

## An Annotated List of the Ants of Maine (Hymenoptera: Formicidae).

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Concerning the extent of Maine's formicifauna, Dr. W. M. Wheeler<sup>1</sup> states: "I believe that there can be hardly more than 35 or 40 species, subspecies and varieties in the whole State." In this paper 54 forms are listed for Maine. Only those forms which have been specifically determined are included. Approximately 13 species, subspecies, and varieties not fully determined have been omitted. It would seem that ultimately more forms will be added to this list, in that the collecting to date has not been intensive throughout the State. Of the 54 forms listed, the following have been taken for the first time: *Formica vetula* Wheeler and *F. rubicunda* Emery.

The annotations while few and brief have been made only on forms collected by the writer. The works of W. M. Wheeler, C. W. Johnson, and William Procter have been used freely. Local names followed by Wheeler refer to the Casco Bay Region, while those followed by Johnson, Procter, or Brower refer to the Mt. Desert Region. From these works, further annotations on species listed herein can be obtained together with information on the climate and geography of Maine.

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### Subfamily PONERINAE.

1. *PONERA COARCTATA* subsp. *PENNSYLVANICA* Buckley. Casco Bay Region (Wheeler); Bar Harbor, Tremont (A. E. Brower); Oakland (D. S. Fink); Orono (G. W. Simpson). Enfield (A. W. Berrie); Old Town, Orono (Wing).

Many small colonies under stones along edge of clearings near Old Town.

<sup>1</sup>The Ants of Casco Bay, Maine, with Observations on Two Races of *Formica sanguinea* Latreille. Bull. Amer. Mus. Nat. Hist. 24, Art. 33, 1908, p. 619.

## Subfamily MYRMICINAE.

2. *MYRMICA BREVINODIS* Emery. Casco Bay Region (Wheeler); Hodgdon Brook, Station F181 (Procter); Enfield (A. W. Berrie); Presque Isle, Lamoine (Wing).

Forming medium-sized colonies under stones and bits of wood in open places.

3. *M. BREVINODIS* subsp. *SULCINODOIDES* Emery. "Maine" (Emery); Ogunquit (Pratt).

4. *M. LOBICORNIS* subsp. *FRACTICORNIS* Emery. Lower Goose Island, Sebascodegan Island (Wheeler); S. W. Harbor, Green Mt., Long Pond (Johnson, Procter); Station F 173, Eden-Town Hill Road (Procter); Presque Isle, Old Town (Wing).

5. *M. SABULETI* subsp. *AMERICANA* Weber (M. S.) Mt. Desert (Hagen, McAtee); Old Town (Wing).

6. *M. SCABRINODIS* SCHENCKI var. *EMERYANA* Forel. "Maine" (Emery); S. W. Harbor, Witch Hole Pond (Johnson, Procter); Robinson Mt. (Procter); Orono (I. H. Blake); Ash Point, Old Town (Wing).

7. *STENAMMA BREVICORNE* (Mayr). Dikes Peak (A. E. Brower); Ash Point, Presque Isle (Wing).

Forming small colonies under moss-covered bark of rotted stumps in coniferous growth near Presque Isle.

8. *S. BREVICORNE* DIECKI var. *IMPRESSUM* Emery. Orono (I. H. Blake).

9. *APHAENOGASTER FULVA* AQUIA var. *PICEA* Emery. South Harpswell, Sebascodegan Island (Wheeler); Old Town (Wing).

One colony nesting in rotted stump in moist woods.

10. *CREMATOGASTER LINEOLATA* (Say). South Harpswell, Ragged Island (Wheeler); Robinson Mt., Cadillac Cliffs, Salisbury Cove (Johnson); Eden (Procter); Old Town (Wing).

11. *C. LINEOLATA* var. *CERASI* (Fitch). "Maine" (Emery).

12. *LEPTOTHORAX CURVISPINOSUS* Mayr. South Harpswell (Wheeler); Paris (Frost).

13. *L. CURVISPINOSUS* subsp. *AMBIGUUS* Emery. Mt. Desert (McAtee).

14. *L. ACERVORUM* subsp. *CANADENSIS* Prov. Stover's Point, near South Harpswell, Ragged Island (Wheeler); S. W. Harbor (Johnson, Procter); Paris (Frost); Orono (Severin, Wing); Ash Point, Old Town, Presque Isle (Wing).

