

RECORDED
IN ANTBIR

Kirby, W. 1837

C. 1837

FAUNA
BOREALI-AMERICANA
OR THE
ZOOLOGY
OF THE
NORTHERN PARTS
OF
BRITISH AMERICA

PART FOUR

INSECTS

XXXIX + 325 pp

JOHN RICHARDSON

WILLIAM SWAINSON

AND

WILLIAM KIRBY

Richardson and Swainson were
authors of other parts.
Kirby is the sole author of
Part 4. See Autere Miss. Notes, p. 88.



ARNO PRESS
A New York Times Company
New York • 1978

QL475
R43
1958

FAUNA
BOREALI-AMERICANA;
OR THE
ZOOLOGY
OF THE
NORTHERN PARTS
OF
BRITISH AMERICA:
CONTAINING

DESCRIPTIONS OF THE OBJECTS OF NATURAL HISTORY COLLECTED ON THE LATE NORTHERN LAND EXPEDITIONS, UNDER COMMAND OF CAPTAIN SIR JOHN FRANKLIN, R.N.

BY
JOHN RICHARDSON, M.D. F.R.S. F.L.S. &c.

MEMBER OF THE WERNERIAN NATURAL HISTORY SOCIETY OF EDINBURGH, AND
FOREIGN MEMBER OF THE GEOGRAPHICAL SOCIETY OF PARIS,
SURGEON AND NATURALIST TO THE EXPEDITION,

ASSISTED BY
WILLIAM SWAINSON, Esq. F.R.S. F.L.S. &c.
AND
THE REVEREND WILLIAM KIRBY, M.A. F.R.S. F.L.S. &c.

ILLUSTRATED BY SEVERAL COLOURED ENGRAVINGS.

*PUBLISHED UNDER THE AUTHORITY OF THE RIGHT HONOURABLE THE SECRETARY OF STATE
FOR COLONIAL AFFAIRS.*

NORWICH:
PRINTED AND PUBLISHED BY JOSIAH FLETCHER;
AND SOLD IN LONDON BY
LONGMAN, ORME, BROWN, GREEN, & LONGMANS.

MDCCXXXVII.

CONTENTS.

xi

	PAGE		PAGE
361 Bracon Crocator	261	388 Miris ventralis	287
IV. ACULEATA	261—274	ACANTHIADÆ	278
FORMICIDÆ. (<i>Ants</i>)	261	389 Aradus tuberculifer	278
362 Formica semipunctata	262	390 „ affinis	279
363 „ fusca	262	REDUVIADÆ	279
VESPIDÆ. (<i>Wasps</i>)	263	391 Reduviolus inscriptus	280
364 Vespa vulgaris	263	392 Chiroleptes Raptor	281
365 „ borealis	264	393 Nabicula subcoleoptrata	282
366 „ marginata	265	HYDROMETRIDÆ	282
367 „ maculata	266	394 Gerris rufo-scutellata	282
PROSOPIDÆ	266	395 „ lacustris	283
368 Prosopis elliptica	266	II. HYDROCORISA. (<i>Water-bugs</i>)	283—285
ANDRENIDÆ	267	CORIXIDÆ	283
369 Halictus rubicundus	267	396 Corixa striata	283
370 „ crassicornis	267	397 „ carinata	284
371 Andrena impuncta	268	398 „ planifrons	284
372 „ varians	268	NOTONECTIDÆ	285
NOMADIDÆ. (<i>Cuckoo-bees</i>)	269	399 Notonecta insulata	285
373 Nomada americana	269	Order HOMOPTERA	285
CHELOSTOMIDÆ	270	CERCOPIDÆ	285
374 Chelostoma albifrons	270	400 Cercopis marginella	285
MEGACHILIDÆ	270	Order LEPIDOPTERA	286—309
375 Megachile maritima	270	I. DIURNA. (<i>Butterflies</i>)	286—300
ANTHOPHORIDÆ	271	PAPILIONIDÆ. (<i>Swallow-tails</i>)	286
376 Anthophora bombooides	271	401 Papilio Turnus	286
BOMBIDÆ. (<i>Humble, or Bumble-bees, or Dores</i>)	272	COLIADÆ. (<i>Whites, Yellows</i>)	287
377 Bombus Sylvicola	272	402 Colias Edusa	287
378 „ borealis	272	403 Pontia casta	288
379 „ Terricola	273	NYMPHALIDÆ	289
380 „ Derhamellus	273	404 Melitaea Selenis	289
381 „ Praticola	274	405 Argynniss Cybele	289
382 „ virginicus	274	406 „ Myrina	290
Subclass HAUSTELLATA	275—318	407 „ Aphrodite	290
Order HEMIPTERA	275—285	408 „ Freya	291
I. GEOCORISA. (<i>Land Bugs</i>)	275—283	VANESSIDÆ	292
PENTATOMIDÆ	275	409 Vanessa (Graptia) C. argenteum	292
383 Pentatoma Carnifex	275	410 „ furcillata	292
384 „ variegata	276	411 „ Antiope (<i>Willow Butterfly</i>)	293
385 „ trilineata	276	412 „ Atalanta (<i>Grand Admiral</i>)	294
EDESSIDÆ	277	413 Cynthia Cardui (<i>Painted Lady</i>)	295
386 Edessa nebulosa	277	414 „ Huntera (<i>Belle Dame de l'Amérique</i>)	296
CAPSIDÆ	277	HIPPARCHIADÆ. (<i>Ringlets, Heaths</i>)	297
387 Miris punctulatus	277	415 Hipparchia Nephele	297

