

SOME NEW DISTRIBUTIONAL RECORDS FOR IRISH CADDISFLIES (TRICHOPTERA) INCLUDING A SPECIES LIST FOR LOUGH NEAGH

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Abstract

Recent research has extended the known distributions of several species of Irish caddisflies (Trichoptera) and these new records are reported.

Key words: Trichoptera, caddisflies, distribution, Ireland, Lough Neagh.

Introduction

O'Connor (2015) mapped the then known distribution of the Irish caddisflies (Trichoptera), data which are also now available on the National Biodiversity Data Centre's website (O'Connor, 2016). Since O'Connor (2015), further research in Ireland has recorded important extensions in the distributions of some species and these records are reported here. Through the kindness of Colin Plant, it has been possible to record several species new to Lough Neagh.

Lough Neagh is the largest fresh-water lake, by surface area, in the British Isles, measuring approximately 24km from north to south and 16km from east to west. The surface area is *circa* 383km². It is generally shallow, with a depth averaging 8.9m. The pH varies from 7.2-9.0 with an average of *circa* 8.2. Six main rivers (Ballinderry, Blackwater, Maine, Moyola, Six Mile Water and the Upper Bann) flow into the lough but the outflow is entirely through the Lower Bann River (Harron and Rushton, 1986). A list of the Trichoptera known from Lough Neagh and its nearby environs is provided (Appendix 1).

Four figure Irish grid references are given with each record. Important extensions in known ranges are shown on new revised longitude and latitude distribution maps prepared using DMAP. The more significant extensions are indicated by arrows. The adults were identified with Malicky (2004) and Barnard and Ross (2012), the larva of *Agraylea multipunctata* Curtis, 1834 with Wallace, Wallace and Philipson (2003) and Waringer and Graf (2011).

RHYACOPHILIDAE

***Rhyacophila munda* McLachlan, 1862 New to County Wexford (Fig. 1)**

WEXFORD: River Boro, Soldier's Hole, Borodale (S9636), ♂♀ 30 July 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

The River Boro flows eastwards from the Blackstairs Mountains for approximately 24km and

meets with the River Slaney some 3km south of Enniscorthy, County Wexford. At the Soldier's Hole, it passes through Borodale, the former ancestral home of Admiral David Beatty of the Battle of Jutland in 1916. Here, the river is fast flowing with small rapids under a bridge (Fig. 20). Three Heath portable light-traps were run along this stretch of river. Other notable captures at the site are given below.

***Agapetus fuscipes* Curtis, 1834 New to County Derry (Fig. 2)**

DERRY: White Rocks Bay (C8840), ♂ 22 June 2014, small waterfall cascading down to the beach, coll. and det. P. H. Langton.

HYDROPTILIDAE

***Agraylea multipunctata* Curtis, 1834 New to Counties Armagh and Cork (Fig. 3)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, 2♂♂ 3-30 August 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

CORK: Fota Island, Fota Golf Course (W7971), larva 30 August 2016, in pond, coll. D. A. Murray, det. JPOC.

***Agraylea sexmaculata* Curtis, 1834**

WATERFORD: Belle Lake (S6605), 5♂♂♀ 3 August 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

Belle Lake (Fig. 21) is one of the few substantial areas of fresh water in the south-east of Ireland and contains a high diversity of vegetation types (Heuff, 1984). Due to the kindness of the Belle Lake Trust, the authors ran three Heath portable light traps on the shore line at the obsolete water pumping station.

Larvae of *Agraylea sexmaculata* have been taken in several ponds in County Waterford but adults have only been taken once before in Ireland (in County Wexford). Due to a printing error in O'Connor (2015), June was omitted from the flight period for the species although it is given in the listed records. The known Irish flight period should now be amended to June, August (3-4 June, 3 August). Other notable captures at the site are given below.

***Hydroptila angulata* Mosely, 1922 New to County Derry (Fig. 4)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, 8♂♂ 3-30 August 2016, 4♂♂ 3 August-3 September 2016, Malaise traps, per C. W. Plant, det. JPOC.

DERRY: Lough Neagh (H9890), west of Toomebridge, 9♂♂♀ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

DUBLIN: River Liffey, Strawberry Beds (O0735), ♀ 1 July 2016, ♀ 25 August 2016, swept from vegetation on the river bank, coll. and det. JPOC.

Neboiss (1963) mentions a hydroptilid (“most probably *Hydroptila angulata*”) taken by John Curtis in Dublin on 6 August 1835. No other details are given but it is very likely that Curtis collected his specimen on the River Liffey at the Strawberry Beds. At that time, Dixon Hardy (1835) remarked “Of the various pleasant drives round the metropolis that through the Phoenix Park, by the side of the Liffey and the Strawberry Beds to Lucan...appears to be the most esteemed by the citizens” “The Strawberry Beds are much frequented by parties of pleasure at the season of the year when the fruit is ripe”. Elsewhere in County Dublin, the species is only recorded from the River Tolka.

