Peck, S. B. (2014). CDF Checklist of Galapagos Antlions and Lacewings - FCD Lista de especies de Hormigas león, crisopas Galápagos. *In*: Bungartz, F., Herrera, H., Jaramillo, P., Tirado, N., Jiménez-Uzcátegui, G., Ruiz, D., Guézou, A. & Ziemmeck, F. (eds.). Charles Darwin Foundation Galapagos Species Checklist - Lista de Especies de Galápagos de la Fundación Charles Darwin. Charles Darwin Foundation / Fundación Charles Darwin, Puerto Ayora, Galapagos: http://www.darwinfoundation.org/datazone/checklists/terrestrial-invertebrates/neuroptera/ Last updated: 28 Jan 2014

# CDF Checklist of Galapagos Antlions and Lacewings

Stewart B. Peck

Last updated: 28 Jan 2014

### Abstract

This Checklist of Galapagos Antlions and Lacewings includes a total of all 11 taxa reported from the Galapagos Islands.

For each name, detailed information is provided: its Galapagos distribution in islands groups or bioregions generated from the specimen records, comments about the taxonomy (especially synonyms), the origin (native and introduced), taxon status (accepted vs. rejected records) and relevant literature references.

## Introduction

This publication lists all species of Galapagos Antlions and Lacewings currently known.

**Antlions** and **Lacewings** are best characterized by their flattened and transparent wings which are filled with a net-like arrangement of veins.

The larvae are predators on other soil- or plant-dwelling insects. Sand-trap pits of antlion larvae are frequently seen in sheltered areas in fine, dry, loose soils of the arid zone of the islands.

Larvae of green and brown lacewings feed on aphids or other small insects on vegetation. Adults may be predators, or may feed on pollen and nectar. They are attracted to lights at night, sometimes in large numbers.

The species composition and distribution of these insects in the Galapagos are now rather well known.

#### Methods

This checklist of all known Galapagos Antlions and Lacewings is automatically generated using the online database of the Charles Darwin Foundation Galapagos Species Checklist.

All CDF Galapagos Species Checklists represent the synthesis of many different records: literature citations, data from previously unpublished reports (grey literature), specimen records of natural history collections located in Galapagos and all over the world. To the best of their knowledge authors of the individual checklists revised all available data. When new information becomes available, the taxonomy of a group changes or new species are discovered, the CDF online database and thus this publication becomes updated.

For many poorly known species groups the higher taxonomic classification still regularly changes according to how our knowledge about species being related changes. In many well known groups the phylogeny is somewhat stable, but to avoid confusion, in particular for groups where taxonomic changes are frequent, all checklists presented here are sorted alphabetical according to genus name and specific epithet. Please refer to the website for the currently accepted taxonomic hierarchy of each group.

Please be aware that the distribution presented here is automatically generated from specimen records and does not always accurately reflect the known distribution for all species.

For marine species, the distribution generally refers to the five main bioregions of the archipelago (Far Northern, Northern, Western, South Eastern and the Elisabeth Bay Bioregion). For the terrestrial species more than 120 islands, islets and small rocks have been aggregated into Islands Groups, thus, for example, the island group "Santa Cruz" includes smaller islands like Santa Fé, Plaza Norte, Plaza Sur, Baltra, Daphne Mayor, Daphne Minor, and others.

IUCN red-list assessments presented here may deviate from the global IUCN list for the following reasons:

- for well known species groups like vascular plants or vertebrates updates proposed to the IUCN are shown instead of the outdated, but currently accepted status;
- for poorly known species groups (e.g., lichenized fungi) a general assessment is currently not possible and the list presented here is a regional red-list list for Galapagos archipelago.

Numbers of the species included in this list are auto-generated. Adding up the number of species in each category will not always equal the total number indicated. Some species have insufficient data to be categorized while others (e.g., category eradicated) will not be included in the total.

## Results

Names of taxa included in this checklist: 11 (11 accepted). Origin of the taxa included: 1 questionable native, 5 endemic, 2 indigenous.

1. Ceraeochrysa cincta (Schneider, 1851)

Taxon status: Accepted name; taxon occurs in Galapagos.

