

DIPTERA FROM THE PRIBILOF ISLANDS, ALASKA

BY

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A few Diptera have been recorded from the Pribilof Islands in past years, but heretofore no extensive collection has formed the basis of a report. Dr. G. Dallas Hanna and Mr. A. G. Whitney made a collection a few years ago and reports were prepared by Mr. J. R. Malloch and Dr. C. P. Alexander on the Diptera in general and the Tipulidæ, respectively. The following list is based solely upon the considerable series secured by Dr. Hanna in 1920. The Tipulidæ were determined by Dr. C. P. Alexander; the Anthomyiidæ, Chironomidæ and some of the Scatophagidæ by Mr. J. R. Malloch; and one species of Dolichopodidæ by Mr. M. C. Van Duzee. Their reports appear as sections of the present series.

Owing to the cold, foggy, summer climate of the Pribilof Islands, one would not expect to find many species of flies, especially as the islands are about 200 miles from the mainland; but there is a considerable number and some of them are said to occur in almost incredible abundance. The large number of decomposing carcasses of fur-seals and the kelp beds along the beaches attract many scavengers, such as certain of the Muscidæ, Scatophagidæ and Anthomyiidæ. This dampness of the climate also makes the preservation of dry specimens somewhat difficult.

CHIRONOMIDÆ

The few species collected were examined by Mr. Malloch. All of the specimens were in rather poor condition for study.

MYCETOPHILIDÆ

1. *Boletina obesula* Johanns.

One female, St. Paul Island, June 21. The type is a female, taken at the head of the Tsirku River, Alaska.

2. *Boletina* sp.

One male of an undescribed species, St. Paul Island, June 21. Too poorly preserved for description.

3. *Neosciara* sp.

Near *tridentata* Rubs. One female in rather poor condition, so that its identity is not certain, St. Paul Island, June 21.

DOLICHOPODIDÆ

4. *Hydrophorus fumipennis* Van Duzee

For description see page 167 of preceding paper.

5. *Dolichopus rupestris* Halid.

St. Paul Island, August 10. Previously described from St. Paul Island and from Kukak Bay and Popof Island, Alaska.

EMPIDÆ

6. *Empis* sp.

One male of a species probably undescribed, St. George Island, June 30. In poor condition.

7. *Rhamphomyia* sp.

One female of a species very close to *conservatica* Malloch, recently described from the Yukon and Northwest Territory. St. Paul Island, August 10.

SYRPHIDÆ

8. *Pterallastes borealis* Cole, new species, figures 1, 1a

Female: Length 13.5 mm. Very near *P. perfidiosus* Hunter. Antennæ black, arista brown and bare, third joint about as broad as long (fig. 1a). Middle of face and triangle in front of cheeks shining black (fig. 1), otherwise yellowish pollinose and pilose, with yellowish ground color under the pollen. Vertex black; frons yellowish pollinose, with erect black pile. Occiput yellowish gray with yellow pile and a few black hairs above eye margin. Proboscis black.

Mesonotum opaque black, with yellowish pollen on lateral margins and two faint yellow longitudinal stripes, widely separated and narrow; pile rather dark yellow. Narrow base of

scutellum black, the rest translucent yellow, rather densely yellow pilose. Pleura semishining black, with black pile. Halteres small and yellowish, the stigmata below halteres with short, dense, fur-like, bright yellow pile.

First abdominal segment semishining black, second with broad yellow lateral margin, the yellow portion triangular in shape and reaching one-third distance across abdomen; third segment with small round yellow spot on anterior corners; remainder of abdomen black, the posterior portion of 2 to 5 shining, the basal portion opaque; a pair of linear, oblique, yellow pollinose marks on dorsum of third and fourth segments. Pile of abdomen largely yellow, black on posterior margins of third, fourth and fifth segments. Venter semishining black, with sparse whitish yellow pile. Legs black, extreme tips of femora and bases of tibiæ; pile of front femora and most of pile of middle and hind femora, black; some yellowish pile; hind tibia arcuate; hind femora noticeably thickened and with black bristles below, short and dense on outer third; short pile below on tarsi golden yellow. Wings hyaline and about as figured for *P. perfidiosus*; anterior cross-vein slightly beyond middle of cell 1st A.

