

## Two typically coastal halophilous species of dipterans are found inland in freshwater habitat (Diptera: Psychodidae, Sphaeroceridae)

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Two typically coastal halophilous species: *Telmatoscopus similis* Tonnoir (Psychodidae) and *Thoracochaeta brachystoma* (Stenhammar) (Sphaeroceridae), were collected at the shore of a freshwater lake in Pskov Prov.

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### Family PSYCHODIDAE

#### ***Telmatoscopus similis* Tonnoir, 1922**

*Material.* 1 ♂, **Russia**, Pskov Prov., Sebezh Distr., lake Anninskoe near vill. Anninskoe, 56°12'N 28°40'E, zone of water margin (site 6; shore marsh), by aspirator, 9.V.1998 (leg. A. Przhiboro, deposited at the Zoological Institute, St.Petersburg).

*Note.* New record for Russia.

### Family SPHAEROERIDAE

#### ***Thoracochaeta brachystoma* (Stenhammar, 1855)**

*Material.* 1 ♂, same locality as in *T. similis*, zone of water margin (site 1), by aspirator, 10.V.1998 (leg. A. Przhiboro, deposited at the Zoological Institute, St.Petersburg).

*Note.* New record for Russia.

### Discussion

Both the species are typical inhabitants of sea coasts (Nielsen, 1965; Vaillant, 1972; Withers, 1989; Roháček & Marshall, 2000; Kirk Spriggs et al., 2001); *T. similis* was recorded also from lagoon shores and in other similar conditions, not far from coasts (Feuerborn, 1926; Jung, 1956; Vaillant, 1972, 1978). In the papers cited above, *T. similis* and *Th. brachystoma* are considered halobionts. No information is available on these species in freshwater or inland habitats.

Lake Anninskoe is a low eutrophic reservoir with an area of about 1.5 km<sup>2</sup>. For details of the

study lake and sites, see Przhiboro (2001a, 2001b). The lake is completely freshwater; the total mineralization of water equals 210-225 mg/l, with hydrocarbonates accounting for 70% of mineralization value (Boulion, unpublished).

The locality is more than 300 km distant from the Baltic Sea coast. No mineralized or salinized semiaquatic habitats (either artificial or natural) are known in the area where the material was collected.

Adults of halobiotic dipterans may be not uncommon at some freshwater lakes situated close to the sea coast. For example, I collected numerous imagines of *Scathophaga litorea* Fallén and *Ephydria riparia* Fallén by net-sweeping in July and August 1997 at the shore of freshwater lake Krivoe (Karelia, Loukhi Distr.), which is situated at a distance of 100-300 m from the White Sea coast. These species are typical as larvae in many sites of the intertidal zone in this area (personal observations), but were never found to develop at shores of freshwater lakes, including Lake Krivoe. However, it is not the case with the above records of *T. similis* and *Th. brachystoma*.

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