adults shun lupines. Use Large Silver-Studded Blue.  
 Plebejus icarioides. Lupine Blue fits only this species, which eats dozens of lupines.  
 Plebejus shasta. Shasta Blue applies to only a tiny part of range. Use Cushion Plant Blue as it occurs on windswept ridges where plants are little cushions shaped by wind (blowing dust & ice crystals) & plant genes.  
 Philotes sonorensis. Sonora Blue is a current error as Sonora is outside the range in Mex. Use Stonecrop Blue.

## COMMON NAMES LIST FOR NORTH AMERICAN BUTTERFLIES

### HESPERIIDAE

Phocides pigmalion Mangrove Skipper	<i>U. teleus</i> Teleus Longtail
<i>P. belus</i> Beautiful Beamer	<i>U. tanna</i> Tanna Longtail
<i>P. polybius</i> Guava Skipper	<i>U. simplicius</i> Simple Longtail
<i>Proteides mercurius</i> Mercurial Skipper	<i>U. procne</i> Brown Longtail
<i>Epargyreus zestos</i> Zestos Skipper/Rusty Skipper	<i>U. doryssus</i> White-tailed Longtail
<i>E. clarus</i> Silver-spotted Skipper	<i>Astraptus fulgerator</i> Two-barred Flasher
<i>E. exadeus</i> Broken Silverdrop	<i>A. egregius</i> Small-spotted Flasher
<i>Polygonus leo</i> Hammock Skipper	<i>A. alardus</i> Frosted Flasher
<i>Chioides (catillus?) albofasciatus</i> White-striped Longtail	<i>A. alector=gilberti</i> Mad Flasher
<i>C. zilpa</i> Zilpa Longtail	<i>A. anaphus</i> Yellow-tipped Flasher
<i>Typhedanus undulatus</i> Mottled Longtail	<i>Autochthon cellus</i> Golden-banded Skipper
<i>Polythix octomaculata</i> Eight-spotted Longtail	<i>A. pseudocellus</i> Little Golden-banded Skipper
<i>P. mexicana</i> Mexican Longtail	<i>A. cincta</i> White-banded Skipper
<i>Aguna asander</i> Gold-spotted Aguna	<i>Achalarus lyciades</i> Hoary Edge
<i>A. metophis</i> Tailed Aguna	<i>A. casica</i> Desert Cloudywing
<i>A. claxon</i> Green Aguna	<i>A. albociliatus</i> White-fringed Cloudywing
<i>Zestusa dorus</i> Short-tailed Skipper	<i>A. toxeus</i> Coyote Cloudywing
<i>Codatractus alcaeus</i> White-crescent Longtail	<i>A. (Thessia) jalapus</i> Jalapus Cloudywing
<i>C. arizonensis</i> Arizona Skipper	<i>Thorybes drusius</i> Drusius Cloudywing
<i>C. valeriana</i> Valeriana Skipper	<i>T. bathyllus</i> Eastern Cloudywing
<i>Urbanus proteus</i> Long-tailed Skipper	<i>T. pylades</i> Northern Cloudywing
<i>U. belli</i> Bell's Longtail	<i>T. confusus</i> Confused Cloudywing
<i>U. pronus</i> Pronus Longtail	<i>T. diversus</i> California Cloudywing
<i>U. esmeraldus</i> Esmeraldus Longtail	<i>T. mexicana</i> Mountain Cloudywing
<i>U. dorantes</i> Dorantes Longtail	<i>Cabares potrillo</i> Potrillo Skipper
	<i>Spathilepia clonius</i> Falcate Skipper

