Damselflies (Odonata: Zygoptera) and dragonflies (Odonata: Anisoptera) in northern Poland: new records

Ważki (Odonata: Zygoptera, Anisoptera) Polski północnej – nowe dane

Peter Senn

ul. Kańskiego 7D/9,81-603 Gdynia, e-mail: petersenn47@gmail.com

Abstrakt: Praca obejmuje informacje na temat 21 gatunków ważek, stwierdzonych od 2004 do 2014 r. w województwach pomorskim (przeważnie na Pojezierzu Kaszubskim) i warmińskomazurskim.

Key words: damselflies, dragonflies, Odonata, northern Poland, new records.

Introduction

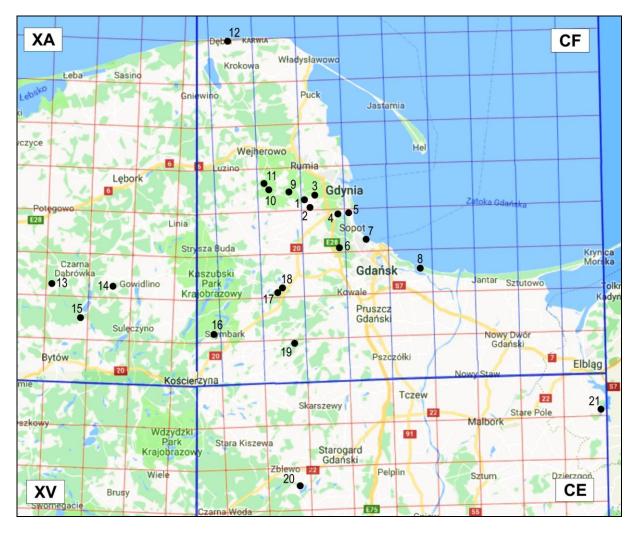
This article presents a handful of records of 21 species of damselflies (Zygoptera) and dragonflies (Anisoptera) from 21 sites in northern Poland (see map). All but one of the records are from the province of Pomerania (PM); the exception is from Warmia-Mazury (WM). There are a good many records of odonates from various parts of this region, especially the Gdańsk-Sopot-Gdynia area and its hinterland, and also the Bory Tucholskie forests, but coverage is still quite a long way from being complete. The present records, obtained on an occasional basis from 2004 until 2014, should thus fill a few gaps in the dragonfly atlas of Poland (Bernard et al. 2009).

The species are given in the same order as in Bernard et al. (2009). Some are illustrated photographically, as are most of the sites (habitats) where they were recorded. The sites are described as follows: locality and/or nearest town, district, village etc., UTM code, province, geographical coordinates of the locality, physiogeographical region (Kondracki 1981), a brief description of the habitat (see also the photographic documentation). The species records contain the following information: scientific name (author), number of photograph (if illustrated), site number, number and sex of individuals, date of record, comments. The terms "widespread" and "common" refer to the species' status in Poland. All the photographs of the sites and species are by the author.

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Sites of damselfly and dragonfly records



Map showing the site locations Mapa lokalizacji stanowisk



Site 1. Gdynia-Wiczlino CF34 (PM); 54°29′40″N, 18°23′9″E; Kashubian Lake District (Pojezierze Kaszubskie); woodland clearing, in the vicinity of natural pools of water or patches of damp soil with aquatic/semi-aquatic vegetation.



Site 2. Gdynia-Wiczlino CF34 (PM); 54°28′46″N, 18°25′16″E; Kashubian Lake District (Pojezierze Kaszubskie); wet meadow by the River Kacza.



Site 3. Gdynia-Chwarzno CF34 (PM); 54°30′4″N, 18°26′24″E; Kashubian Lake District (Pojezierze Kaszubskie); woodland edge near a storm water management pond with well-developed stands of bulrushes *Typha*, reeds *Phragmites* and rushes *Juncus*.