Male: Length 11.5 mm. Very near the female in appearance. Eyes widely separated, frons almost twice as wide as ocellar tubercle; vertex noticeably convex, a depression between it and antennal protuberance. Abdomen lacks oblique yellowish pollinose marks on third and fourth segments. Hypopygium quite large, blackish, with short yellow pile.

Holotype, female, No. 808, and *allotype*, male, No. 809, Mus. Calif. Acad. Sci.; collected by G. Dallas Hanna, August 20, 1920.

Type locality, St. Paul Island, Alaska.

9. *Syrphus contumax* O. S.

St. George Island, June 30. This species has a wide northern range.

TACHINIDÆ

10. *Didyma pullata* v. d. Wulp.

St. Paul Island, July 21 and August 10. The type was described from the high mountains in Guerrero, Mexico. Coquillett determined a specimen from Farragut Bay, Alaska, as this species.

MUSCIDÆ

11. *Cynomyia hirta* Hough.

St. Paul Island, July 12 and August 10; St. George Island, July 1. Originally described from St. Paul Island. Coquillett reported the species from Alaska as *mortisequa* Kirby. It is much less numerous than the species given below.

12. *Calliphora vomitaria* Linn.

St. Paul Island, August 10 and 16; St. George Island, July 1. Apparently very common.

ANTHOMYIIDÆ

All of these flies, except the genus *Fucellia*, were sent to Mr. J. R. Malloch for examination and are considered separately (p. 178). Aldrich has worked up the genus *Fucellia* so that the species are easily determined.

13. *Fucellia antennata* Stein.

A common species on St. Paul Island, August 10 to 25.

14. *Fucellia fucorum* Fall.

The commonest species, taken in large numbers from June 21 to August 25.

15. *Fucellia ariciiformis* Holmgr.

A series taken on St. Paul Island, August 10.

16. *Fucellia pictipennis* Beck

Three specimens taken on St. Paul Island, June 21 and August 25.

SCATOPHAGIDÆ

17. *Scatophaga crinita* Coq.

St. Paul Island, August 10; St. George Island, July 1, a large series. Described from Bering Island.

18. *Scatophaga islandica* Beck

St. Paul Island, June 21 and August 10. Described from Iceland and Labrador; reported from Alaska and Bering Island.

19. *Scatophaga dasythrix* Beck

St. Paul Island, June 20; St. George Island, June 30. Described from Bering Straits; reported from Bering Island, by Coquillett.

20. *Scatophaga furcata* Say

St. Paul Island, June 21 to August 10; St. George Island, June 30. Very common.

21. *Scatophaga rubicunda* Mall.

St. George Island, July 1. The description by Malloch is in press, the name having been given in a preliminary paper. Described from Northwest Territory and Pribilof Islands.

HELOMYZIDÆ

22. *Leria crassipes* Loew.

St. Paul Island, July 4 and August 10. Described from Germany and reported by Aldrich from Ungava Bay, Hudson Bay Territory.

23. *Leria fraterna* Loew.

St. Paul Island, June 21; St. George Island, June 30. Originally described from Alaska.

24. *Leria* sp.

One female from St. Paul Island, June 10; near *iners* Meigen, of which only the male has been described.

BORBORIDÆ

Two species were taken, one a *Copromyza*, the other a *Leptocera*, but the specimens are in poor condition for identification.

PHYCODROMIDÆ

25. *Coelopa frigida* Fall.

St. George Island, July 19; St. Paul Island, July 4 and August 10. Very common.

26. *Coelopa parvula* Halid.*(Nitidula* Zett.)

St. Paul Island, June 8 and 21. An European species, reported from Kodiak, Alaska, by Coquillett. Less common than *C. frigida*.

