

102. Oestridae (incl. Gasterophilidae, Hypodermatidae)
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Nomenclature: CPD 11: 237-251

Number of species: in Switzerland: 11 - in Europe: 21

Faunistic knowledge of the family in Switzerland: medium

List:

Gasterophilinae

Gasterophilus intestinalis (De Geer, 1776) !

- *haemorrhoidalis* (Linnaeus, 1758) !

- *nasalis* (Linnaeus, 1758) L1

- *pecorum* (Fabricius, 1794) L1

Hypodermatinae

Hypoderma bovis (Linnaeus, 1758) !

- *lineatum* (De Villers, 1789) !

Oestromyia leporina (Pallas, 1778) !

Oestrinae

Cephenemyia auribarbis (Meigen, 1824) !

- *stimulator* (Clark, 1815) !

Oestrus ovis Linnaeus, 1758 !

Pharyngomyia picta (Meigen, 1824) !

Notes:

1. The botflies were in the past (eg. CPD) usually treated as three separate families: Gasterophilidae, Hypodermatidae and Oestridae. But these groups are morphologically and biologically similar and, therefore, united in one family: Oestridae sensu lato.
2. Botflies usually occur where they can find suitable hosts. For *Hypoderma bovis* and *H. lineatum*, however, they seem to be restricted to lowland habitats. Practices in husbandry play an important part in the local distribution of the species restricted to livestock (ox and horse botflies).
3. A modest number of species of Oestridae is recorded from Switzerland, and the current total of 11 species is probably about 70% (compared to the botfly fauna of Austria, which is well known). An additional species of horse stomach botflies, *Gasterophilus inermis* (Brauer, 1858), may possibly occur in Switzerland, as may the dermal botflies of the roe and red deer, *Hypoderma actaeon* Brauer, 1858 and *Hypoderma diana* Brauer, 1858, and the throat bot of the moose, *Cephenemyia ulrichii* (Brauer, 1862). The rodent and rabbit botfly *Portschinskia neugebaueri* (Portschinsky, 1881) is known from the Italian Alps (Tirol) and is likely to occur in the nearby Swiss Alps.
4. Recent decades have seen large changes in the abundance of host populations, and such changes are deemed to have a major impact on botfly populations. Also, with the advent of more efficient treatment of livestock, botfly parasites of domestic horses and cattle have become much more rare. Extensive campaigns against especially the ox warble flies *H. bovis* and *H. lineatum* have

dramatically reduced their numbers, resulting in extensive eradication. It may serve as a vivid illustration that the most recently collected specimens of *H. bovis* and *H. lineatum* in the Swiss collections examined (ETHZ, MHNG, NHBB) were collected more than 45 years ago (!), and most other botfly species are likewise represented by rather old specimens.

5. Larvae of the Neotropical human botfly *Dermatobia hominis* (Linnaeus, Jr.) are occasionally introduced under the skin of European tourists returning from Central- and South-American destinations. Although no Swiss records have been found during literature searches for the present check-list, such records may be anticipated.

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