

BRIEF NOTES AND RECORDS

EXTREMELY NORTHERN RECORDS OF *SYMPETRUM DEPRESSIUSCULUM* (SEL.) IN POLAND (ANISOPTERA: LIBELLULIDAE)

Many thermophilous dragonfly species of southern provenance have the borders of their ranges within Poland. *S. depressiusculum* (R. BERNARD et al., 2002, *Nat. Conserv.* 59: 53-71; K.-D.B. DIJKSTRA, 2006, *Field guide to the dragonflies of Britain and Europe*, British Wildlife Publishing, Gillingham) is one of them. The precise course of its range in north-eastern Europe is not known therefore data from Poland are crucial for its establishing. Below three localities from northern Poland are given (Fig. 1):

- (1) Nature reserve "Bielawa" ad Ostrowo (54°47'32,6"N, 18°14'17,1"E), small pool near the edge of high peat bog, on sand, with a thin layer of tyrfopel. In the vicinity of the pool there are low beds of *Carex* sp. and *Eriophorum* sp., farther, moorland and stunted *Pinus silvestris* L., 11-VIII-2006, 1♂ feeding in vegetation growing by the edges of the pool.
- (2) Grotowo (54°18'22,3"N, 20°19'13,9"E), the complex of intensively used fish ponds. Bottom of silt covered with tree leaves, water yellowish and turbid, the belt of swamp vegetation discontinuous, with the dominance of *Phragmites australis* (Cav.) Trin. ex Steud. and *Glyceria* sp., behind the belt, not very numerous *Lemna* sp. and *Potamogeton* spp., 10-VIII-2007, highly numerous population (at least a few hundred imagines), many territorial ♂♂, numerous tandems and egg-laying.
- (3) Chmielnik ad Kętrzyn (54°07'12,6"N, 2°12'13,2"E), a neglected fish pond. Bottom of silt, water green and turbid. Swamp of *Typha latifolia* L. with the addition of *Lemna* sp., the centre opened with the mats of green algae. By the shore *Salix* and a small meadow and a small domestic field. 11-VIII-2007, 1♂ (juvenile) caught on the meadow 10 m from the shore.

Those localities are situated within Koszalin Coastland (No. 1) and the Staropruska Low-

land (Nos 2 and 3) J. KONDRACKI, 2000, *Geografia regionalna Polski*, PWN, Warszawa).

New data are crucial for the knowledge on the occurrence of *S. depressiusculum*. Geographical range of this species in DIJKSTRA (ibid.) is shown correctly and much better than in the hitherto existing studies, e.g. R.R. ASKEW (2004, *The dragonflies of Europe*, Harley, Colchester). The problem here was the small amount of published data. For example, from the area north of 54°N, the discussed species was recorded in Poland only once: 1♂ was caught in 1968 on a meadow by a salty lake in the vicinities of Gdańsk (*S. MIELEWCZYK*, 1970, *Fragm. faun.* 15: 343-363) (Fig. 1). Despite the fact that in Lithuania this species exceeds 55°N it is a rare species, so far only known from a few localities (*A. STANIONYTĖ*, 1993, *New rare Lithuania Insect Sp.* 1993: 50-60; – R. Bernard, pers. comm.). The area between 53°N and 54°N is also poor in localities. In Poland *S. depressiusculum* was recorded from the following Lakelands: Zachodniopomorskie (G. MICHONSKI, 2003, *Wiad. ent.* 22: 187-188), Południowopomorskie (P. MUNCHBERG, 1936, *Abh. Ber. Naturw.* (Grenzmark.) 11: 118-125) and Mazurskie (P. BUCZYŃSKI & J. PAKULNICKA, 2000, *Notul. odonatol.* 5: 69-72). There are no data from northwestern Belarus; the only known study site is situated

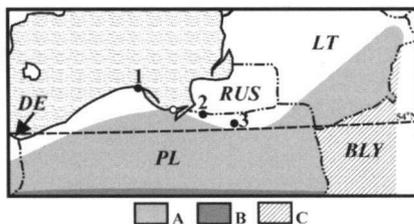


Fig. 1. The northernmost records of *Symptetrum depressiusculum* in Poland on the background of its hitherto known distribution area (after DIJKSTRA, 2006, changed): A: area of scattered distribution; – B: main part of distribution area; – C: no data; – ●: new records (numbering as in text); – ○: Górkki Wschodnie (MIELEWCZYK, 1970).

in the valley of the Prypyat, near the southern border of this country (P. BUCZYŃSKI & M. MOROZ, 2005, *Notul. odonatul.* 6: 37-39).

The new data expand the range of *S. depressiusculum*, particularly so locality No. 1, representing the northernmost known site of its occurrence, beyond southeastern Lithuania. However, its stable occurrence in this area is not certain. It could also indicate just a temporary "pulsing" of the range, associated with the currently favourable (warm) period. Nevertheless, noteworthy is the circumstance that in two of the three localities the development was documented and one of these populations is very large and in an optimal habitat, therefore its longer survival is expected.

Due to the geographical situation (sea barrier) a further expansion on Koszalin Coastland is not possible. However, the small distance between the localities on the Staropruska Lowlands and the Russian border (ca 11 km) suggests that the presence of *S. depressiusculum* in the Kaliningrad district is likely. The situation is similar to that of *Erythromma viridulum*, a species recorded near the Polish-Russian border at the same time and regarded as a stage of clear expansion in northeastern Poland (P. BUCZYŃSKI, 2007, *Odonatrix* 3: 15-18; unpublished data).

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