Site 4. Gdynia-Wielki Kack CF33; 54°27′48″N, 18°30′4″E; Kashubian Lake District (Pojezierze Kaszubskie); by an overgrown lake.



Site 5. Gdynia-Orłowo CF43 (PM); 54°28′20″N, 18°32′36″E; Kashubian Lake District (Pojezierze Kaszubskie); scrub.

Site 6. Gdańsk-Oliwa, Dolina Radości CF33 (PM); 54°23′34″N, 18°30′38″E; Kashubian Lake District (Pojezierze Kaszubskie); edge of south-facing woodland adjoining a wet meadow.



Site 7. Gdańsk-Przymorze CF43 (PM); 54°24′57″N, 18°36′17″E; Vistula Spit (Mierzeja Wiślana); near one of the ponds in the Ronald Reagan Park.

Site 8. Gdańsk-Sobieszewo CF52 (PM); 54°21′6″N, 18°47′28″E; Vistula Spit (Mierzeja Wiślana); clump of lilac bushes about 100 m from reed beds by the River Wisła Śmiała.



Site 9. Koleczkowo-Piekiełko CF24 (PM); 54°30′54″N, 18°19′29″E; Kashubian Lake District (Pojezierze Kaszubskie); wetland vegetation by the River Zagórska Struga.



Site 10. Lake Rąbówko, Bieszkowice CF24 (PM); 54°31′3″N, 18°15″35″E; Kashubian Lake District (Pojezierze Kaszubskie); waterside vegetation.



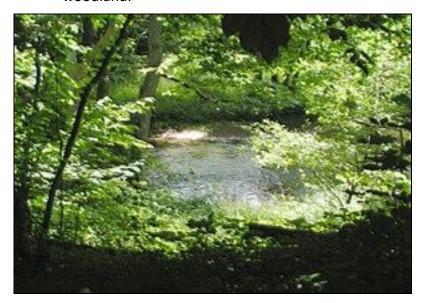
Site 11. Lake Pałsznik, Bieszkowice CF24 (PM); 54°32′7″N, 18°14′35″E; Kashubian Lake District (Pojezierze Kaszubskie); edge of the lake.

Site 12. Dębki CF17 (PM); 54°49′44″N, 18°6′29″E; Slowinski Coast (Wybrzeże Słowińskie); edge of coastal pine woodland by a wet meadow and drainage ditch.



Site 13. Nożyno XA62 (PM); Polanów Upland (Wysoczyzna Polanowska); 54°19′45″N, 17°29′19″E; waterside vegetation by a small lake.

Site 14. Stara Huta XA72 (PM); Kashubian Lake District (Pojezierze Kaszubskie); damp woodland.



Site 15. River Słupia, Soszyca XA61 (PM); 54°15′8″N, 17°35′20″E; Polanów Upland (Wysoczyzna Polanowska); waterside vegetation with overhanging trees by the channel leading to the historic hydro-electric power station.



Site 16. Lake Kniewo, Gołubie CF01 (PM); 54°12′56″N, 18°4′14″E; Kashubian Lake District (Pojezierze Kaszubskie); waterside vegetation.



Site 17. River Radunia, Babi Dół CF22 (PM); 54°17′50″N, 18°17′7″E; Kashubian Lake District (Pojezierze Kaszubskie); waterside vegetation with overhanging trees.



Site 18. River Radunia, Babi Dół CF22 (PM); 54°18′24″N, 18°18′28″E; Kashubian Lake District (Pojezierze Kaszubskie); waterside vegetation with overhanging trees.



Site 19. Lake Przywidzkie, Przywidz CF20 (PM); 54°11′48″N, 18°21′24″E; Kashubian Lake District (Pojezierze Kaszubskie); a stream running through riparian woodland by the lake.



Site 20. Wirty-Borzechowo CE27 (PM); 53°53′49″N, 18°22′44″E; Starogard Lake District (Pojezierze Starogardzkie); near an overgrowing pond in the Wirty arboretum.



