NEW DISTRIBUTIONAL DATA ON THE CADDISFLIES (TRICHOPTERA) OF IRELAND

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Abstract

Recently discovered data on the caddisflies (Trichoptera) of Ireland are reported. New monad and hectad records are included. New county records are noted.

Key words: Trichoptera, caddisflies, Ireland, new records, distribution.

Introduction

Since O'Connor and O'Connor, (2020), the most recent summaries of the distributions of the Irish caddisflies (Trichoptera) are to be found in O'Connor (2020a, 2021). The latter work also contains updated information on flight-periods and county distributions. Subsequently, O'Connor and Feeley (2021) and Nolan (2021) have provided additional data. The present paper increases this body of information and contains new monad (1km²) and hectad (10km²) records. New county records are reported. For completeness, new county records from Nolan and O'Connor (2020), O'Connor (2020b), Nolan (2021) and O'Connor and Feeley (2021), are noted if not already cited in O'Connor and O'Connor (2020). Four figure (1km²) Irish grid references are given for each record. The more important discoveries are shown (Figs 1-30).

Unless otherwise stated, specimens were identified by the senior author using Malicky (2004), Barnard and Ross (2012) and Salokannel and Mattila (2018). Voucher material of the rarer species has been retained in the O'Connor collection.

Addendum 5

Addendum 5 to the dataset "Caddisflies (Trichoptera) of Ireland", was uploaded by the National Biodiversity Data Centre on the 19 November 2020 https://maps.biodiversityireland.ie/Dataset/250 (O'Connor, 2020a). There are presently 17219 records for 156 species from 656 sites.

Addendum 6

The records in this paper, O'Connor and Feeley (2021) and Nolan (2021) will be sent to the National Biodiversity Data Centre in Addendum 6 for incorporation into the above dataset.

The records

RHYACOPHILIDAE

Rhyacophila dorsalis (Curtis, 1834)

ANTRIM: Greenmount Campus near Six Mile Water and Lough Neagh (J1584), $1 \circlearrowleft 1 \circlearrowleft 11$ May 2016, light-trap, R. Monteith.

DUBLIN: River Dodder, Firhouse Road, Knocklyon (O1127), 1 degree 18 June 2020, Knocklyon (O1128), 1 degree 18 June 2020, both collected & determined J. T. Brophy.

MONAGHAN: Mountain Water, Derrykinnigh Beg (H6243), 1♀ 7 October 2020. River Finn, Edenaforan (H5428), 1♂ 8 October 2020. Both collected & determined J. T. Brophy.

TIPPERARY: Ballywilliam, Ballyporeen, Cahir (R9009), 1 ? 7 August 2021, on a window, S. Voss.

GLOSSOSOMATIDAE

Agapetus fuscipes Curtis, 1834

OFFALY: Raheenduff (N4019), 12 15 July 2020, collected & determined J. T. Brophy.

Agapetus ochripes Curtis, 1834

CAVAN: Lough Sheelin, Chambers Bay (N4285), 1° 5 September 2021, light-trap, C. McNaughton.

Glossosoma conformis Neboiss, 1963 (Fig. 1)

Recorded as new to County Galway from the Clare (Galway) River (M4049) by O'Connor and Feeley (2021).

ANTRIM: Greenmount Campus near Six Mile Water and Lough Neagh (J1584), $1 \stackrel{\frown}{} 30$ July 2015 & $1 \stackrel{\frown}{} 29$ June 2019, light-trap, R. Monteith.

OFFALY: Rathgibbon (N1407), $1 \supseteq 15$ August 2021, light-trap, R. Mc Kenna.

HYDROPTILIDAE

Agraylea multipunctata Curtis, 1834

CAVAN: Lough Sheelin, Chambers Bay (N4285), 1 2 27 July 2020, C. McNaughton.

DUBLIN: Grand Canal Dock (O1734), 2♂♂1♀ 28 July 2020, collected & determined J. T. Brophy.

GALWAY: Lough Derg, Portumna Forest Park (M8503), 1 delay 1 August 2020, collected & determined J. T. Brophy.

Agraylea sexmaculata Curtis, 1834 New to County Cavan (Fig. 2)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, adult 5 June 2020, light-trap, R. Monteith (NBN, 2021).

This was the first record for County Antrim (O'Connor, 2021).

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1 degree 1021, light-trap, C. McNaughton. Lough Sheelin, Chambers Bay (N4285), 1 degree 2021, C. McNaughton. *Allotrichia pallicornis* (**Eaton, 1873**) (**Fig. 3**)

Recorded as new to County Mayo from Lough Cullin (G2301) by O'Connor and Feeley (2021).

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, 1 29 June 2019 & 2 3 17 August 2020, light-trap, R. Monteith.

KILDARE: River Liffey, Castletown Estate, Celbridge (N9733), $10 \stackrel{?}{\circlearrowleft} 2 \stackrel{?}{\hookrightarrow} 10$ June 2021, stream flowing into the River Liffey, Castletown Estate, Celbridge (N9833), $1 \stackrel{?}{\circlearrowleft} 10$ June 2021, both J. P. O'Connor & M. A. O'Connor.

WATERFORD: Tramore (S5701), 1\$\infty\$ 30 May 2020, light-trap, T. Bryant.

Hydroptila angulata Mosely, 1922 New to Counties Cavan and Clare (Fig. 4)

CAVAN: Lough Sheelin, Chambers Bay (N4285), $3 \stackrel{\frown}{} \stackrel{\frown}{} 5$ September 2021, light-trap, Mullaghboy (N4285), $1 \stackrel{\frown}{} 23$ August 2021, light-trap, both C. McNaughton.

CLARE: Lough Derg, Williamstown Harbour (R7787), 233 2 August 2020, collected & determined J. T. Brophy.

Hydroptila cornuta Mosley, 1922

Recorded as new to County Meath from the River Boyne (N8056) by O'Connor (2020b).

CAVAN: Lough Sheelin, Chambers Bay (N4285), $1 \circlearrowleft 24$ August 2021 & $5 \circlearrowleft \circlearrowleft 5$ September 2021, light-trap, C. McNaughton.

Hydroptila forcipata (Eaton, 1873) New to County Antrim (Fig. 5)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \stackrel{\frown}{}$ 29 June 2019 & $1 \stackrel{\frown}{}$ 17 August 2020, light-trap, R. Monteith.

Hydroptila pulchricornis Pictet, 1834

CAVAN: Lough Sheelin, Chambers Bay (N4285), $1\stackrel{\frown}{\hookrightarrow}$ 29 June 2020, light-trap, C. McNaughton.

