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DIPTERA TAKEN AT ROBSON, B.C.

H. R. FOXLEE

Robson, B.C.

Robson is in the southern part of the West Kootenay region of British Columbia, close to the northeastern corner of the State of Washington. The elevation is about 1410 feet.

The Diptera in this list were taken between 1939 and 1955.

ORTHORRHAPHA

NEMATOCERA

Anisopodidae

Anisopus alternatus Say.

Simuliidae

Prosimulium fulvum (Coq.)

Simulium arcticum Mall.

Simulium hunteri Mall.

Simulium tuberosum Lund.

Simulium vittatum Zett.

Fungivoridae (Mycetophilidae)

Ceroplatinae

Apemon negriventris Joh.

Ceroplatys terminalis Coq.

Sciophilinae

Dziedzickia fuscipennis (Coq.)

Monoclona elegantula Joh.

Fungivorinae

Rhymosia cristata (Staeg.)

Bibionidae

Biblio longipes Lw.

Biblio nervosus Lw.

Biblio slossonae Ckll.

BRACHYCERA

Stratiomyidae

Clitellariinae

Adoxomyia rustica (O.S.)

Stratiomyinae

Eulalia pubescens (Day)

Stratiomys barbata Lw.

Stratiomys maculosa Lw.

Geosarginae

Geosargus cuprarius (L.)

Geosargus decorus (Say)

Geosargus viridis (Say)

Microchrysa polita (L.)

Beridinae

Scoliopecta luteipes Will.

Rhagionidae

Rhagioninae

Rhagio concava Leon.

Chrysopilinae

Symphoromyia atripes Big.

Coenomyiidae

Arthroceras sp.

Xylophagus decorus Will.

Tabanidae

- Silviinae (Pangoniinae)
Apatolestes comastes Will.
Chrysops asbestos Philip
Chrysops excitans Wlk.
Chrysops pertinax Will.
Silvius gigantulus (Lw.)
Stonemyia californica (Big.)

Tabaninae

- Atylotus incisuralis* Macq.
Tabanus aegrotus O.S.
Tabanus californicus Mart.
Tabanus captionis Mart.
Tabanus haemaphorus Mart.
Tabanus kesseli Phil.
Tabanus laniferus McD.
Tabanus lasiophthalmus Macq.
Tabanus melanorhinus Big.
Tabanus nivosus O.S.
Tabanus nudus McD.
Tabanus procyon O.S.
Tabanus rhombicus O.S.
Tabanus rupestris McD.
Tabanus sequax Will.
Tabanus typhus Whitn.
Tabanus sonomensis O.S.
Tabanus zygotus Phil.

Cyrtidae

- Eulonchus tristis* Lw.
Ogcodes albiventris Jhns.

Bombyliidae**Anthracinae**

- Anthrax analis* Say
Anthrax irrorata Say
Anthrax plesia Cn.
Anthrax pluto Wd.
Anthrax varia F.
Dipalta serpentina O.S.
Hemipenthes catulina (Coq.)
Hemipenthes morioides (Say)
Hemipenthes sinuosa (Wd.)
Villa agrippina (O.S.)
Villa alternata (Say)
Villa fulviana (Say)
Villa hybomelas (McQ.)
Villa lateralis (Say)

Lomatiinae

- Aphoebantus* sp.

Toxophorinae

- Eclimus luctifer* (O.S.)
Eclimus magnus (O.S.)
Eclimus muricatus (O.S.)

Bombyliinae

- Bombylius albicapillus* Lw.
Bombylius lancifer O.S.
Bombylius major L.
Bombylius validus Lw.
Systoechus oreas O.S.

Therevidae

- Psilocephala canadensis* Cole
Psilocephala munda Lw.
Psilocephala signatipennis Cole
Thereva brunnea Cole
Thereva cingulata Krob.
Thereva fucata Lw.

Omphralidae (Scenopinidae)

- Omphrale fenestrata* (L.)
Omphrale nubilipes Say

Asilidae**Leptogastrinae**

- Leptogaster* sp.

Dasyopogoninae

- Chrysoceria pollenia* Cole
Cyrtopogon banksi W. and M.
Cyrtopogon dasyloides Will.
Cyrtopogon leucozona Lw.
Cyrtopogon montanus Lw.
Cyrtopogon praepes Will.
Cyrtopogon sansoni Cn
Cyrtopogon willistoni Cn
Dioctria pusio O.S.
Dioctria sackeni Will.
Eucyrtopogon nebulo (O.S.)
Heteropogon senilis (Big.)
Lasiopogon aldrichi Mel.
Lasiopogon monticola Mel.
Metapogon setigerum Cole ?
Nicocles canadensis Cn.
Nicocles dives (Lw.)
Nicocles punctipennis Mel.
Stenopogon inquinatus Lw.