Family BRACONIDÆ. *Braconidans.*

CLIV. Genus BRACON. Fab.

(361)

1. * BRACON CROCATOR. *Saffron-coloured Bracon.**B. (croator) ater, nitidus; abdomine croceo; alis infuscatis; ovipositore corpore vix breviore.*

Saffron-coloured Bracon, very black, glossy; abdomen saffron-coloured; wings embrowned; ovipositor scarcely shorter than the body.

Length of the body without the ovipositor 3 lines.

A single specimen taken in Lat. 65°.

DESCRIPTION.

Body very black, glossy. Head subglobose, with the segment of a circle taken out behind; eyes between oval and round; antennæ as long as the trunk; trunk oblong, widest between the wings; scutellum rather large, rounded at the apex; metathorax obsoletely transversely wrinkled, sloping towards the abdomen: posterior legs rather robust: wings embrowned, middle areolets four, viz. 3 and 1, all quadrangular; stigma very large: abdomen lanceolate-ovate, as long as the trunk, saffron coloured, paler towards the apex; the three first segments are emarginate, and marked with two longitudinal faint furrows, the first pair being curvilinear: ovipositor longer than the body, borer red.

IV. ACULEATA. Lat

i. HETEROGYNA. Lat.

a. PHILOPONA. Kirb.

Family FORMICIDÆ. *Formicidans.*I consider the *Heterogyna* of Latreille as consisting of two races.

1. The *Philopona* containing all those genera, that constitute Linné's genus *Formica*, distinguished by their admirable industry, their wonderful economy, and the nests they construct.

2. The *Misopona* consisting of Linné's genus *Mutilla*, affording no such examples.

CLV. Genus FORMICA. Linn.

(362) 1. * FORMICA SEMIPUNCTATA. *Semipunctured Formica.*

F. (semipunctata) nigra, glabra; abdome pubescente, punctato; segmentis apice membranaceis rufescensibus, intermediis basi levibus.

Semipunctured Formica, black, naked; abdomen downy, punctured; segments membranous at the apex and reddish; the intermediate ones impunctured at the base.

Length of the body $7\frac{3}{4}$ lines.

Several taken in the Journey from New York to Cumberland-house.

DESCRIPTION.

Body black, glossy. Head something wider than the trunk, subtriangular: antennæ piceous with the scape black; wings cast in all the specimens;⁹ scale vertical between the trunk and abdomen, sloping to a thin edge upwards, where it is very slightly emarginate: abdomen oblong, subcylindrical, minutely punctured with the punctures piliforous; hairs decumbent with those of the margin of the segments and the anus, longer; margin of both abdominal and ventral segments membranous, membrane reddish; base of the three intermediate segments not punctured.

This species a good deal resembles the *Formica herculanea* of Linné (*F. ligniperda* Latr.) but it is proportionably more narrow, and entirely black save the legs and upper portion of the antennæ. I at first took it for a variety of *F. pubescens* of Latreille,¹ but in his description of that species, he makes no mention of the punctures of the abdomen, nor of the rufescens membranous margin of the abdominal segments, circumstances also which distinguish it from *F. pennsylvanica* of De Geer, and which, from the figure of that author, is evidently a much smaller insect.²

