

SYNOPSIS OF THE KNOWN LIFE-HISTORIES OF
JAPANESE BUTTERFLIES

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For the convenience of lepidopterists everywhere interested in food-plant questions, as well as for those in Palearctic Asia, the following checklist has been prepared. It includes the results of the very active post-war study of life-histories in Japan. All are drawn from published records, mostly in Japanese, and all seem to be reliably established. The foodplants and modes of hibernation in this list are only those discovered in Japan, and unstudied subspecies are omitted.

Abbreviations:

S. Single brooded.	E. Egg hibernation
D. Double (or more) brooded.	L. Larval hibernation.
(M). Myrmecophilous.	P. Pupal hibernation.
(F). Feeds on flowers or fruits.	A. Adult hibernation.

"Larva on" means "wild larva actually feeds on."

HESPERIIDÆ

1. *Pyrgus maculatus* Bremer & Grey larva on *Potentilla* (Rosaceæ). D. P.
2. *Erynnis montanus* Bremer larva on *Quercus* (Fagaceæ). S. L.
3. *Daimio tethys tethys* Ménétriès and *D. t. daiseni* Riley larva on *Dioscorea* (Dioscoreaceæ). D. L.
4. *Choaspes benjaminii japonica* Murray larva on *Meliosma* (Sabiaceæ). D. P./L.
5. *Bibasis aquilina chrysægla* Butler larva on *Kalopanax* (Araliaceæ). S. E.
6. *Notocrypta curvifascia* Felder & Felder larva on *Alpinia* (Zingiberaceæ). D. P.
7. *Leptalina unicolor* Bremer & Grey larva on *Miscanthus*, *Imperata*, *Setaria* (Gramineæ). D. L.
8. *Carterocephalus palæmon satakei* Matsumura larva on Gramineæ. S. L.
9. *Carterocephalus sylvicola issaikii* Matsumura ?larva on Gramineæ. S. L.?
10. *Æromachus inachus* Ménétriès larva on Gramineæ. D. L.?
11. *Isoteinon lamprospilus* Felder & Felder larva on *Miscanthus* (Gramineæ). S. L.
12. *Thymelicus leoninus* Butler larva on *Agropyron* (Gramineæ). S. E.?
13. *Thymelicus sylvaticus* Bremer larva on Gramineæ. S. E.?
14. *Ochlodes venata herculea* Butler larva on *Miscanthus* (Gramineæ). S. L.
15. *Ochlodes ochracea rikuchina* Butler larva on *Oplismenus* (Gramineæ). D. L.
16. *Hesperia comma florinda* Butler larva on *Carex* (Cyperaceæ). S. E.
17. *Potanthus flava* Murray larva on *Setaria*, *Miscanthus*, *Oplismenus* etc. (Gramineæ). D. L.
18. *Thoressa varia varia* Murray and *T. obscura* larva on *Arundinaria*, *Pleioblastus*, *Sasa* etc. (Gramineæ). D. L.
19. *Polytremis pellucida* Murray larva on *Arundinaria*, *Shibatæa*, *Pleioblastus*, *Oryza*, *Miscanthus*, etc. (Gramineæ). D. L.
20. *Pelopidas mathias oberthûri* Evans larva on *Oryza*, *Miscanthus*, etc. (Gramineæ). D. L.
21. *Pelopidas jansonis* Butler larva on *Miscanthus*, etc. (Gramineæ). D. L.
22. *Parnara guttata* Bremer & Grey larva on *Oryza*, *Imperata*, *Setaria*, etc. (Gramineæ). D. L.