***Hydroptila sparsa* Curtis, 1834 New to County Armagh**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♂ 3 August-3 September 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

***Hydroptila tineoides* Dalman, 1819 New to Counties Armagh and Derry (Fig. 5)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♂ 6 July - 28 August 2016, Malaise trap, per C. W. Plant, det. JPOC.

DERRY: Lough Neagh (H9890), west of Toomebridge, 6♂♂ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

***Ithytrichia lamellaris* Eaton, 1873 New to County Wexford (Fig. 6)**

WEXFORD: River Boro, Soldier’s Hole, Borodale (S9636), 4♀♀ 30 July 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

PHILOPOTAMIDAE

***Wormaldia occipitalis* (Pictet, 1834)**

WEXFORD: Mill Stream, New Ross (S7328), 5♂♂ 2 August 2016, swept off vegetation beside a small trickle flowing into the stream, coll. JPOC/MAOC, det. JPOC.

Neu (2016) gives characters for the identification of seven European species of *Wormaldia*. Of particular importance is the separation of *Wormaldia subterranea* Radovanovic, 1932 from *W. occipitalis*. The former species has been taken out of synonymy with the latter. The specimens from New Ross are consistent with Neu’s diagnosis of *W. occipitalis*.

***Wormaldia subnigra* McLachlan, 1865**

WEXFORD: J. F. Kennedy Park (S7219), ♀ 25 July 2016, swept from vegetation beside a fast flowing small stream, coll. JPOC, det. JPOC/MAOC.

The only other record from County Wexford is a male taken by J. J. F. X. King on the River Sow, Edenvale, in July 1902 (King and Halbert, 1910; O’Connor, 2015).

ECNOMIDAE

Ecnomus tenellus (Rambur, 1842) New to County Armagh

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, 5♂♂14♀♀ 3-30 August 2016, Malaise trap, per C. W. Plant, det. JPOC.

WATERFORD: Belle Lake (S6605), ♀ 3 August 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

This is only the second site for the species in County Waterford. It was previously reported from Ballyscanlan Lough (O'Connor, 2015).

POLYCENTROPODIDAE

Cyrnus insolutus McLachlan, 1878 (Fig. 7)

WATERFORD: Belle Lake (S6605), ♂ 3 August 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

This is only the second known Irish locality for this rare species. A full account of the find is given in O'Connor and O'Connor (2016).

Neureclipsis bimaculata (Linnaeus, 1758) New to County Derry (Fig. 8)

DERRY: Lough Neagh (H9890), west of Toomebridge, 2♀♀ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

The trap was located near where the Lower Bann flows out of Lough Neagh. Such an outlet is a common habitat for this species.

Plectrocnemia geniculata McLachlan, 1871

WEXFORD: J. F. Kennedy Park (S7319), ♂ 2 July 2016, swept from vegetation beside a small stream, coll. H. O'Connor, det. JPOC.

Previously only known from the county based on a larva taken in the Park in 1987 (O'Connor, 2015).

Polycentropus kingi McLachlan, 1881

WEXFORD: River Boro, Soldier's Hole, Borodale (S9636), 2♀♀ 30 July 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

This is only the second site for the species in south-east Ireland. It was previously reported from the Corock River, also in County Wexford (O'Connor, 2015).

PHRYGANEIDAE

Agrypnia varia (Fabricius, 1793) New to County Waterford (Fig. 9)

WATERFORD: Belle Lake (S6605), ♂♀ 3 August 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

Although *Agrypnia varia* is widely distributed in Ireland, this is the first record from the

south-east.

***Phryganea bipunctata* Retzius, 1783**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, 2♂♂3♀♀ 24 May - 30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

***Phryganea grandis* Linnaeus, 1758 New to County Armagh**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, 2♂♂ 3-30 August 2016, Malaise trap, per C. W. Plant, det. JPOC.

Previously reported from the lake in County Antrim (King and Halbert, 1910).

GOERIDAE

***Goera pilosa* (Fabricius, 1775) New to County Derry**

DERRY: Lough Neagh (H9890), west of Toomebridge, ♂ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

***Silo nigricornis* (Pictet, 1834)**

WEXFORD: Pollfur Bridge near Fethard (S7806), ♀ 29 July 2016, swept from the bank of the stream, coll. JPOC/MAOC, det. JPOC.

Previously only known in County Wexford from a ♂ pupa taken at the same site in 2014 (O'Connor, 2015).

LIMNEPHILIDAE

***Limnephilus affinis* Curtis, 1834 New to County Derry (Fig. 10)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♀ 3 August-3 September 2016, Malaise trap, per C. W. Plant, det. JPOC.

DERRY: Lough Neagh (H9890), west of Toomebridge, ♀ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

***Limnephilus auricula* Curtis, 1834 New to County Derry (Fig. 11)**

DERRY: Lough Neagh (H9890), west of Toomebridge, 6♂♂ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

***Limnephilus elegans* Curtis, 1834**

KERRY: Coad Bog, Castle Cove (V5860), adult 24 May 2016, coll. K. G. M. Bond, det. JPOC from a photograph of the specimen.