Hydroptila simulans Mosely, 1920

DUBLIN: Castleknock (O0837), 1\$\infty\$ 25 August 2021, on the outside of lighted window, suburban house, J. P. O'Connor.

Hydroptila sparsa Curtis, 1834 New to County Antrim (Fig. 6)

The species was taken in 1994 at Rosroe (Barrna-nOra) (L7541) by M. C. D. Speight (O'Connor and O'Connor, 2020) and this was the first record for County Galway.

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \stackrel{\frown}{}$ 29 June 2019 & $1 \stackrel{\frown}{}$ 17 August 2020, light-trap, R. Monteith.

DUBLIN: Royal Canal, Castleknock (O0938), 1 d 8 August 2021, M. A. O'Connor.

KILDARE: stream flowing into the River Liffey, Castletown Estate, Celbridge (N9833), 1∂1♀ 10 June 2021, J. P. O'Connor & M. A. O'Connor.

Hydroptila tineoides Dalman, 1819 (Fig. 7)

CAVAN: Lough Sheelin, Chambers Bay (N4285), $1 \stackrel{\frown}{\hookrightarrow} 27$ July 2020 & $8 \stackrel{\frown}{\hookrightarrow} 5$ September 2021, light-trap, Crover (N4786), $2 \stackrel{\frown}{\hookrightarrow} 8$ September 2021, light-trap, C. McNaughton.

GALWAY: Lough Derg, Portumna Forest Park (M8202), 1 \(\text{1} \) August 2020, collected & determined J. T. Brophy.

WATERFORD: Tramore (S5701), $1 \supseteq 3$ June 2020, light-trap, T. Bryant.

This was the first record for County Waterford (O'Connor, 2021).

Ithytrichia lamellaris Eaton, 1873

WICKLOW: Clara Vale near the Avonmore River (T1892), $1\stackrel{\frown}{}$ 24 June 2020, light-trap, C. Osthoff, determined K. G. M. Bond.

Orthotrichia angustella (McLachlan, 1865) (Fig. 8)

Recorded as new to County Galway from the Screeb River (L9740) by O'Connor and Feeley (2021).

WATERFORD: Ballyscanlan Lake (S5402), 1\$\times\$ 19 May 2020, light-trap, T. Bryant.

Orthotrichia costalis (Curtis, 1834)

WATERFORD: Belle Lake, pump house (S6605), $1 \circlearrowleft 14$ October 2020, light-trap, A. Walshe. Tramore (S5701), $1 \hookrightarrow 28$ July 2020, light-trap, T. Bryant.

The previous known Irish flight period was June-July.

Oxyethira flavicornis (Pictet, 1834)

CAVAN: bog near Finnea, Lough Sheelin (N4082), $1 \capp2$ 12 September 2021, light-trap, C. McNaughton. Corglass, Lough, Kilnaleck (N4292), $3 \capp2 \capp2$ 9 September 2021, light-trap, C. McNaughton. Lough Sheelin, Crover (N4786), $7 \capp2 \capp2$ 8 September 2021, light-trap, Chambers Bay (N4285), $1\capp2$ 5 September 2021, light-trap, both C. McNaughton.

Oxyethira frici Klapálek, 1891 New to County Cork (Fig. 9)

CORK: Glengarriff Wood (V9175), $2 \stackrel{\frown}{\hookrightarrow} 10$ August 2020, G. O'Donnell, determined K. G. M. Bond.

PHILOPOTAMIDAE

Philopotamus montanus (Donovan, 1813)

Recorded as new to County Offaly from the Silver River (N2407) by Nolan and O'Connor (2020).

ANTRIM: Dungonnell Dam near Cargan (D1917), 1♀ 24 April 2021, C. McNaughton.

DUBLIN: Glencullen River, Boranaraltry Bridge (O1620), 1♂ 25 April 2021, collected & determined H. B. Feeley. Owendoher River, Cruagh (O1322), 1♂1♀ 19 July 2020, Cruagh Road Bridge (O1322), 1♂1♀ 25 April 2021, both collected & determined H. B. Feeley.

Wormaldia mediana McLachlan, 1878 (Fig. 10)

MEATH: River Boyne, Navan (N8868), 1 $\stackrel{\frown}{}$ 26 June 2020, collected & determined J. T. Brophy.

This was the first record for County Meath (O'Connor, 2021).

Wormaldia occipitalis (Pictet, 1834)

DUBLIN: Glencullen River, Enniskerry (O2217), $1 \circlearrowleft 2 \circlearrowleft \circlearrowleft 20$ June 2020, collected J. T. Brophy, determined J. T. Brophy & J. P. O'Connor.

GALWAY: Knockaunranny Stream, bridge upstream of Ross Lake (M1935), 1 d 11 August 2021, H. B. Feeley.

ECNOMIDAE

Ecnomus tenellus (Rambur, 1842)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \stackrel{\frown}{\hookrightarrow} 5$ May 2016, light-trap, R. Monteith.

CAVAN: Lough Sheelin, Chambers Bay (N4285), 1& 16 July 2020, light-trap, C. McNaughton.

POLYCENTROPOPIDAE

Holocentropus dubius (Rambur, 1842) (Fig. 11)

Recorded as new to County Sligo from Lough Arrow (G7808) by O'Connor and Feeley (2021).

Holocentropus picicornis (Stephens, 1836)

WATERFORD: Ballyscanlan Lake (S5402), 1 ? 27 May 2020, light-trap, T. Bryant. Great Newtown Head (X5698), 1 ? 14 August 2020, light-trap, T. Bryant.

Neureclipsis bimaculata (Linnaeus, 1758)

CAVAN: Lough Sheelin, Chambers Bay (N4285), 1♀ 5 September 2021, light-trap, C. McNaughton.

LEITRIM: River Shannon, Jamestown (M9797), 733 2 August 2021, M. A. O'Connor.

Plectrocnemia conspersa (Curtis, 1834)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, 16 15 September 2019, light-trap, R. Monteith.

CAVAN: bog near Finnea, Lough Sheelin (N4082), $1 \stackrel{\frown}{\hookrightarrow} 10$ September 2021 & $1 \stackrel{\frown}{\hookrightarrow} 12$ September 2021, light-trap, C. McNaughton.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), 1♂ 16 September 2020, light-trap, C. McNaughton.