Laphriinae

- Andrenosoma fulvicauda lutea* McAt.?
Bombomima astur (O.S.)
Bombomima asturina Brom.
Bombomima californica (Bks)
Bombomima columbica (Wlk.)
Bombomima fernaldi (Back)
Bombomima partitor (Bks)
Laphria aimatis McAt.
Laphria felis felis O.S.
Laphria felis crocea McAt.
Laphria ferox Will.
Laphria franciscana Big.
Laphria gilva (L.)
Laphria index McAt.
Laphria janus McAt.
Laphria sackeni Will.
Laphria sadales Wlk.
Laphria vivax Will.
Laphria vultur O.S.
Pogonosoma ridingsi Cress.

Asilinae

- Asilus auriannulatus* (Hine)
Asilus callidus (Will.)
Asilus occidentalis Hine
Asilus platyceras Hine
Asilus vesus Hine
Asilus willistoni Hine

Empididae**Hybotinae**

- Eubybos triplex* (Wlk.)

Ocydromiinae

- Leptozeza disparilis* Mel.
Ocydromia glabricula (Fln.)
Oedalea sp.
Trichina astripes Mil.
Trichina pullata Mel.

Empidinae

- Hesperempis mabelae* Mil.?

Clinoceratinae

- Clinocera undulata* Mel.
Dolichocephala irrorata (Fln.)

Hemerodromiinae

Hemerodromia rogoris Coq.

Tachydromiinae

Platypalpus crassifemoris Fitch
Platypalpus flavirostris microcerus Mel.
Palypalpus inops Mel.
Platypalpus juvenis hyaenoides Mel.
Platypalpus juvenis juvenis Mel.
Platypalpus pectinator Mel.
Platypalpus pilatus Mel.
Platypalpus trivialis Lw.
Platypalpus xanthopodus Mel.
Tachydromia bimaculata (Lw.)
Tachybeza discifera Mel.

Dolichopodidae

Dolichopodinae

Dolichopus consanguineus Wheel.
Dolichopus deterius Lw.

Campsicneminae

Chrysotimus pusio Lw.

Chrysosomatinae

Condylostylus pilicornis (Ald.)**Lonchopteridae***Lonchoptera dubia* Cn.**Phoridae***Megaselia* sp.**CYCLORRHAPHA**

ASCHIZA

Clythiidae (Platypezidae)

Callomyia venusta Snow
Clythia coraxa Kess.
Clythia polypteri (Willd.)
Platypezina pacifica Kess.

Syrphidae

Syrphinae

Baccha obscuricornis Lw.
Didea fuscipes Lw.
Epistrophe diversipunctata Cn.
Epistrophe grossulariae (Mg.)
Eupeodes volucris O.S.
Melanostoma sp.
Metasyrphus amalopis (O.S.)
Metasyrphus lapponicus (Zett.)
Metasyrphus limatus (Hine)
Metasyrphus snowi (Wehr)
Metasyrphus venablesi (Cn.)?
Paragus bicolor (F.)
Platycheirus peltatoides Cn.
Scaeva pyrastris (L.)
Syrphus opinator O.S.

Chrysotoxinae

Chrysotoxum integrum Will.
Chrysotoxum ventricosum Lw.

Microdontinae

Microdon cothurnatus Big.
Microdon piperi Knab.
Microdon tristis Lw.

Eumerinae

Eumerus strigatus (Fln.)
Eumerus tuberculatus (Rond.)

Cheilosinae

Brachopa sp.
Cartosyrphus tristis (Lw.)
Ferdinandea croesus (O.S.)

Neocnemodon auripleura Cn.*Neocnemodon calcarata* Cn.*Pipiza oregona* Lov.*Sphegina punctata* Cole

Volucellinae

Volucella bombylans plumata Deg.
Volucella bombylans rufomaculata Jones

Sericomyiinae

Arctophila flagrans O.S.
Condidea lata Coq.
Pyritis kincaidii (Coq.)
Pyritis montigena Hunt.
Sericomyia chalcopyga Lw.

