

THE VERNON L. KELLOGG MALLOPHAGA TYPE MATERIAL  
IN THE UNITED STATES NATIONAL MUSEUM

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Only in a few instances did Kellogg indicate the disposition of type material listed in his taxonomic papers. In 1896, he stated "Types of the new species described will be placed in the collections of this University (Stanford), in the collections of the California Academy of Sciences, and in those of the University of Kansas." The Kellogg type material in the Snow Entomological Museum of the University of Kansas was reported by the author in 1958. During a visit to San Francisco, California, during the summer of 1958, Dr. Edward S. Ross stated that all Kellogg type material deposited in that institution was destroyed during the earthquake of 1906. Even though Kellogg did not publish information to the effect that some of his type material was deposited in the USNM, more is in that collection than in the Snow Entomological Museum.

Kellogg did not designate a holotype or type, but considered all material examined as cotypes. In some instances, the series he examined contained material from several hosts and are known to contain more than one species of Mallophaga. During the last few years, several workers have selected as lectotype the specimen which Kellogg used in illustrating his descriptions; thereby doing much to clarify the status of these species. Much remains to be done before this task is completed.

In this paper, all specimens conspecific with the lectotype are accepted as syntypes. Specimens not conspecific with the lectotype are regarded as no longer being syntypes. If a lectotype has not been designated, all specimens listed by Kellogg are considered to still be syntypes. In some instances, cotype labels were placed on material not examined at the time of the description. This material is listed in subsequent publications, and is not accepted by the author as part of the type material.

In the last twenty years, I have examined most of the Kellogg type material, and have found that errors on his labels are not uncommon. The percentage found in the U. S. National Museum Collection is not excessive.

I am indebted to the staff of the U. S. National Museum for permission to study this material, and especially to C. F. W. Muesebeck for his assistance and suggestions.

**Colpocephalum osborni** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 521, pl. 71, figs. 2 and 3.

Type slide USNM 64940. Two male syntypes with label "Colpocephalum osborni Kellogg, From *Elanus glaucus*, Palo Alto, Cal., V. L. Kellogg, Stanford."

*Present status: Colpocephalum osborni* Kellogg, 1896.

**Docophorus atlanticus** Kellogg, 1914. *Sci. Bull. Brooklyn Inst.*, 2: 81, pl. 16, fig. 1.

Type slide USNM 42752. Five female syntypes with label "Stercorarius crepidatus, North Tropical Atlantic, Robert C. Murphy, Coll., S. Ga. Isl. Exped. 1912-13, RCM 1279". The male syntypes could not be located, so designation of a lectotype is postponed at this time.

*Present status*: A synonym of *Saemundssonina cephalus* (Denny, 1842).

**Docophorus atricolor** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 93, pl. 3, fig. 9.

One male and one female syntypes with label "Docophorus atricolor Kellogg, From Synthliborhampus antiquus, Monterey Bay, Cal., V. L. Kellogg, Stanford." The host could be *Gavia arctica pacifica*, see Emerson (1955). Lectotype, designated by Carriker (1957), is on slide 63a at Stanford University.

*Present status*: A synonym of *Craspedonirmus colymbinus* (Denny, 1842).

**Docophorus californiensis** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 483, pl. 66, fig. 6.

Two female syntypes with label "Docophorus californiensis Kell., From Melanerpes formicivorus bairdi, Palo Alto, Cal., V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957), is on slide 361a at Stanford University.

*Present status*: *Penenirmus auritus californiensis* (Kellogg, 1896).

**Docophorus calvus** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 79, pl. 3, fig. 1.

Type slide USNM 64968. One female syntype with label "Docophorus calvus Kellogg, From Uria troile californica, Bay of Monterey, V. L. Kellogg, Stanford." In the description, Kellogg listed only one female as the type series. This specimen is therefore considered the type.

*Present status*: *Saemundssonina calva* (Kellogg, 1896).

**Docophorus domesticus** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 475, pl. 65, fig. 4.

One male syntype with label "Docophorus domesticus Kellogg, From Progne subis, Lawrence, Kansas, V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957), is on slide 319a at Stanford University.

*Present status*: *Philopterus excisus domesticus* (Kellogg, 1896).