Plectrocnemia geniculata McLachlan, 1871

CORK: Fota Wildlife Park (W7871), $1 \stackrel{\frown}{} 12\text{-}18$ October 2020 & $1 \stackrel{\frown}{} 21\text{-}29$ June 2021, Rothamsted Insect Survey light-trap, per A. Riley.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $1 \stackrel{\frown}{} 17$ September 2020, light-trap, C. McNaughton.

Polycentropus flavomaculatus (Pictet, 1834)

ANTRIM: Greenmount Campus near Six Mile Water and Lough Neagh (J1584), $1 \circlearrowleft 30$ July 2015, $1 \circlearrowleft 5$ August 2015, $1 \circlearrowleft 1 \circlearrowleft 3$ August 2017 & $1 \circlearrowleft 17$ August 2020, light-trap, R. Monteith.

CORK: Fota Wildlife Park (W7871), $1 \stackrel{\frown}{\hookrightarrow} 5$ -11 July 2021, Rothamsted Insect Survey light-trap, per A. Riley.

GALWAY: Lough Derg, Portumna Forest Park (M8503), 1 delay 1 August 2020, collected & determined J. T. Brophy.

LEITRIM: River Shannon, Jamestown (M9797), 1 2 August 2021, M. A. O'Connor.

MEATH: woods at the south-east corner of Lough Sheelin (N4582), $2 \stackrel{\frown}{} \stackrel{\frown}{} 25$ August 2021, light-trap, C. McNaughton.

PSYCHOMYIIDAE

Lype phaeopa (Stephens, 1836)

WESTMEATH: Lough Sheelin, Goreport (N4381), 1 \(\frac{1}{2} \) 23 August 2021, C. McNaughton.

Lype reducta (Hagen, 1868)

Recorded as new to County Waterford from Belle Lake (S6605) by O'Connor (2020b).

Psychomyia pusilla (Pictet, 1834)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \stackrel{?}{\circlearrowleft} 30$ July 2015, $2 \stackrel{?}{\hookrightarrow} 2$ August 2017, $66 \stackrel{?}{\circlearrowleft} \stackrel{?}{\circlearrowleft} 29$ June 2019 & $1 \stackrel{?}{\hookrightarrow} 2$ June 2020, light-trap, R. Monteith.

Tinodes maclachlani Kimmins, 1966 New to County Derry (Fig. 12)

DERRY: White Rocks, small stream (C8840), $1 \stackrel{\frown}{} 27$ June 2021, C. McConaghy, determined P. Langton.

DUBLIN: River Dodder, Firhouse Road, Knocklyon (O1127), 1 d 18 June 2020, on weir structure, collected & determined J. T. Brophy.

Tinodes maculicornis (Pictet, 1834)

CLARE: Lough Derg, Williamstown Harbour (R7787), 1 2 August 2020, collected & determined J. T. Brophy.

GALWAY: Lough Derg, Portumna Forest Park (M8202), 1 delay 1 August 2020, collected & determined J. T. Brophy.

WESTMEATH: Lough Sheelin, Goreport (N4381), 1♂ 23 August 2021, C. McNaughton.

Tinodes unicolor (Pictet, 1834)

DUBLIN: tufa spring above the Bohernabreena Reservoir (O0922), 1 d 24 June 2020, collected & determined J. T. Brophy.

Tinodes waeneri (Linnaeus, 1758)

ANTRIM: Lough Fea near Cookstown (H7587), 1♂ 8 August 2019, R. Monteith.

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1♀ 10 September 2021, light-trap, C. McNaughton. Corglass Lough, Kilnaleck (N4292), 1♀ 9 September 2021, light-trap, C. McNaughton.

DUBLIN: Phoenix Park, (O1334), adult 19 May 2020, J. O'Neill. River Dodder, Dartry (O1629), 1\$\top 16\$ June 2020, Firhouse Road, Knocklyon, (O1127), 1\$\tilde{\pi}\$ 18 June 2020, both collected & determined J. T. Brophy. Santry Stream, Santry (O1640), 1\$\tilde{\pi}\$ 23 June 2020, collected & determined J. T. Brophy.

GALWAY: Lough Derg, Portumna Forest Park (M8202), 1 delay 1 August 2020, collected & determined J. T. Brophy.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $1 \supseteq 17$ September 2020, light-trap, C. McNaughton.

HYDROPSYCHIDAE

Cheumatopsyche lepida (Pictet, 1834)

MEATH: River Boyne, Navan (N8868), $1 \circlearrowleft 2 \circlearrowleft \circlearrowleft 26$ June 2020, collected & determined J. T. Brophy.

Hydropsyche instabilis (Curtis, 1834) New to County Meath (Fig. 13)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $2 \stackrel{\frown}{} \stackrel{\frown}{} 10$ May 2020 & $1 \stackrel{\frown}{} 17$ August 2020, light-trap, R. Monteith.

CAVAN: Lough Sheelin, Chambers Bay (N4285), $1 \stackrel{\frown}{\hookrightarrow} 6$ September 2020, light-trap, C. McNaughton.

MEATH: Ardsallagh (N8963), 1♀ 22 May 2021, on car windscreen, D. A. Murray.

Although the River Boyne was only 250m from the parked car, the specimen probably came from one of the nearby streams flowing into the river.

WATERFORD: Great Newtown Head, Tramore (X5698), $1 \stackrel{\frown}{\hookrightarrow} 10$ August 2020 & $1 \stackrel{\frown}{\hookrightarrow} 14$ August 2020, light-trap, T. Bryant.

Hydropsyche pellucidula (Curtis, 1834)

CAVAN: bog near Finnea beside the River Inny (N4082), $1 \stackrel{\frown}{} 10$ September 2021, light-trap, C. McNaughton.

Hydropsyche siltalai Döhler, 1963

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \supseteq 29$ June 2019, $1 \supseteq 10$ May 2020 & $1 \supseteq 2$ June 2020, light-trap, R. Monteith.

CAVAN: Corglass Lough, Kilnaleck (N4292), 1 9 September 2021, light-trap, C. McNaughton.

CORK: Dromdeer East near Doneraile (R6306), 1♀ 1 August 2020, light-trap, K. G. M. Bond.

KILDARE: stream flowing into the River Liffey, Castletown Estate, Celbridge (N9833), 1 degree 10 June 2021, J. P. O'Connor & M. A. O'Connor.

OFFALY: Killaun Bog (N1005), 1 24 August 2021, light-trap, R. Mc Kenna.

PHRYGANEIDAE

Agrypnia obsoleta (Hagen, 1864)

CAVAN: Lough Sheelin, Mullaghboy (N4285), 2♂♂ 23 August 2021, light-trap, C. McNaughton.