PAPILIONIDÆ

1. *Lübdorfia puziloi yessoensis* Rothschild and *L. inexpecta* Sheljuzhko larva on *Asiasarum* (Aristolochiaceæ). S. P.
2. *Lübdorfia japonica* Leech larva on *Heterotropa*, *Japonasarum*, *Asiasarum* (Aristolochiaceæ). S. P.
3. *Parnassius stubbendorffii boenei* Schweitzer larva on *Corydalis* (Papaveraceæ). S. E.
4. *Parnassius glacialis glacialis* Butler and *P. mikado* Bryk & Eisner larva on *Corydalis* (Papaveraceæ). S. E.
5. *Parnassius eversmanni daisetsuzana* Matsumura larva on (F) *Dicentra* (Papaveraceæ). S. E. (1st winter) and P. (2nd winter).
6. *Menelaides alcinous* Klug larva on *Aristolochia*, *Hocquartia* (Aristolochiaceæ). D. P.
7. *Graphium sarpedon nipponum* Fruhstorfer larva on *Cinnamonum*, *Machilus*, *Neolitsea* (Lauraceæ). D. P.
8. *Graphium doson albidum* Wileman larva on *Michelia*, *Magnolia* (Magnoliaceæ). D. P.
9. *Papilio machaon hippocrates* Felder & Felder larva on *Angelia*, *Cryptotaenia*, *Daucus*, *Fœniculum*, *Glebnia*, etc. (Umbelliferæ); *Pbellodendron*, etc. (Rutaceæ). D. P.
10. *Papilio xuthus* Linné. larva on *Citrus*, *Fagara*, *Pbellodendron*, *Poncris*, *Zanthoxylum*, etc. (Rutaceæ). D. P.
11. *Papilio macilentus* Janson larva on *Orixa*, *Fagara*, *Zanthoxylum*, *Poncris*, etc. (Rutaceæ). D. P.
12. *Papilio protenor demetrius* Cramer larva on *Citrus*, *Poncris*, *Zanthoxylum*, etc. (Rutaceæ). D. P.
13. *Papilio memnon thunbergii* von Siebold larva on *Citrus*, *Poncris*, etc. (Rutaceæ). D. P.
14. *Papilio helenus nicconicolens* Butler larva on *Citrus*, *Fagara*, etc. (Rutaceæ). D. P.
15. *Papilio bianor debaani* Felder & Felder larva on *Orixa*, *Pbellodendron*, *Fagara*, *Zanthoxylum*, *Poncris*, etc. (Rutaceæ). D. P.
16. *Papilio maackii tutanus* Fenton and *P. satakei* Matsumura larva on *Pbellodendron*, *Orixa*, etc. (Rutaceæ). D. P.

PIERIDÆ

1. *Leptidea amurensis* Ménétrière larva on *Vicia*, *Lotus*, *Latyrus* (Leguminosæ). D. P.
2. *Leptidea morsei* Fenton larva on *Vicia* (Leguminosæ). D. P. ?
3. *Eurema becabe mandarina* l'Orza larva on *Lespedeza*, *Cæsalpinia*, *Acacia*, *Albizzia*, *Æchynomene*, etc. (Leguminosæ). D. A.
4. *Eurema leta bethesba* Janson larva on *Cassia* (Leguminosæ). D. A.
5. *Gonepteryx rhamnii maxima* Butler larva on *Rhamnus* (Rhamnaceæ). S. A.
6. *Gonepteryx mahaguru nipponica* Verity larva on *Rhamnus* (Rhamnaceæ). S. A.
7. *Colias erate poliographus* Motschulsky larva on *Glycine*, *Hedysarum*, *Indigofera*, *Lupinus*, *Lotus*, *Medicago*, *Pisum*, *Robinia*, *Trifolium*, etc. (Leguminosæ). D. L.
8. *Colias palæno aias* Fruhstorfer larva on *Vaccinium* (Ericaceæ). S. L.
9. *Anthocaris cardamines issaikii* Matsumura larva on (F) *Arabis*, *Barbarea*, etc. (Cruciferæ). S. P.
10. *Anthocaris scolymus* Butler larva on (F) *Arabis*, *Brassica*, *Cardamine*, *Rorippa* (Cruciferæ) S. P.
11. *Hebomoia glaucippe liukiensis* Fruhstorfer larva on *Cratæva* (Capparidaceæ). D. L.
12. *Pieris rapæ crucivora* Boisduval larva on *Arabis*, *Brassica*, *Raphanus*, *Wasabia*, etc. (Cruciferæ); *Cleome* (Capparidaceæ); *Reseda* (Resedaceæ). D. P.
13. *Pieris napi pseudomelete* Verity and *P. n. japonica* Shirozu larva on *Arabis*, *Cardamine*, etc. (Cruciferæ). D. P.
14. *Pieris melete melete* Ménétrière and *P. m. pseudonapi* Verity larva on *Arabis*, *Raphanus*, *Brassica*, *Wasabia*, etc. (Cruciferæ). D. P.

15. *Pieris canidia juba* Fruhstorfer ?larva on Cruciferæ. D. P. ?
16. *Aporia bippia japonica* Matsumura larva on *Berberis* (Berberidaceæ). S. L.
17. *Aporia crataegi adherbal* Fruhstorfer larva on *Chaenomeles*, *Crataegus*, *Malus*, *Pyrus*, *Prunus*, etc. (Rosaceæ). S. L.