Xylotinae

Chrysosomidia crawfordi (Shann.)
Chrysosomidia pulcher (Will.)
Criopora femorata Will.
Cynorbina armillata O.S.
Cynorbina nigripes Cn.
Cynorbina scitula (Will.)
Penthesilia aurata Cn.
Penthesilia aurea (Lov.)
Penthesilia caudata (Cn.)
Penthesilia coquilleti (Will.)
Penthesilia intermedia (Jhns.)
Penthesilia nigripes (Will.)
Sphecomyia pattoni Will.
Sphecomyia vespiformis Gorski
Xylota barbata Lw.
Xylota ejuncida Say.
Xylota flavitibia Big.
Xylota subfasciata Lw.
Xylotodes inarmatus (Hunt.)
Xylotodes pigra (Lov.)
Xylotomima curvaria (Cn.)
Xylotomima nemorum (F.)
Xylotomima pigra (F.)

Tubiferinae

Elophilus fasciatus Wlk.
Lampetia equestris narcissi (F.)
Tubifera anthophorina (Fln.)
Tubifera nemorum (L.)
Tubifera tenax (L.)
Tubifera tenax campestris (Mg.)

SCHIZOPHORA

ACALYPTERAE

Conopidae

Occeomyia luteipes Camr.
Phyocephala burgessi Will.

Otitidae

Epibleta sp.
Psatroptera similis Cress.
Pseudotephritis sp.
Seioptera vibrans (L.)
Stenopterina sp.
Tritoxa cuneata Lw.

Palloppteridae

Palloptera jucunda (Lw.)
Palloptera terminalis (Lw.)

Pionhilidae

Mysetaulus bipunctatus (Fln.)
Piophila atrifrons M. & S.
Piophila xanthopoda M. & S.

Trupaneidae

Epochra canadensis Lw.
Myoleja rubida Coq.

Rbagoletis berberis Cn.
Rbagoletis symphoricarpi Cn.
Rbagoletis tabellaria (Fitch)
Tephritis pacifica (Doane)
Tephritis variabilis Doane
Trupanea microsetulosa Mall.
Zonosema setosa (Doane)

Lonchaeidae

Lonchaea flavidipennis Zett.
Lonchaea marylandica Mall.

Lauxaniidae

Calliopum quadrisetosum (Thoms.)
Homoneura occidentalis nudifemur (Mall.)
Lauxania cylindricornis (F.)
Lauxania nigrimana Coq.
Minettia americanella Shew.
Minettia flaveola (Coq.)
Minettia lupulina (F.)
Sapromyza brachysoma Coq.
Sapromyza hyalinata (Mg.)
Sapromyza monticola Mel.
Sapromyza ouelleti Shew.

Tylidae (Calobatidae)

Cnodacophora nasoni (Cress.)
Paracalobata univitta (Wlk.)

Psilidae

Chyliza scrobiculata Mel.
Pseudopsila perpolita Jhns.
Psila nigricornis Mg.
Psila rosae (F.)

Sepsidae

Decacbaetophora aeneipes de Meij.
Sepsis punctum violacea Mg.

Sciomyzidae (Tetanoceridae)

Limnia sp.
Melina albocostata (Fln.)
Melina nana (Fln.)
Melina tenuipes (Lw.)
Melina ventralis (Fln.)
Tetanocera nanciae Brim.
Tetanocera phylliphora Mel.
Tetanocera plebeja Lw.
Trypetoptera canadensis (Macq.)

Chamaemyiidae

Chamaemyia juncorum (Fln.)
Chamaemyia polystigma (Mg.)
Pseudodinia nitida Mel.
Pseudodinia varipes Coq.

Helomyzidae

Allophylla laevis Lw.
Amoebaleria flavotestacea (Zett.)?
Eccoptomera simplex Coq.
Helomyza serrata (L.)
Oecotheca fenestralis (Fln.)
Suillia apicalis (Lw.)
Suillia assimilis (Lw.)
Suillia barberi Darl.
Suillia limbata (Thoms.)
Suillia loewi Garr.
Suillia longipennis (Lw.)

Trioxscelidae

Trioxscelis frontalis (Fln.)
Trioxscelis fumibennis Mel.

Chromyidae

Chyromya concolor Mall.?
Chyromya flava (L.)

Clusiidae

Acartophthalmus nigrinus (Zett.)
Clusiodes melanostoma (Lw.)?

Opomyzidae

Geomyza monostigma Mel.

Ephyridae

Notiphilinae

Ilythea spilota Curt.
Psilopa compta (Mg.)

Hydropotinae (Hydrelliinae)

Hydrina debilis (Lw.)
Hydrina nigrescens Cress.
Hydrina opposita (Lw.)
Hydropota griseola (Fln.)
Lytogaster gravida Lw.
Nostima picta (Fln.)
Pelina compar Cress.