Coad Bog was donated to the Irish Peatland Conservation Council (IPCC) in 2015. It is a blanket bog, some 4ha in extent. Rainfall mixed with sea spray is the main source of water to the bog but pools and streams are present (Geraghty, O'Connell and Ó Corcora, 2016).

Limnephilus elegans is a local Irish species which has been badly affected by the destruction of peat lands (O'Connor, 2015).

***Micropterna sequax* McLachlan, 1875**

MEATH: Meadesbrook, Kilmoon, Ashbourne (O0495), ♀ 29 June 2016, at a lighted window, coll. D. A. Murray, det. JPOC.

This is only the third record from County Meath.

***Stenophylax permistus* McLachlan, 1895 New to County Waterford (Fig. 12)**

WATERFORD: Tramore (S5701), ♀ 17 September 2016 and ♂ 30 September 2016, MV Robinson light-trap, coll. T. Bryant, det. JPOC.

LEPTOCERIDAE

***Ceraclea albimacula* (Rambur, 1842) New to County Wexford (Fig. 13)**

WEXFORD: River Boro, Soldier's Hole, Borodale (S9636), 2♂♂3♀♀ 30 July 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

***Ceraclea annulicornis* (Stephens, 1836) New to County Galway (Fig. 14)**

GALWAY: Lough Corrib (M2241) ♂ 25 May 2016, swept on the shore, coll. and det. Martin Gammell, identification confirmed by JPOC from a photograph.

Ceraclea annulicornis is a local Irish species and there are few adult records. Until the present one, the most recent adult had been taken in 1973.

***Ceraclea dissimilis* (Stephens, 1836) New to Counties Armagh and Derry**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♂ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

DERRY: Lough Neagh (H9890), west of Toomebridge, 2♂♂2♀♀ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

***Ceraclea fulva* (Rambur, 1842) New to Counties Armagh, Derry and Waterford (Fig. 15)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♀ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

DERRY: Lough Neagh (H9890), west of Toomebridge, 2♀♀ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

WATERFORD: Belle Lake (S6605), 2♀♀ 3 August 2016, Heath portable light trap, coll. JPOC/MAOC, det. JPOC.

Although *Ceraclea fulva* is widely distributed in Ireland, this is the first record from the south-east.

***Ceraclea nigrionervosa* (Retzius, 1783) New to County Armagh (Fig. 16)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♀ 24 May-30 June 2016,

Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

***Mystacides longicornis* (Linnaeus, 1758) New to Derry (Fig. 17)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, 2♂♂ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

DERRY: Lough Neagh (H9890), west of Toomebridge, 9♂♂ 24 May-30 June 2016, Malaise trap, per C. W. Plant, det. JPOC.

Surprisingly, this common Irish species is new to Lough Neagh.

***Oecetis lacustris* (Pictet, 1834) New to County Armagh (Fig. 18)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♂ 3-30 August 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

***Oecetis ochracea* (Curtis, 1825) (Fig. 19)**

ARMAGH: Lough Neagh (J0163), quay near Derrytrasna, Lurgan, ♂♀ 24 May-30 June and 13♂♂2♀♀ 3-30 August 2016, Malaise trap, per C. W. Plant, det. JPOC.

New to Lough Neagh.