Agrypnia varia (Fabricius, 1793) New to County Meath (Fig. 14)

MEATH: woods at the south-east corner of Lough Sheelin (N4582), $1 \stackrel{\frown}{}$ 25 August 2021, light-trap, C. McNaughton.

WESTMEATH: Lough Sheelin, Goreport (N4381), 1♀ 23 August 2021, C. McNaughton.

Hagenella clathrata (Kolenati, 1848) (Fig. 15)

Recorded as new to County Offaly from Killaun Bog (N1005) by Nolan (2021).

Phryganea bipunctata Retzius, 1783

ANTRIM: Lough Fea near Cookstown (H7587), 1 3 8 August 2019, R. Monteith.

Phryganea grandis Linnaeus, 1758

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \stackrel{\frown}{\hookrightarrow} 29$ June 2019, light-trap, R. Monteith.

GOERIDAE

Goera pilosa (Fabricius, 1775) (Fig. 16)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, 1 d 17 August 2020, light-trap, R. Monteith.

Previously recorded from County Antrim from Kilgad (Riversdale) Lake (J1798), Kells, by O'Connor and McNaughton (2019). This was omitted from the county list in O'Connor (2021).

DUBLIN: River Dodder, Dartry (O1529), 1\$\int 16\$ June 2020, collected & determined J. T. Brophy.

Silo nigricornis (Pictet, 1834)

Recorded as new to County Roscommon from the Cloonfad River (M4971) by O'Connor and Feeley (2021).

LEPIDOSTOMATIDAE

Crunoecia irrorata (Curtis, 1834)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, 1♂ 30 July 2015, light-trap, R. Monteith.

Lepidostoma basale (Kolenati, 1848)

Recorded as new to County Roscommon from the Cloonfad River (M4971) by O'Connor and Feeley (2021).

Lepidostoma hirtum (Fabricius, 1775)

LEITRIM: River Shannon, Jamestown (M9797), 1 2 August 2021, M. A. O'Connor.

APATANIDAE

Apatania muliebris McLachlan, 1866

ANTRIM: Garron spring (D2619), $1 \stackrel{\frown}{} 23$ April 2020, C. McNaughton. Lough na Bric (D2519), $6 \stackrel{\frown}{} \stackrel{\frown}{} 23$ April 2020, collected from the edge of the lake, C. McNaughton.

LIMNEPHILIDAE

Drusus annulatus (Stephens, 1837)

ANTRIM: Waterloo Gardens, Belfast (J3378), 2001 18 September 2021, P. Thomlinson.

DERRY: White Rocks, small stream (C8840), 1\$\tilde{\cap}\$ 27 June 2021, C. McConaghy.

TIPPERARY: Ballywilliam, Ballyporeen, Cahir (R9009), 12 17 September 2020, S. Voss.

Chaetopteryx villosa (Fabricius, 1798) New to County Monaghan (Fig. 17)

MONAGHAN: River Finn, Edenaforan (H5428), 1♂ 8 October 2020, collected & determined J. T. Brophy.

TIPPERARY: Ballywilliam, Ballyporeen, Cahir (R9009), 1♀ 21 October 2020, S. Voss.

Anabolia brevipennis (Curtis, 1834)

CAVAN: Lough Sheelin, Mullaghboy (N4285), 1\$\infty\$ 19 August 2021, light-trap in woods, C. McNaughton.

This is the second record for County Cavan and the first Irish record from August.

Glyphotaelius pellucidus (Retzius, 1783) New to County Offaly (Fig. 18)

LAOIS: Deerpark near Ballyfin (N3803), adult 25 May 2020, on window ledge, R. Duff, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre). Shanahoe (S3985), adult 3 June 2020, C. Uys, determined C. McNaughton, from photograph (National Biodiversity Data Centre).

MEATH: woods at the south-east corner of Lough Sheelin (N4582), $1 \circlearrowleft 1 \circlearrowleft 25$ August 2021, light-trap, C. McNaughton.

OFFALY: Killaun Bog (N1005), $1 \circlearrowleft 19$ July 2021, light-trap, R. Mc Kenna. Rathgibbon, South, Killyon (N1306), $1 \circlearrowleft 28$ May 2021 & $1 \circlearrowleft 26$ June 2021, light-trap, R. Mc Kenna.

Grammotaulius nigropunctatus (Retzius, 1783) New to Counties Laois and Limerick (Fig. 19) (Plate 1)

LAOIS: Shanahoe (S3985), 2 adults 30 May 2020, C. Uys, confirmed J. P. O'Connor from photographs (National Biodiversity Data Centre).

LIMERICK: Drumlohan, Kilcornan (R4052), adult 24 May 2021, L. Nolan, determined C. McNaughton from photograph, confirmed J. P. O'Connor.

Limnephilus affinis Curtis, 1834

CAVAN: Lough Sheelin, Chambers Bay (N4285), 2♀♀ 5 September 2021, light-trap, C. McNaughton. Corglass Lough, Kilnaleck (N4292), 2♂♂ 9 September 2021, light-trap, C. McNaughton.

WATERFORD: Great Newtown Head, Tramore (X5698), $1 \stackrel{\frown}{\hookrightarrow} 10$ August 2020, light-trap, T. Bryant.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $1 \stackrel{\frown}{\hookrightarrow} 16$ September 2020, light-trap, C. McNaughton.

Limnephilus auricula Curtis, 1834

ANTRIM: Springfarm (J1588), 13 29 April 2015, light-trap, R. Monteith.

LAOIS: Shanahoe (S3985), adult 10 June 2020, C. Uys, determined J. P. O'Connor from photograph (National Biodiversity Data Centre).

OFFALY: Killaun Bog (N1005), $1 \circlearrowleft 1 \circlearrowleft 24$ August 2021, light-trap, R. Mc Kenna. Rathgibbon (N1407), $1 \circlearrowleft 15$ August 2021, light-trap, R. Mc Kenna.

TIPPERARY: Ballywilliam, Ballyporeen, Cahir (R9009), shed-wall, 1 of 7 August 2021, S. Voss.

Limnephilus binotatus Curtis, 1834 New to County Kildare (Fig. 20)

Recorded as new to County Waterford from Belle Lake (S6605) by O'Connor (2020b).

KILDARE: Ballyvoneen (N8040), adult 2 April 2020, light-trap, P. Sheridan, determined C. McNaughton from photograph, confirmed J. P. O'Connor.

This is the earliest known Irish adult.