*Cogia hippalus* Acacia Skipper  
*C. outis* Outis Skipper  
*C. caicus* Gold-costa Skipper  
*C. calchas* Mimosa Skipper  
*Apyrrothrix araxes* Dull Firetip  
*Celaenorrhinus fritzgaertneri* Fritzgaertner's Flat  
*C. stallingsi* Stallings' Flat  
*Arteurotia tractipennis*  
*Nisoniades rubescens* Purplish-black Skipper  
*Pellicia arina* Glazed Pellicia  
*P. dimidiata*  
*Wandia windi* Wind's Skipper  
*Noctuana stator*  
*Bolla brennus* Brennus Bolla  
*B. clytius* Mottled Bolla  
*Staphylus ceos* Golden-headed Scallopwing  
*S. mazans* Mazans Scallopwing  
*S. hayhurstii* Hayhurst's Scallopwing  
*Pholisora catullus* Common Sootywing  
*P. mejicanus* Mexican Sootywing/Blue Sootywing  
*Hesperopsis libya* Mojave Sootywing  
*H. alpheus* Saltbush Sootywing  
*H. alpheus graciellae* MacNeill's Saltbush Sootywing  
*Gorgythion begga* Variegated Skipper  
*Sostrata (bifasciata?) nordica*  
*Mylon pelopidas*  
*Grais stigmaticus* Hermit Skipper  
*Timochares ruptifasciatus* Brown-banded Skipper  
*Anastrus sempiternus*  
*Chiomara asychis* White-patched Skipper  
*C. mithrax*  
*Gesta (gesta) invisus* False Duskywing  
*Ephyriades brunnea* Caribbean Duskywing  
*Erynnis icelus* Dreamy Duskywing  
*E. brizo* Sleepy Duskywing  
*E. martialis* Mottled Duskywing  
*E. pacuvius* Pacuvius Duskywing  
*E. funeralis* Funereal Duskywing  
*E. zarucco* Zarucco Duskywing  
*E. baptisiae* Wild Indigo Duskywing  
*E. lucilius* Columbine Duskywing  
*E. afranius* Afranius Duskywing  
*E. persius* Persius Duskywing/Hairy Duskywing  
*E. juvenalis* Juvenal's Duskywing  
*E. j. clitus* Arizona Juvenal's Duskywing  
*E. telemachus* Rocky Mountain Duskywing  
*E. propertius* Propertius Duskywing  
*E. p. meridianus* Meridian Duskywing  
*E. scudderi* Scudder's Duskywing  
*E. horatius* Horace's Duskywing  
*E. tristis* Mournful Duskywing  
*Achlyodes pallida*  
*Eantis mithridates tamenund* Sickle-winged Skipper  
*Carrhenes canescens* Hoary Skipper  
*Xenophanes tryxus* Glassy-winged Skipper  
*Antigonus emorsa* White Spurwing  
*A. erosus*  
*Systasea pulverulenta* Texas Powdered-Skipper  
*S. zampa* Arizona Powdered-Skipper  
*Celotes nesus* Streaky-Skipper  
*C. limpia* Chisos Streaky-Skipper  
*Pyrgus centaureae* Grizzled Skipper  
*P. ruralis* Two-banded Checkered-Skipper  
*P. xanthus* Mountain Checkered-Skipper  
*P. scriptura* Small Checkered-Skipper  
*P. communis* Common Checkered-Skipper  
*P. (communis?) albescens* White Checkered-Skipper  
*P. philetas* Desert Checkered-Skipper  
*P. oileus* Tropical Checkered-Skipper  
*Heliopetes domicella* Erichson's White-Skipper  
*H. sublinea* Sublinea White-Skipper  
*H. ericetorum* Northern White-Skipper  
*H. macaira* Turk's-cap White-Skipper  
*H. laviana* Laviana White-Skipper  
*H. arsalte* Veined White-Skipper  
*Carterocephalus (palaemon) mandan* Canadian Skipper  
*C. palaemon skada* Arctic Skipper  
*Piruna pirus* Russet Skipperling  
*P. haferniki* Chisos Skipperling  
*P. polingii* Four-spotted Skipperling  
*P. aea* Many-spotted Skipperling  
*P. penaea* Tamaulipas Skipperling  
*Megathymus yuccae* Yucca Giant-Skipper  
*M. ursus* Ursine Giant-Skipper  
*M. cofaqui* Cofaqui Giant-Skipper  
*M. (cofaqui) streckeri* Strecker's Giant-Skipper  
*Stallingsia smithi maculosus* Aloe Giant-Skipper  
*Agathymus neumoegeni* Orange Giant-Skipper  
*A. n. chisosensis* Chisos Giant-Skipper  
*A. polingi* Poling's Giant-Skipper  
*A. aryxna* Arizona Giant-Skipper  
*A. (aryxna) alliae* Mojave Giant-Skipper  
*A. evansi* Huachuca Giant-Skipper  
*A. mariae* Lechuguilla Giant-Skipper  
*A. remingtoni* Coahuila Giant-Skipper  
*A. stephensi* California Giant-Skipper  
*Erionota thrax* Banana Skipper  
*Perichares philetas* Green-backed Ruby-Eye  
*Ancyloxypha numitor* Least Skipperling  
*A. arene* Tropical Least Skipperling  
*Oarisma poweshiek* Poweshiek Skipperling  
*O. garita* Garita Skipperling  
*O. edwardsii* Edwards' Skipperling  
*Copaeodes aurantiaca* Orange Skipperling  
*C. minima* Southern Skipperling  
*Adopaeoides prittwitzi* Sunrise Skipperling  
*Thymelicus lineola* European Skipperling  
*Calpodes ethlius* Brazilian Skipper/Canna Skipper  
*Panoquina panoquin* Salt Marsh Skipper  
*P. panoquinoides* Estuary Skipper  
*P. pan. errans* Pacific Estuary Skipper  
*P. ocola* Ocola Skipper  
*P. lucas=sylvicola* Purple-washed Skipper  
*P. hecebolus* Hecebolus Skipper  
*P. (fusina?) evansi* Evans' Skipper  
*Synapte malitiosa* Malicious Skipper  
*S. salenus* Orangish Synapte Skipper  
*S. (syraces) shiva* Faceted Skipper