Acknowledgements

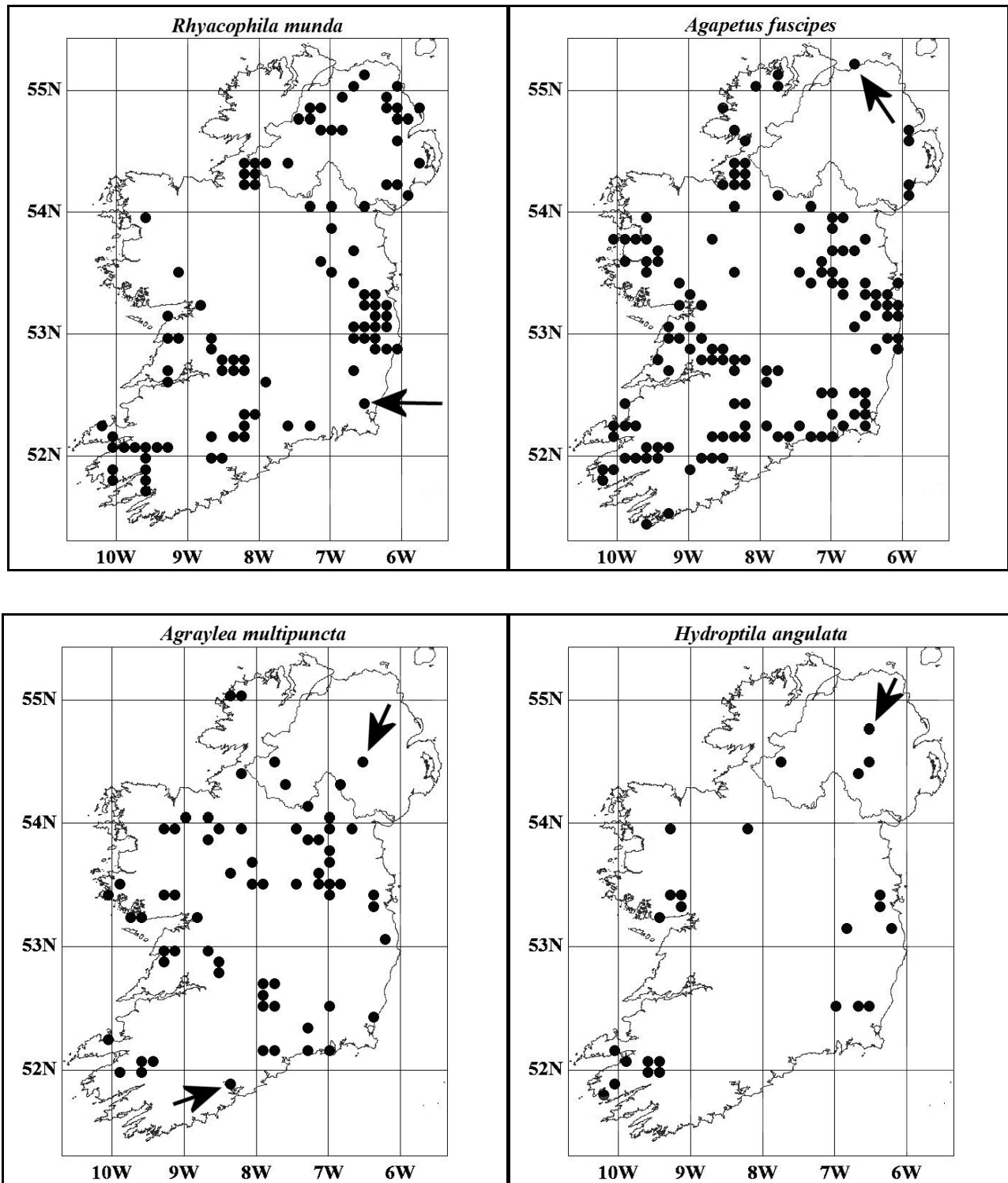
The authors are very grateful to Ken Bond, Tony Bryant, Martin Gammell, Peter Langton, Declan Murray and Colin Plant for providing specimens and/or records; Helen O'Connor for her help with field-work in the J. F. Kennedy Park; Alan Walshe and Nicky Walshe of the Belle Lake Trust for arranging access to the lake and for helping us during the light-trapping; Alan Morton for supplying the relevant software programme used for preparing the maps with DMAP.