LYCÆNIDÆ

1. *Curetis acuta paracuta* de Nicéville larva on (F) *Wistaria*, *Milletia*, *Pueraria*, *Sophora* (Leguminosæ). D. A.
2. *Arhopala japonica* Murray larva (M) on *Cyclobalanopsis*, *Quercus* (Fagaceæ). D. A.
3. *Arhopala ganesa loomisi* Pryer larva (M) on *Cyclobalanopsis* (Fagaceæ). S. A.
4. *Arhopala bazalus turbata* Butler larva (M) on *Lithocarpus*, *Kuromatea* (Fagaceæ). D. A.
5. *Artopoëtes pryeri* Murray larva on *Ligustrum* (Oleaceæ). S. E.
6. *Coreana raphælis* Oberthür larva on *Fraxinus* (Oleaceæ). S. E.
7. *Coreana ibara* Butler larva on *Fraxinus* (Oleaceæ). S. E.
8. *Japonica lutea* Hewitson larva on *Quercus* (Fagaceæ). S. E.
9. *Japonica sæpestriata* Hewitson larva on *Quercus*, *Castanea* (Fagaceæ). S. E.
10. *Araragi entheum* Janson larva on *Juglans* (Juglandaceæ). S. E.
11. *Antigius atilia* Bremer larva on *Quercus* (Fagaceæ). S. E.
12. *Antigius butleri* Fenton larva on *Quercus* (Fagaceæ). S. E.
13. *Wagimo signata signata* Butler and *W. quercivora* Staudinger larva on *Quercus* (Fagaceæ). S. E.
14. *Shirôzua jonasi* Janson larva (carnivorous) on oak-aphids. S. E.
15. *Iratsume orsedice* Butler larva on *Hammamelis* (Hammamelidaceæ). S. E.
16. *Favonius orientalis* Murray larva on *Quercus* (Fagaceæ). S. E.
17. *Favonius yuasai* Shirôzu larva on *Quercus* (Fagaceæ). S. E.
18. *Favonius jezoensis* Matsumura larva on *Quercus* (Fagaceæ). S. E.
19. *Favonius hayashii* Shirôzu larva on *Quercus* (Fagaceæ). S. E.
20. *Favonius ultramarinus* Fixsen larva on *Quercus* (Fagaceæ). S. E.
21. *Favonius sapphirinus* Staudinger larva on *Quercus* (Fagaceæ). S. E.
22. *Favonius fujisanus* Matsumura larva on *Fagus* (Fagaceæ). S. E.
23. *Neozephyrus taxila regina* Butler, *N. t. japonicus* Murray, and *N. t. monticola* Shirôzu larva on *Alnus* (Betulaceæ). S. E.
24. *Neozephyrus aurorinus* Oberthür larva on *Quercus* (Fagaceæ). S. E.
25. *Neozephyrus smaragdinus* Bremer larva on *Prunus* (Rosaceæ). S. E.
26. *Neozephyrus hisamatsusanus* Nagami & Ishiga ?larva on *Fagaceæ*. S. E. ?
27. *Neozephyrus ataxus kirishimaensis* Okajima larva on *Cyclobalanopsis* (Fagaceæ). S. E.
28. *Rapala arata* Bremer larva (M) on (F) *Wistaria* (Leguminosæ); *Deutzia* (Saxifragaceæ); *Rosa* (Rosaceæ); *Vaccinium* (Ericaceæ); *Palura* (Symplocaceæ); *Rhamnus* (Rhamnaceæ). D. P.
29. *Strymonidia w-album fentoni* Butler larva on *Ulmus* (Ulmaceæ); *Prunus* (Rosaceæ). S. E.
30. *Strymonidia merus* Janson larva on *Rhamnus* (Rhamnaceæ). S. E.
31. *Strymonidia pruni jezoensis* Matsumura larva on *Prunus* (Rosaceæ). S. E.
32. *Ahlbergia ferrea* Butler larva on (F) *Viburnum* (Caprifoliaceæ); *Rhododendron* (Ericaceæ); *Malus* (Rosaceæ). S. P.
33. *Spindasis takanonis* Matsumura mature larva fed orally by host ants in their nests on *Pinus*, *Prunus*, *Elæagnus*. S. L.
34. *Lycæna phleas daimio* Seitz larva on *Rumex* (Polygonaceæ). D. L.
35. *Taraka hamada* Druce larva (carnivorous) on bamboo woolly aphid, *Oregma japonica* (Eriosomatidæ). D. L.
36. *Nipbanda fusca shijima* Fruhstorfer larva in 1st 2 instars feeds on the excretion of dwarf-oak aphid, *Greenidea kuwanai* and in later instars is fed orally by the host-ants, *Camponotus herculeanus japonicus*. S. L.