Limnephilus decipiens (Kolenati, 1848)

CAVAN: Lough Sheelin, Crover (N4786), $1 \stackrel{\frown}{\hookrightarrow} 8$ September 2021, light-trap, C. McNaughton. **WESTMEATH:** bog at Finea, Lough Sheelin (N4181), $1 \stackrel{\frown}{\hookrightarrow} 17$ September 2020, light-trap, C.

McNaughton.

Limnephilus elegans Curtis, 1834 New to County Armagh (Fig. 21)

ARMAGH: Peatlands Park (H9061), adult 1 July 2021, A. Boyle, determined C. McNaughton from photograph.

Limnephilus flavicornis (Fabricius, 1787)

DUBLIN: Áras an Uachtaráin, Phoenix Park (O1235), adult 25 May 2020, in ditch, J. O'Neill, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

The species is already known from the adjoining Dublin Zoo (O1235).

MEATH: woods at the south-east corner of Lough Sheelin (N4582), $5 \stackrel{\frown}{} \stackrel{\frown}{} 25$ August 2021, light-trap, C. McNaughton.

OFFALY: Rathgibbon South, Killyon (N1306), adult 2 July 2021, light-trap, R. Mc Kenna, determined C. McNaughton from photograph.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $2 \stackrel{\frown}{\hookrightarrow} 16$ September 2020, light-trap, C. McNaughton.

Limnephilus hirsutus (Pictet, 1834) (Fig. 22)

ANTRIM: Greenmount Campus (J1584), 12 23 September 2019, light-trap, R. Monteith.

WATERFORD: Great Newtown Head, Tramore (X5698), $1 \circlearrowleft 2 \circlearrowleft \circlearrowleft 10$ August 2020, light-trap, T. Bryant.

Limnephilus incisus Curtis, 1834

Recorded as new to County Tipperary from Ballywilliam (R9009) by O'Connor (2020b).

Limnephilus lunatus Curtis, 1834

CAVAN: bog near Finnea, Lough Sheelin (N4082), $1 \circlearrowleft 2 \hookrightarrow 10$ September 2021, light-trap, C. McNaughton. Dunaweel (H2607), adult 21 November 2020, several lakes nearby, H. Bothwell, determined J. P. O'Connor from photograph (National Biodiversity Data Centre).

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $3 \stackrel{\frown}{\hookrightarrow} 17$ September 2020, light-trap, C. McNaughton.

Limnephilus luridus Curtis, 1834

WESTMEATH: bog at Finea, Lough Sheelin (N4181), 1♂ 16 September 2020, light-trap, C. McNaughton.

Limnephilus marmoratus Curtis, 1834

ANTRIM: Waterloo Gardens, Belfast (J3378), $1 \stackrel{\frown}{} 4$ September 2021, light-trap, P. Thomlinson.

CAVAN: bog near Finnea, Lough Sheelin (N4082), $2 \circlearrowleft \circlearrowleft 10$ September 2021, light-trap, C. McNaughton. Corglass Lough, Kilnaleck (N4292), $2 \circlearrowleft \circlearrowleft 9$ September 2021, light-trap, C. McNaughton. Lough Sheelin, Crover (N4786), $1 \circlearrowleft 8$ September 2021, light-trap, C. McNaughton.

KERRY: Tullamore, Listowel (R0040), adult 16 August 2020, feeding on umbellifers, P. Halpin, determined J. P. O'Connor from photograph (National Biodiversity Data Centre).

LAOIS: Shanahoe (S3985), adult 3 June 2020, C. Uys, determined J. P. O'Connor from photograph (National Biodiversity Data Centre).

LEITRIM: River Shannon, Jamestown (M9797), 1♀ 2 August 2021, M. A. O'Connor.

OFFALY: Killaun Bog (N1005), 1♀ 24 August 2021, light-trap, R. Mc Kenna. Rathgibbon (N1407), 1♂ 15 August 2021, light-trap, R. Mc Kenna.

WATERFORD: Ballyscanlan Lake (S5402), $1 \stackrel{\frown}{\hookrightarrow} 9$ November 2020, light-trap, T. Bryant. Great Newtown Head, Tramore (X5698), $1 \stackrel{\frown}{\hookrightarrow} 14$ August 2020 & $1 \stackrel{\frown}{\circlearrowleft} 16$ September 2020, light-trap, T. Bryant.

The Ballyscanlan Lake date of 9 November is the latest known one for an adult of *Limnephilus marmoratus* in Ireland.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), 1♂3♀♀ 17 September 2020, light-trap, C. McNaughton.

Limnephilus rhombicus (Linnaeus, 1758) New to County Laois (Fig. 23) (Plate 2)

LAOIS: Shanahoe (S3985), adult 18 June 2020, C. Uys, determined C. McNaughton, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

Limnephilus sparsus Curtis, 1834 New to County Laois (Fig. 24)

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1♀ 11 September 2021, light-trap, C. McNaughton.

LAOIS: Deerpark near Ballyfin (N3803), adult 17 May 2020, R. Duff, determined C. McNaughton and confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

OFFALY: Killaun Bog (N1005), 1∂1♀ 24 August 2021, light-trap, R. Mc Kenna. Rathgibbon, South, Killyon (N1306), adult 2 July 2021, light-trap, R. Mc Kenna.

WATERFORD: Ballyscanlan Lake (S5402), 1 \circlearrowleft 22 April 2020 & 1 \circlearrowleft 16 May 2020, light-trap, T. Bryant.

Limnephilus vittatus (Fabricius, 1798) New to County Laois (Fig. 25)

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1♀ 11 September 2021, light-trap, C. McNaughton. Lough Sheelin, Chambers Bay (N4285), 1♂ 6 September 2020, light-trap, C. McNaughton. Corglass Lough, Kilnaleck (N4292), 1♀ 9 September 2021, light-trap, C. McNaughton.

CLARE: Bell Harbour (M2808), adult 23 July 2021, light-trap, R. Mc Kenna, determined C. McNaughton from photograph.

LAOIS: Shanahoe (S3985), adults 14, 16 & 27 May 2020, 19 June 2020, C. Uys, determined J. P. O'Connor from photographs (National Biodiversity Data Centre).

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $1 \stackrel{\frown}{} 16$ September 2020, light-trap, C. McNaughton.

Halesus digitatus (Schrank, 1781)

CAVAN: Dunaweel (H2607), adult 21 November 2020, light-trap, H. Bothwell, determined C. McNaughton from photograph (National Biodiversity Data Centre).