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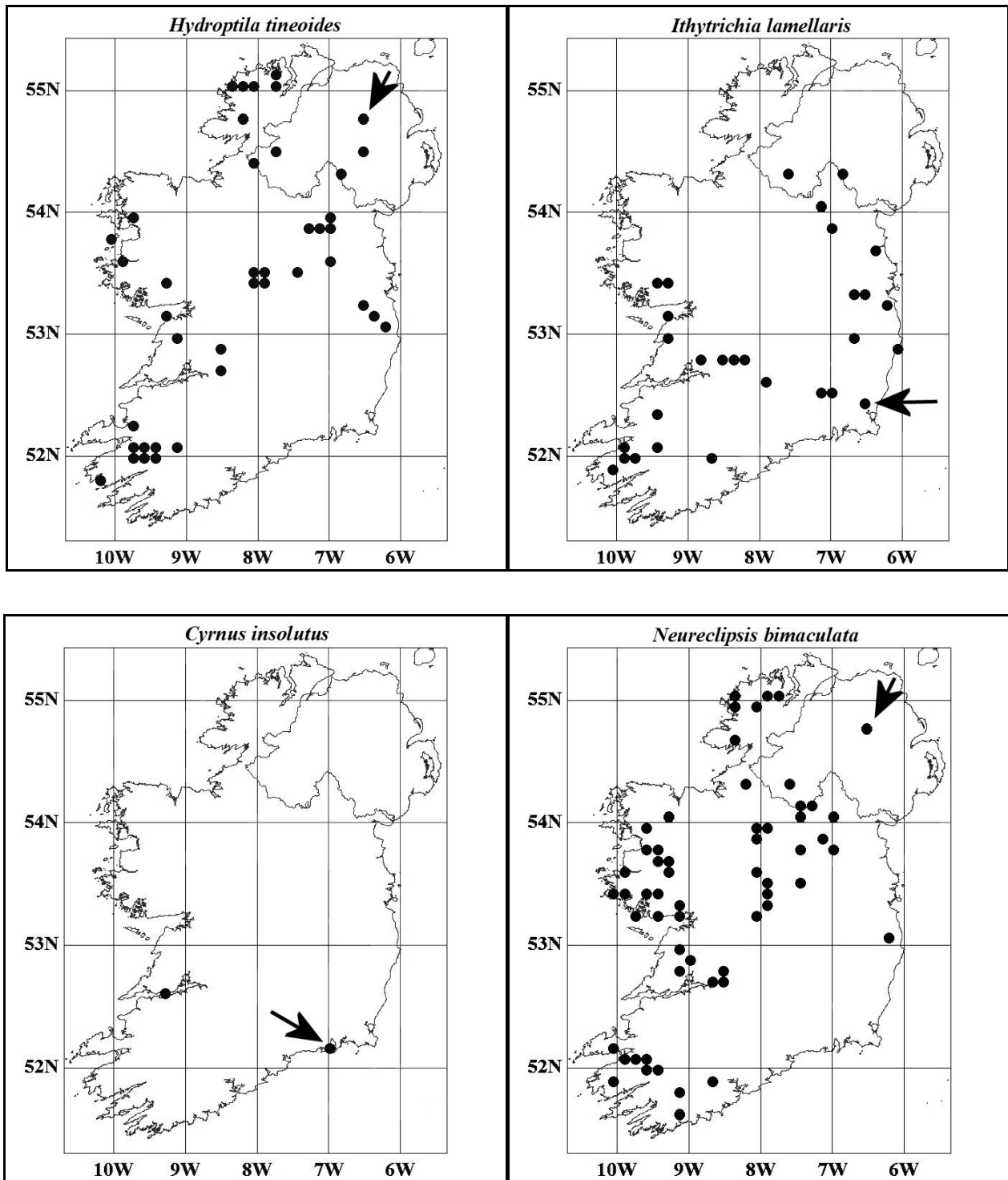
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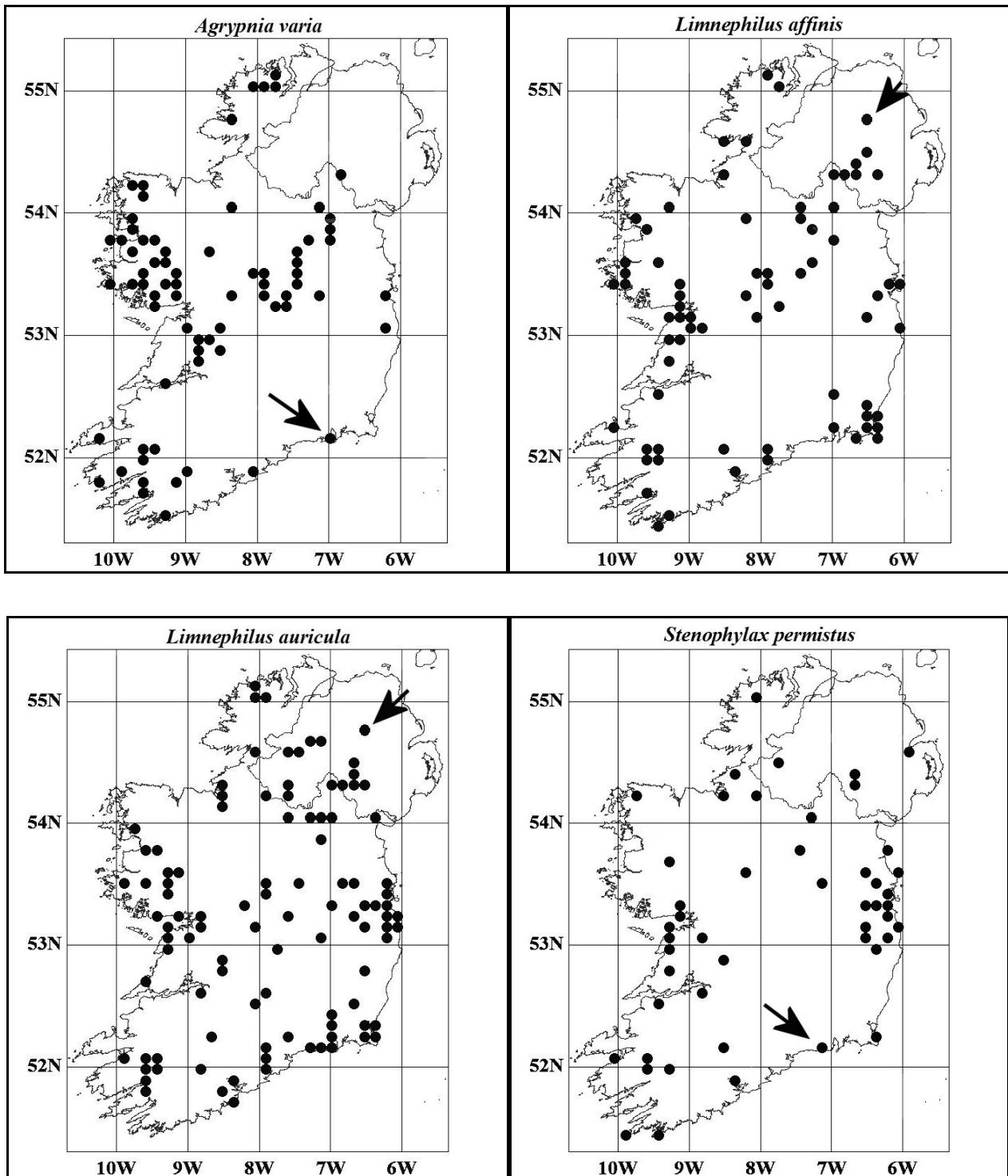
FIGURES 1-4. The known Irish distributions of *Rhyacophila munda* McLachlan, 1862; *Agapetus fuscipes* Curtis, 1834; *Agraylea multipunctata* Curtis, 1834 and *Hydroptila angulata* Mosely, 1922. Notable range extensions are indicated by arrows.



