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## SECOND OBSERVATION OF DIACYCLOPS ABYSSICOLA (LILLJEB.) (CRUSTACEA, COPEPODA) IN NORWAY

## **IVAR A. BASTE**

The crustacean copepod *Diacyclops abyssicola* (Lilljeb.) was found in a shallow bay in Lake Snåsavatn in 1984 (UTM reference PS 342 144).

Horizontal samples were taken near the shore at 0.5—1 meter's depth, using a net with mesh size 90  $\mu$ m and a diameter of 30 cm. The bottom substrate, which consisted of sand and rock, was touched during each sampling. Fortytwo samples were obtained between June 15th and October 7th, although *D. abyssicola* was only present in three of them. One example was found on July 5th, and three specimens were taken on the 7th of October. All of the specimens were non-egg bearing females. The species was identified after Sars (1918), and nomenclature is in accordance with Illies (1975). One specimen is now in the collections of the museum of the University of Trondheim.

The first record of *D. abyssicola* in Norway was published by G.O. Sars in 1918. He found «some specimens of this pretty form...» in Lake Mjøsa near Hamar, during the summer of 1917. These specimens were taken from a depth of 4—6 fathoms (approximately 7—10 meters) on a muddy bottom. The further distribution of the species is restricted to the southern parts of Sweden (Illies 1975). Lilljeborg (1901) found several specimens in large lakes from Lake Storsjön, Jämtland in the north, to Lake Ifösjön, Skåne, in the south. Specimens were collected from the muddy bottom in the deeper parts of the lakes. Specimens from Lake Ifösjön were found at a depth of about 45 m (Lilljeborg 1901).

D. abyssicola is, according to Sars (1918), a very distinct and easily recognizable species. It is therefor unlikely that it has been overlooked or confused with some of the other 34 known freshwater cyclopoid copepods in Norway. The majority of these copepods are benthic and generally poorly investigated (Nøst et al. in press). This is a probable explanation for why nearly 70 years have elapsed between the first observation of this species and that recorded in the present study.

The present study confirms the impression that *D. abyssicola* is a species connected to relatively large, deep lakes. The records indicate that the species is capable of occupying various substrates, and that it does enter the upper parts of the littoral zone. The present observation extends the current distributional range of the species by about 100 kilometers northwards.

## References

- Illies, I. (ed.). 1978. Limnofauna Europa. 2. Auflage. Fischer Verlag, Stuttgart. 532 pp.
- Lilljeborg, W. 1901. Synopsis specierum huc usque in aquis dulcibus Sueciae observatorium generis Cyclopsis. Kgl. Svenska Vetensk.-Akad. Handl. 35, Nr. 4: 1—118.
- Nøst, T., Aagaard, K., Arnekleiv, J.V., Jensen, J.W., Koksvik, J.I. and Solem, J.O., in press. Vassdragsreguleringer og ferskvannsinvertebrater. En oversikt over kunnskapsnivå. Økoforsk. Rapp.
- Sars, G.O. 1918. An account of the Crustacea of Norway. VI. Copepoda, Cyclopoida. Bergen Museum. 225 pp.

Ivar A. Baste, Institute of Zoology, University of Trondheim, N-7055 Dragvoll, Norway.