15. *L. EMERSONI* Wheeler. Stover's Point, near South Harpswell (Wheeler); Lamoine (Wing).

## Subfamily DOLICHODERINAE.

16. *DOLICHODERUS TASCHEBERGI* Mayr. Robinson Mt. (Procter).

17. *D. TASCHEBERGI* var. *GAGATES* Wheeler. South Harpswell, Sebascodegan Island (Wheeler).

18. *D. PLAGIATUS* Mayr. Section 26 (Procter); Ash Point, Old Town (Wing).

One colony nesting under stone in blueberry field at Ash Point.

19. *D. PLAGIATUS* var. *INORNATUS* Wheeler. S. W. Harbor (Johnson); Break Neck Pond (Procter).

20. *D. PLAGIATUS* subsp. *PUSTULATUS* Mayr. South Harpswell, Sebascodegan Island (Wheeler).

21. *TAPINOMA SESSILE* (Say). Prince's Point, Lower Goose Island (Wheeler); S. W. Harbor (Johnson Procter); Station F173 (Procter); Ash Point, Old Town, Orono, Presque Isle (Wing).

## Subfamily FORMICINAE.

22. *BRACHYMYRMEX HEERI* subsp. *DEPILIS* Emery. South Harpswell, Lower Goose Island, Prince's Point (Wheeler); Orono (I. M. Burgess, Wing); Old Town (Wing).

23. *CAMPONOTUS HERCULEANUS* (L.). Harpswell Neck, Lower Goose Island, Prince's Point, Sebascodegan Island (Wheeler).

24. *C. HERCULEANUS* var. *WYMPERI* Forel. South Harpswell (Wheeler); Bar Harbor, Narrows (Johnson, Procter); Section 15 (Procter); Reeds Island, Penobscot Bay (A. C. Burrill); Heald Pond, near Jackman (F. A. Jones); Orono (J. F. Whitney); Ash Point, Lamoine, Presque Isle (Wing).

25. *C. HERCULEANUS* subsp. *PENNSYLVANICUS* (Degeer). Bar Harbor (Johnson); Mt. Desert Region (Procter); Mt. Katahdin (Hamlin, I. H. Blake); Bethel (Mus. Comp. Zoöl, I. H. Blake); Orono, Presque Isle (Wing).

26. *C. HERCULEANUS* *LIGNIPERDA* var. *NOVAEBORACENSIS* (Fitch). Harpswell Neck, Lower Goose Island, Prince's Point, Sebascodegan Island, Ragged Island, Haskell Island (Wheeler); Mt. Desert Region (Johnson, Procter); West Beach (Mus. Comp. Zoöl.); Lincolnville (Heald); Orono (C. O. Dirks, I. H. Blake, Wing); Ash Point, Old Town, Presque Isle (Wing).

27. *C. HERCULEANUS* *LIGNIPERDA* var. *RUBENS* Wheeler. Norway (S. J. Smith); Bethel (A. M. Edwards).

28. *C. CARYAE* (Fitch). Robinson Mt. (Procter); Orono (Wing).

A single stray worker taken.

29. *LASIVS NIGER* var. *SITKAËNSIS* Pergande. Long Pond, Bar Harbor (Johnson, Procter); Corfield (Procter); Penobscot Bay (A. C. Burrill); Presque Isle (Wing).

Nesting at base of rotted stump in moist woods.

30. *L. NIGER* var. *NEONIGER* Emery. South Harpswell, Ram Island, Haskell Island, Ragged Island, Lower Goose Island, Sebascodegan Island (Wheeler); Matinicus Island (U. S. Biol. Surv.); Norway (S. J. Smith); Bethel (Mus. Comp. Zoöl.); Ash Point, Lamoine, Old Town, Orono, Presque Isle (Wing).

31. *L. NIGER* var. *AMERICANUS* Emery. Casco Bay Region (Wheeler); Mt. Desert (McAtee); Stations F150 and F173 (Procter); Bridgeport (Miss Edmonds); Oakland (D. S. Fink); Enfield (A. W. Berrie); Ash Point, Old Town Presque Isle (Wing).

32. *L. BREVICORNIS* Emery. Northern portions of Casco Bay, Haskell Island (Wheeler).

33. *L. UMBRATUS MIXTUS* var. *APHIDICOLA* (Walsh). "Maine" (Emery); S. W. Harbor, Green Mt. (Johnson, Procter); Pretty Marsh, Bubble Pond (Procter); Elms (Deane); Orono (I. H. Blake).