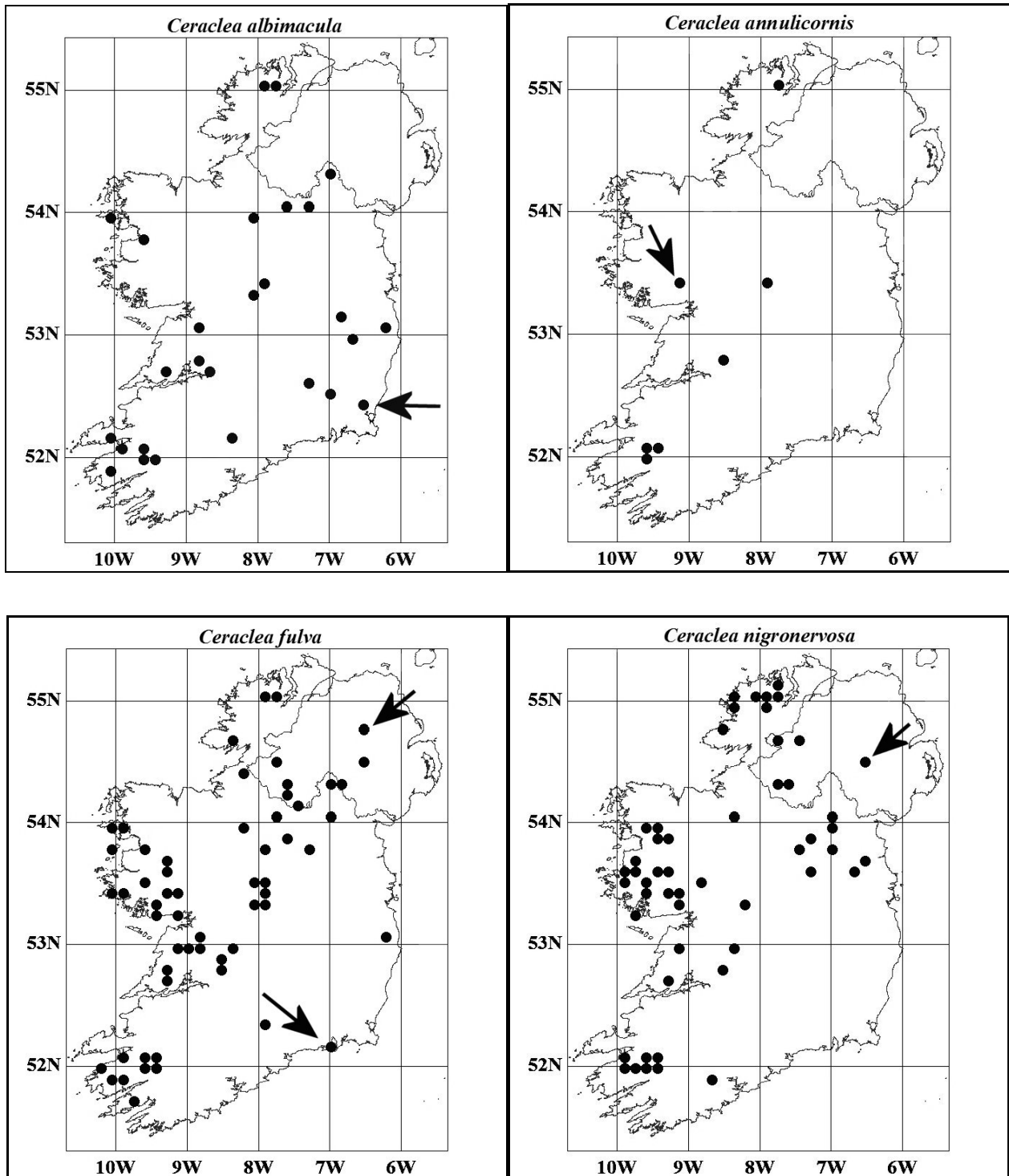
FIGURES 5-8. The known Irish distributions of *Hydroptila tineoides* Dalman, 1819; *Ithytrichia lamellaris* Eaton, 1873; *Cyrnus insolutus* McLachlan, 1878 and *Neureclipsis bimaculata* (Linnaeus, 1758). Notable range extensions are indicated by arrows.



FIGURES 9-12. The known Irish distributions of *Agrypnia varia* (Fabricius, 1793); *Limnephilus affinis* Curtis, 1834; *Limnephilus auricula* Curtis, 1834 and *Stenophylax permistus* McLachlan, 1895. Notable range extensions are indicated by arrows.



FIGURES 13-16. The known Irish distributions of *Ceraclea albimacula* (Rambur, 1842); *Ceraclea annulicornis* (Stephens, 1836); *Ceraclea fulva* (Rambur, 1842) and *Ceraclea nigronevosa* (Retzius, 1783). Notable range extensions are indicated by arrows.