SCIOMYZIDÆ

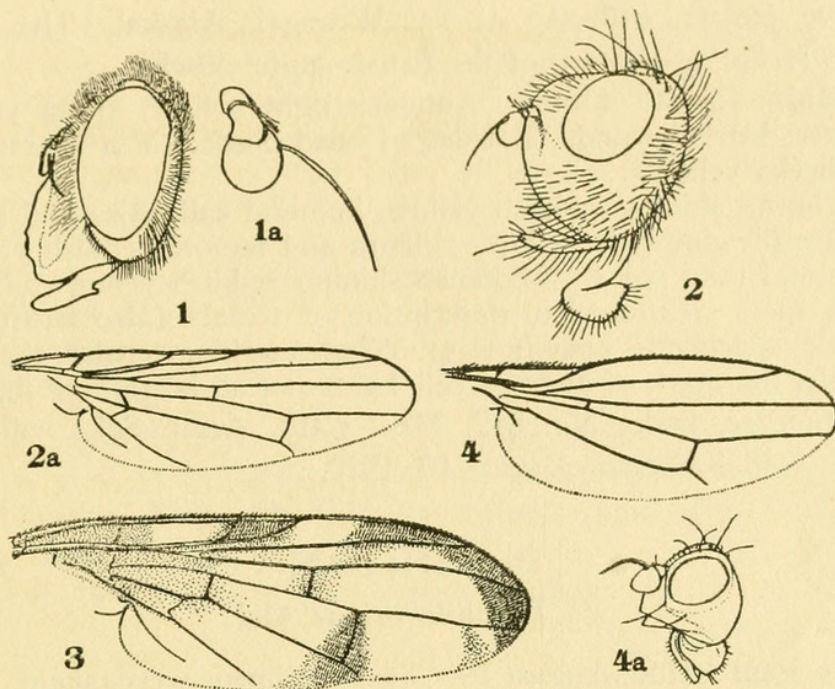
27. *Dryomyza hannai* Cole, new species

Male: Length 5 to 7 mm. Ground color of head largely yellowish, of rest of body largely black. First two joints of antennæ reddish; third blackish brown, arista black and very short pubescent, the joint itself longer than first two combined (fig. 2); first two joints black pilose, black bristles above on second. Face and cheeks yellow, with yellow pollen, the face retreating, the epistoma projecting. Palpi yellow, with black pile. Cheek slightly broader than eye, with black pile, longer near the oral margin, but no pile on the oral margin. Frons yellowish below and in the middle, the sides and vertex reddish brown; lower half of frons with short black pile; three fronto-orbital bristles; 2 large proclinate ocellars; post vertical bristles almost as long as ocellars. Occiput blackish in ground color, bare of pile in the middle, but with blackish pile on sides.

Thorax black, largely gray pollinose, mesonotum in median portion brownish; pile and bristles of mesonotum black; dorso-central bristles more or less distinct and about 9 in a row. Humeral and propleural bristles quite long. Pleura dense gray pollinose; sternopleura densely black pilose, all rest bare. Scutellum triangular, gray pollinose in middle, sides above brown; two long apical bristles and two bristles on side near base. Halteres yellow.

Abdomen blackish or blackish brown in ground color, gray pollinose, densely black pilose; pile of first segment short, on the rest of the abdomen, long. Genitalia of medium size, long black pilose. Legs near a honey-yellow, apical half or more of femora darkened; legs long black pilose, even to second joint of tarsi; spurs of mid-tibiæ strong and black, three quite long and four or more shorter ones; one large and one small spur on hind tibiæ. Wings gray hyaline, stigma and base of wing yellow; yellow color along radial veins; no clouding on cross-veins; first vein bare; cell 1stA scarcely longer than cell 2 M; R_{4+5} ending in wing tip parallel with M; anal cross-vein reflexed, (fig. 2a).