**Docophorus excisus major** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 490.

One female syntype with label "Docophorus excisus var. major Kellogg, From Petrochelidon lunifrons, Palo Alto, Cal., V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957), is on slide 372a at Sanford University.

*Present status*: *Philopterus excisus major* (Kellogg, 1896).

*Docophorus graviceps* Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 82, pl. 3, fig. 3.

One male and one female syntypes with label "Docophorus graviceps Kell., From Urinator pacificus, Bay of Monterey, Cal., V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957), is on slide 125b at Stanford University.

*Present status:* A synonym of *Craspedonirmus colymbinus* (Denny, 1842).

*Docophorus insolitus* Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 94, pl. 4, fig. 5.

Two female syntypes with label "Docophorus insolitus Kellogg, From Ptychoramphus aleuticus, Monterey Bay, Cal., V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957) is on slide 163c at Stanford University.

*Present status:* *Saemundssonina insolita* (Kellogg, 1896).

*Docophorus latifrons occidentalis* Kellogg, 1899. Occ. Pap. Calif. Acad. Sci., 6: 6, pl. 1, figs. 5 and 8.

One male and one female syntypes with label "Docophorus latifrons occidentalis Kellogg, Cocygus californicus occidentalis, Baja California, V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957) is on slide 428a at Stanford University.

*Present status:* A synonym of *Cuculoecus coccygii* (Osborn, 1896).

*Docophorus montereyi* Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 87, pl. 3, fig. 6.

One male and one female syntypes and one immature specimen with label "Docophorus montereyi Kellogg, From Synthliboramphus antiquus, Monterey Bay, Cal., V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957) is on slide 151b at Stanford University.

*Present status:* *Saemundssonina montereyi* (Kellogg, 1896).

*Docophorus occidentalis* Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 89, pl. 3, fig. 7.

Type slide USNM 64941. Two female syntypes with label "Docophorus occidentalis Kellogg, From Fulmarus glacialis pacificus, Bay of Monterey, Calif., V. L. Kellogg, Stanford University."

*Present status:* *Saemundssonina occidentalis* (Kellogg, 1896).

*Docophorus procax* Kellogg and Chapman, 1899. Occ. Pap. Calif. Acad. Sci., 6: 54, pl. 5, fig. 1.

Two female syntypes with label "Docophorus procax Kellogg and Chapman, From Cepphus columba, Bay of Monterey, Calif., V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957), is on slide 468a at Stanford University.

*Present status:* *Saemundssonina procax* (Kellogg and Chapman, 1899).

**Docophorus rufus** Kellogg, 1899. *Occ. Pap. Calif. Acad. Sci.*, 6: 7, pl. 1, figs. 6 and 9.

Type slide USNM 64942. One male and one female syntypes with label "Docophorus rufus Kellogg, From Myiarchus cinerascens nuttingi, Baja California, V. L. Kellogg, Stanford University."

*Present status: Philopterus rufus* Kellogg, 1899).

**Eurometopus murphyi** Kellogg, 1914. *Sci. Bull. Brooklyn Inst.*, 2: 87, pl. 16, figs. 4 and 5.

Type slide USNM 64969. Kellogg listed type material from *Ossigraga gigantea* (RCM 1383), *Diomedea melanophrys* (RCM 1406), and *Thalassogeron chlororhynchus* (RCM 1405). The male on slide labeled "Ossifraga gigantea, South Atlantic, Robert C. Murphy Coll., S. Ga. Isl. Exped. 1912-13, RCM 1383." is designated lectotype. Also on this slide are two female syntypes. The two females on a slide from *Thalassogeron chlororhynchus* (RCM 1405) and the two immature specimens on a slide from *Diomedea melanophrys* (RCM 1406) are not conspecific with the lectotype, and are no longer considered syntypes. By this action, *Docophoroides hunteri* Harrison, 1937 becomes a synonym.

*Present status: Docophoroides murphyi* (Kellogg, 1914).

**Eurymetopus pacificus** Kellogg, 1914. *Sci. Bull. Brooklyn Inst.*, 2: 87. *Nomen novum* for "Eurymetopus taurus" *sensu* Kellogg, 1896 (nec Nitzsch, 1866).