Ephydrinae

Limnellia stenhammari (Zett.)
Parydra incommoda Cress.
Parydra varia (Lw.)
Scatella laxa Cress.
Scatella tenuicosta Coll.?

Sphaeroceratidae (Borboridae)

Borborus equinus Fln.
Leptocera (Collinella) fumipennis Spul.
Leptocera (Collinella) latiforceps Sabr.
Leptocera (Collinella) omega Sabr.
Leptocera (Collinella) suberecta Sabr.
Leptocera (Leptocera) fontinalis (Fln.)
Leptocera (Opacifrons) sciaspidis Spul.
Leptocera (Scotophilella) abundans Spul.
Leptocera (Scotophilella) dissimilicosta Spul.?
Leptocera (Scotophilella) neriifrons Spul.?
Sphaerocera pusilla (Fln.)

Drosophilidae

Campichaeta micans (Hend.)
Chymomyza sp.
Diastata eluta Lw.
Diastata modesta Mel.
Diastata vagans Lw.
Drosophila funebris (F.)
Drosophila nigrohvidei P. & W.
Drosophila occidentalis Spen.
Drosophila pseudoobscura Frol.
Drosophila suboccidentalis Spen.
Drosophila subquinaria Spen.
Drosophila testacea v. Ros.
Scaptomyza disticha Duda
 (=graminum auctt.)
Scaptomyza terminalis (Lw.)
Stegana sp.

Agromyzidae

Cerodonia denticornis nigroscutellata Strobl
Ophiomyia pinguis (Fln.)
Phytomyza orbitalis (Mel.)

Phyllomyzidae (Milichiidae)

Desmomyza confusa Cn.
Neophyllomyza quadricornis Mel.
Paramyia nitens (Lw.)

Chloropidae

Oscinellinae

Dicraeus incongruus Ald.
Dicraeus ingratus (Lw.)
Elachiptera costata (Lw.)
Elachiptera decipiens (Lw.)

Elachiptera flaviceps Sabr.
Oscinella frit (L.)
Oscinella frit nitidissima (Mg.)
Oscinella frit pusilla (Mg.)
Oscinella incerta Beck.
Oscinella magnipalpis Beck.
Oscinella umbrosa Lw.
Tricimba brunnicollis (Beck.)
 Chloropinae
Chlorops sp.
Meromyza marginata Beck.
Thaumatomyia annulata (Wlk.)
Thaumatomyia glabra (Mg.)
 CALYPTERAE
Muscidae
 Scatomyzinae (Cordylurinae)
Cordilura latifrons Lw.
Cordilura vittipes Lw.
Megaphthalma americana Mall.
Megaphthalmoides unilineata (Zett.)
Parallelomma gracilipes (Lw.)
Pseudopogonota aldrichi Mall.
Scatophaga furcata Say.
Scatophaga stercoraria (L.)
 Anthomyiinae
Chirosia idabensis Stn.
Eremomyia humeralis Stn.
Hydroboria divisa (Mg.)
Hylemya alcohoe (Wlk.)
Hylemya antiqua (Mg.)
Hylemya brassicae (Bé)
Hylemya betarum (Lint.)
Hylemya cilicrura (Rond.)
Hylemya coenosiaeformis Stn.
Hylemya depressa Stn.
Hylemya fugax (Mg.)
Hylemya garretti Huck.
Hylemya bucketti Ringd.
Hylemya lasciva (Zett.)
Hylemya neomexicana Mall.
Hylemya octoguttata (Zett.)
Hylemya oppidans Huck.
Hylemya propinqua Huck.
Hylemya setiventris alternata Huck.
Hylemya testacea Stn.
Hylemya trivittata Stn.
Hylemya variata (Fln.)
Paraprosalpia silvestris (Fln.)
Paregle cinerella (Fln.)
Paregle radicum (L.)
Pegomya accutipennis Mall.
Pegomya anabnormis Huck.?
Pegomya bicolor (Wd.)
Pegomya caesia Stn.?
Pegomya cresca Huck.
Pegomya duplicata (Mall.)
Pegomya flavipalpis (Zett.)
Pegomya fuscicauda Huck.
Pegomya gilva (Zett.)
Pegomya intersecta (Mg.)
Pegomya lividiventris Huck.
Pegomya longicornis Huck.
Pegomya lunatifrons (Zett.)
Pegomya marginata Huck.
Pegomya partita Huck.
Pegomya rufipes (Fln.)
Pegomya solitaria Stn.
Pegomya unguiculata Mall.