37. *Lampides boeticus* Linné larva (M) on (F) *Dolichos*, *Phaseolus*, *Vicia*, etc. (Leguminosæ). D. Migratory.
38. *Nacaduba kurava septentrionalis* Shirôzu larva on *Bladbia* (Myrsinacæ). D. ?
39. *Zizeeria maha argia* Ménériès larva (M) on *Oxalis* (Oxalidacæ). D. L.
40. *Zizina otis alope* Fenton larva (M) on *Lotus*, *Indigofera*, *Lespedeza* (Leguminosæ). D. L.
41. *Scolitantides orion jezoensis* Matsumura larva (M) on *Sedum* (Crassulacæ). S. P.
42. *Sinia divina barine* Leech larva (M) on (F) *Sophora* (Leguminosæ). S. P.
43. *Glaucopsyche lycormas* Butler larva (M) on *Vicia* (Leguminosæ). S. ?
44. *Maculinea euphemis shiriyensis* Matsumura and *M. e. kazamoto* Druce larva (M) on (F) *Sanguisorba* (Rosacæ) and later (carnivorous) on ant-grubs and eggs of *Myrmica* (Formicidæ). S. L.
45. *Maculinea arionides takamukui* Matsumura larva (M) on (F) *Isodon* (Labiatae) and later (carnivorous) on ant-grubs and eggs of *Myrmica*? (Formicidæ). S. L.
46. *Celastrina argiolus ladonides* l'Orza larva (M) on (F) *Wistaria*, *Sophora*, *Robinia*, *Lespedeza*, etc. (Leguminosæ); *Malus*, *Prunus* (Rosacæ). D. P.
47. *Celastrina sugitanii* Matsumura larva (M) on (F) *Æsculus* (Hippocastanacæ). S. P.
48. *Celastrina puspa umenois* Matsumura larva (M) on *Pieris* (Ericacæ), *Glochidion* (Euphorbiacæ), *Rosa* (Rosacæ). D. P. ?
49. *Celastrina albocerulea sauteri* Fruhstorfer larva on (F) *Prunus* (Rosacæ), *Dicalix* (Symplocacæ), *Ilex* (Aquifoliacæ), *Viburnum* (Caprifoliacæ). D. L./P.
50. *Everes argiades seitzi* Wnukowsky larva (M) on (F) *Lespedeza*, *Indigofera*, *Pisum*, *Pueraria*, *Trifolium Medicago*, *Phaseolus*, etc. (Leguminosæ); *Humulus* (Moracæ). D. L.
51. *Everes lacturnus kawaii* Matsumura larva (M) on *Vicia* (Leguminosæ). D. L.
52. *Tongeia fischeri* Eversmann larva (M) on *Sedum* (Crassulacæ). D. L.
53. *Plebejus argus micrargus* Butler larva (M) on *Synurus*, etc. (Compositæ). S. E.
54. *Lycæides argyrognomon præterinsularis* Verity larva (M) on (F) *Indigofera* (Leguminosæ). D. E.
55. *Lycæides subsolana yagina* Strand larva (M) on *Vicia* (Leguminosæ). S. E.
56. *Lycæides yarigadakeana* Matsumura larva (M) on *Astragalus*, *Hedysarum* (Leguminosæ). S. E.
57. *Lycæides iburiensis* Butler ?larva on Leguminosæ. S. ?
58. *Vacinina optilete daisetsuzana* Matsumura ?larva on *Vaccinium* (Ericacæ). S. ?

LIBYTHEIDÆ

1. *Libythea celtis celtoides* Fruhstorfer larva on *Celtis* (Ulmacæ). S. A.

DANAIDÆ

1. *Caduga tytia nipponica* Moore larva on *Marsdenia*, *Metaplexis* (Asclepiadacæ). D. P.