Halesus radiatus (Curtis, 1834)

ANTRIM: Waterloo Gardens, Belfast (J3378), 1\$\infty\$ 26 September 2021, light-trap, P. Thomlinson.

LAOIS: Ballyboodin, near Rivers Goul and Erkina (S3677), 5 adults 3 October 2020, UV lamp, M. Brennan, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre). Shanahoe (S3985), adult, October 2019, C. Uys, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

The species was previously recorded from square S3677 when M. Kelly-Quinn reported 20 larvae from the River Goul (O'Connor and O'Connor, 2019) but the county was given by her as Kilkenny instead of Laois.

TIPPERARY: Ballywilliam, Ballyporeen, Cahir (R9009), $1 \stackrel{\frown}{\hookrightarrow} 9$ September 2020, $1 \stackrel{\frown}{\hookrightarrow} 7$ September 2021 & $1 \stackrel{\frown}{\circlearrowleft} 8$ September 2021, S. Voss.

These adults confirm the identification of two larvae collected on 14 May 2020.

WATERFORD: bog at Finea, Lough Sheelin (N4181), 1♂ 16 September 2020, light-trap, C. McNaughton.

WEXFORD: Rathnure (S9137), adult 17 October 2020, C. Moriarty, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

Micropterna lateralis (Stephens, 1837)

Recorded as new to County Tipperary from Ballywilliam (R9009) by O'Connor (2020b). **CAVAN:** Lough Sheelin, Chambers Bay (N4285), 1 14 September 2020, light-trap, C. McNaughton.

WATERFORD: Ballyscanlan Lake (S540), 1\$\times\$ 19 May 2020, light-trap, T. Bryant.

Micropterna sequax McLachlan, 1875

Recorded as new to County Tipperary from Ballywilliam (R9009) by O'Connor (2020b).

CAVAN: Lough Sheelin, Chambers Bay (N4285), 1\$\infty\$ 6 September 2020, light-trap, C. McNaughton.

WATERFORD: Great Newtown Head, Tramore (X5698), 1♂ 10 August 2020, light-trap, T. Bryant.

Potamophylax cingulatus (Stephens, 1837)

WATERFORD: Great Newtown Head, Tramore (X5698), $1 \stackrel{\frown}{\hookrightarrow} 14$ August 2020, light-trap, T. Bryant. Tramore (S5701), $1 \stackrel{\frown}{\hookrightarrow} 5$ September 2020, light-trap, T. Bryant.

Potamophylax latipennis (Curtis, 1834)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, 1 23 September 2019, light-trap, R. Monteith.

DERRY: White Rocks, small stream (C8840), 1 \$\frac{1}{2}\$ July 2021, C. McConaghy, determined P. Langton.

TIPPERARY: Ballywilliam, Ballyporeen, Cahir (R9009), 1♀ 26 August 2021, on a window, S. Voss.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), 1♂ 16 September 2020, light-trap, C. McNaughton.

Stenophylax permistus McLachlan, 1895 New to County Kilkenny (Fig. 26)

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1 degree 12 12 September 2021, light-trap, C. McNaughton.

KILKENNY: Ballinaboley, Kilmacow (S5320), 3 24 March 2020, A. Allen, determined J. T. Brophy.

WATERFORD: Tramore (S5701), 233 March 2020, light-trap, T. Bryant.

The 13 March is the earliest adult date for the species in Ireland.

SERICOSTOMATIDAE

Sericostoma personatum (Spence, 1826)

Recorded as new to County Offaly from Knockbarron Wood (N1706) by Nolan and O'Connor (2020).

CORK: Cork City (W6471), 1\$\infty\$ 9 July 2020, S. Waheed.

DUBLIN: Owendoher River, Cruagh (O1322), 1♂ 19 July 2020. River Dodder, Dartry (O1629), 1♀ 7 June 2020. All collected & determined J. T. Brophy.

WICKLOW: Greystones (O2813), adult 11 June 2020, C. Mc Kenna, determined J. P. O'Connor from photograph (National Biodiversity Data Centre).

BERAEIDAE

Beraea maurus (Curtis, 1834) New to County Westmeath (Fig. 27)

The species was taken in 1994 at Rosroe (Barrna-nOra) (L7541) by M. C. D. Speight (O'Connor and O'Connor, 2020) and this was the first record for County Galway.

WESTMEATH: Goreport, Lough Sheelin (N4381), 1♀ 16 July 2021, C. McNaughton.

Beraea pullata (Curtis, 1834)

KILDARE: stream flowing into the River Liffey, Castletown Estate, Celbridge (N9833), 1∂1♀ 10 June 2021, J. P. O'Connor & M. A. O'Connor.

ODONTOCERIDAE

Odontocerum albicorne (Scopoli, 1763)

CORK: Mullihassig Wood near Coachford (W4275), adult 12 July 2021, M. O'Sullivan, determined C. McNaughton from photograph.

MOLANNIDAE

Molanna albicans (Zetterstedt, 1840) New to County Clare (Fig. 28)

CLARE: Lough Derg, Williamstown Harbour (R7787), 1 2 August 2020, collected & determined J. T. Brophy.

LEPTOCERIDAE

Adicella reducta (McLachlan, 1865)

CORK: Mullihassig Wood near Coachford (W4275), adult 12 July 2021, M. O'Sullivan, determined C. McNaughton from photograph.

Athripsodes albifrons (Linnaeus, 1758)

CORK: River Lee, Cork City (W6471), 233 5 July 2020, collected & determined J. T. Brophy.

LAOIS: Ballyboodin near Rivers Goul and Erkina (S3677), adult 6 August 2020, M. Brennan, determined by S. Stone from photographs (National Biodiversity Data Centre).

OFFALY: Killaun Bog (N1005), adult 19 July 2021, light-trap, R. Mc Kenna, determined C. McNaughton from photograph.

TIPPERARY: Ballybeg, near the River Suir (S1417), adult 20 August 2020, L. Garcia, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

Athripsodes aterrimus (Stephens, 1836)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, 1 29 June 2019 & 1 3 17 August 2020, light-trap, R. Monteith.

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1♀ 10 September 2021, light-trap, C. McNaughton.

DUBLIN: Áras an Uachtaráin, Phoenix Park (O1235), $1 \stackrel{\frown}{}_{\sim} 28$ May 2020, in vegetation beside small pond, S. Hodge. Castleknock (O0837), $1 \stackrel{\frown}{}_{\sim} 3$ August 2021, dead in a spider's web, suburban house, J. P. O'Connor.