Corticea corticea Redundant Skipper  
 Amblyscirtes exotera Large Roadside Skipper  
 A. cassus Cassus Roadside-Skipper  
 A. aenus aenus Bronze Roadside-Skipper  
 A. a. linda Linda's Roadside-Skipper  
 A. oslari Oslar's Roadside-Skipper  
 A. texanae Texas Roadside-Skipper  
 A. hegon Pepper & Salt Roadside-Skipper  
 A. nereus Slaty Roadside-Skipper  
 A. celia Celia's Roadside-Skipper  
 A. belli Bell's Roadside Skipper  
 A. eos Dotted Roadside-Skipper  
 A. elissa Elissa Roadside-Skipper  
 A. tolteca Toltec Roadside-Skipper  
 A. nysa Nysa Roadside-Skipper  
 A. alternata Dusky Roadside-Skipper  
 A. vialis Common Roadside-Skipper  
 A. aesculapius Lace-winged Roadside-Skipper  
 A. reversa Reversed Roadside-Skipper  
 A. carolina Carolina Roadside-Skipper  
 A. phylace Redhead Roadside-Skipper  
 A. fimbriata Redrim Roadside-Skipper  
 Vidius perigenes Pale-rayed Skipper  
 Monca crispinus=tyrtaeus Violet-patched Skipper  
 Nastra lherminier Swarthy Skipper  
 N. neamathla neamathla Neamathla Skipper  
 N. neamathla julia Julia Skipper  
 Cymaenes tripunctus Dingy Dotted Skipper  
 C. (odilia) trebius Fawn-spotted Skipper  
 Lerodea eufala Eufala Skipper  
 L. arabus Blotchy Gray Skipper/Violet-clouded Skipper  
 L. arabus dysaules Olive-clouded Skipper  
 Lerema accius Clouded Skipper  
 L. liris  
 Vettius fantasos Fantastic Skipper  
 Rhinthon osca  
 Decinea percosius Double-dotted Skipper  
 Oligoria maculata Three-spot Skipper  
 Conga chydaea Hidden-ray Skipper  
 Hylephila phyleus Fiery Skipper  
 Pseudocopaodes eunus Alkali Skipperling  
 Hesperia uncas Uncas Skipper  
 H. juba Juba Skipper  
 H. comma Common Branded Skipper  
 H. woodgatei Apache Skipper  
 H. ottoe Ottoe Skipper  
 H. leonardus Leonard's Skipper  
 H. leonardus pawnee Pawnee Skipper  
 H. pahaska Yellow-dust Skipper/Pahaska Skipper  
 H. columbia Chaparral Skipper/Columbian Skipper  
 H. viridis Black-dust Skipper/Green Skipper  
 H. attalus Dotted Skipper  
 H. metea Cobweb Skipper  
 H. meskei Meske's Skipper  
 H. dacotae Dakota Skipper  
 H. sassacus Indian Skipper  
 H. lindseyi Lindsey's Skipper  
 H. miriamae Sierra Skipper  
 H. nevada Nevada Skipper  
 Polites (Yvretta) carus Carus Skipper  
 P. (Y.) rhesus Rhesus Skipper  
 Polites sabuleti Sandhill Skipper  
 P. draco Draco Skipper/Rocky Mtn. Skipper  
 P. peckius Peck's Skipper  
 P. mardon Mardon Skipper  
 P. baracoa Baracoa Skipper  
 P. themistocles Tawny-edged Skipper  
 P. origenes Crossline Skipper  
 P. mystic Long Dash  
 P. sonora Western Long Dash  
 P. vibex Whirlabout  
 Wallengrenia otho Red Broken-Dash/Southern Broken-Dash  
 W. egeremet Brown Broken-Dash/Northern Broken-Dash  
 Pompeius verna Little Glasswing  
 Atalopedes campestris Sachem  
 Atrytone arogos Arogos Skipper  
 Problema byssus Byssus Skipper  
 P. bulenta Rare Skipper  
 Poanes zabulon Zabulon Skipper  
 P. taxiles Taxiles Skipper  
 P. hobomok Hobomok Skipper  
 P. aaroni Aaron's Skipper  
 P. viator Broad-winged Skipper  
 P. yehl Yehl Skipper  
 P. massasoit Mulberry Wing  
 P. melane Umber Skipper  
 Stinga morrisoni Morrison's Skipper/Arrowhead Skipper  
 Ochloides agricola Rural Skipper  
 O. sylvanoides Woodland Skipper  
 O. yuma Yuma Skipper/Giant-reed Skipper  
 Paratrytone snowi Snow's Skipper/Rusty Gully Skipper  
 Anatrytone logan Delaware Skipper  
 A. mazai  
 Quasimellana eulogius Common Mellana  
 Notamblyscirtes simius Hilltop Little Skipper  
 Euphyes pilatka Palatka Skipper  
 E. conspicua Black Dash  
 E. dion Dion Skipper  
 E. dion bayensis Bay Skipper  
 E. berryi Berry's Skipper  
 E. bimacula Two-spotted Skipper  
 E. arpa Palmetto Skipper  
 E. vestris Dun Skipper  
 E. dukesi Dukes' Skipper  
 Asbolis capucinus Monk Skipper/Palm Skipper  
 Atrytonopsis hianna Dusted Skipper  
 A. hianna loammi Loammi Skipper  
 A. hianna deva Deva Skipper  
 A. vierecki Viereck's Skipper  
 A. lunus Moon-marked Skipper  
 A. pittacus White-barred Skipper  
 A. cestus Cestus Skipper  
 A. python Python Skipper  
 A. (ovinia) edwardsi Rounded Dusted Skipper  
 Nyctelius nyctelius Violet-banded Skipper  
 Thespieus macareus Chestnut-marked Skipper

