

INDEX FOR VOLUME 52

(new names in **boldface**)

- 2-methyloctadecane, 356
- Abaeis nicippe*, 57
Acacia farnesiana, 215
Acanthaceae, 74, 107, 215
Acer rubrum, 128
Aceraceae, 128
Achalarus, 236, 240
 casica, 50
 toxews, 50
Achlyodes, 240
 busrus heros, 52
 selva, 52
Acrodipsas illidgei, 139
Acronicta albarufa, 381
adaptation, 207
Adelia triloba, 338
Adelotypa eudocia, 66
Adelpha, 239
 basiloides basiloides, 62
 celerio diademata, 62
 fessonia fessonia, 62
 iphiclus massilides, 62
 ixia leucas, 62
 leuceria leuceria, 62
 naxia epiphicla, 62
 phylaca phylaca, 62
 serpa massilia, 62
Adhemarius gannascus, 110
 ypsilon, 110
Aegicerus corniculatum, 141
Aellopos
 ceculus, 111
 clavipes, 111
 fadus, 111
Aeshnidae, 137
Aethilla lavochea, 52
Agathymus rethon, 55
Aglais urticae, 156
Agraulis
 vanillae, 25
 vanillae incarnata, 59
Agrius cingulata, 110
Agrotis stigmata, 381
Aguna
 asander asander, 49
 metophis, 49
Aides dysoni, 55
Aleuron
 carinata, 111
 chloroptera, 111
Allocasuarina glauca, 139
Allosmaitia strophius, 66
Alnus incana rugosa, 128
altiplano, 277
Amblyscirtes, 237, 240
 fimbriata pallida, 54
 fluonia, 54
 folia, 54
 patriciae, 54
 raphaeli, 54
 tolteca tolteca, 54
Ampelocera hottelii, 109
Anaea, 239, 242
 aidea, 62
Anartia, 242
 amathea colima, 59
 jatrophe, 25
 jatrophe luteipicta, 59
Anastrus
 robigus, 52
 sempiternus sempiternus, 52
Anatrytone, 237
 mazai, 54
Anchistea virginica, 128
Ancyloxypha, 240
 arene, 54
Anemeca ehrenbergii, 60
Annonaceae, 107
Anteos, 241
 clorinde nivifera, 57
 maerula lacordairei, 57
Anteros carausius carausius, 65
Anthanassa, 239
 alexon alexon, 60
 ardys ardys, 60
 ptolyca amator, 60
 sitalces cortes, 60
 texana texana, 60
 tulcis, 60
Anthocharis
 cardamines, 156
 euphenoides, 156
Anthoptus insignis, 53
Antigonus
 emorsa, 52
 erosus, 51
 funebri, 52
 nearchus, 51
Antilles, 318, 328
Antithesia montana, 177
Aphrissa statira jada, 57
Apocynum androsaemifolium, 102
Apodemia
 hypoglauca hypoglauca, 66
 multiplaga, 66
 walkeri, 66
Aporia crataegi, 156
Appias, 237
Aquifoliaceae, 130

- Araneus diadematus*, 136
Arawacus
 jada, 67
 sito, 67
 arboreal ants, 139
Arcas cypria, 66
Archaeoprepona
 demophon mexicana, 62
 demophon occidentali, 62
Arctia villica, 361
 Arctiidae, 356, 381
Argentulia
 gentilii, 177
 montana, 177
Argraulis, 238
 Argynninae, 262
Argynnis paphia, 156
Aricia cramera, 156
Arigiopie aurantia, 136
Aronia melanocarpa, 130
Arthromastix lauralis, 215
 arthropod, 105
 artificial diet, 73
Ascia, 237
 monuste monuste, 58
Asclepias syriaca, 357
Aster
 lanceolatus, 98
 novae-angliae, 98
 Asteraceae, 215
Asterocampa, 239
Astragalus, 216
 crassicaarpus, 216
Astrartes, 240
 alector hopfferi, 50
 anaphus annetta, 50
 egregius, 50
 fulgerator azul, 50
Atalopedes, 236
Atarnes sallei, 51
Ategunia ebulealis, 215
Atlides, 238
 carpasia, 66
 gaumeri, 66
 aucubin, 74
 Austin, G. T., 166
 Australia, 139
 Australian Lepidoptera, 386
Autochton
 cincta, 50
 neis, 50
Avicennia marina, 139
 Avicenniaceae, 139