WATERFORD: Great Newtown Head (X5698), $1 \supseteq 10$ August 2020, light-trap, T. Bryant. Tramore (S5701), $1 \supseteq 27$ July 2020, light-trap, T. Bryant.

WESTMEATH: Lough Sheelin, Goreport shore (N4381), $3 \stackrel{\frown}{} \stackrel{\frown}{} 1$ July 2020 & $5 \stackrel{\frown}{} \stackrel{\frown}{} 23$ August 2021, C. McNaughton.

Athripsodes cinereus (Curtis, 1834)

CORK: River Lee, Cork City (W6471), $3 \stackrel{?}{\circ} 3 \stackrel{?}{\circ} 9 \stackrel{?}{\circ} 5$ July 2020, collected & determined J. T. Brophy.

GALWAY: Lough Derg, Portumna Forest Park (M8202), 1 delay 1 August 2020, collected & determined J. T. Brophy.

KILDARE: Royal Canal, Leixlip (O0037), adult 12 July 2020, on canal-side vegetation, C. Lee, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

Ceraclea albimacula (Rambur, 1842)

CAVAN: bog near Finnea, Lough Sheelin (N4082), $3 \circlearrowleft \circlearrowleft 1 \hookrightarrow 10$ September 2021, light-trap, C. McNaughton.

Ceraclea dissimilis (Stephens, 1836) New to County Waterford (Fig. 29)

Recorded as new to County Meath from the River Boyne (N8056) by O'Connor (2020b).

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \stackrel{\frown}{} 29$ June 2019, light-trap, R. Monteith.

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1° 10 September 2021, light-trap, C. McNaughton.

WATERFORD: Belle Lake, pump house (S6605), 1 14 October 2020, light-trap, A. Walshe. *Ceraclea fulva* (Rambur, 1842)

CAVAN: Lough Sheelin, Chambers Bay (N4285), $1\stackrel{\frown}{\hookrightarrow} 14$ September 2020, light-trap, C. McNaughton.

WESTMEATH: bog at Finea, Lough Sheelin (N4181), $2 \stackrel{\frown}{\hookrightarrow} 16$ September 2020 & $1 \stackrel{\frown}{\circlearrowleft} 17$ September 2020, light-trap, C. McNaughton.

Ceraclea senilis (Burmeister, 1839)

CAVAN: Lough Sheelin, Mullaghboy (N4285), 1\$\int 20\$ August 2021, light-trap, C. McNaughton.

DUBLIN: Grand Canal Dock (O1734), 1\$\int \text{ pupa 28 July 2020, grab sampler, collected & determined J. T. Brophy.

Leptocerus tineiformis Curtis, 1834 New to County Cavan (Fig. 30)

CAVAN: Lough Sheelin, Mullaghboy (N4285), 1♀ 17-18 July 2021, light-trap, C. McNaughton.

GALWAY: Lough Derg, Portumna Forest Park (M8503), 1∂1♀ 1 August 2020, collected & determined J. T. Brophy.

This was the first record for County Galway (O'Connor, 2021).

WATERFORD: Ballyscanlan Lake (S5402), $1\stackrel{\frown}{}$ 24 June 2020 & $1\stackrel{\frown}{}$ 30 July 2020, light-trap, T. Bryant.

Mystacides azurea (Linnaeus, 1761)

CAVAN: Lough Sheelin, Chambers Bay (N4285), 1♀ 5 September 2021, light-trap, C. McNaughton.

DUBLIN: Rathfarnham (O1327), adult 2-3 June 2020, light-trap, Á. O'Connor, determined J. T. Brophy from photograph. River Dodder, Dartry (O1629), 3♂♂ 7 June 2020, Firhouse Road, Knocklyon (O1127), 1♀ 18 June 2020, Milltown (O1629), 2♂♂ 7 June & 1♂ 16 June 2020, all collected & determined J. T. Brophy.

KERRY: Killarney (V9588), adult 3 June 2020, U. Harris, determined J. P. O'Connor from photograph (National Biodiversity Data Centre).

LEITRIM: River Shannon, Jamestown (M9797), 1 2 August 2021, M. A. O'Connor.

OFFALY: Turraun Wetlands (N1722), 1\$\infty\$ 12 June 2021, R. Mc Kenna, determined C. McNaughton from photograph.

WESTMEATH: Lough Sheelin, Goreport (N4381), 1♀ 23 August 2021, C. McNaughton.

Mystacides longicornis (Linnaeus, 1758)

ANTRIM: Greenmount Campus (J1584), near Six Mile Water and Lough Neagh, $1 \circlearrowleft 4 \circlearrowleft 2 \circlearrowleft 29$ June 2019, light-trap, R. Monteith.

CAVAN: bog near Finnea, Lough Sheelin (N4082), 1♀ 12 September 2021, light-trap, C. McNaughton.

DUBLIN: People's Garden Pond, Phoenix Park (O1334), 1 december 19 May 2020, on hogweed beside the pond, J. O'Neill, confirmed J. P. O'Connor from photograph (National Biodiversity Data Centre).

Two larvae were collected in the pond by J. M. Caffrey in June 2007 (O'Connor and O'Connor, 2019).

Oecetis furva (Rambur, 1842)

Recorded as new to County Roscommon from Grange (Lisheen) Lough (M9385) by O'Connor and Feeley (2021).

Oecetis notata (Rambur, 1842)

Recorded as new to County Meath from the River Boyne (N8868) by O'Connor (2020b).

Oecetis ochracea (Curtis, 1825)

OFFALY: Turraun Wetlands (N1722), adult 16 May 2021, R. Mc Kenna, determined C. McNaughton, from photograph.

Previously only known in County Offaly from the nearby Lough Boora (N1818) (O'Connor and O'Connor, 2018).

WESTMEATH: Goreport shore, Lough Sheelin (N4381), $1 \stackrel{\frown}{} 1$ July 2020, C. McNaughton. *Triaenodes bicolor* (Curtis, 1834)

CAVAN: Lough Sheelin, Crover (N4786), 1 ? 8 September 2021, light-trap, C. McNaughton.

WESTMEATH: Lough Sheelin, Goreport shore (N4381), 1 d 1 July 2020, C. McNaughton.

Ylodes reuteri (McLachlan, 1880)

WATERFORD: Tramore (S5701), $1 \stackrel{\frown}{} 29$ May 2020, light-trap, T. Bryant.

The above date is the earliest adult one for the species in Ireland.

