A LIST OF NEUROPTEROID INSECTS FROM NORTH CAROLINA.

By Nathan Banks.

The following list is the result of an examination of several collections from North Carolina during the past few years. One of the most important was that made by Mr. Beutenmüller in the Black Mts., and all the specimens from that locality should be credited to him. Mr. W. F. Fiske gave me a small collection made at Tryon; Mrs. A. T. Slosson has sent a few from Lake Toxaway and Hot Springs, and Mr. A. H. Mainee has collected many interesting species, especially myrmeleon, at Southern Pines. In the U. S. National Museum there is a number of small species labelled "N. Car." From the pinning I think they were taken by Morrison, and probably from near Morgantown. Practically all the other localities represent material taken by Mr. C. S. Brimley and Prof. Franklin Sherman, Jr., or his assistants. Professor Sherman has always been on the lookout for these insects in his travels through the State, so that to his efforts I am greatly indebted for the materials from which this list is made up.

This material is sufficient to indicate that North Carolina has a large and interesting neuropteroid fauna. The sandy regions have a great variety of myrmeleons, while the mountains have a varied and peculiar trichopterous fauna. The Panorpidae are especially numerous, and of particular interest is the Panorpodes, a genus elsewhere known only from Oregon and Japan.

Altogether 114 species are recorded in this list. The Odonata and Termitidae are not included.

Order CORRODENTIA.

Family PSOCIDÆ.

Pterodela rufus Walsh.
   Raleigh.
Peripsocus madidus Hagen.
   Raleigh.
Elipsocus conterminus Walsh.
   Beaufort, June 6.
Polyspsocus corruptus Hagen.
   Raleigh, May 24; "N. Car." (Morrison), probably from Morgantown.
Myopsocus lugens Hagen.
   Hendersonville, July.
Psocus hageni Banks.
   Blowing Rock, July.
Psocus striatus Walker.
   Raleigh, May 25.
Cerastipsocus trifasciatus Provancher.
   Raleigh; Goldsboro, September.
Cerastipsocus venosus Burmeister.
   Raleigh, June 30; “N. Car.” (Morrison), probably from Morgantown.

Order ARCHIPTERA.

Family PERLIDÆ.

Acroneuria abnormis Newman.
   Black Mts., June.
Acroneuria arenosa Pictet.
   “N. Car.”
Perla carolinensis Banks.
   Black Mts., June.
Perla fumosa Banks.
   Raleigh, June 21, July 28.
Perla immarginata Say.
   Raleigh, June 11.
Perla valida Banks.
   Waynesville, July.
Perla xanthenes Newman.
   Tryon.
Perlesta placida Hagen.
   “N. Car.” (Morrison), probably near Morgantown.
Neoperla occipitalis Pictet.
   Black Mts.
Isoperla guerini Pictet.
   Hot Springs; Black Mts.; May.
Isoperla transmarina Newman.
   Black Mts., May; “N. Car.” (Morrison), probably Morgantown.
Alloperla imbecilla Say.
   Black Mts., May.
Tæniapteryx frigida Hagen.
   Raleigh, March 9.
Nemoura similis Hagen.
   Raleigh, April 5.
Leuctra grandis Banks.
   Black Mts., June.

Family EPHEMERIDÆ.

Hexagienia munda Eaton.
   "N. Car."
Leptophlebia cupida Say.
   Brinkleyleville, April; Raleigh, April.
Leptophlebia sp.
   "N. Car." (Morrison), probably from Morgantown.
   Very near L. prospecta, but smaller.
Siphlonurus mirus Eaton.
   Raleigh, March 31.
Heptagenia vicaria Walker.
   Black Mts.

Order NEUROPTERA.

Family SIALIDÆ.

Corydalis cornuta Linnaeus.
   Raleigh, June, July.
Chauliodes pectinicornis Linnaeus.
   Raleigh, April, May, July.
Chauliodes rastricornis Rambur.
   Raleigh, April, May.
Chauliodes serricornis Say.
   Black Mts.
Sialis infumata Newman.
   Southern Pines, March; Black Mts.

Family HEMEROBIIDÆ.

Lomamyia flavicornis Walker.
   Tryon; Southern Pines; "N. Car." (Morrison), probably
   from Morgantown.
Hemeroebius conjunctus Fitch.
   Black Mts.
Hemeroebius humuli Linnaeus.
   Raleigh, April, October; Black Mts.
Hemeroebius marginatus Stephens.
   Black Mts.
Hemerobius stigmaterus Fitch.
   Raleigh, April.
Boriomyia fidelis Banks.
   Rocky Point, May 18; Raleigh, June 21; Tryon.
Sympherobius amiculus Fitch.
   Raleigh, June 14; Black Mts.; Tryon.
Micromus subanticus Walker.
   Raleigh, May 4; Henrietta, December 9.
Micromus posticus Walker.
   Raleigh, November 21, December 1; Black Mts.

Family CHRYSPIDÉÆ.

Allochrysa virginica Fitch.
   Raleigh, September 1; Lake Ellis, May.
Chrysopa albicornis Fitch.
   Raleigh, July 8, May, June.
Chrysopa harrisii Fitch.
   Southern Pines, September; Raleigh, November 18, September 17.
Chrysopa lateralis Guérin.
   Raleigh, August 25, September 1.
Chrysopa nigricornis Burmeister.
   Raleigh, August 6, October; Black Mts.
Chrysopa oculata Say.
   Raleigh, June, July, September; Beaufort, May 15; Jefferson, August; Southern Pines, September; Hickory; Wilkesboro; Black Mts.
Chrysopa quadripunctata Burmeister.
   Raleigh, April 11; Blowing Rock.
Chrysopa robusta Banks.
   Tryon.
Chrysopa rufilabris Burmeister.
   Raleigh, September, October; Greensboro, August; Hendersonville; Black Mts.