Bactris, 109
Baeotis zonata simbla, 65
 Bailey's triple catch design, 13
 baiting for moths, 2
 Bandera County, 234
Banisia myrsusalis, 215
Baronia brevicornis brevicornis, 55
Basilarchia, 239
Battus, 237
 eracon, 55
 laodamus iopas, 55
 philenor, 235
 philenor orsua, 55
 philenor philenor, 55
 polydamus polydamus, 55
 Beale, J. P., 139
 behavior, 98
 Betulaceae, 128
Biblis, 242
 hyperia aganis, 60
Bicilia iarchasalis, 215
 biogeography, 40, 98, 277, 333
 Bird's-foot Violet, 264
 Blechnaceae, 128
Blechnum pyramidatum, 215
 Blue Prairie Violet, 264
Boerhaavia erecta, 215
 Bog Buck Moth, 125
Bolla
 clytius, 51
 eusebius, 51
 evippe, 51
 guerra, 51
 litus, 51
 orsines, 51
 subapicatus, 51
 Bombacaceae, 106, 109
Bombyx mori, 207
 Book review, 386, 220
 Bowers, M. D., 73
Brangas neora, 68
Bravaisia integerrima, 107
 Brazil, 166, 364
Brenthis ino, 156
Brephidium, 238
 exilis exilis, 68
Brintesia circe, 156
 British Columbia, Canada, 115
Bromus inermis, 102
Brosimum, 106
 Brower, A. E., 118
 Brown, J. W., 177, 387
 Brown, R., 335
Brunfelsia, 215
 brush organs, 318, 328
Brysonima crassifolia, 106
 Buckeye, 73
 Burns, J. M., 364
Bursera simarouba, 106
 Burseraceae, 106
 butterfly survey, 229

- Cabares potrillo*, 50
Caerofethra carnica, 68
Calaides
 androgeus, 56
 astylus bajaensis, 56
 ornythion, 56
Calcephelis, 238, 242
 argyrodines, 65
 fulmen, 65
 laverna laverna, 65
 mexicana, 65
 montezuma, 65
 nemesis nemesis, 65
 perditalis perditalis, 65
 California, 84, 335
Callimormus saturnus, 53
Callinomia
 denticulata, 111
 falcifera, 111
 inuus, 111
 neivai, 111
 nomius, 111
 parce, 111
Callophrys rubi, 156
Calociasma lilina, 66
Calospila zeurippa, 66
Calpodes, 241
 ethlius, 55
Calycopis, 238
 clarina, 68
 demonassa, 68
 isobea, 68
 susanna, 68
Calydina sternula hegas, 65
Camponotus
 americanus, 217
 pennsylvanicus, 217
 Carabidae, 131
Carex
 blanda, 102
 pensylvanica, 102
 rugosperma, 102
 siccata, 102
Caria, 242
 ino ino, 65
 stillaticia, 65
Carphephorus corymbosus, 382
Carrhenes
 canescens canescens, 51
 fuscescens, 51
Carystoides abrahami, 54
 Casuarinaceae, 139
 catalpol, 74
Catastica flisa flisa, 58
 caterpillar, 207
 Catling, P. M., 98
Catocala, 118
 californiensis, 118
 erichi, 118
 johnsoniana, 118
 lincolnana, 118
 texarcana, 118
Catonephele cortesi, 61
Ceiba pentandra, 106
Celaenorrhinus
 fritzgaertneri, 50
 stola, 50
Celastrina
 argiolus, 156
 gozora, 68
Celotes, 236
 Central America, 338
Cercyonis, 239
Ceriops, 140
Chaetoglaea tremula, 381
 Chajul, 105
 Chalcidoidea, 136
 Chaleur Bay, 345
Chalybs hassan, 68
Chamaedaphne calyculata, 128
Chamaedora tepejilote, 109
Charidryas, 239
Chezala, 386
 Chiapas, 105
Chiodes, 236, 240
 catillus albofasciatus, 49
 zilpa, 49
Chiomara, 240
 georgina, 52
 mithrax, 52
Chlorostrymon, 241
 simaethis, 67
 telea, 67
Chlosyne, 239
 gloriosa, 59
 gorgone carlota, 98
 hippodrome hippodrome, 59
 janais, 59
 lacinia crocale, 60
 marianna, 60
 marina dryope, 60
 riobalsensis, 60
 Chrysobalanaceae, 106
Chrysophyllum oliviforme, 215
Climedia, 106
 cluster pine, 151
Cobubatha dividua, 381
Cocytius
 antaeus, 110
 duponchel, 110
Codatractus
 bryaxis, 49
 hyster, 49
 melon, 49
 sallyae, 49
 wyldixa, 49

- Coelostathma parallelana*, 215
Coenonympha
 pamphilus, 156
 tullia inornata, 345
 tullia nipisiquit, 345
Cogia, 240
 aventinus, 51
 cajeta eluina, 51
 calchas, 51
 hippalus hippalus, 50
Colias, 237
 croceus, 156
 eurytheme, 235
Colima, 40
Colobura dirce dirce, 60
 Common Blue Violet, 264
 common plantain, 74
 Common, I. J. W., 386
Conga chydaea, 54
 conifers, 151
 Connaraceae, 106
 Conner, W. E., 356
 conservation, 40, 139, 151
Consul fabius cecrops, 63
Contrafacia bassania, 66
Copaodes, 236
 minima, 54
 Cornaceae, 74, 129
Cornus sericea, 129
Corticea corticea, 53
 Crambidae, 215
 Cream Lake, 117
Cretonotos, 361
Crematogaster, 139
 punctulata, 217
 Cryan's Buck Moth, 125
Cryptobotys zoilusalis, 215
 Cuba, 214
Cupressus macrocarpa, 86
Curatella americana, 106
 cyanogenesis, 9
Cyanophrys
 herodotus, 67
 longula, 67
 miserabilis, 67
Cycloglypha thrasibulus, 52
Cyclogramma
 bacchis, 62
 pandama, 62
Cyllopsis caballeri, 64
Cyllopsis
 diasi, 64
 hedemanni hedemanni, 64
 suivalenoides, 64
 windi, 64
Cymaenes trebius, 53
Cymbopetalum penduliflorum, 107
Cynthia cardui, 156
 Cyperaceae, 128
Cyperius houghtonii, 102