Type slide USNM 64970. One male syntype with label "Eurymetopus taurus Nitzsch, From Diomedea albatrus, Monterey Bay, Cal., V. L. Kellogg, Stanford." This slide also contains a specimen of *Saemundssonina* sp. One male syntype and one immature specimen with label "Nirmus giganticola Kellogg, From Diomedea albatrus, Monterey Bay, Cal., V. L. Kellogg, Stanford." This slide has obviously been mislabeled. I have examined other slides of this series, and none were relabeled by Kellogg following his action in 1914.

*Present status: Docophoroides pacificus* (Kellogg, 1914).

**Giebelia mirabilis** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 138, pl. 11, figs. 7 and 8.

Type slide USNM 64971. Two female syntypes with label "Giebelia mirabilis Kellogg, From Puffinus opisthomelas, Monterey Bay, Cal., V. L. Kellogg, Stanford."

*Present status: Trabeculus mirabilis* (Kellogg, 1896).

**Goniocotes creber** Kellogg, 1896. *Proc. Calif. Acad. Sci.*, 6: 510, pl. 69, fig. 3.

Type slide USNM 64972. Three female syntypes and one immature specimen with label "Goniodes creber Kellogg, From Phasianus nychthemerus, San Francisco Bird Store, V. L. Kellogg, Stanford." Such minor errors on slide labels by Kellogg are rather common.

*Present status: Probably a synonym of Goniocotes albidus* Giebel, 1874.

**Lipeurus celer** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 117, pl. 7, figs. 5 and 6.

Type slide USNM 64973. One male and one female syntypes with label "Lipeurus celer Kellogg, From Fulmarus glacialis, Monterey Bay, Cal., V. L. Kellogg, Stanford."

*Present status*: A synonym of *Perineus nigrolimbatus* (Giebel, 1874).

**Lipeurus diversus** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 123, pl. 8, figs. 3 and 4.

Type slide USNM 64974. One male syntype with label "Lipeurus diversus, From Puffinus opisthomelas, Monterey Bay, Cal., V. L. Kellogg, Stanford." Hopkins and Clay (1952) report this host is *Puffinus griseus*.

*Present status*: *Halipeurus diversus* (Kellogg, 1896).

**Lipeurus fuliginosus major** Kellogg and Chapman, 1899 (*nec* Piaget, 1880).

Oec. Pap. Calif. Acad. Sci., 6: 101, pl. 7, fig. 3.

One male and one female syntypes with label "Lipeurus fuliginosus major Kellogg, Puffinus opisthomelas, Pacific Grove, Calif., Oct. '96." These specimens were remounted by Ewing, and in doing so, he destroyed the original Kellogg labels. The lectotype, designated by Carriker (1957) is on slide 494 at Stanford University. *Lipeurus fuliginosus major* Kellogg and Chapman, 1899 is a homonym of *Lipeurus major* Piaget, 1880. R. L. Edwards has a paper in press in which the status of this form will be clarified.

**Lipeurus gracilicornis major** Kellogg, 1899 (*nec* Piaget, 1880). Oec. Pap. Calif.

Acad. Sci., 6: 30, pl. 3, fig. 3.

*Epifregata fregatiphagus* Eichler, 1943. Zool. Anz., 141: 59.

*Nomen novum* for *Lipeurus gracilicornis major* Kellogg, 1899.

One male and one female syntypes with label "Lipeurus gracilicornis P. var. major Kellogg, From Fregata aquila, Panama, V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957), is on slide 401a at Stanford University.

*Present status*: A synonym of *Pectinopygus fregatiphagus* (Eichler, 1943).

**Lipeurus limitatus** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 124, pl. 8, figs. 5 and 6.

Type slide USNM 64975. Two immature female syntypes with label "Lipeurus limitatus Kellogg, From Puffinus griseus, Bay of Monterey, Calif., V. L. Kellogg, Stanford University."

*Present status*: A synonym of *Halipeurus diversus* (Kellogg, 1896).

**Lipeurus macgregori** Kellogg, 1899. Oec. Pap. Calif. Acad. Sci., 6: 33, pl. 3, figs. 5 and 6.

Type slide USNM 64976. One male and one female syntypes with label "Lipeurus macgregori Kellogg, From Crotophaga sulcirostris,

Panama, V. L. Kellogg, Stanford University.