34. *L. UMBRATUS* subsp. *MINUTUS* Emery. "Maine" (Emery).

35. *L. UMBRATUS* subsp. *SUBUMBRATUS* Viereck. Bar Harbor (Johnson); Mt. Desert (Procter); Penobscot Bay (A. C. Burrill); Ash Point (Wing).

Three winged queens were captured on August 5, 1938 as they were dropping down from their nuptial flight in the late afternoon.

36. *L. (ACANTHOMYOPS) INTERJECTUS* Mayr. Corfield (Procter).

37. *L. (A.) CLAVIGER* Roger. Deer Brook, Station F218 (Procter).

38. *L. (A.) CLAVIGER* var. *SUBGLABER* Emery. Sebascodegan Island (Wheeler).

39. *FORMICA NEOGAGATES* Emery. South Harpswell, Prince's Point, Lower Goose Island, Sebascodegan Island (Wheeler); S. W. Harbor, Bar Harbor (Johnson, Procter); Oakland (D. S. Fink); Ash Point, Old Town, Orono (Wing).

40. *F. NEOGAGATES LASIODES* var. *VETULA* Wheeler. Aroostook No. 1, Ash Point, Old Town, Presque Isle (Wing).

This form makes rather small colonies under stones in open dry fields.

41. *F. PALLIDE-FULVA* subsp. *SCHAUFUSSI* Mayr. Ogunquit (Pratt).

42. *F. FUSCA* L. South Harpswell, Lower Goose Island (Wheeler); Mt. Desert Region (Johnson, Procter); Monmouth (Frost); Presque Isle (Wing).

43. *F. FUSCA* var. *SUBSERICEA* Say. South Harpswell, Sebascodogan Island, Lower Goose Island, Prince's Point (Wheeler); New Mill Pond, Jordan Pond, Seal Cove, (Procter).

44. *F. FUSCA* var. *ARGENTEA* Wheeler. South Harpswell, Sebascodogan Island, Lower Goose Island (Wheeler).

45. *F. FUSCA* var. *SUBAENESCENS* Emery. Lower Goose Island (Wheeler); Tremont (Procter); Norway (S. J. Smith); Bethel (Mus. Comp. Zoöl.); Orono (I. H. Blake); Aroostook No. 1, Ash Point, Old Town (Wing).

46. *F. FUSCA* var. *ALGIDA* Wheeler. Kittery Point (R. Thaxter); Robinson Mt. (Procter).

47. *F. FUSCA* var. *GLACIALIS* Wheeler. South Harpswell, Casco Bay Region generally (Wheeler); Presque Isle (Wing).

48. *F. TRUNCICOLA* subsp. *OBSCURIVENTRIS* Mayr. Doughty's Point on Sebascodogan Island (Wheeler); Mt. Desert (Procter).

49. *F. TRUNCICOLA* subsp. *INTEGRA* Nylander. Lower Goose Island, Prince's Point (Wheeler); Salisbury Cove (Johnson); Eden, Corfield, Bar Harbor (Procter); Monmouth (Frost).

50. *F. EXSECTOIDES* Forel. South Harpswell, Prince's Point (Wheeler); Ogunquit (Pratt); Pittston, Jefferson, Augusta, Vassalboro, China (H. B. Peirson); Old Town (H. B. Peirson, Wing).

Numerous colonies of this species occur near Old Town. All colonies seen by the writer were rather small.

51. *F. SANGUINEA* subsp. *ASERVA* Forel. Harpswell Neck, Ash Point, Prince's Point, Lower Goose Island, Sebascodogan Island (Wheeler); Bar Harbor, S. W. Harbor, Green Mt. (Johnson, Procter); Section 26 (Procter); Oakland (D. S. Fink); Enfield (A. W. Berrie); Aroostook No. 1, Ash Point, Old Town, Presque Isle (Wing).

52. *F. SANGUINEA* subsp. *RUBICUNDA* Emery. Aroostook No. 1 (Wing).

One populous colony under stone near woods.

53. *F. SANGUINEA* subsp. *SUBINTEGRA* Emery. Harpswell Neck, Ash Point, Prince's Point, Lower Goose Island, Sebascodogan Island (Wheeler).

54. *F. SANGUINEA* subsp. *SUBNUDA* Emery. South Harpswell (Wheeler).