

The blurred baseline: Denmark's unknown biodiversity

Henrik Enghoff¹
Isabel Calabuig¹
Lars Skipper[†]

²Danish Biodiversity Information Facility (DanBIF), Natural History Museum of Denmark, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen OE, email: henghoff@snm.ku.dk

Abstract:

Estimating extinction rates is hampered by insufficient knowledge about which species actually exist. The project "allearter.dk", a project under the Danish Biodiversity Information Facility, DanBIF (Skipper 2011, Borchsenius et al. 2011, <http://www.danbif.dk>) enumerates all species known from Denmark, but during preparation of the species lists, it has become clear that even in a very thoroughly studied area like Denmark, where there has been a tradition for floristic and faunistic studies for centuries, the actual species pool remains insufficiently to extremely poorly known for many groups of non-charismatic groups of organisms, e.g., microarthropods, nematodes, microalgae, and several groups of fungi, let alone proper microorganisms. Every year, species new to science are discovered in Denmark (e.g., Buhl 2006, Grilli et al. 2009), and numerous previously described species are recorded as new to the country (e.g. Calabuig & Madsen 2009, Enghoff et al. 2011). Some of these are newcomers, or even invasive, but without doubt very many have simply gone unnoticed. Add problems of changing species concepts, changing names, and misidentifications, and the notion of a complete, stable census of Danish biodiversity at the species level seems to disappear beyond the horizon. Basic research on non-charismatic groups (which may be ecologically and economically important) and increased involvement of non-professional naturalists will ameliorate the situation.

References:

- Buhl, P.N. (2006). *Key to Platygaster (Hymenoptera, Platygasteridae) from Denmark, with descriptions of new species*. Steenstrupia, Vol 29, pp. 127-167.
- Borchsenius, F., Enghoff, H., Calabuig, I., Endsleff, L. (2011). *Dansk biodiversitet under luppen? Vand og Jord*, Vol 18, No 2, pp. 46-49.
- Calabuig, I., Madsen, H.B. (2009) *Kommenteret checkliste over Danmarks bier - Del 2: Andrenidae (Hymenoptera, Apoidea)*. Entomologiske Meddelelser, Vol 77, No 2, pp. 83-113.
- Enghoff, H., Pedersen, J., Thomsen, P.F., Iversen, L. (2011). *Tusindben, skolopendre og mejere fra Rødbyhavn og omegn – med fem nye arter for den danske fauna (Diplopoda, Chilopoda, Opiliones)*. Entomologiske Meddelelser Vol. 79, in press.
- Grilli, P. Kristensen, R.M. Balsamo, M. (2009). *Heterolepidodermis caudosquamatum (Gastrotricha: Chaetonotida), a new species from brackish waters of Denmark*. Zootaxa, Vol 2173, pp. 49-54.
- Skipper, L. (2011). *Allearter.dk. Oversigt over Danmarks dyr, planter, svampe m.v.* www.allearter.dk