Syn.: Ceraeochrysa wollebaeki

Origin: Native, Endemic.

Galapagos Distribution: Fernandina, Floreana, Isabela, Marchena, San Cristóbal, Santa Cruz. **References:** Baert, L.L. et al. (1992), Peck, S.B. et al. (2001).

2. Chrysoperla externa (Hagen, 1861)

Taxon status: Accepted name; taxon occurs in Galapagos.Origin: Introduced, Questionable Native.Galapagos Distribution: Fernandina, Floreana, Isabela, San Cristóbal, Santa Cruz.References: Peck, S.B. et al. (2001).

- Chrysoperla galapagoensis (Banks, 1924)
   Taxon status: Accepted name; taxon occurs in Galapagos.
   Origin: Native, Endemic.
   Galapagos Distribution: Española, Fernandina, Floreana, Genovesa, Isabela, Marchena, Pinzón, Santa Cruz, Santa Fé, Santiago, Wolf.
   References: Baert, L.L. et al. (1992), Peck, S.B. et al. (2001).
- 4. Chrysopodes nigricubitus Tauber & Tauber, 2010 Taxon status: Accepted name; taxon occurs in Galapagos. Origin: No Data.
  Galapagos Distribution: Santa Cruz.
  References: Tauber, C.A. et al. (2010).
- Chrysopodes nigripilosa (Banks, 1924)
   Taxon status: Accepted name; taxon occurs in Galapagos.

Origin: Native, Endemic.

Galapagos Distribution: Fernandina, Floreana, Isabela, Pinta, Santa Cruz, Santa Fé, Santiago. **References:** Peck, S.B. et al. (2001), Tauber, C.A. et al. (2010).

- 6. *Chrysopodes pecki* Tauber & Tauber, 2010 Taxon status: Accepted name; taxon occurs in Galapagos. Origin: No Data. Galapagos Distribution: Santa Cruz. References: Tauber, C.A. et al. (2010).
- 7. Galapagoleon darwini (Stange, 1969)
  Taxon status: Accepted name; taxon occurs in Galapagos.
  Syn.: Brachynemurus darwini, fide Peck (2001)
  Origin: Native, Endemic.
  Galapagos Distribution: Española, Fernandina, Floreana, Genovesa, Isabela, Marchena, Pinta, Pinzón, Santa Cruz, Santa Fé, Santiago, Wolf.
  References: Peck, S.B. et al. (2001), Stange, L.A. et al. (1969).
- 8. Megalomus darwini Banks, 1924

Taxon status: Accepted name; taxon occurs in Galapagos.
Origin: Native, Endemic.
Galapagos Distribution: Fernandina, Floreana, Isabela, Marchena, San Cristóbal, Santa Cruz, Santiago.
References: Baert, L.L. et al. (1992), Banks, N. et al. (1924), Klimaszewski, J. et al. (1987), Linsley, E.G. et al. (1966), Peck, S.B. et al. (2001).

9. Myrmeleon timidus Gerstäcker, [1888]

Taxon status: Accepted name; taxon occurs in Galapagos.
Syn.: Myrmeleon perpilosus Banks, 1924 fide Roskov et al. (2013)
Origin: Native, Indigenous.
Galapagos Distribution: Unknown.
References: Baert, L.L. et al. (1992), Banks, N. et al. (1924), Klimaszewski, J. et al. (1987), Linsley, E.G. et al. (1977), Linsley, E.G. et al. (1966), Parkin, P. et al. (1972), Peck, S.B. et al. (2001), Roskov Y. et al.

al. (1977), Linsley, E.G. et al. (1966), Parkin, P. et al. (1972), Peck, S.B. et al. (2001), Roskov Y. et al. (2013), Stange, L.A. et al. (1969).

10. Neosuarius nigripilosa (Banks, 1924)

Taxon status: Accepted name; taxon occurs in Galapagos.Origin: No Data.Galapagos Distribution: Santa Cruz.References: Baert, L.L. et al. (1992).

11. Sympherobius barberi Banks, 1903

Taxon status: Accepted name; taxon occurs in Galapagos.Origin: Native, Indigenous.Galapagos Distribution: Fernandina, Isabela, Santa Cruz, Santiago.References: Baert, L.L. et al. (1992), Klimaszewski, J. et al. (1987), Peck, S.B. et al. (2001).