Family CONIOPTERYGINIDÉÆ.

Coniopteryx vicina Hagen.
   Highlands, July 6.

Family MYRMELEONIDÉÆ.

Acanthaclisis americana Drury.
   Southern Pines, July; Beaufort, September.
Myrmeleon crudelis Walker.
Beaufort; Southern Pines, July; Raleigh, May 30 to September 22.

Myrmeleon immaculatus De Geer.
Black Mts.

Myrmeleon tectus Walker.
Southern Pines, May 27, 1 specimen.

Psammoleon guttipes Banks.
Southern Pines, July 20; Tryon.

Dendroleon obsoletum Say.
Raleigh, June 25; Tryon.

Dendroleon pumilis Burmeister.
Southern Pines, August 26.

Brachynemurus abdominalis Say.
Beaufort; Southern Pines, July; Raleigh, June, July, September.

Brachynemurus longicaudus Burmeister.
Beaufort; Southern Pines, July.

Brachynemurus ramburi Banks.
Southern Pines, August.

Cryptoleon nebulosum Olivier.
Southern Pines, May 25, June.

Family ASCALAPHIDÆ.

Neuroptynx appendiculatus Fabricius.
Raleigh, July 8.

Ululodes hyalina Latreille.
Beaufort; Greensboro.

Ululodes quadripunctata Burmeister.
Raleigh, August 27.

Colobopterus excisus Hagen.
Southern Pines, July 3.

Family PANORPIDÆ.

Panorpa lugubris Swederus.
Raleigh, October 10, November 2; Southern Pines, October, November.

Panorpa americana Swederus.
Raleigh, September, October; Southern Pines, October 11.

Panorpa nebulosa Westwood.
Black Mts., June; Hot Springs; Lake Toxaway; Highlands, June; Havelock, May.
Panorpa rufa Gray.
   Wilmington, December 25; Southern Pines, October, November.

Panorpa carolinensis Banks.
   Black Mts., June.

Panorpa confusa Westwood.
   Blowing Rock, June, August; Black Mts.; Raleigh, May; Highlands, July.

Panorpa maculosa Hagen.
   Blowing Rock, July; Highlands, July; Hendersonville, June.

Panorpa rufescens Rambur.
   Wilkesboro, September; Wallace, April; Lake Ellis, May; Havelock, late May; Hendersonville, June.

Panorpa signifer Banks.
   Blowing Rock, August.

Panorpa venosa Westwood.
   Raleigh, September, October; Southern Pines, June.

Panorpa virginica Banks.
   Highlands, September; Hendersonville, June; Boone, August.

Panorpodes carolinensis Banks.

Bittacus occidentis Walker.
   Raleigh, September.

Bittacus pilicornis Westwood.
   Havelock, May; Black Mts., June.

Bittacus punctiger Westwood.
   Raleigh, June; Havelock, May.

Order TRICHOPTERA.

Family PHRYGANEIDÆ.

Phryganea vestita Walker.
   Southport, late October; Lake Ellis, May.

Neuronia postica Walker.
   Raleigh, May, June, July; Lake Ellis, May 25.

Family LIMNENPHILIDÆ.

Colpotaullius medialis Banks.
   Blowing Rock, August.

Pycnosyche scabripennis Rambur.
   Black Mts.; Lineville, August 19.

Platyphyllax lepida Hagen.
   Black Mts.
Family RHYACOPHILIDÆ.
Rhyacophila nigrita Banks.
Black Mts., June.

Chimarrha aterrima Hagen.
"N. Car." (Morrison), probably Morgantown.

Family SERICOSTOMATIDÆ.
Heteroplectron boreale Provancher.
Black Mts., June.

Atomyia modesta Banks.
Black Mts., May.

Goera calcara Banks.
"N. Car." (Morrison), probably Morgantown.

Goera fuscula Banks.

Notiopsyche latipennis Banks.
Black Mts., June.

Mormomyia vernalis Banks.
Tryon.

Family LEPTOCERIDÆ.
Leptocerus transversus Hagen.
"N. Car." (Morrison), probably from Morgantown.

Triænodes sp.
Lake Ellis. perhaps new.

Œcetina avara Banks.
"N. Car." (Morrison), probably from Morgantown.

Œcetina incerta Walker.
Lake Toxaway.

Œcetina parvula Banks.
"N. Car." (Morrison), probably from Morgantown.

Family HYDROPSYCHIDÆ.
Hydropsyche analis Banks.
"N. Car." (Morrison), probably Morgantown.

Hydropsyche alternans Walker.
Black Mts.; "N. Car." (Morrison), probably Morgantown.

Hydropsyche chlorotica Hagen.
"N. Car." (Morrison), probably Morgantown.

Hydropsyche hageni Banks.
Blowing Rock, July 22; Lake Ellis, May 23.

Hydropsyche scalaris Hagen.
Black Mts.
Hydropsyche sordida Hagen.
   Hot Springs; Black Mts.; "N. Car." (Morrison), probably Morgantown.

Hydropsyche speciosa Banks.
   Hot Springs; "N. Car." (Morrison), probably Morgantown.

Plectrocnemia auriceps Banks.
   Black Mts.

Arctopsyche irrorata Banks.
   Black Mts.

Polycentropus carolinensis Banks.
   Black Mts.

Phylocentropus placidus Banks.
   "N. Car." (Morrison), probably from Morgantown.

Nycticophylax affinis Banks.
   Hot Springs.

Nycticophylax vestitus Hagen.
   "N. Car." (Morrison), probably Morgantown.