FIGURES 17-19. The known Irish distribution of *Mystacides longicornis* (Linnaeus, 1758); *Oecetis lacustris* (Pictet, 1834) and *Oecetis ochracea* (Curtis, 1825). Notable range extensions are indicated by arrows.

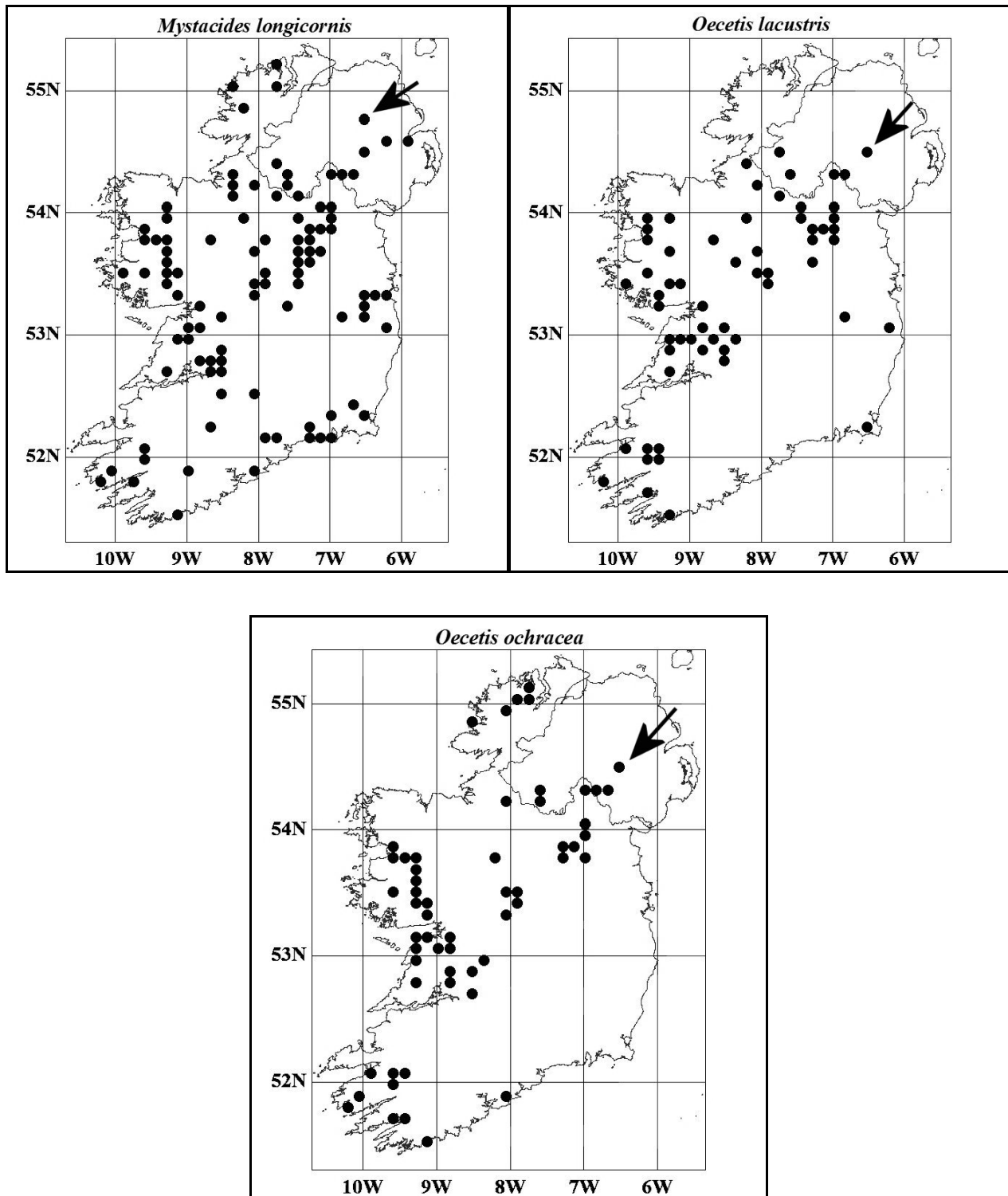


FIGURE 20. The River Boro at the Soldier's Hole, Borodale, County Wexford. Photograph
© Mary O'Connor.



FIGURE 21. Belle Lake, County Waterford. Photograph © Google.



APPENDIX 1. The known Trichoptera of Lough Neagh, Northern Ireland.

The previously unpublished records (new) are based on adult material collected in 2016, provided by C. W. Plant and identified by the senior author. * Indicates species associated with wetlands that diminish or dry out during the summer months including ditches, marshes and pools often created by flooding from the lake. The location of Lough Neagh and its surrounding counties are shown (Fig. 22).

GLOSSOSOMATIDAE

Agapetus ochripes Curtis, 1834

ANTRIM: (J1187) (King and Halbert, 1910).