## PAPILIONIDAE

*Parnassius eversmanni* Eversmann's Parnassian  
*P. clodius* Clodius Parnassian  
*P. phoebus* Phoebus Parnassian  
*P. phoebus smintheus* Rocky Mountain Parnassian  
*Eurytides marcellus* Zebra Swallowtail  
*E. philolaus* Dark Kite-Swallowtail  
*Parides eurimedes mylotes* Cattle Heart  
*P. alopheus* White-dotted Cattleheart  
*Battus philenor* Pipevine Swallowtail  
*B. polydamas* Polydamas Swallowtail  
*Papilio xuthus* Asian Swallowtail  
*P. machaon* Old World Swallowtail  
*P. m. bairdii/brucei/oregonius* Baird's Swallowtail  
*P. m. joanae* Ozark Swallowtail  
*P. m. brevicauda* Short-tailed Swallowtail  
*P. zelicaon* Anise Swallowtail  
*P. polyxenes* Black Swallowtail  
*P. p. coloro* Desert Black Swallowtail  
*P. indra* Indra Swallowtail  
*P. thoas* Thoas Swallowtail  
*P. crespontes* Giant Swallowtail  
*P. aristodemus* Schaus' Swallowtail  
*P. andraemon* Bahamian Swallowtail  
*P. ornythion* Ornythion Swallowtail  
*P. astyalus* Broad-banded Swallowtail  
*P. androgeus* Androgeus Swallowtail  
*P. anchisiades* Ruby-spotted Swallowtail  
*P. rogeri*  
*P. glaucus glaucus* Eastern Tiger Swallowtail  
*P. g. appalachiensis* Appalachian Tiger Swallowtail  
*P. g. canadensis* Canadian Tiger Swallowtail  
*P. g. rutulus* Western Tiger Swallowtail  
*P. eurymedon* Pale Tiger Swallowtail  
*P. multicaudata* Two-tailed Tiger Swallowtail  
*P. garamas*  
*P. menatius*  
*P. pilumnus* Three-tailed Tiger Swallowtail  
*P. troilus* Spicebush Swallowtail  
*P. palamedes* Palamedes Swallowtail

## PIERIDAE

*Enantia (melite) albania* Dimorphic Sulfur  
*Kricogonia lyside* Lyside Sulfur  
*Nathalis iole* Dainty Yellow  
*Eurema दौरा* Barred Yellow  
*E. mexicana* Mexican Yellow/Wolf Face Yellow  
*E. arbela boisduvaliana* Boisduval's Yellow  
*E. salome* Salome Yellow  
*E. proterpia* Tailed Orange  
*E. messalina* Shy Yellow  
*E. lisa* Little Yellow  
*E. nise* Mimosa Yellow  
*E. dina* Dina Yellow  
*E. nicippe* Erratic Orange  
*Colias nastes* Labrador Sulfur  
*C. tyche* Booth's Sulfur  
*C. canadensis* Canadian Sulfur  
*C. hecla* Hecla Sulfur

*C. meadii* Mead's Sulfur  
*C. m. johanseni* Hyperboreal Sulfur  
*C. occidentalis* Western Sulfur  
*C. o. christina* Christina Sulfur  
*C. columbiensis* BC Sulfur  
*C. edwardsii* Edwards' Sulfur  
*C. alexandra* Queen Alexandra's Sulfur  
*C. harfordii* Harford's Sulfur  
*C. eurytheme* Alfalfa Sulfur/Orange Sulfur  
*C. philodice* Common Sulfur  
*C. interior* Pink-edged Sulfur  
*C. palaeno* Palaeno Sulfur  
*C. pelidne* Pelidne Sulfur  
*C. scudderi* Scudder's Sulfur  
*C. s. gigantea* Giant Sulfur  
*C. behrii* Sierra Sulfur  
*Zerene cesonia* Dogface  
*Z. eurydice* California Dogface  
*Anteos clorinde* White Angled Sulfur/Ghost Brimstone  
*A. maerula* Yellow-angled Sulfur/Yellow Brimstone  
*Phoebis statira* Statira Sulfur  
*P. orbis* Orbed Sulfur  
*P. sennae* Cloudless Sulfur  
*P. agarithe* Large Orange Sulfur  
*P. argante* Apricot Sulfur  
*P. philea* Orange-barred Sulfur  
*P. neocypris* Tailed Sulfur  
*Anthocharis julia* Julia Orangetip  
*A. sara* Sara Orangetip  
*A. cethura* Desert Orangetip  
*A. midea* Falcate Orangetip  
*A. lanceolata* Gray Marble  
*Euchloe (hyantis) guaymasensis* Sonoran Marble  
*E. hyantis* Pearly Marble  
*E. ausonides* Large Marble  
*E. naina* Green Marble  
*E. creusa* Northern Marble  
*E. olympia* Rosy Marble  
*Appias drusilla* Tropical White/Florida White  
*Melete lycimnia*  
*Neophasia menapia* Pine White  
*N. terlooti* Chiricahua White  
*Catasticta nimbice* Mexican Dartwhite  
*Pieriballia demophile*  
*Leptophobia aripa*  
*Pieris rapae* Cabbage White  
*P. hulda* Arctic White  
*P. marginalis* Sharp-veined White  
*P. oleracea* Mustard White  
*P. virginensis* West Virginia White  
*Pontia protodice* Checkered White  
*P. callidice occidentalis* Western White  
*P. sisymbrii* Spring White  
*P. beckerii* Becker's White  
*Ascia monuste* Great Southern White  
*A. josephina* Giant White  
*A. j. howarthi* Howarth's Giant White

