

## Scientific note

## New records of the tadpole shrimp *Lepidurus apus* (Linnaeus, 1758) and the fairy shrimp *Eubranchipus grubii* (Dybowski, 1860) in north-eastern Germany

(Crustacea, Branchiopoda, Notostraca and Anostraca)

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**Fig. 1.** A. Brandenburg, Schwante, shallow pool in moist beech/alder forest W Sommerswalde, habitat of *E. grubii* and *L. apus*; B. Brandenburg, Kremmen, flooded extensive grassland on the edge of the Kremmener Luch, habitat of a huge population of *L. apus* (small picture).

This work presents 22 unpublished records of the two branchiopods *Lepidurus apus* (Linnaeus, 1758) and *Eubranchipus grubii* (Dybowski, 1860) from Mecklenburg-Vorpommern and Brandenburg in Germany. Both species are still widespread in temporary waters of moist deciduous forests and in spring-flooded meadows of river lowlands, in the north-east of Germany, although their populations have been declining here for years (Simon 2016). All observations occurred in the last four years and were merely by-catches when recording the aquatic beetle fauna in both federal states. The paper complements the compilations of records in Engelmann & Hahn (2004), Hauser (2014, 2015, 2017), Hochmuth & Zierold (2008), Stephan (2008) and Stephan & Schwartz (2004).

**Material studied. Mecklenburg-Vorpommern:** Greifswald, NSG Eldena, vegetation-free, temporary pond along woodland path – 54°04'20.4"N, 13°28'01.7"E – 16/04/2020 – *E. grubii* – vid. L. Wendlandt; Greifswald, NSG Eldena, vegetation-free, temporary roadside pond – 54°04'08.6"N, 13°27'52.6"E

– 16/04/2020 – *E. grubii* – vid. L. Wendlandt; Greifswald, NSG Eldena, ephemeral small pond ("Wächtersoll") – 54°04'11.5"N, 13°28'32.5"E – 03/23/2024 – *E. grubii* 4 ♂, 4 ♀ – vid. L. Wendlandt & J. Arlt; Vorpommern-Greifswald, NW Groß Kiesow, peatland complex Pankhörn, small pools at the edge of alder carr, enriched with rotten leaves and *Carex* sedges – 54°02'21.9"N, 13°26'10.8"E – 02/04/2020 – *E. grubii* – vid. L. Wendlandt; Vorpommern-Greifswald, Dargelin, kettle hole SW Sestelin – 54°01'04.9"N, 13°19'09.0"E – 01/05/2020 – *L. apus* – vid. L. Wendlandt & T. Mainda; Vorpommern-Greifswald, Weitenhagen, forest S of the town, small peat bog, edge area with rotten leaves – 54°02'15.6"N, 13°24'29.9"E – 10/03/2024 – *E. grubii* 3 exs. – vid. L. Wendlandt & T. Mainda; Vorpommern, Rügen, Ribnitz-Damgarten, forest NE Tempel, ephemeral pond without vegetation – 54°16'26.7"N, 12°31'41.2"E – 24/03/2024 – *E. grubii* 6 ♂, 11 ♀ – vid. L. Wendlandt & C. Nitsche; Vorpommern, Rügen, Divitz-Spoldershagen, forest E of Martenshagen, ephemeral pond at parking lot on B105 – 54°17'49.5"N, 12°40'57.3"E – 24/03/2024 – *E. grubii* 1 ♀ – vid. L. Wendlandt.