(363) 2. FORMICA FUSCA. (Linné.) *Brown Formica.*

Formica fusca. Linn. *Syst. Nat.* ii, 963, 4.; *Fn. Suec.* 1722. *Fab. Ent. Syst.* ii, 352, 11; *Syst. Piez.* 399, 13. De Geer *Ins.* ii, 1082, 3, t. xiii, f. 12. *Lat. Fourmis.* 159, 35, t. vi, f. 32; *N. Dict. D'H. Nat.* xii. Article *Fourmis. Crust. Arachn. et Ins.* ii, 312. Geoff. *Ins.* ii, 428, 5. De Geer *Ins.* ii, 1050, 1082, 3, t. xlvi, f. 12. Müll. *Fn. Frid.* 657; *Linn. Nat.* v, 913. Oliv. *Encycl. vi,* 433. Schrank. *Enum.* 833. Vill. *Ent.* iii, 334, 3. Berk. *Syn.* i, 159. Ced. *Fn. Ingr.* 557. Walck. *Fn. Paris.* ii, 162, 7. Stew. *Elem.* ii, 248. Jur. *Hymenopt.* 272. Kirb. and Sp. *Introd. to Ent.* ii, 62. Lam. *An. sans Vertèbr.* iv, 9, 5. Steph. *Cat.* i, 357, 4846, 8.

Formica media nigro colore splendens Rai. *Hist. Ins.* 69.

The small Black Ant. Gould. *Ants,* 2, 3.

Formica flavipes. Fourc. *Ent. Par.* ii, 52.

— libera. Scop. *Carn.* 835?

Fournis noir cendrée. Hub. *Fourm.* 159, 35, t. vi, f. 32, a.

Length of the body $1\frac{1}{4}$ line.

One specimen taken in Lat. 65° .

⁹ *Introd. to Ent.* i, 370.

¹ *Hist. Nat. de Fourmis.* 96, t. i, f. 2, A, B.

² De Geer, *Ins.* iii, 603, 4, t. xxxi, f. 9, 10.

DESCRIPTION.

♀

Body black, but not intensely, glossy, subcinereous from down. Head triangular, large, much wider than the trunk; antennæ with the scape, the three following joints, and the terminal one, rufous, the other joints are darker: trunk oblong, compressed, anteriorly elevated and wider; the prothorax with the scutellum forming a rhomboid; scutellum large, trapezoidal, subrufous; scale subtriangular, subemarginate; legs rufous; thighs embrowned; abdomen subglobose, more hairy than the rest of the body, especially towards the anus.

ii. LESTICA.

a. DIPLOPTERYGA.³Family VESPIDÆ. *Vespidans.*

CLVI. Genus VESPA. Linn.

(364)

I. VESPA VULGARIS. Common *Vespa*.

Vespa vulgaris. Linn. *Syst. Nat.* ii, 914, 4; *Fn. Suec.* 1671. *Fab. Ent. Syst.* ii, 256, 10; *Syst. Piez.* 255, 9. *Rai. Hist. Ins.* 250. *Scop. Carn.* 825. *Geoff. Ins.* ii, 360, 2. *Müll. Linn. Nat.* v, 880. *Frisch. Ins.* 9, t. xii, f. 2. *Schäff. Elem. t. cxxx, Icon. t. xxxv, f. 4.* *De Geer Ins.* ii, 766, 2, t. xxvi, f. 5—7. *H—s. Expos.* 128, t. xxxvii, f. 5. *Amo. Ins. venim* 251, t. ii, f. 13. *Schrank. Enum.* 787. *Vill. Ent.* iii, 263, 2. *Christ. Hymenopt.* 236, t. xxii, f. 2. *Don. Brit. Ins.* vii, t. cxxvi. *Berk. Syn.* i, 158. *Ced. Fn. Ingr.* 521. *Walck. Fn. Paris.* ii, 91, 4. *Stew. Elem.* ii, 238. *Bingl. An. Bi.* iii, 341. *Panz. Fn. Germ.* xl ix, t. 19. *Shaw. Gen. Zool.* vi, 285, t. xc v. *Jur. Hymenopt.* 168. *Lat. N. D. D'H. N.* xiv, 8; *Crust. Arachn. et Ins.* ii, 340. *Lam. An. sans Vertèbr.* iv, 88, 2. *Sam. Compend.* 280, 2. *Kirb. and Sp. Introd. to Ent.* ii, 106. *Steph. Cat.* i, 374, 5029, 2. *Ramd. Verdaung Ins.* 132, 1, t. xii.

Vespa. Mouff. *Ins.* 45.— major. Schwenck. *Theriotr.* 561.— flava major. Merr. *Pinax.* 196.

Aristot. *Hist. Anim.* l, ix, c. 41. Plin. *Hist. Nat.* l, xi, c. 21. Swamm. *Bibl. Nat.* t. xxvi, f. 8. Reaum. *Ins.* vi, t. xiv, f. 1—7.

Length of the body 6½ lines.

A single specimen taken in Lat. 65°.

³ Latreille names this section *Diploptera*, but the termination *ptera* being consecrated to the *Orders* of insects, I have changed the term for another of the same meaning.