Female: Length 5 mm. Very nearly like male, slightly paler in coloration and with very much shorter pile. Front and hind tibiæ with a distinct preapical bristle. Upper margin of



- 1, 1a. *Pterallastes borealis* Cole, new species.
 2, 2a. *Dryomyza hannai* Cole, new species.
 3. *Acidia uncinata* Coquillett.
 4, 4a. *Parydra metallica* Cole, new species.

sternopleura with 4 bristles, quite distinct from the surrounding pile.

Several specimens were taken with the types, most of them males. The shape of the head is not exactly typical of *Dryomyza*, and there are some other characters which make its position in that genus a little doubtful.

This species is named for Dr. G. Dallas Hanna in recognition of his interest in the insect fauna of the Pribilof Islands.

Holotype, male, No. 810, and *allotype*, female, No. 811, Mus. Calif. Acad. Sci.; collected by G. Dallas Hanna, August 20, 1920.

Type locality, St. Paul Island, Alaska.

TRYPETIDÆ

28. *Acidia uncinata* Coq.

Several specimens of both sexes were taken on St. Paul Island, August 10 and 12. Coquillett described the species from a

unique female, collected at Ft. Wrangel, Alaska. The male answers the description of the female quite closely.

Male: Length 4 mm. Antennæ light yellow, arista yellow at base, black beyond. Bristles of head black; short sparse pile of cheeks yellow.

Thorax shining reddish yellow, humeral callosities and stripe at base of wing pale yellow. Pleura and femora reddish yellow, tibiæ and tarsi paler. Abdomen shining reddish yellow, without black spots mentioned in description of female (also lacking in female specimens examined). Wing markings paler than in female, the mark at apex of cell 1st A not so large (see fig. 3).

Allotype, male, No. 812, Mus. Calif. Acad. Sci.; collected by G. Dallas Hanna, August 10, 1920.

PIOPHILIDÆ

29. *Piophila oriens* Mel.

St. Paul Island, August 10. Two specimens were taken. The species was described from New York and Massachusetts.

EPHYDRIDÆ

30. *Scatella quadrisetosa* Beck

St. Paul Island, June 21 and August 10. A large series of specimens seem to answer the description of this form, which was originally taken in Norway.

31. *Parydra metallica* Cole, new species

Male: Length 3 mm. Largely metallic bluish black or bluish green. Antennæ black, third joint very large, the arista black, long pubescent to tip (fig. 4a). One large bristle on cheek near front corner of eye, a smaller one back of it and under eye. Lower half of face almost perpendicular, slanting from middle back to antennal base, blackish, metallic; cheeks thinly blackish brown pollinose; frons and vertex blackish with metallic olive green reflections; two large ocellar, two fronto-orbital, two vertical bristles; face just below antennæ with pollen yellowish in certain lights; cheeks fairly broad (fig. 4a).

Mesonotum metallic blackish green, with a faint suggestion of purple vittæ; bristles short, sparse and black; one pair of long prescutellar bristles; about 12 small dorsocentral bristles, about 12 acrostichal. Scutellum colored as thorax, dorsum flat, with four marginal bristles, no conical warts. Pleura blackish

pollinose, the metallic color when apparent more coppery than mesonotum. Knob of halteres pale brown, the stem blackish.

Abdomen metallic greenish, with coppery reflections, semi-shining but finely tessellate; pile short and black. Femora metallic greenish black, rest of legs black, all of pile black. Wings distinctly infuscated, more strongly at base and along anterior border, veins black, cross-veins not clouded; R_{2+3} without appendiculate vein; M_{2+3} not reaching margin of wing; R_{4+5} and M_1 parallel. (Fig. 4.)

This species would run to *cognata* Loew. in Becker's table of species and to *breviceps* or *limpidipennis* in the table given by Jones (Univ. Cal., Tech. Bull., vol. I, p. 190). It differs quite distinctly from these species in several important characters.

Holotype, male, No 813, Mus. Calif, Acad. Sci.; collected by G. Dallas Hanna, June 28, 1920.

Type locality, St. George Island, Alaska.



1921. "Diptera from the Pribilof Islands, Alaska." *Proceedings of the California Academy of Sciences*, 4th series 11, 169–177.

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