Dalla
 bubobon, 53
 dividuum, 53
 faula, 53
 Daly Point, 346
 Danaidae, 239, 242
Danaus, 239, 242
 chrysippus, 208
 erippus, 208
 erisimus montezuma, 63
 gilippus berenice, 86
 gilippus thersippus, 63
 plexippus, 84, 136, 207
 plexippus plexippus, 63
Danthonia spicata, 102
Dardarina dardaris, 53
Daucus carota, 102
 Davidson, R. B., 356
 Debinski, D. M., 262
Decinea mustea, 54
 development times, 98
Diaethria asteria, 62
Dialium guianense, 106
 diapause, 351
 Dilleniaceae, 106
 Dilophonotini, 110
Dione, 242
 juno huascuma, 59
 moneta poeyii, 59
Dioriste tauropolis, 64
 Diptera, 136
Dircenna klugii klugii, 63
Disclisioprocta stellata, 215
 disjunct, 98
Dismorphia amphiona lupita, 57
 distribution, 40, 98, 214
 diversity indices, 151
Doxocopa
 laure acca, 63
 pavon theodora, 63
Drephalys, 364
Dryas, 238
 ilulia moderata, 59
Dynamine, 242
 dyonis, 62
 postverta mexicana, 62

Eantis tamenund, 52
 early female dispersal, 85
 Eastern Peru, 364
Ebrietas anacreon, 52
Eciton burchelli, 174
 Edwards Plateau, Texas, 229
 egg, 338
 Elatidae, 131

- Elbella scylla*, 49
 electroantennogram, 356
Electrostrymon canus, 68
 Ellis, A., 73
 Eltham copper, 148
Emesis
 ares ares, 65
 emesia emesia, 66
 mandana furor, 65
 poeas, 65
 tegula, 66
 tenedia tenedia, 65
 vulpina, 65
Enantia mazai diazi, 57
 endangered, 345
 Ennominae, 335
Enyo
 cavifer, 111
 gorgon, 111
 lugubris, 111
 ocypete, 111
 taedium, 111
Epargyreus, 240
 aspina, 49
 exadeus cruxa, 49
 spina, 49
 spinosa, 49
 windi, 49
Epargyreus-like, 364
Epiphile adраста escalantei, 61
Eprius veleda, 53
 Ericaceae, 125
Erinnyis, 109
 alope, 110
 ello, 110
 lassauxi, 110
 obscura, 110
 oenotrus, 110
 yucatana, 110
Eriogonum fasciculatum, 212
Erora
 aura, 68
 carla, 68
Erynnis, 236, 240
 funeralis, 52
 juvenalis clitus, 52
 scudderi, 52
 tristis tatus, 52
 Estacion de Biologica Chajul, 105
Estigmene acrea, 214, 215
Eucalyptus, 139, 386
 globulus, 86
Euchaetes egle, 356
Eueides, 209
Eulechria, 386
Eumaeini, 328
Eumaeus toxea, 66
Eumorpha, 109
 anchemola, 111
 fasciatus, 111
 labruscae, 111
 obliquus, 111
 phorbas, 111
 satellitita, 111
 triangulum, 111
 vitis, 111
Eunica, 242
 alcmena alcmena, 61
 monima monima, 61
 tatila tatila, 61
 Eupelmidae, 136
 Euphorbiaceae, 338
Euphydryas aurinia, 156
Euphyes, 237
Euptoieta, 239, 242
 claudia, 25
 hegesia, 9
 hegesia hoffmanni, 59
Euptychia fetna, 64
Eurema, 237, 241
 albula celata, 58
 boisdwaliana, 58
 daira, 58, 235
 lisa, 235
 mexicana mexicana, 58
 nicippe, 235
 nise, 235
 salome jamapa, 58
Euselasia
 aurantiaca, 64
 eubule, 64
Evenus regalis, 66
Everes, 238
 comyntas, 69
Exoplisia cadmeis, 65
 Fabaceae, 216
Fabriciana adippe, 156
 niobe, 156
 feeding stimulant, 74
 female pheromone glands, 356
 Ferrin, 151
Festuca rubra, 350
Ficus, 106
 field observations, 212
Fixsenia, 238
 Flat-top buckwheat, 212
 flight periods, 98
 floristic patterns, 255
 Flower Ridge, 117
 fluctuating asymmetry, 84
 foodplants, 98
 Forbidden Plateau, 117
 forest management, 151