*Present status: Vernoniella macgregori* (Kellogg, 1899).

**Lipeurus macrocephalus** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 504, pl. 68, fig. 3.

Two male syntypes with label "Lipeurus macrocephalus Kell., From Chordeiles virginianus henryi, Palo Alto, Cal., V. L. Kellogg, Stanford." Lectotype, designated by Carriker (1957), is on slide 370a at Stanford University.

*Present status: Multicola macrocephalus* (Kellogg, 1896).

**Lipeurus protervus** Kellogg, 1899. Occ. Pap. Calif. Acad. Sci., 6: 31, pl. 3, fig. 4.

Two female syntypes and one immature specimen with label "Lipeurus protervus Kellogg, From Lagopus lagopus, Kodiak Island, Alaska, V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957), is on slide 447b at Stanford University.

*Present status: A synonym of Lagopoecus affinis* (Children, 1836).

**Menopon incertum** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 533, pl. 73, fig. 2.

One male and one female syntypes with label "Menopon incertum Kell., From Turdus ustulatus, Palo Alto, Cal., V. L. Kellogg, Stanford." Kellogg listed as type material specimens from *Turdus ustulatus* and *Spinus tristis*. The species of *Myrsidea* found on these two hosts are not conspecific. The correct host for this species cannot be determined until a lectotype can be designated from the syntypes at Stanford University.

**Menopon infrequens** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 161, pl. 15, fig. 5.

One female syntype and one immature specimen with label "Menopon infrequens Kell., From Larus glaucescens, Monterey Bay, Cal., V. L. Kellogg, Stanford."

*Present status: A synonym of Austromenopon transversum* (Denny, 1842).

**Mesopon numerosum** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 159, pl. 15, fig. 1.

Type slide USNM 64977. One male syntype and one immature specimen with label "Menopon numerosum Kell., From Fulmarus glacialis, Monterey Bay, Cal., V. L. Kellogg, Stanford." Two female syntypes with label "Lipeurus varius Kellogg, From Fulmarus glacialis, Monterey Bay, Cal., V. L. Kellogg, Stanford." The label on the latter mentioned slide is an obvious error which is not uncommon among Kellogg material.

*Present status: A synonym of Procellariphaga brevifimbriata* (Piaget, 1880). Dr. Clay (*in litt.*) informs me that she does not consider the genus *Procellariphaga* separable from *Austromenopon*.

**Menopon praecursor** Kellogg, 1899. Occ. Pap. Calif. Acad. Sci., 6:46, pl. 4, fig. 8.

Type slide USNM 64978. Two female syntypes with label "Menopon

praecursor Kellogg, From *Melanerpes uropygialis*, Baja California, V. L. Kellogg, Stanford Univ.'

*Present status: Menacanthus praecursor* (Kellogg, 1899).

**Menopon titan impar** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 165.

Type slide USNM 64979. One male syntype with label "Menopon titan Piaget var. impar Kellogg, From *Pelecanus erythrorhynchos*, Lawrence, Kansas, V. L. Kellogg, Stanford."

*Present status: A synonym of Piagetiella peralis* (Leidy, 1878).

**Menopon titan linearis** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 165, pl. 15, fig. 2.

Type slide USNM 64980. One male syntype and one immature specimen with label "Menopon titan Piaget var. linearis Kell., From *Pelecanus californicus*, Monterey Bay, Cal., V. L. Kellogg, Stanford."

*Present status: A synonym of Piagetiella bursaepelecani* (Perry, 1876).

**Menopon tridens insolens** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 166, pl. 15, figs. 3 and 4.

Type slide USNM 64981. Two female syntypes with label "Menopon tridens N. var. insolens Kellogg, From *Colymbus nigricollis californicus*, Bay of Monterey, Calif., V. L. Kellogg, Stanford University."

*Present status: Pseudomenopon insolens* (Kellogg, 1896).

**Menopon tridens pacificum** Kellogg, 1896. Proc. Calif. Acad. Sci., 6: 166.

Type slide USNM 64982. Two female syntypes with label "Menopon tridens Nitzsch var. pacificum Kell., From *Urinator pacificus*, Monterey Bay, Cal., V. L. Kellogg, Stanford."