## NYMPHALIDAE

- Libythea carinenta Snout Butterfly  
Danaus plexippus Monarch  
D. gilippus Queen  
D. eresimus Soldier  
Lycorea halia Tiger Mimic-Queen  
Dircenna klugii  
Pteronymia cotytto  
Lethe portlandia Southern Pearly-Eye  
L. anhedon Northern Pearly-Eye  
L. creola Creole Pearly-Eye  
L. eurydice Marsh Eyed Brown  
L. e. fumosus Smoky Eyed Brown  
L. appalachia Woods Eyed Brown  
Coenonympha haydenii Hayden's Ringlet  
C. tullia Common Ringlet  
Cyllopsis pyracmon Nabokov's Satyr  
C. pertepida Canyonland Satyr  
C. gemma Gemmed Satyr  
Paramacera xicaque Pine Satyr  
Hermeuptychia hermes Hermes Satyr  
H. h. sosybius Carolina Satyr  
Neonympha areolata Georgia Satyr  
N. helicta Helicta Satyr  
N. mitchellii Mitchell's Satyr  
Megisto cymela Little Wood-Satyr  
M. c. viola Viola's Wood-Satyr  
M. rubricata Red Satyr  
Cercyonis pegala Common Wood-Nymph  
C. sthenele Scrub Wood-Nymph/Great Basin Wood-Nymph  
C. meadii Mead's Wood-Nymph/Red Wood-Nymph  
C. oetus Small Wood-Nymph  
Gyrocheilus patrobas Red-bordered Satyr  
Erebia vidleri Vidler's Alpine  
E. rossii Ross' Alpine  
E. disa Disa Alpine  
E. mancinus Taiga Alpine  
E. magdalena Magdalena Alpine/Rockslide Alpine  
E. fasciata Banded Alpine  
E. epipsodea Common Alpine  
E. discoidalis Red-disked Alpine  
E. stubbendorffii Red-striped Alpine  
E. dabanensis youngi Young's Four-dotted Alpine  
E. kozhantshikovi Reddish Alpine  
E. occulta Eskimo Alpine  
E. callias Colorado Alpine  
Neominois ridingsii Grasshopper Satyr/Ridings' Satyr  
N. r. wyomingo Swale Satyr  
Oeneis uhleri Uhler's Arctic  
O. nevadensis Great Arctic  
O. (nevadensis) macounii Macoun's Arctic  
O. chryxus Chryxus Arctic  
O. calais Calais Arctic  
O. alberta Alberta Arctic  
O. bore White-veined Arctic  
O. jutta Jutta Arctic  
O. alpina Sentinel Arctic  
O. melissa Melissa Arctic  
O. polixenes Polixenes Arctic  
O. philipi Philip's Arctic  
Morpho polyphemus White Morpho  
M. peleides Blue Morpho  
Anaea troglodyta floridalis Florida Leafwing  
A. aidea Tropical Leafwing  
A. andria Goatweed Leafwing  
A. glycerium Angled Leafwing  
A. pithyusa Pale-spotted Leafwing  
A. echemus Creamy Leafwing  
A. forreri Blue Leafwing  
Archaeoprepona demophon centralis  
Limenitis archippus Viceroy  
L. arthemis White Admiral  
L. a. astyanax Red-spotted Purple  
L. weidemeyerii Weidemeyer's Admiral  
L. lorquini Lorquin's Admiral  
Adelpha fessonia Band-celled Sister  
A. basiloides  
A. eulalia Mexican Sister  
A. (bredowii?) californica California Sister  
Dione moneta Mexican Silverspot  
D. vanillae Gulf Fritillary  
Dryas iulia Julia Heliconian  
Dryadula phaetusa Banded Orange Heliconian  
Heliconius (Eueides) isabella Isabella's Heliconian  
H. charithonia Zebra (Heliconian)  
H. erato Erato Heliconian  
Euptoieta claudia Variegated Fritillary  
E. hegesia Mexican Fritillary  
Argynnis (Speyeria) diana Diana Fritillary  
A. cybele Great Spangled Fritillary  
A. aphrodite Aphrodite Fritillary  
A. nokomis Nokomis Fritillary  
A. idalia Regal Fritillary  
A. mormonia Mormon Fritillary  
A. adiaspe Unsilvered Fritillary  
A. hydasphe Hydasphe Fritillary  
A. callippe Callippe Fritillary  
A. atlantis Atlantis Fritillary  
A. hesperis Northwestern Fritillary  
A. egleis Great Basin Fritillary  
A. zerene Zerene Fritillary  
A. coronis Coronis Fritillary  
A. edwardsii Edwards' Fritillary  
Boloria alaskensis Alaskan Fritillary  
B. eunomia Bog Fritillary  
B. selene Silver Meadow Fritillary.  
B. epithore Pacific Fritillary  
B. bellona Meadow Fritillary  
B. frigga Frigga Fritillary  
B. improba Dingy Fritillary  
B. alberta Alberta Fritillary  
B. astarte Astarte Fritillary  
B. astarte distincta Distinctive Fritillary  
B. polaris Polar Fritillary  
B. freija Freija Fritillary/Zigzag Fritillary  
B. tarquinius natazhati Pleistocene Fritillary