- Formica schaufussi dolosa*, 217
 Formicidae, 139
Fountainea
 euryppyle glanzi, 63
 glycerium glycerium, 63
 tehuana, 63
Fragaria virginiana, 102
 Franclemont, J. G., 6
 French Guiana, 364
 Frey, D., 84
 Frio-Sabinal, 229
- Ganyra josephina josepha*, 58
Garberia fruticosa, 382
 gas chromatography, 356
 Gaskin, D. E., 229
 gene flow, 182
 generalist, 73
 genetic population structure, 182
 genitalia, 166, 277, 318, 328, 364
Geococcyx californianus, 214
 geographic components, 230
 geographic variation, 262
 Geometridae, 215, 335, 356
Gesta, 236
 invisus, 52
Glaucopsyche lygdamus, 216
Glaux maritima, 346
Gliricidia sepium, 215
Glutophrissa drusilla tenuis, 58
Gonepteryx
 cleopatra, 156
 rhamni, 156
 Gorgone Checkerspot, 98
Gorgythion, 236
 begga pyralina, 51
Grais, 240
 stigmaticus stigmaticus, 52
 Great Lakes, 125
Greta
 annette moschion, 64
 morgane morgane, 64
 growth, 262
Guarea glabra, 107
 Guttiferae, 109
 Guyana, 364
- habitat area, 267
 habitat conservation, 381
 habitat types, 230
Halotus jonaveriorum, 54
Halysidota leda, 361
Hamadryas
 amphinome mazai, 61
 atlantis lelaps, 61
 februa ferentina, 61
 feronia farinulenta, 61
 glauconome grisea, 61
 guatemalena marmorice, 61
 Hardwick, D. F., 381
Helianthus
 annuus, 101
 decapatalus, 101
 divaricatus, 101
 tuberosus, 101
Heliconius, 209, 238
 charithonia vazquezae, 59
 erato punctata, 59
Heliopetes, 240
 alana, 53
 arsalte, 53
 domicella domicella, 52
 laviana laviana, 52
 macaira, 52
Hemeroplanes ornatus, 110
 triptolemus, 110
Hemiargus, 238
 ceraunus zachaeina, 68
 isola, 217
 isola isola, 68
Hemileuca, 125
 electra, 212
 lucina, 125
 maia, 125
 nevadensis, 125
 Hemiptera, 136
Heodes
 alciphron, 156
 tityrus, 156
 virgaureae, 156
Heraclides, 237
Heraclides
 cresphontes, 56, 235
 thoas, 235
 thoas autocles, 56
Hermeuptychia, 239
 hermes, 64
 Herrera, J. G., 277
Hesperia, 236
 HesperIIDae, 48, 166, 229, 236, 240,
 277, 364
 HesperIIDae, 277
 Hesperioidea, 40, 229
Hesperocharis costaricensis pasion, 58
 Heterocera, 381
Heterotrichum umbellatum, 215
Hieracium piloselloides, 102
Hileithia ductalis, 215
Hipparchia semele, 156
Historis odious dious, 60
 holm oak, 151
Holomelina, 362
 holotype, 1, 118, 217
 holotypes, 118

- Hope Lake, 117
 host plant, 73, 262, 345
Hulstina, 335
 grossbecki, 335
 nevadaria, 335
Hyalorsita limasalis, 215
Hylephila, 236, 277
 adriennae, 277
 ignorans, 277
 kenhaywardi, 277
 lamasi, 277
 phyleus phyleus, 54
 venusta, 277
Hyles lineata, 111
Hymenia perspectalis, 215
 Hymenoptera, 136
Hypanartia godmani, 59
Hypena vetustalis, 215
Hypercallia montana, 179
Hypna clytemnestra mexicana, 62
Hyponephele lycaon, 156
Hypostrymon critola, 68
Hyptis verticillata, 215

ignorans, 277
Ilex verticillata, 130
 Illinois, 1
 immature stages, 381
Inachis io, 156
Incisalia, 241
 Index of Economically Important Lep, 221
 infrared spectroscopy, 356
 insect body measurements, 269
 inventory, 105
 invertebrates, 105
Iodopepla u-album, 381
 Iowa, 262
Iphiclides podalirius, 156
Ipidecla miadora, 68
 iridoid glycosides, 73
Isognathus rimosus, 110
Issoris lathonis, 156

 Jalisco, 40
 Juniper-Oak savanna, 256
Juniperus communis, 102
Junonia, 239
 coenia, 59, 73
 genoveva nigrosuffusa, 59

 Kansas, 262
 Kelly, L., 262
 Kildeer Plains Wildlife Area, 1
Kisutam ceromia, 68
Kloneus babayaga, 110
Kricogonia, 237
 lyside, 58

Labiatae, 215
Lampides boeticus, 156
 Lance-leafed Violet, 264
Lantana camara, 215
Larix laricina, 135, 136
 larvae, 338
 larval food limitation, 262
 larval performance, 12
 larval sampling, 214
Lasaia agesilas callaina, 65
 maria maria, 65
 sessilis, 65
 sula sula, 65
Lasiommata maera, 156
 megeera, 156
 Layberry, R. A., 98
 Leguminosae, 106, 107, 215
Lemmaria digitalis, 381
Lemonius agave, 66
 Leon-Cortes, J. L., 105
 Leong, K. L. H., 84
 Lepidoptera, 40, 214, 217, 356, 386
 Lepidoptera survey, 381
Leptophobia aripa elodia, 58
Leptotes, 238
 cassius striata, 68
 marina, 68
Leptothorax pergandei, 217
Lerema, 236
 accius, 53
 liris, 54
Lerodea, 237
 arabus, 54
Liatris
 cylindracea, 381
 spicata, 381
Libytheana, 238
 carinenta mexicana, 64
 Libytheidae, 238
Licania platypus, 106
 life history, 15, 345, 381
 light traps, 214
Limenitis reducta, 156
Limonium nashi, 346
Lineodes graciealis, 215
Linka lina, 277
Liphyra brassolis major, 140
***Lithophane franclemonti*, 1**
 Llorente, J. B., 40
 localized distribution, 139
Luehea semanii, 106
 Luis, A. M., 40
 lustinian oak, 152
Lycaena phlaeas, 156
 Lycaenidae, 64, 139, 216, 238, 241, 318
Lycas argentea, 54
Lycorea halia atergatis, 63