NYMPHALIDAE

1. *Boloria thore jezoensis* Matsumura larva on *Viola* (Violacæ). S. L.
2. *Boloria iphigenia* Graeser ?larva on *Viola* (Violacæ). S. L. ?
3. *Boloria freija asahidakeana* Matsumura larva on *Sieversia* (Rosacæ). S. L.
4. *Brenthis daphne raddia* Butler larva on *Sanguisorba* (Rosacæ). S. L.
5. *Brenthis ino tigroides* Fruhstorfer larva on *Filipendula* (Rosacæ). S. L.
6. *Argynnis paphia geisha* Hemming larva on *Viola* (Violacæ). S. L.
7. *Argynnis sagana liane* Fruhstorfer larva on *Viola* (Violacæ). S. L.
8. *Argynnis anadyomene midas* Butler larva on *Viola* (Violacæ). S. E.
11. *Argynnis charlotta basalis* Matsumura and *A. c. fortuna* Janson larva on *Viola* (Violacæ). S. L.
12. *Argynnis laodice japonica* Ménériès larva on *Viola* (Violacæ). S. L.
13. *Argynnis ruслana* Motschulsky larva on *Viola* (Violacæ). S. E.

14. *Argynnis hyperbius* Linné larva on *Viola* (Violaceæ). D. L.
15. *Limnitis populi jezoensis* Matsumura larva on *Populus* (Salicaceæ). S. L.
16. *Limnitis camilla japonica* Ménétriès larva on *Lonicera* (Caprifoliaceæ). D. L.
17. *Limnitis glorifica* Fruhstorfer larva on *Lonicera* (Caprifoliaceæ). D. L.
18. *Neptis aceris oda* Fruhstorfer and *N. a. passerculus* Fruhstorfer larva on *Lespedeza*, *Robinia*, *Rhynchosia*, *Milletia*, *Wistaria*, *Glycine* (Leguminosæ). D. L.
19. *Neptis pbilyra excellens* Butler larva on *Acer* (Aceraceæ). S. L.
20. *Neptis alvina kæmpferi* l'Orza larva on *Prunus* (Rosaceæ). S. L.
21. *Neptis cænobita aino* Shirôzu and *N. c. insularum* Fruhstorfer larva on *Spiræa* (Rosaceæ). S. L.
22. *Neptis pryeri* Butler larva on *Spiræa* (Rosaceæ). D. L.
23. *Melitæa ambigua nippona* Butler larva on *Melampyrum*, *Siphonostegia*, *Veronicastrum* (Scrophulariaceæ); *Plantago* (Plantaginaceæ). S. L.
24. *Melitæa protomeidia* Ménétriès larva on *Valeriana* (Valerianaceæ). S. L.
25. *Melitæa phoebe scotosia* Butler larva on *Cirsium*, *Serratula* (Compositæ). S. L.
26. *Araschnia levana obscura* Fenton larva on *Laportea*, *Urtica* (Urticaceæ). D. P.
27. *Araschnia burejana strigosa* Butler larva on *Boehmeria*, *Urtica* (Urticaceæ). D. P.
28. *Polygonia c-aureum* Linné larva on *Humulus* (Moraceæ). D. A.
29. *Polygonia c-album bokkaidensis* Nomura and *P. c. hamigera* Butler larva on *Ulmus*, *Celtis* (Ulmaceæ); *Humulus* (Moraceæ); *Ribes* (Saxifragaceæ). D. A.
30. *Polygonia l-album samurai* Fruhstorfer larva on *Betula* (Betulaceæ). S. A.
31. *Kaniska canace no-jaconicum* von Siebold larva on *Lilium*, *Tricyrtis*, *Streptopus*, *Smilax* (Liliaceæ). D. A.
32. *Nymphalis antiopa asopos* Fruhstorfer larva on *Salix*, *Toisusu* (Salicaceæ). S. A.
33. *Nymphalis xanthomelas japonica* Stichel larva on *Celtis* (Ulmaceæ); *Salix* (Salicaceæ). S. A.
34. *Nymphalis io geisha* Stichel larva on *Humulus* (Moraceæ); *Urtica* (Urticaceæ). D. A.
35. *Aglais urticae connexa* Butler larva on *Laportea*, *Urtica* (Urticaceæ). S. A.
36. *Vanessa cardui* Linné larva on *Arctium*, *Gnaphalium* etc. (Compositæ); *Glycine* etc. (Leguminosæ). D. A.
37. *Vanessa indica* Herbst larva on *Boehmeria*, *Urtica* (Urticaceæ); *Humulus* (Moraceæ); *Ulmus* (Ulmaceæ). D. A.
38. *Precis orithya* Linné ?larva on *Antirrhium* (Scrophulariaceæ). D. A. ?
39. *Hypolimnas missippus* Linné ?larva on *Ficus* (Moraceæ). ? ?
40. *Cyrestis thyodamas mabella* Fruhstorfer larva on *Ficus* (Moraceæ). D. A.
41. *Dichorragia nesimachus nesiotus* Fruhstorfer larva on *Meliosma* (Sabiaceæ). D. P.
42. *Apatura ilia substituta* Butler larva on *Salix*, *Populus* (Salicaceæ). D. L.
43. *Hestina japonica* Felder & Felder larva on *Celtis* (Ulmaceæ). D. L.
44. *Sasakia cbaronda* Hewitson larva on *Celtis* (Ulmaceæ). S. L.