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**Brandenburg:** Prignitz, Lenzen (Elbe), oxbow SE of the village – 53°03'44.5" N, 11°29'43.4" E – 13/04/2021 – *L. apus* – vid. L. Wendlandt & N. Wendlandt; Oberhavel, Kremmen, E Moorhof, flooded extensive grassland on the edge of the Kremmener Luch (Fig. 1B) – 52°47'11.4" N, 12°58'20.9" E – 14/04/2023 – *L. apus* (thousands of specimens) – vid. L. Wendlandt, N. Wendlandt & L. Hendrich; Overhavel, Oberkrämer, Schwante, shallow pool in alder carr, surrounded by moist beech forest W Sommerswalde, rich in rotten leaves and with small sedges (possibly *Carex remota*) (Fig. 1A) – 52°45'05.0" N, 13°05'49.7" E – 21/04/2023 – *E. grubii* & *L. apus* – vid. L. Wendlandt; Oberhavel, Kremmen, Hohenbruch, extensively flooded alder carr and forest ditch W Germendorfer Straße – 52°46'36.8" N, 13°08'22.2" E – 21/04/2023 – *E. grubii* & *L. apus* – vid. L. Wendlandt; Märkisch-Oderland, Bleyengenschmar, Oderaue E Nieschen, flooded dike foreland and various oxbows in the immediate vicinity of the Oder – 52°37'41.5" N, 14°31'39.6" E; 52°37'46.1" N, 14°32'00.3" E – 18/05/2023 and 27/05/2023 (only ancient individuals) – *L. apus* – vid. L. Wendlandt & N. Wendlandt; Oberhavel, Löwenberger Land, Falkenthal, forest area "Exin", forest ditch and alder carr – 52°55'48.1" N, 13°20'31.3" E – 27/03/2024 – *E. grubii* 6 ♂, 5 ♀ – vid. & leg. L. Wendlandt & L. Hendrich; Oberhavel, Löwenberger Land, Liebenberg, Liebenberger Bruch, pond on Hertefeldler Weg – 52°52'57.6" N, 13°16'52.1" E – 27/03/2024 – *E. grubii* 18 ♂, 14 ♀ – vid. & leg. L. Wendlandt & L. Hendrich; Oberhavel, Liebenwalde, Kreuzbruch, beech forest, pool rich in rotten leaves, with *Carex* sedges, surrounded by alder trees – 52°49'56.9" N, 13°22'53.6" E – 27/03/2024 – *E. grubii* 9 ♂, 44 ♀ – vid. & leg. L. Wendlandt & L. Hendrich; Oberhavel, Liebenwalde, Kreuzbruch, beech forest, ephemeral, peaty forest pool with dense stands of *Carex* – 52°49'48.8" N, 13°22'33.2" E – 27/03/2024 – *E. grubii* 4 ♂, 7 ♀ – vid. & leg. L. Wendlandt & L. Hendrich; Oberhavel, Oranienburg, Kreuzbruch, E Bernöwe, numerous ponds, inflow of "Rote Fließlaake" – 52°49'01.0" N, 13°21'18.3" E – 27/03/2024 – *E. grubii* 1 ♂, 1 ♀ – vid. & leg. L. Wendlandt & L. Hendrich; Elbe-Elster, Sonnenwalde, Brenitz, Lugkteichgebiet, small pond with *Carex* sedges – 51°43'11.5" N, 13°35'12.9" E – 28/03/2024 – *L. apus* 6 exs. – vid. L. Wendlandt & L. Hendrich; Uckermark, Nordwestuckermark, Fürstenwerder, Kiecker, forest spring pond – 53°22'20.4" N, 13°36'23.3" E – 20/04/2024 – *E. grubii* 1 ♀ – leg. L. Wendlandt; Uckermark, Nordwestuck-

ermark, Fürstenwerder, Kiecker, shallow puddle in alder carr – 53°22'25.1" N, 13°36'40.6" E – 20/04/2024 – *E. grubii* 5 ♂ – leg. L. Wendlandt; Havelland, Nauen, Stolpshof, ephemeral forest puddle near Ruheforst – 52°38'19.7" N, 12°58'11.9" E – 04/04/2020 – *E. grubii* 1 ♂, 1 ♀ – vid. T. Mainda.

## References

- Engelmann, M. & Hahn, T. 2004. Vorkommen von *Lepidurus apus*, *Triops cancriformis*, *Eubranchipus* (*Siphonophanes*) *grubii*, *Tanymastix stagnalis* und *Branchipus schaefferi* in Deutschland und Österreich (Crustacea: Notostraca und Anostraca). Faunistische Abhandlungen 25: 3–67.
- Hauser, H. 2014. Untersuchungen zur Verbreitung und Ökologie von *Eubranchipus grubii* (Dybowski, 1860) (Crustacea: Anostraca) im Brieselang (Brandenburg). Rana 15: 4–15.
- 2015. Ein Typusfundort des Frühlings-Feenkrebse *Eubranchipus grubii* (Dybowski, 1860) (Crustacea: Anostraca) beim Alten Finkenkrug. Heimatjahrbuch 2015 für Falkensee und Umgebung: 126–129.
- 2017. Urzeitkebe in Brandenburg, Lebensweise und Bestimmung der Arten. 65 pp., Brieselang (Biophil-Verlag).
- Hochmuth, M. & Zierold, T. 2008. Entwicklung von Habitatmodellen für *Lepidurus apus* und *Eubranchipus grubii* anhand aktueller Vorkommen im Raum Frankfurt (Oder). Abhandlungen und Berichte für Naturkunde, Magdeburg 31: 89–109.
- Simon, L. 2016. Rote Liste und Gesamtartenliste der Blattfußkrebse (Branchiopoda: Anostraca, Conchostraca, Notostraca). Pp. 367–378 in: Bundesamt für Naturschutz (Hrsg.). Rote Liste gefährdeter Tiere, Pflanzen und Pilze Deutschlands, Band 3: Wirbellose Tiere (Teil 2), 70 (4).
- Stephan, S. 2008. Männchen von *Lepidurus apus* (Notostraca, Crustacea) in der Rühstädter Elbtalau. Abhandlungen und Berichte für Naturkunde, Magdeburg 31: 47–57.
- Schwartz, R. 2004. Biologie und Verbreitung von Großbranchiopoden in den Rühstädter Elbtalauen. Untere Havel – Naturkundliche Berichte aus Altmark und Prignitz 14: 17–25.