- Lygropia tripunctata*, 215
Lymantria dispar, 75
 Lymantriidae, 75, 356
- MacNeill, D., 277
 Macroglolini, 111
 Macroglossinae, 110
Maculinea, 139
Madoryx
 bubastus, 111
 oiclus, 110
 pluto, 111
 Magnoliaceae, 107
 male-biased sex ratio, 85
 mallow, 75
 Malpigiaceae, 106
Malva acuta, 215
 Malvaceae, 75, 215
Manataria maculata, 64
Manduca, 109
 albipalga, 110
 corallina, 110
 dilucida, 110
 florestan, 110
 hannibal, 110
 lanuginosa, 110
 lefeburei, 110
 lichenia, 110
 muscosa, 110
 occulta, 110
 ochus, 110
 pellenia, 110
 sexta, 110
 rustica, 110
 mangrove, 139
Maniola jurtina, 156
 Maritime Ringlet, 345
 mark-release-recapture, 13
Marpesia
 chiron marius, 62
 petreus tethys, 62
 Martin-Cano, 151
 mass spectroscopy, 356
 mate choice, 84
 mate location, 212
 mating, 84
 mating behavior, 356
Mechanitis polymnia lycidice, 63
Megathymus, 241
Megisto, 239
 rubricata pseudocleophes, 64
Melanargia
 ines, 157
 lachesis, 157
Melanis
 cephise cephise, 65
 pixe sexpunctata, 65
- Melastomataceae, 106, 215
Melete lycimnia isandra, 58
 Meliaceae, 106, 107
Melinaea
 ethra flavicans, 63
 athalia, 154, 156
 cinxia, 156
 didyma, 156
Memphis
 forreri, 63
 pithyusa, 63
 viloriae, 217
 xenocles carolina, 63
 Menyanthaceae, 125
Menyanthes trifoliata, 125
Meris alticola, 209
Mesoacidalia aglaja, 156
Mesosemia lamachus, 64
Mesotaenia vaninka delafuentei, 217
 Mesquite-Oak savanna, 256
Mestra, 239
 dorcas amymone, 61
 metatibial tufts, 364
Methionopsis ina, 53
 Metzler, E.H., 1
 Mexico, 40, 105, 335
Michaelus
 hecate, 67
 jebus, 67
 vibidia, 67
 Michoacan, 40
 Microlepidoptera, 386
Microtia elva elva, 60
Microtyris anarmalis, 215
 Milkweed tussock moth, 357
 mimicry, 207, 364
Mimoides
 ilus occiduus, 56
 thymbraeus aconophos, 56
Ministrymon, 241
 azia, 68
 clytie, 68
 phrutus, 68
Mitoura, 238
Mnasicles hicetaon, 53
Mnasilus allubita, 53
Moeris stroma, 53
 Monarch, 84, 136
Monarda fistulosa, 102
Monca tyrtaeus, 53
Monomorium minimum, 217
 Moraceae, 106
Morys
 micythus, 54
 valda, 54
 moths, 214
 Mount Albert Edward, 117