B. titania Purplish Fritillary  
 B. t. chariclea Arctic Fritillary  
 B. kriemhild Relict Fritillary  
 Marpesia zerynthia Waiter Daggerwing  
 M. chiron Banded Daggerwing  
 M. petreus Ruddy Daggerwing  
 M. eleucea Antillean Daggerwing  
 Historis odius Odius Leaf Wing  
 H. acheronta Acheronta Leaf Wing  
 Doxocopa pavon Purple Emperor/Pavon Emperor  
 D. laure Silver Emperor  
 Asterocampa celtis Hackberry Emperor  
 A. leilia Empress Leilia  
 A. clyton Tawny Emperor  
 A. idyja "Cream-banded" Dusky Emperor  
 Dynamine postverta=mylitta  
 D. dyonis Blue-eyed Sailor  
 Epiphile adrasta Common Banner  
 Temenis laothoe  
 Hamadryas februa Gray Cracker  
 H. glaucanome Pale Cracker  
 H. atlantis Dusky Cracker  
 H. feronia Blue Cracker  
 H. guatemalena Guatemalan Cracker  
 H. iphthime Ringless Blue Cracker  
 H. amphinome Red Cracker  
 Myscelia ethusa Blue Wave/Mexican Bluewing  
 M. cyananthe Blackened Bluewing  
 Eunica monima Dingy Purplewing  
 E. tatila Florida Purplewing  
 Mestra amymone Common Mestra  
 Biblis hyperia Red Rim  
 Smyrna blomfieldia Blomfield's Beauty  
 Hypanartia lethe Orange Mapwing  
 Vanessa virginiensis American Painted Lady  
 V. cardui Painted Lady  
 V. carye (annabella) Western Painted Lady.  
 V. atalanta Red Admiral  
 V. tameamea Kamehameha Lady  
 Aglais milberti Fire-rim Tortoiseshell/Milbert's  
 Tortoiseshell  
 A. urticae Small Tortoiseshell  
 Nymphalis (Roddia) l-album Compton Tortoiseshell  
 N. californica California Tortoiseshell  
 N. antiopa Mourning Cloak  
 Polygonia interrogationis Question Mark  
 P. comma Eastern Comma  
 P. satyrus Satyr Comma  
 P. progne Dark-gray Comma.  
 P. oreas Oreas Comma  
 P. gracilis Hoary Comma  
 P. faunus Green Comma  
 Siproeta stelenes Malachite  
 S. epaphus Rusty-tipped Page  
 Anartia jatrophae White Peacock  
 A. amathea fatima Banded Peacock  
 A. lytrea chrysopelea Caribbean Peacock  
 Hypolimnas misippus Mimic  
 Junonia coenia Buckeye  
 J. evarete Tropical Buckeye  
 J. e. nigrosuffusa Dark Tropical Buckeye  
 J. genoveva Mangrove Buckeye  
 Euphydryas phaeton Baltimore Checkerspot  
 E. colon Colon Checkerspot  
 E. chalcedona Chalcedon Checkerspot  
 E. anicia Anicia Checkerspot  
 E. bernadetta Bernadetta Checkerspot  
 E. editha Edith's Checkerspot  
 E. gillettii Gillett's Checkerspot  
 Poladryas minuta minuta Dotted Checkerspot  
 P. m. arachne Arachne Checkerspot  
 Microtia elva Elf  
 M. (Dymasia) dymas Tiny Checkerspot  
 M. (Texola) elada Elada Checkerspot  
 Chlosyne janais Crimson Patch  
 C. definita Definite Patch  
 C. endeis Banded Patch  
 C. melitaeoides Red-spotted Patch  
 C. eumeda Eumeda Patch  
 C. rosita Rosita Patch  
 C. theona Theona Checkerspot  
 C. chinatiensis Chinati Checkerspot  
 C. cyneas Black Checkerspot  
 C. leanira Leanira Checkerspot  
 C. l. fulvia Fulvia Checkerspot  
 C. nycteis Silvery Checkerspot  
 C. gorgone Gorgone Checkerspot  
 C. lacinia Bordered Patch  
 C. californica California Patch  
 C. harrisii Harris' Checkerspot  
 C. whitneyi Rockslide Checkerspot  
 C. gabbii Gabb's Checkerspot  
 C. sterope Sagebrush Checkerspot  
 C. palla Northern Checkerspot  
 C. hoffmanni Hoffmann's Checkerspot  
 Phyciodes frisia Cuban Crescent  
 P. f. tulcis Pale-banded Crescent  
 P. ptolyca Black Crescent  
 P. texana Texan Crescent  
 P. t. seminole Seminole Texan Crescent  
 P. argentea Chestnut Crescent  
 P. vesta Vesta Crescent  
 P. mylitta Mylitta Crescent  
 P. pallida Pale Crescent  
 P. orseis California Crescent  
 P. tharos Pearl Crescent  
 P. cocyta Northern Crescent  
 P. batesii Bates' Crescent.  
 P. pulchella Field Crescent  
 P. pallescens Pallescens Crescent  
 P. picta Painted Crescent  
 P. phaon Phaon Crescent