#### Acknowledgements

We are grateful for the financial report received for this project. Please refer to the website (www.darwinfoundation.org/datazone/checklist/) for a detailed list of all our donors.

This checklist would not be possible without adjunct and collaborating scientists, and volunteers of the Charles Darwin Foundation. The following scientists and volunteers have contributed to the CDF Checklist of Galapagos Antlions and Lacewings: Sandra Abedrabbo, Léon L. Baert, Fabián Bersosa, Ruth Boada, Carolina Calderon, Charlotte Causton, Germania Estévez, Lilian Guzmán, John M. Heraty, Henri W. Herrera, Bernard Landry, María T. Lasso, Maria Piedad Lincango, E. G. Linsley, Yale Lubin, Alejandro Mieles, Renato Oquendo, Helmut W. Rogg, Lázaro Roque-Álbelo, Bradley J. Sinclair, Leslie Usinger.

## References

- 1. Baert, L.L., Desender, K. & Peck, S.B. (1992) *New Data on the Neuroptera of the Galápagos Islands, Ecuador*. Bull. Inst. R. Sci. Nat. Belg. Entomol. 62: 143-147.
- 2. Banks, N. (1924) Neuroptera from the Williams Galapagos Expedition. Zoologica 5(17): 177-180.
- Klimaszewski, J., Kevan, D.K.McE. & Peck, S.B. (1987) A review of the Neuroptera of the Galápagos Islands with a new record for Sympherobius barberi (Banks) (Hermerobiidae). Canadian Journal of Zoology 65(12): 3032-3040.
- Linsley, E.G., Usinger, R.L. (1966) *Insects of the Galápagos Islands*. Proceedings of the California Academy of Sciences Fourth Series 33(7): 113-196.
- Linsley, E.G. (1977) Insects of the Galápagos (Supplement). Occassional Papers of the Califoria Academy of Sciences 125: 1-50.
- 6. Parkin, P., Parkin D.T., Ewing, A.W. & Ford, H.A. (1972) A report on the arthropods collected by the Edinburgh University Galapagos Islands Expedition, 1968. The Pan-pacific Entomologist 48: 100-107.
- 7. Peck, S.B. (2001) *Small Orders of Insects of the Galápagos Islands, Ecuador: Evolution, Ecology, and Diversity.* NRC Research Press, Ottawa, Ontario, Canada, 278 pp.
- Roskov Y., Kunze T., Paglinawan L., Orrell T., Nicolson D., Culham A., Bailly N., Kirk P., Bourgoin T., Baillargeon G., Hernandez F., De Wever A., (eds.) (2013) *Species 2000 & ITIS Catalogue of Life, 2013 Annual Checklist* Digital resource at www.catalogueoflife.org/annual-checklist/2013/. Species 2000: Reading, UK
- 9. Stange, L.A. (1969) *Myrmeleontidae of the Galapagos Islands (Insecta: Neuroptera)*. Acta Zoologica Lilloana 15(17): 187-198.
- 10. Tauber, C.A., Tauber, M.J. (2010) *Two new endemic species of Chrysopodes (Neosuarius) (Neuroptera, Chrysopidae) from the Galápagos Islands.* ZooKeys 42: 47-78.

#### Disclaimer

Please do not hesitate to contact us; your input is very welcome. However, please understand that additions, changes, and corrections will be posted at periodic intervals after thorough cross-referencing of all new data. As an independent international scientific organization, the Charles

The Charles Darwin Foundation Galapagos Species Checklist is a continuously updated list of all species currently known from the Galapagos Islands and reflects up-to-date knowledge compiled by scientists of the Charles Darwin Foundation (CDF) in collaboration with experts from around the world. CDF shares this data publicly and invites comments, corrections and additions.

Darwin Foundation relies on funding from donors who support our work. Please contact us at datazone@fcdarwin.org.ec if you would like to support the Charles Darwin Foundation Galapagos Species Checklist and help make knowledge of Galapagos biodiversity more widely available.