Pegomya univittata (v. Ros.)
Pegomya vittigera (Zett.)
Pegomya winthemi (Mg.)
 Fanniinae
Azelia sp.
Euryomma peregrinum (Mg.)
Fannia aerea (Mg.)
Fannia canicularis (L.)
Fannia fuscata (Fln.)
Fannia incisurata (Zett.)
Fannia postica Stn.
Fannia scalaris (F.)
 Lispiinae
Lispe tentaculata (Deg.)
 Coenosiainae
Coenosia tigrina (F.)
Limosia aliena (Mall.)
Limosia nigrescens (Stn.)
Limosia rufbasis (Stn.)
Lispocephala alma (Mg.)
 Phaoniinae
Alloeostylus conformis (Mall.)
Alloeostylus diaphanus (Wd.)
Dialyia pallida Stn.
Helina multiseriata Mall.
Helina oregonensis (Mall.)
Helina procedens (Wlk.)
Helina troene (Wlk.)
Hydrotaea armipes (Fln.)
Hydrotaea piliibia Stn.
Lasiops septentrionalis (Stn.)
Limnophora (Spilogona) anthrax Big.
Limnophora (Spilogona) magnipunctata (Mall.)
Limnophora (Spilogona) novae-angliae Mall.
Mydaea discimana Mall.
Mydaea electa (Zett.)
Mydaea obscurella Mall.
Mydaea occidentalis Mall.
Myosila meditabunda (F.)
Opbyra leucostoma (Wd.)
Phaonia consobrina (Zett.)
Phaonia errans (Mg.)
Pseudolimnophora nigripes (Desv.)
Spilaria lucorum (Fln.)
Xenaricia fulva (Big.)
 Muscinae
Eumesebrina latreillei (Desv.)
Graphomya maculata (Scop.)
Haematobia irritans (L.)
Hypodermodes solitaria (Knab.)
Musca domestica L.
Muscina stabulans (Fln.)
Stomoxys calcitrans (L.)
Metopiidae
 Calliphorinae
Calliphora vicina Desv.
Calliphora vomitoria (L.)
Cyanus elongata (Hough)
Cynomyiopsis cadaverina (Desv.)
Eucalliphora lilaea (Wlk.)
Lucilia illustris (Mg.)
 Sarcophaginae
Helicobia rapax (Wlk.)
Pseudosarcophaga affinis (Fln.)
Ravinia herminieri Desv.
Ravinia pusiola (Wlp.)
Ravinia stimulanis (Wlk.)
Sarcophaga (Acanthodotheca) eleodis Ald.