SATYRIDÆ

1. *Ypthima argus* Butler larva on *Oplismenus*, etc. (Gramineæ). D. L.
2. *Ypthima motschulskyi* Bremer & Grey larva on *Digitaria*, etc. (Gramineæ). D. L.
3. *Erebia nipponica* Janson larva on *Carex* etc. (Cyperaceæ). S. L.
4. *Erebia ligea takanonis* Matsumura larva on *Carex* (Cyperaceæ). S. L.
5. *Cœneis asamana* Matsumura larva on *Carex* (Cyperaceæ). S. L. (2 winters).
6. *Cœneis daisetsuzana* Matsumura larva on Cyperaceæ. S. L.
7. *Satyrus dryas bipunctatus* Motschulsky larva on *Agrotis*, *Poa* (Gramineæ). D. L.
9. *Pararge achine achinoides* Butler larva on Gramineæ and Cyperaceæ. S. L.
10. *Lethe callipteris* Butler larva on *Pleioblastus*, etc. (Gramineæ). S. L.
11. *Lethe sicelis* Hewitson larva on *Pleioblastus*, etc. (Gramineæ). D. L.
12. *Lethe diana* Butler larva on *Pleioblastus*, etc. (Gramineæ). D. L.
13. *Lethe marginalis* Motschulsky larva on *Miscanthus*, etc. (Gramineæ). S. L.
14. *Aranda schrenckii menalcas* Fruhstorfer larva on *Carex* (Cyperaceæ). S. L.
15. *Aranda epaminondas* Staudinger larva on Gramineæ. S. L.

16. *Neope goschkevitschii* Ménériès larva on *Pleioblastus* (Gramineæ). D. P.
17. *Mycalesis gotama fulginia* Fruhstorfer larva on *Oryza*, *Oplismenus*, etc. (Gramineæ). D. L.
18. *Mycalesis francisca perdiccas* Hewitson larva on *Oplismenus*, etc. (Gramineæ). D. L.
19. *Cænonympha œdippus annulifer* Butler larva on Cyperaceæ. S. L.
20. *Cænonympha hero neoperseis* Fruhstorfer larva on Cyperaceæ. S. L.
21. *Melanitis leda* Linné ?larva on Gramineæ. D. A.?
22. *Melanitis phedima oitensis* Matsumura larva on *Miscanthus*, *Zea*, *Coix*, *Setaria*, *Saccharum*, etc. (Gramineæ). D. A.

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THE NAMING OF SUBSPECIES IN LEPIDOPTERA

The great proliferation of subspecific names within the Lepidoptera in the past twenty-five years has posed a problem which the authors feel is important to all lepidopterists. The purpose of this note is not to condemn the practice of naming subspecies but rather to propose that the following partly accepted criteria be observed more consistently by those who would describe new races.

1. That new subspecies be named primarily in papers which discuss the geographic variation of the entire species as fully as possible.
2. That isolated descriptions of subspecies be made only in such species as have already been analyzed in the above manner.

We feel that the advantages to be gained from such a procedure are considerable. In the first place, this would cut down the naming of populations later found to be intermediate in a cline. Secondly, it would gather the names applied to the subspecies of a species together into a few rather than many scattered publications. Thirdly, and perhaps most important, it would reduce the necessity for later writers of synonymizing numerous names found not worthy of retention when the whole species population is reviewed. One only needs to look at the taxonomy of a genus like *Parnassius* to see the terrific systematic confusion that can result from ill-considered, over-enthusiastic naming of infraspecific entities. We sincerely hope that the above criteria will be followed in the naming of subspecies in order that a ponderous accumulation of trivial names in the Lepidoptera can be avoided.

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