- Mount Becher, 117
 Mount Cokely, 117
 Mueller, J. C., 183
Mursa phtisialis, 215
Mylon
 lassia, 51
 pelopidas, 51
Nymphalis, 238
Myrica gale, 128
 Myricaceae, 128
 Myristicaceae, 106
 myrmecophily, 216
 Myrmicinae, 139
 Myrsinaceae, 141
 Myrtaceae, 139, 386
Myscelia
 cyananthe cyananthe, 61
 cyaniris alcaradia, 61
 cyaniris cyaniris, 338
 ethusa ethusa, 61
 amystis hages, 49
Mysoria
 affinis, 49
 amra, 49
- Napaea umbra umbra*, 64
Narcosius parisi helen, 50
 narrow-leafed plantain, 74
Nastra, 236
 hoffmanni, 53
 julia, 53
Nathalis, 238
 iole, 235
 iole iole, 58
 natural history, 338
Neocystis cluentius, 110
Neohipparchia stalinus, 156
 Neomorphidae, 214
 neotropical species, 364
 Neotropics, 166
 neotype, 177
Nesiostrymon celona, 68
 New Brunswick, 345
 New York, 98
 Nicolay, S., 318, 328
Niconiades incomptus, 55
Nioeterpes graefiaria, 209
Nisoniades rubescens, 51
Noctuana stator, 51
 Noctuidae, 215, 356, 381
 nomenclature, 318
 North Dakota, 262
 Nuttall's Violet, 264
 Nyctaginaceae, 215
Nyctelius nyctelius nyctelius, 55
 Nymphalidae, 59, 73, 98, 207, 217, 238, 242, 262, 338
- Nymphalis*
 antiopa, 156
 antiopa antiopa, 59
 polychlorus, 156
- Oberhauser, K., 84
Ocaria ocrisia, 67
Ochlodes samenta, 54
Ocyba calathana calamus, 50
Odocoileus virginianus, 136
 Oecophoridae, 386
Oenomaus ortygnus, 67
Ogyris amaryllis, 147
 Ohio, 1
Oncocnemis riparia, 381
 Ontario, 98
Ophryocystis elektroscirrha, 86
Opsiphanes
 boisduvalii, 63
 invirae fabricii, 63
 tamarindi, 63
 orear biomes (high mountain), 277
Ornithoptera, 148
 Oswego County, NY, 125
 overwintering, 84
 oviposition behaviour, 338
 ovipositioning stimulant, 74
 ovipositor lobes, 364
- Paches polla*, 51
Pachira acuatica, 109
Pachygonia drucei, 111
Pachylia
 ficus, 110
 syces, 110
Pachylodes resumens, 110
 Painted Lady, 73
Paiwarria umbratus, 66
 palpi, 364
 Panama, 338
Pandemos godmanii, 66
Pandoriana pandora, 156
Panicum implicatum, 102
Panoquina, 237
 errans, 55
 evansi, 55
 hecebolus, 55
 leucas, 55
 ocola, 55
 Pantepui, 217
Panthiades
 bathildis, 67
 bitias, 67
 ochus, 67
Papaipema awene, 381
Papilio, 237
 alexanor, 208
 demodocus, 208

- glaucus*, 208
machaon, 156, 207
polyxenes, 207
polyxenes asterius, 56
zelicaon, 208
Papilionidae, 55, 207, 237
Papilionoidea, 40, 229
Paradros, 365
Paraeuchaetes pseudoinsulata, 361
Paralucia pyrodiscus lucida, 148
Paramacera xicaque xicaque, 64
Paramidea, 241
paramo, 277
Pararge aegeria, 156
parasitism, 84
Parides
erithalion trichopus, 56
eurimedes mylotes, 56
montezuma montezuma, 55
photinus photinus, 55
Parnassius
phoebus guppyi, 115
phoebus olympianus, 115
smintheus Doubleday, 115
Parrhasius, 241
moctezuma, 67
polibetes, 67
Parus, 208
Passiflora, 9
foetida, 12
suberosa, 12
Passifloraceae, 9
Peffer, E, 84
Pellicia
arina, 51
dimidiata, 51
Pennsylvania, 1, 98
Penstemon, 209
Pereute charops leonilae, 58
Perichares philetas adela, 54
Perigonia lusca, 111
Pescador, A. R., 105
Pessonia polyphemus polyphemus, 63
Peters River, 346
Phaeostrymon, 238
Phanes aletes, 53
phenology, 166
pheromones, 212, 356
Philampelini, 111
Philobota, 386
Phocides
belus, 49
palemon lilea, 49
pigmalion pigmalion, 49
Phoebis, 237
agarithe, 57
argante argante, 57
neocypris virgo, 57
philea philea, 57
sennae marcellina, 57
Pholisora, 236
catallus, 53
phosphoglucosutase, 182
Phragmatobia fuliginosa, 361
Phyciodes, 239, 242
batesii batesii, 102
cocyta, 182
euclea, 183
morpheus, 183
pallescens, 60
selenis, 183
phaon, 60, 235
tharos, 182, 235
vesta, 235
vesta vesta, 60
Phyla scaberrima, 215
phyleus, 277
phylogeny, 177
Phytolacaceae, 215
Pieriballia viardi laogore, 58
Pieridae, 57, 241
Pieris napi, 156
Pinaceae, 135
Pindis squamistriga, 64
Pinus
pinaster, 151
pineae, 151
radiata, 86
sylvestris, 151
Piruna
aea aea, 53
ajijiciensis, 53
penaea, 53
Plantaginaceae, 73
Plantago
lanceolata, 73
major, 73
maritima, 346
plant-insect interactions, 73
Plebejus melissa samuelis, 102
pleisomorphic character, 356
Pleuroptya silicalis, 216
Poa
compressa, 102
pratensis, 102
Poanes
benito, 54
inimica, 54
zabulon, 54
Pococera jovira, 215
Polites, 240, 277
pupillus, 54
subreticulata, 54
vibex praeceps, 54
Polyctor cleta, 51
Polygala verticillata, 102