- Sarcophaga (Acridiophaga) falciformis* Ald.
Sarcophaga (Boettcheria) cimbicis (Tns.)
Sarcophaga (Boettcheria) latisterna (Park.)
Sarcophaga (Fletcherimyia) fletcheri Ald.
Sarcophaga (Kellymyia) kellyi Ald.
Sarcophaga (Protodexia) hunteri Hough.
Sarcophaga (Sapromyia) cooleyi Park.
Sarcophaga (Sarcophaga) exuberans Pand.
Sarcophaga (Sarcophaga) nearctica Park.
Sarcophaga (Sarcotachinella) sinuata Mg.
Sarcophaga (Tephromyiella) atlantis Ald.
Sarcophaga (Thelyleptiocnema) incurva Ald.
- Miltogramminae
Eubilarella fulvicornis (Coq.)
Eubilarella pilosifrons (Allen)
Euselenomyia trilineata (Wln.)
Metopia leucocephala Rossi
Parametopia lateralis (Macq.)
Taxigramma heteroneura (Mg.)
- Cuterebridae**
Cuterebra tenebrosa Coq.
- Larvaevoridae**
 Phasiinae
Cylindromyia californica Big.
Gymnoclytia occidentale Tns.
Hemyda aurata Desv.
Leucostoma (Paradionaea) atra Tns.
Neoclyptera dosiades (Wlk.)
Paraphasia nigra Brks.
Rhodogyne filiola (Lw.)
Sciasma nebulosa Coq.
- Dexiinae
Mochlosoma validum B. & B.?
Psilodexia neotibialis (West)
Rhampbinina confusa West
Trochilodes skinneria Coq.
- Phoroceratinae
Admontia (Xenadmontia) degeeroides (Coq.)
Bessa harveyi (Tns.)
Crocota sp. (= *Siphona* auctt.)
Cryptomeigenia nigripilosa Cn.
Dexodes nana Cn.
Exorista mella (Wlk.)
Homalactia barringtoni (Coq.)
Lasionera bicolor (Cn.)
Patelloa pachyptya (A. & W.)
Patelloa reinhardi (A. & W.)
Phylacteropoda sp.
- Plagiprospherysa parvipalpis* (Wlp.)
Tachinomyia apicata Cn.
Tachinomyia nigricans Webb.
Tachinomyia variata Cn.
- Goniinae
Achaetoneura frenchii (Will.)
Aplomya theclarum (Scudd.)
Belvosia canadensis Cn.
Carcelia reclinata (A. & W.)
Cyzenis festinans (A. & W.)
Dolichotarsus griseus Brks.
Euexorista futilis (O.S.)
Eufrontina spectabilis (Ald.)
Eumea caesar (Ald.)
Gonia (Knabia) frontosa (Say)
Huebneria imitator (Sell.)
Leschenaultia (Rileymyia) americana B. & B.
Lydella neriota (Tns.)
Madremyia saundersii (Will.)
Nemorilla pyste (Wlk.)
Phryxe pecosensis (Tns.)
Pseudoperichaeta erecta (Coq.)
Wintbemia militaris (Wlsh.)
Wintbemia rufonotata (Big.)
- Larvaevorinae
Archyias (Nemochaeta) lateralis (Macq.)
Argentoepalpus rufipes Brks.
Argentoepalpus signiferus (Wlk.)
Bombyliomyia flavipalpia (Macq.)
Cuphocera (Deopalpus) contigua Rnh.
Ernestia (Pseudomeriania) nigrocornes (Toth.)
Eulasiona nigra Cn.
Eutrichogena polita Brks.
Fabriciella (Fabriciodes) polisa Toth.
Fabriciella (Metapotachina) brevisrostris Toth.
Fabriciella (Metapotachina) latifacies Toth.
Fabriciella (Nowickia) hispida Toth.
Fabriciella (Rhachogaster) algens (Wd.)
Fabriciella (Upodemocera) niida (Wlp.)
Lypsa sp.
Mericia nigropalpis (Toth.)
Metopomuscapteryx tibialis (Coq.)
Neothelaira chaetoneura (Coq.)
Pararchytas decisa (Wlk.)
Peleteria (Peleteropsis) iterans (Wlk.)
Peleteria (Sphyromyia) apicalis (Wlk.)
Peleteria (Sphyromyia) bryantii Cn.
Peleteria (Sphyromyia) malleola Big.
Sithophyto neomexicana Tns.
Wagneria helyma (Wlk.)

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Scavengers and Parasites from a Used Wasps' Nest

In October 1955 Professor Kenneth Graham brought in from Langley an unusually large wasps' nest of the current season's making and kept it in a glass chamber. The nest was deserted so it was not possible to determine which species of yellow jacket constructed it; it was probably

Vespula arenaria (Fab.), a common wasp at the coast.

During the autumn months some eight recognizable specimens of what was apparently *Ephestia elutella* (Hubner) and some small ichneumon flies emerged and died in the container. These were given to me by

Professor Graham the following spring. Unfortunately, Professor Graham needed this unusually large wasp nest for demonstration purposes, so I could not cut it up to determine the true status of the hymenopterans.

The small ichneumons were either parasitic upon the moth caterpillars or were *Sphecothbaga burra* (Cresson), a parasite of wasp larvae. This insect, when it pupates spins across the wasp cell a silken sheet coloured like a poached egg with a brown instead of a yellow centre. The sheet is always slightly oblique and not straight across a cell.

From a small *Vespula* nest taken in the forest at 3100 ft. above Kamloops, I once obtained a number of small caterpillars which died without pupating. By cutting up the nest it was found that the larvae had

acted as scavengers, feeding on the deposit of wasp larval frass that is always plastered against the base of each cell when the insect pupates. This deposit may be from one to three layers deep, depending upon how many larvae were reared in each cell, and is also fed upon by scavenging larvae of both the black carpet beetle and a dermestid, *Perimegatoma vespulae* Milliron, that develops in both animal and plant remains.

I have found that moths invade wasps' nests late in the season and develop in the upper, that is, the older comb layers. The ichneumon parasites usually develop in weak colonies; or if in strong colonies, only at the end of the season when the wasp population is declining. Neither moth larvae nor ichneumons seem to be interfered with by wasps.—G. J. Spencer, *University of British Columbia*.

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