## LYCAENIDAE

- Calephelis borealis* Northern Metalmark  
*C. muticum* Swamp Metalmark  
*C. virginensis* Little Metalmark  
*C. nilus perditalis* Rounded Metalmark  
*C. nemesis* Fatal Metalmark  
*C. rawsoni* Rawson's Metalmark  
*C. r. arizonensis* Arizona Rawson's Metalmark  
*C. wrighti* Wright's Metalmark/Sweetbush Metalmark  
*Caria ino* Red-bordered Metalmark  
*Lasaia maria* Maria Metalmark  
*L. sula* Blue Metalmark  
*Melanis pixe* Red-bordered Pixie  
*Emesis zela* Zela Metalmark  
*E. ares* Ares Metalmark  
*E. emesia* Curve-winged Metalmark  
*E. teneidia* Falcate Metalmark  
*Apodemia mormo* Mormon Metalmark  
*A. cythera* Oranger Mormon Metalmark  
*A. virgulti* Multivoltine Mormon Metalmark  
*A. dialeuca* Early Mormon Metalmark  
*A. nais* Coppermark/Nais Metalmark  
*A. n. chisosensis* Chisos Coppermark  
*A. phyciodoides* Crescentmark  
*A. palmeri* Palmer's Metalmark/Mesquite Metalmark  
*A. hepburni* Hepburn's Metalmark  
*A. walker* Walker's Metalmark  
*A. multiplaga* Narrow-winged Metalmark  
*Feniseca tarquinius* Harvester  
*Lycaena phlaeas* Small Copper  
*L. cupreus* Lustrous Copper  
*L. thoe* Bronze Copper  
*L. nivalis* Lilac-bordered Copper  
*L. helloides* Purplish Copper  
*L. florus* Florus Copper  
*L. dorcas* Dorcas Copper  
*L. epixanthe* Bog Copper/Cranberry-bog Copper  
*L. mariposa* Mariposa Copper/Forest Copper  
*L. gorgon* Gorgon Copper  
*L. heteronea* Blue Copper  
*L. rubidus* Ruddy Copper  
*L. dione* Gray Copper  
*L. xanthoides* Great Copper  
*L. x. editha* Edith's Copper  
*L. hermes* Hermes Copper  
*L. arota* Tailed Copper  
*Hypaurotis crysalus* Colorado Hairstreak  
*Habrodais grunus* Golden Hairstreak  
*Eumaeus atala* Atala/Cycad Hairstreak  
*E. toxea* Toxic Cycad Hairstreak  
*Atlides halesus* Great Blue Hairstreak  
*Rekoa palegon* Slated Hairstreak  
*R. marius* Double-spotted Slate Hairstreak  
*Arawacus jada* Nightshade Hairstreak/Creamy Stripe-  
Streak  
*Satyrium fuliginosa* Sooty Hairstreak  
*S. behrii* Behr's Hairstreak  
*S. liparops* Striped Hairstreak  
*S. kingi* Sweetleaf Hairstreak/King's Hairstreak  
*S. caryaevorus* Hickory Hairstreak  
*S. calanus* Banded Hairstreak  
*S. edwardsii* Edwards' Hairstreak  
*S. auretteum* Gold-hunter's Hairstreak  
*S. saepium* Hedgerow Hairstreak  
*S. tetra* Mountain Mahogany Hairstreak  
*S. sylvinus* Sylvan Hairstreak/Western Willow Hairstreak  
*S. californica* California Hairstreak  
*S. acadica* Acadian Hairstreak/Northern Willow Hairstreak  
*S. titus* Coral Hairstreak  
*S. favonius* Southern Oak Hairstreak  
*S. f. ontario* Northern Oak Hairstreak  
*S. f. ilavia* Ilavia Hairstreak  
*S. polingi* Poling's Hairstreak  
*Phaeostrymon alcestis* Soapberry Hairstreak  
*Ocaria ocrisia* Black Hairstreak  
*Chlorostrymon simaethis* Silver-banded Hairstreak  
*C. maesites* Amethyst Hairstreak  
*C. m. telea* Continental Amethyst Hairstreak  
*Callophrys goodsoni* Goodson's Greenstreak  
*C. herodotus* Tropical Greenstreak  
*C. miserabilis* Clench's Greenstreak  
*C. affinis apama* Canyon Hairstreak/Apama Hairstreak  
*C. a. affinis* Immaculate Hairstreak  
*C. a. perplexa* Bramble Hairstreak  
*C. sheridani* comstocki Desert Sheridan's Hairstreak  
*C. s. lemberti* Alpine Sheridan's Hairstreak  
*C. s. viridis* Coastal Green Hairstreak  
*C. s. sheridani* Sheridan's Hairstreak  
*C. gryneus gryneus* Olive Juniper Hairstreak  
*C. g. sweadneri* Sweadner's Juniper Hairstreak  
*C. g. siva* Siva Juniper Hairstreak  
*C. g. nelsoni* Nelson's Juniper Hairstreak  
*C. g. muiri* Muir's Juniper Hairstreak  
*C. g. loki* Loki Juniper Hairstreak  
*C. g. thornei* Thorne's Juniper Hairstreak  
*C. hesseli* White-cedar Hairstreak/Hessel's Hairstreak  
*C. spinetorum* Thicket Hairstreak  
*C. johnsoni* Johnson's Hairstreak  
*C. xami* Xami Hairstreak  
*C. mcfarlandi* Beargrass Hairstreak  
*C. fotis* Desert Elfin  
*C. mossii* Moss' Elfin/Stonecrop Elfin  
*C. augustinus* Brown Elfin  
*C. polios* Hoary Elfin  
*C. irus* Frosted Elfin  
*C. henrici* Henry's Elfin  
*C. lanoraieensis* Bog Elfin  
*C. nippon* Eastern Pine Elfin  
*C. eryphon* Western Pine Elfin  
*Allosmaitia strophius* Blue-metal Hairstreak  
*Ziegleria guzanta* Guzanta Hairstreak  
*Electrostrymon hugon=sangala* Ruddy Hairstreak  
*E. joya=canus* Muted Hairstreak  
*E. angelia* Fulvous Hairstreak  
*Calycopis cecrops* Red-banded Hairstreak  
*C. c. isobeon* Dusky-blue Hairstreak