- Polygonaceae, 212
Polygonia, 238
 c-album, 156
Polygonus
 leo arizonensis, 49
 manueli, 49
Polyommatus icarus, 156
 polyphyletic, 364
Polythrix
 asine, 49
 octomaculata, 49
Pompeius pompeius, 54
Pontia, 237
 daphidice, 156
 protodice, 58
 population size, 267
 population structure, 20
 Porter, A. H., 182
Posoqueira latifolia, 109
 post-diapause, 352
Potentilla arguta, 102
 prairie, 98
 prairie habitat, 262
 predation, 9, 212
 pre-diapause, 351
Prenolepis imparis, 217
Prepona laertes octavia, 62
 presidential address, 1
Priamides
 anchisiades idaeus, 56
 erostratus vazquezae, 56
 pharnaces, 56
Proeulia, 177
 montana, 179
Protambulyx
 strigilis, 110
 xanthus, 110
Proteides mercurius mercurius, 49
Protesilaus macrosilaus penthesilau, 56
Protographium
 agesilaus fortis, 56
 epidaus tepicus, 56
 philolaus philolaus, 56
Prunella vulgaris, 102
Prunus virginiana, 102
Pseudocopaeodes eunus chromis, 54
Pseudodrephalys, 364
 atinas, 364
 hypargus, 364
 sohni, 364
Pseudolycaena damo, 66
Pseudonymphydia clearista, 66
Pseudosphinx tetrio, 110
Pteridium aquilinum, 102
Pterocarpus rohrii, 107
Pteronymia cotytto, 63
 rufocincta, 63
Pterourus, 237
 multicaudatus, 57
 pilumnus, 56
 pupa, 341
Pycnanthemum virginianum, 102
 Pyralidae, 215
 pyrenean oak, 151
 Pyrginae, 229
Pyrgus, 236, 240
 adepta, 52
 albescens, 52
 oileus, 52
 philetas, 52
Pyrisitia
 dina westwoodi, 57
 lisa centralis, 57
 nise nelphe, 57
 prototerpia prototerpia, 58
Pyronia
 bathseba, 156
 cecilia, 156
Pyrrharctia isabella, 362
Pyrrhogyra neaerea hypsenor, 61
Pyrrhopyge
 araxes araxes, 49
 chloris, 48
 crida, 48
Pyrrhostica
 victorinus morelius, 57
 garamas garamas, 57

Quadrus
 cerialis, 51
 lugubris, 51
Quararibea funebris, 107
Quasimellana
 agnesae, 54
 aurora, 54
 balsa, 54
 eulogius, 54
 mulleri, 54
 Quebec, 345
Quercus
 faginea, 152
 ilex, 151
 ilex ballota, 152
 pyrenaica, 151
Quinta cannae, 54

 range position or limit, 230
 Real County, 234
 rearing, 11
 reforestation, 151
 Regal Fritillary, 262
Reinhardtia gracilis, 109
Rekoa
 marius, 67

- meton*, 67
palegon, 67
stagira, 67
zebina, 67
Remella
duena, 53
rita, 53
Repens florus, 53
 reproductive behavior, 84
 reproductive isolation, 356
Rhabdodryas trite trite, 57
Rheedia edulis, 109
Rhetus arcus beutelspacheri, 64
Rhinthon osca, 54
Rhizophora stylosa, 140
 Rhizophoraceae, 140
Rhus typhina, 102
Ridens
bidens, 166
pacasa, 169
 Riordinidae, 238, 242
Rivinia humilis, 215
 Robbins, R., 318, 328
 Rosaceae, 129
Rourea, 106
 Rubiaceae, 106, 109
Rubus allegheniensis, 102
Rudbeckia hirta, 98
 Rutaceae, 107

Sabicea villosa, 106
Salbia haemorrhoidalus, 215
Saliana
esperii, 55
longirostris, 55
 Salicaceae, 129
Salix pedicellaris, 128
 salt marsh, 345
 Salticidae, 135
 sand dunes, 381
 Saptaceae, 215
 Saturniidae, 125, 212
 Satyridae, 239, 345
Satyrium, 238
Sayornis phoebe, 137
 Schappert, P. J., 9
Schinia
carmosina, 381
sanguinea, 381
Schizolubium parahybum, 107
 scots pine, 151
 Scrophulariaceae, 74
 seasonal patterns, 105
 secondary compounds, 75
Sedum divergens, 115
Selaginella rupestris, 102
 Selva Lacandona, 105

Senecio pauperculus, 102
 sexual dimorphism, 9
 Shore, J. S., 9
Sida rhombifolia, 215
Siderone galanthis, 62
Siderus tephraeus, 68
 silk moth, 212
 silvery blue, 216
 Simmons, R. B., 356
Siproeta, 242
epephus epephus, 59
stelenes biplagiata, 59
 size, 84
 Smerinthini, 110
 Smidt, R. K., 84
Smyrna
blomfeldia datis, 60
karwinskii, 60
 Solanaceae, 215
Solidago
canadensis, 102
juncea, 102
nemoralis, 102
sempervirens, 346
Sostrata nordica, 51
 South America, 166, 277
 South Dakota, 262
 Southern Venezuela, 364
 Southwestern Ontario, 381
 Spain, 151
Spartina
alterniflora, 346
patens, 345
Spartiniphaga inops, 381
Spathilepia clonius, 50
 specialist, 73
 species-level systematics, 182
 spermatophores, 85
Speyeria idalia, 262
 Sphingidae, 105, 110
Sphinx merops, 110
Spiraea alba, 126, 129
Sporobolus cryptandrus, 102
 Staphylinidae, 131, 151
Staphylus, 240
azteca, 51
iguala, 51
tepeca, 51
tierra, 51
vulgata, 51
 Stead, K., 381
 stone pine, 151
 Strathcona Provincial Park, 117
Strymon, 238, 241
albata, 67
amonensis, 328
andrewi, 328