HYDROPTILIDAE

Agraylea multipunctata Curtis, 1834

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

Hydroptila angulata Mosely, 1922

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

Hydroptila sparsa Curtis, 1834

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

Hydroptila tineoides Dalman, 1819

DERRY: west of Toomebridge (H9890) (new).

ECNOMIDAE

Ecnomus tenellus (Rambur, 1842)

ANTRIM: (J0485) (Murphy and Carter, 1984).

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

POLYCENTROPODIDAE

Cyrnus trimaculatus (Curtis, 1834)

ARMAGH: Maghera (H8342) (King and Halbert, 1910); quay near Derrytrasna, Lurgan (J0163) (new).

Neureclipsis bimaculata (Linnaeus, 1758)

DERRY: west of Toomebridge (H9890) (new).

Polycentropus flavomaculatus (Pictet, 1834)

ANTRIM: (J1181), (J0485) (Murphy and Carter, 1984).

ARMAGH: Coney Island (H9364) (King and Halbert, 1910); quay near Derrytrasna, Lurgan

(J0163) (new).

DERRY: (H9485), (H9586) (Murphy and Carter, 1984); west of Toomebridge (H9890) (new).

PSYCHOMYIIDAE

***Psychomyia pusilla* (Fabricius, 1781)**

ANTRIM: (J1181), (J0485) (Murphy and Carter, 1984).

ARMAGH: Coney Island (H9364) (King and Halbert, 1910); quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: (H9485) (Murphy and Carter, 1984).

***Tinodes waeneri* (Linnaeus, 1758)**

ANTRIM: (J1181), (J0485) (Murphy and Carter, 1984); Rea's Wood (J1485) (O'Connor, 2015).

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: (H9586), (H9485) (Murphy and Carter, 1984); west of Toomebridge (H9890) (new).

PHRYGANEIDAE

***Phryganea bipunctata* Retzius, 1783**

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

***Phryganea grandis* Linnaeus, 1758**

ANTRIM: (J1187) (King and Halbert, 1910).

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

GOERIDAE

***Goera pilosa* (Fabricius, 1775)**

ARMAGH: Coney Island (H9364) (King and Halbert, 1910); quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

LEPIDOSTOMATIDAE

***Lepidostoma hirtum* (Fabricius, 1775)**

ANTRIM: Shane's Castle (J1187) (King and Halbert, 1910).

LIMNEPHILDAE

***Anabolia nervosa* (Curtis, 1834)**

ARMAGH: Maghery (H9263) (King and Halbert, 1910).

***Glyphotaelius pellucidus* (Retzius, 1783)**

ANTRIM: Rea's Wood (J1485) (O'Connor, 2015).

***Limnephilus affinis* Curtis, 1834**

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

Limnephilus auricula* Curtis, 1834

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

***Limnephilus incisus* Curtis, 1834**

ANTRIM: Portmore near L. Neagh (J1169) (King and Halbert, 1910).

***Limnephilus lunatus* Curtis, 1834**

ANTRIM: (J1181), (J0485) (Murphy and Carter, 1984).

DERRY: (H9485) (Murphy and Carter, 1984).

Limnephilus sparsus* Curtis, 1834

ANTRIM: Rea's Wood (J1485) (O'Connor, 2015).

Micropterna lateralis* (Stephens, 1837)

ANTRIM: Rea's Wood (J1485) (O'Connor, 2015).

Micropterna sequax* McLachlan, 1875

ANTRIM: Rea's Wood (J1485) (O'Connor, 2015).

SERICOSTOMATIDAE

***Sericostoma personatum* (Spence, 1826)**

ANTRIM: (J1181), (J0485) (Murphy and Carter, 1984).

ARMAGH: Coney Island (H9364) (King and Halbert, 1910); quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: (H9485), (H9586) (Murphy and Carter, 1984).

LEPTOCERIDAE

***Athripsodes cinereus* (Curtis, 1834)**

ANTRIM: (J1181), (J0485) (Murphy and Carter, 1984).

ARMAGH: Coney Island (H9364) (O'Connor, 2015); quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: (H9485) (Murphy and Carter, 1984); west of Toomebridge (H9890) (new).

***Ceraclea dissimilis* (Stephens, 1836)**

ANTRIM: Rea's Wood (J1485) (O'Connor, 2015).

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

Ceraclea fulva (Rambur, 1842)

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

Ceraclea nigronervosa (Retzius, 1783)

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

Mystacides azurea (Linnaeus, 1761)

ANTRIM: (J0485) (Murphy and Carter, 1984).

ARMAGH: Coney Island (H9364), Maghera (H8342) (King and Halbert, 1910); quay near Derrytrasna, Lurgan (J0163) (new).

DERRY: west of Toomebridge (H9890) (new).

Mystacides longicornis (Linnaeus, 1758)

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

Oecetis lacustris (Pictet, 1834)

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

Oecetis ochracea (Curtis, 1825)

ARMAGH: quay near Derrytrasna, Lurgan (J0163) (new).

Triaenodes bicolor (Curtis, 1834)

ARMAGH: Coney Island (H9364) (King and Halbert, 1910).

FIGURE 22. The counties of Ireland. Lough Neagh is shown in black.