The correct host is *Fulica americana*.

*Present status: Pseudomenopon pacificum* (Kellogg, 1896).

**Nirmus actophilus** Kellogg and Chapman, 1899. Occ. Pap. Calif. Acad. Sci., 6: 78, pl. 6, fig. 4.

One female syntype with label "Nirmus actophilus Kellogg and Chapman, From *Calidris arenaria*, Bay of Monterey, Calif., V. L. Kellogg, Stanford University." The slide also has a female *Quadriceps* sp. Lectotype, designated by Carriker (1957), is on slide 494 at Stanford University.

*Present status: Lunaceps holophaeus actophilus* (Kellogg and Chapman, 1899).

**Nirmus complexivus** Kellogg and Chapman, 1899. Occ. Pap. Calif. Acad. Sci., 6: 75, pl. 6, fig. 3.

One male and one female syntypes with label "Nirmus complexivus Kellogg and Chapman, From *Calidris arenaria*, Bay of Monterey, Calif., V. L. Kellogg, Stanford University." Lectotype, designated by

Carriker (1957), is on slide 472b at Stanford University.

*Present status: Carduceps zonarius complexivus* (Kellogg and Chapman, 1899).

*Nirmus fusco-marginatus americanus* Kellogg and Chapman, 1899. Occ. Pap. Calif. Acad. Sci., 6: 69, pl. 5, fig. 9.

Two female syntypes and one immature specimen with label "Nirmus fusco-marginatus var. americanus Kellogg and Chapman, From *Colymbus nigricollis californicus*, Bay of Monterey, Calif., V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957), is on slide 460a at Stanford University.

*Present status: Aquanirmus americans* (Kellogg and Chapman, 1899).

*Nirmus pacificus* Kellogg and Chapman, 1899. Occ. Pap. Calif. Acad. Sci., 6: 70, pl. 5, fig. 8.

One male and one female syntypes with label "Nirmus pacificus Kellogg and Chapman, From *Cepphus columba*, Bay of Monterey, Calif., V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957), is on slide 468b at Stanford University.

*Present status: Quadriceps pacificus* (Kellogg and Chapman, 1899).

*Nirmus peninsularis* Kellogg, 1899. Occ. Pap. Calif. Acad. Sci., 6: 21, pl. 2, fig. 9.

One male and one female syntypes with label "Nirmus peninsularis Kellogg, From *Phainopepla nitens*, Baja California, V. L. Kellogg, Stanford University." Lectotype, designated by Carriker (1957), is on slide 441a at Stanford University.

*Present status: Brüelia peninsularis* (Kellogg, 1899).

#### REFERENCES

- Carriker, M. A., 1957. Notes on some of the Vernon L. Kellogg types of Mallophaga. *Microentomology*, 22: 95-110.
- Emerson, K. C., 1955. A new Mallophaga from a Loon. *Ann. Mag. Nat. Hist.*, (12), 8: 718-720.
- , 1958. Catalogue of the types in the Snow Entomological Museum. Part II (Mallophaga). *Univ. Kansas Sci. Bull.*, 39: 507-518.
- Hopkins, G. H. E. and Theresa Clay, 1952. A check list of the genera and species of Mallophaga. London.
- Kellogg, V. L., 1896. New Mallophaga, I, with special reference to a collection made from maritime birds of the Bay of Monterey, California. *Proc. Calif. Acad. Sci.*, 6: 31-168.
- , 1896. New Mallophaga, II, from land birds, together with an account of the mallophagous mouth-parts. *Proc. Calif. Acad. Sci.*, 6: 431-552.
- , 1899. Mallophaga from birds of Panama, Baja California, and Alaska. *Occ. Papers Calif. Acad. Sci.*, 6: 3-52.
- , 1914. Mallophaga from birds of the South Atlantic. *Sci. Bull. Brooklyn Inst.*, 2: 80-89.
- Kellogg, V. L. and Bertha L. Chapman, 1899. Mallophaga from birds of California. *Occ. Papers Calif. Acad. Sci.*, 6: 53-143.