*Strymon melinus* Gray Hairstreak  
*S. avalona* Avalon Scrub-Hairstreak  
*S. rufofusca* Red-crescent Scrub-Hairstreak  
*S. albata* White Scrub-Hairstreak  
*S. alea* Lacey's Scrub-Hairstreak  
*S. bebrycia* Red-lined Scrub-Hairstreak/Balloon-vine  
 Hairstreak  
*S. yojoa* Yojoa Scrub-Hairstreak  
*S. cestri* Tailless Scrub-Hairstreak  
*S. martialis* Martial Scrub-Hairstreak  
*S. acis* Bartram's Scrub-Hairstreak  
*S. bazochii* Lantana Scrub-Hairstreak  
*S. istapa* Mallow Scrub-Hairstreak  
*S. limenia* Disguised Scrub-Hairstreak  
*S. serapio* Bromeliad Scrub-Hairstreak  
*Tmolus echion* Red-spotted Hairstreak  
*Ministrymon leda* Leda Ministreak  
*M. clytie* Clytie Ministreak  
*M. azia* Gray Ministreak  
*Strephonota tephraeus* Tephraeus Hairstreak  
*Oenomaus ortygnus* Large Brilliant Hairstreak  
*Parrhasius m-album* White-M Hairstreak  
*Hypostrymon critola* Sonoran Hairstreak  
*Erora laeta* Turquoise Hairstreak  
*E. l. quaderna* Arizona Turquoise Hairstreak  
*Lampides boeticus* Pea Blue  
*Leptotes cassius* Cassius Blue  
*L. marina* Marine Blue  
*Brephidium exilis* Pygmy Blue  
*B. e. pseudofea* Eastern Pygmy Blue  
*Zizula cyna* Cyna Blue  
*Zizina otis otis* Mimosa Blue  
*Cupido comyntas* Eastern Tailed Blue  
*C. amyntula* Western Tailed Blue  
*Celastrina neglecta* Summer Azure  
*C. neglecta* echo California Azure  
*C. lucia* Early Spring Azure  
*C. ladon* Spring Azure  
*C. idella* Holly Azure  
*C. (argentata?)serotina* Cherry-gall Azure  
*C. (argentata?) humulus* Hop Azure  
*C. neglectamajor* Appalachian Azure  
*C. nigra* Spring Sooty  
*Udara blackburni* Green Hawaiian Blue  
*Hemiargus (hanno) ceraunus* Ceraunus Blue  
*Philotes sonorensis* Stonecrop Blue  
*Philotiella speciosa* Small Blue  
*Euphilotes bernardino* Bernardino Blue  
*Euphilotes battoides* etc. Square-spotted Blue  
*E. enoptes* etc. Dotted Blue  
*E. rita* Rita Blue  
*E. spaldingi* Spalding's Blue  
*Glaucopsyche piasus* Arrowhead Blue  
*G. lygdamus* Silvery Blue  
*Echinargus (Cyclargus) thomasi* Miami Blue  
*E. (C.) ammon* Nickerbean Blue  
*E. isola* Reakirt's Blue  
*Polyommatus icarus* Icarus Blue  
*Plebejus anna* Anna Blue  
*P. scudderii* Northern Blue  
*P. atrapraetextus* Hybrid Blue  
*P. samuelis* Karner Blue  
*P. melissa* Melissa Blue/Orange-margined Blue  
*P. optilete* Cranberry Blue  
*P. saepiolus* Greenish Blue  
*P. icarioides* Lupine Blue/Boisduval's Blue  
*P. shasta* Cushion Plant Blue  
*P. acmon* Silver-studded Blue  
*P. alupini* Large Silver-studded Blue.  
*P. chlorina* Greenish Silver-studded Blue  
*P. neurona* Veined Blue  
*P. emigdionis* San Emigdio Blue  
*P. glandon* Arctic Blue/Primrose Blue  
*P. cassiope* Heather Blue  
*P. podarce* Sierra Blue

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