Site 21. Lake Drużno, Markusy CE99 (WM); 54°3′22″N, 19°26′55″; Vistula Delta (Żuławy Wiślane); hut among waterside vegetation, including well-developed stands of bulrushes *Typha*, reeds *Phragmites* and willow scrub *Salix*.

Species recorded

Zygoptera

1. Calopteryx splendens (HARRIS, 1782).

SITE 18: 1 \circlearrowleft , 26.06.2008.

Widespread and common along streams and small rivers.

2. Calopteryx virgo (LINNAEUS, 1758).

SITE 2: 1, 8.06.2014; SITE 9: 1, 4.07.2014; SITE 15: numerous 3, 3.07.2005; SITE 17: 1, 27.06.2004, SITE 18: 1, 26.06.2008.

Widespread and common, especially in northern and north-western Poland. Prefers streams and smaller rivers, particularly where these flow through woodland.

3. Lestes sponsa (Hansemann, 1823). (Photo 1).

SITE 13: $1 \stackrel{?}{\circlearrowleft} 1 \stackrel{?}{\hookrightarrow} (tandem)$, 5.08.2007; **SITE 14:** $1 \stackrel{?}{\hookrightarrow} 31.08.2006$.

Widespread and common. A eurytopic species associated with small bodies of standing water with ample reed-like vegetation.

4. Lestes virens (Charpentier, 1825). (Photo 1).

Widespread but not as common as *L. sponsa*. Inhabits bog lakes with peatmoss (*Sphagnum*) and rushes (*Juncus*).

5. Enallagma cyathigerum (Charpentier, 1840). (Photo 2).

SITE 10: 3399 (numerous individuals), 31. 07. 2004.

Also recorded on the nearby Lakes Zawiat, Bieszkowickie, Pałsznik and Wygoda (WENDZONKA 2003). Very widespread and common. Inhabits all kinds of standing waters.

6. Coenagrion puella (LINNAEUS, 1758).

SITE 3: $1 \circlearrowleft$, 8.06.2009; $1 \hookrightarrow$, 22.06.2013; SITE 20: $1 \circlearrowleft$, 11.07.2014. Very widespread and common. A eurytopic species associated with both standing and slow-flowing waters. Prefers the presence of aquatic vegetation.

7. *Pyrrhosoma nymphula* (SULZER, 1776).

SITE 19: 1° , 30.05.2004.

Very widespread and common. Associated with various kinds of small watercourses and standing waters.

<u>Anisoptera</u>

8. Aeshna cyanea (O. F. Müller, 1764).

SITE 6: 1 \circlearrowleft , 14.09.2014.

Very widespread and very common. Eurytopic, preferring small, shaded bodies of stagnant water.

9. Aeshna grandis (LINNAEUS, 1758)

SITE 20: 1♀, 11.07.2014.

Very widespread and common. Inhabits a wide range of standing waters, especially those rich in bankside and submerged vegetation.

10. Libellula depressa LINNAEUS, 1758. (Photo 3).

SITE 3: $1 \circlearrowleft$, 19.08.2008; **SITE 12:** $1 \circlearrowleft$, 24.05.2009.

Very widespread and common. Inhabits different kinds of standing and running waters, especially if these are shallow and sunny.

11. Libellula fulva O. F. Müller, 1764. (Photo 4).

SITE 20: 1\$\infty\$, 11.07.2014.

Widespread and fairly common. Inhabits standing and slow-flowing waters, preferably with emergent vegetation.

12. Libellula quadrimaculata LINNAEUS, 1758.

SITE 1: $1 \circlearrowleft 12.05.2009$; SITE 5: $1 \circlearrowleft 11.06.2009$; SITE 8: $1 \circlearrowleft 10.05.2008$; SITE 11: $1 \circlearrowleft 10.05.2008$

Also recorded on the nearby Lakes Zawiat, Bieszkowickie and Wygoda (WENDZONKA 2003). Very widespread and very common. Eurytopic, with a distinct preference for standing waters with well-developed vegetation.