- bazochii*, 67
bebrycia, 67
cestri, 67
columella, 318
istapa, 67, 318
melinus, 67, 235
rufofusca, 67
serapio, 68
toussainti, 328
yojoa, 67
ziba, 68
 Suomen Kiitajat Ja Kehraajat, 225
 survival, 73
Swietenia macrophylla, 106
Syda nodiflora, 215
Sylvilagus floridanus, 135
Symbiopsis tanaïs, 68
Synapte pecta, 53
 shiva, 53
 syraces, 53
Synargus mycone, 66
Syntomeida epilais, 361
Systasea, 236
 pulverulenta, 52
 systematics, 177

Taluama mexicana, 107
Tapinoma sessile, 217
 taxonomic groups, 230
 taxonomic status, 345
 taxonomy, 318, 328, 333
Taygetis
 mermeria griseomarginata, 64
 uncinata, 64
 virgilia, 64
 weymeri, 64
Tegosa guatemalena, 60
Temenis laothoe quilapayunia, 61
Tenebrio, 208
 Texas, 229
Texola, 239
 anomalus anomalus, 60
 elada elada, 60
Thecla
 keila, 68
 ligurina, 66
 tarpa, 68
 Theclinae, 139, 318
Theclopsis mycon, 68
Theope
 diores, 66
 eupolus, 66
 hypoxanthe, 66
 mania, 66
 pedias isia, 66
 publius, 66
 virgilius virgilius, 66

Thereus
 cithonius, 66
 oppia, 66
 oratus, 67
Thespieus, 277
 dalman, 55
 macareus, 55
Thessalia, 239
 theona, 60
Thisbe lycorias lycorias, 66
Thorybes, 236
 drusus, 50
 mexicana mexicana, 50
 pylades, 50
Thracides phidon, 55
 Thyrididae, 215
 Tiliaceae, 106
Timochares ruptifasciata ruptifasci, 52
Tmolus
 crolinus, 68
 echion, 68
 Tortricidae, 215
 Tortricinae: Euliini, 177
 transect methodology, 231
Trichoclea artesta, 381
Trichosilia manifesta, 381
Trichostigma octandrum, 215
Troilides torquatus mazai, 56
Tromba xanthura, 54
 tropical lowland habitats, 9
Turnera ulmifolia, 9
 Turneraceae, 9
 type localities, 217
 type specimens, 118
Typhedanus ampyx, 49
 Tyrannidae, 137

 Ulmaceae, 109
Unzela japix, 111
Urbanus, 240
 belli, 49, 172
 dorantes dorantes, 50
 doryssus chales, 50
 dubius, 172
 esma, 170
 esmeraldus, 50, 169
 esta, 50, 170
 evona, 50
 longicaudus, 166, 172
 parvus, 166, 175
 procne, 50
 prodicus, 50
 pronta, 49, 169
 proteus, 169
 proteus proteus, 49
 simplicius, 50
 teleus, 50

- velinus*, 170
villus, 166
viterboana, 172
Utetheisa ornatrix, 361
 Uvalde County, 234

Vaccinium macrocarpon, 125
Vacerra
 gayra, 55
 litana, 55
 Vancouver Island, 115
Vanessa, 238
 atalanta, 156
 cardui, 73
 virginiensis, 59
Vareuptychia
 similis, 64
 themis, 64
 undina, 64
 Vargas, I. F., 40
Varifula, 177
Vehilius
 illudens, 53
 inca, 53
 Venezuela, 217
Venusta, 277
 Verbenaceae, 74, 215
 Vespidae, 136
Vettius fantasos, 54
Vicia caroliniana, 216
Vidius perigenes, 53
Viola
 lanceolata, 264
 nuttallii, 264
 papilionacea, 264
 pedata, 264
 pedatifida, 262
 Violaceae, 264
 violets, 262
Vireo solitarius, 136
 Vireonidae, 136
Virola coshunii, 106
 visual cues, 212
Vitis riparia, 102

Wallengrenia, 236, 277
 otho otho, 54

 warning coloration, 207
 Warren, A. D., 40
 Webster, R. P., 345
 wetlands, 381
Windia windi, 51
 wing condition, 84
 wing damage, 23
 wing pattern, 332
 Wisconsin, 1

Xamia, 241
Xanthium struemarium, 215
Xenophanes tryxus, 51
Xylophanes, 109
 amadis cyrene, 111
 anubus, 111
 belti, 111
 ceratomioides, 111
 chiron, 111
 libya, 111
 maculator, 111
 neoptolemus, 111
 pistacina, 111
 pluto, 111
 porcus, 111
 tersa, 111
 thyelia, 111
 titana, 111
 tyndarus, 111
 zurcheri, 111

 Z, Z, Z-3, 6, 9-eicostriene, 356
 Z, Z, Z-3, 6, 9-heneicosatriene, 356
 Z, Z-6, 9-heneicosadiene, 356
Zanthoxylum, 107
Zaretis
 callidryas, 62
 ellops anzuletta, 62
Zariaspes mytheucus, 53
Zera hyacinthinus, 51
Zerene, 237
 cesonia cesonia, 57
Zerynthia rumina, 156
Zizula, 241
 cyna cyna, 68
Zobera albopunctata, 51
Zopyrion sandace, 52