13. Orthetrum cancellatum (LINNAEUS, 1758).

SITE 7: 1\$\frac{1}{0}\$, 30.06.2006.

Very widespread and very common. Mainly inhabits a wide variety of standing waters, often with unvegetated margins.

14. Sympetrum danae (Sulzer, 1776). (Photo 5).

SITE 10: 1♀ teneral, 31.07.2004.

Also recorded on the nearby Lakes Zawiat, Pałsznik and Wygoda (WENDZONKA 2003). Very widespread and common. Breeds mostly in acidic waters, associated with *Sphagnum* bogs, lakes and pools.

15. Sympetrum fonscolombii (Sélys, 1840). (Photo 6).

SITE 3: 1 \circlearrowleft , 29.05.2007.

A migrant species, varying numbers of which arrive in Poland from southern Europe, probably every year. Although it breeds in this country, it does not form permanent populations as none of its developmental stages can withstand the rigours of the Polish winter. It is known to have turned up as far north as Finland (Buczyński, pers. comm.)

16. Sympetrum pedemontanum (O.F MÜLLER in ALLIONI, 1766). (Photo 7).

SITE 3: 1° , 3.10.2012.

Widespread but uncommon. Inhabits small, slow-flowing watercourses.

17. Sympetrum sanguineum (O. F. Müller, 1764).

SITE 21: 1\$\infty\$, 14.09.2005; **SITE 16:** 1\$\infty\$, 27.08.2006.

Very widespread and very common. Prefers standing waterbodies with lush vegetation.

18. Sympetrum striolatum (Charpentier, 1840).

SITE 3: 1° , 3.10.2012.

Very widespread but not very common. Prefers warm, stagnant waters.

19. Sympetrum vulgatum (LINNAEUS, 1758).

SITE 3: 1♀, 24.08.2006.

Very widespread and very common. Present in all kinds of standing water habitats, preferably lushly vegetated.

20. Leucorrhinia albifrons (Burmeister, 1839). (Photo 8).

SITE 11: $1 \circlearrowleft 1 \circlearrowleft$ (tandem), 2.07.2006.

Also recorded on the nearby Lakes Zawiat and Wygoda (WENDZONKA 2003).

Widespread, but only fairly common in northern Poland. Its preferred habitats are meso- and oligotrophic lakes in woodland with plenty of floating and emergent vegetation. A protected species, covered by the Berne Convention and the EU Habitats Directive.

21. Leucorrhinia rubicunda (LINNAEUS, 1758).

SITE 4: 1° , 6.06.2012.

Widespread, and locally fairly common in northern Poland. Inhabits various types of standing waters; if these are eutrophic, those with rich vegetation are preferred.



Photo 1. *Lestes sponsa* (tandem, left). *Lestes virens* (two tandems, right) 5.08.2007. Site 13 – Nożyno XA62



Photo 2. *Enallagma cyathigerum* ♂♂ 31.07.2004. Site 10 – Lake Rąbówko, Bieszkowice CF24



Photo 3. *Libellula depressa* ♂ 19.08.2008. Site 3 – Gdynia Chwarzno CF34



Photo 4. *Libellula fulva ♂* 11.07.2014. Site 20 – Wirty-Borzechowo CE27



Photo 5. *Sympetrum danae* ♀ teneral 31.07.2004. Site 10 – Lake Rąbówko, Bieszkowice CF24



Photo 6. *Sympetrum fonscolombii* ♂ 29.05.2007. Site 3 – Gdynia Chwarzno CF34



Photo 7. Sympetrum pedemontanum \bigcirc 3.10.2012. Site 3 – Gdynia-Chwarzno CF34



Photo 8. *Leucorrhinia albi-frons* tandem 2.07.2006. Site 11 – Lake Pałsznik, Bieszkowice CF24

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