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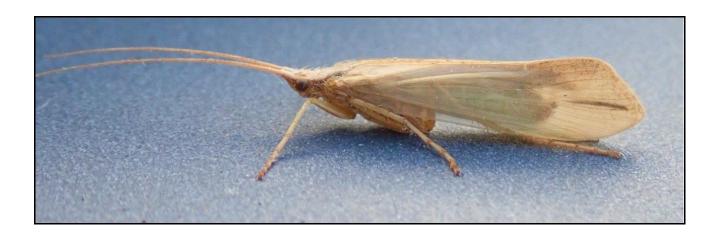
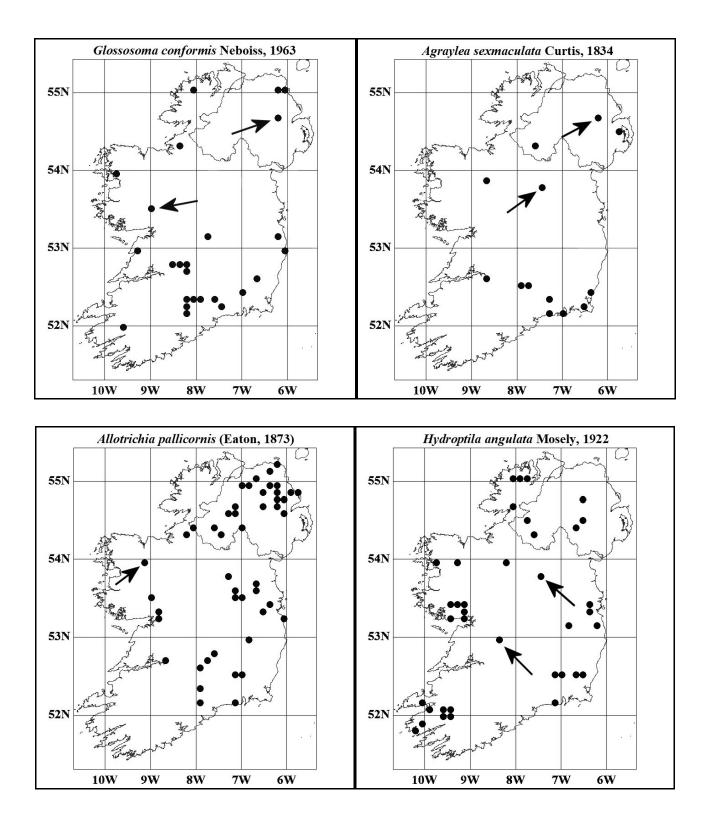


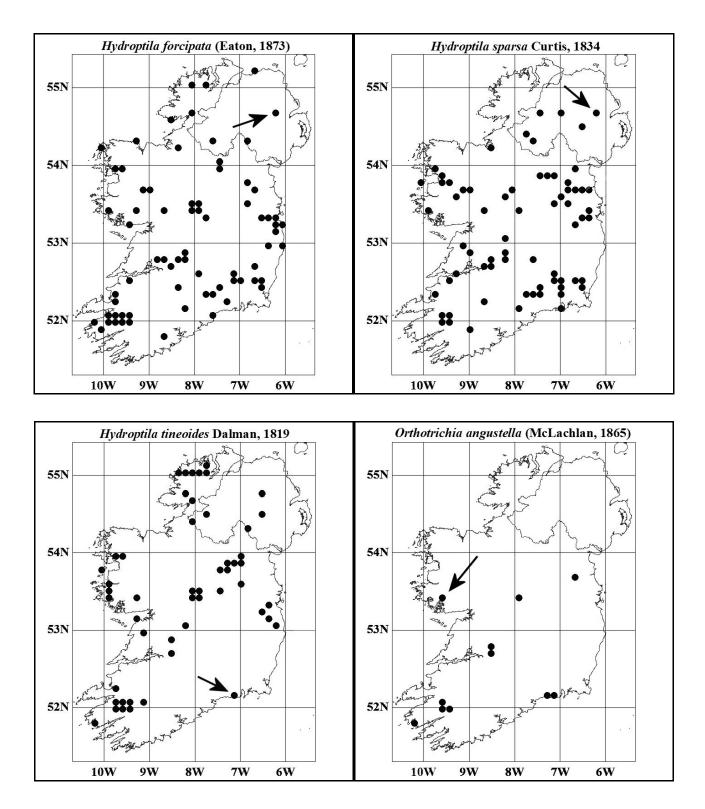
PLATE 1. *Grammotaulius nigropunctatus* (Retzius), adult, 30 May 2020, Shanahoe, Laois, Chris Uys. Photograph: Chris Uys (per National Biodiversity Data Centre).



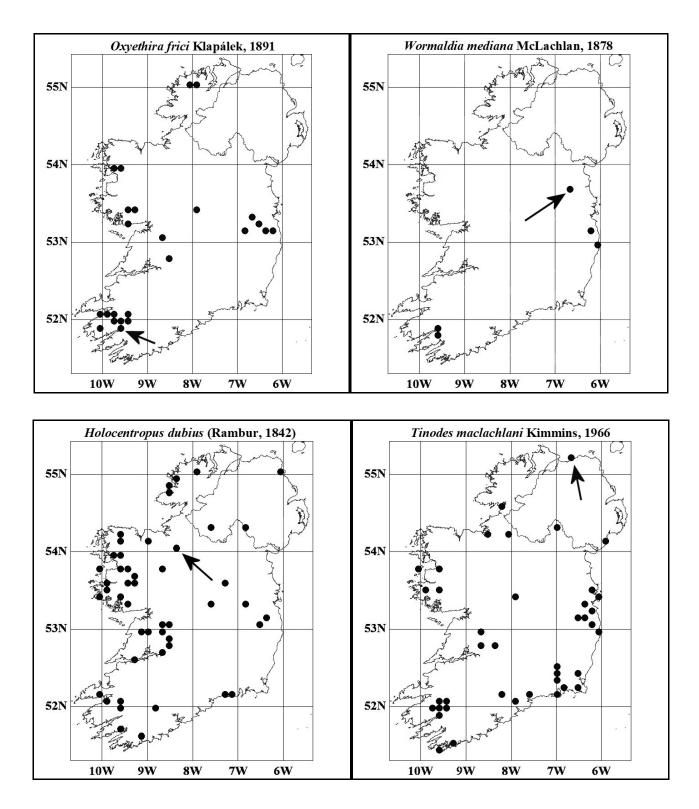
PLATE 2. *Limnephilus rhombicus* (Linnaeus), adult, 18 June 2020, Shanahoe, Laois, Chris Uys. Photograph: Chris Uys (per National Biodiversity Data Centre).



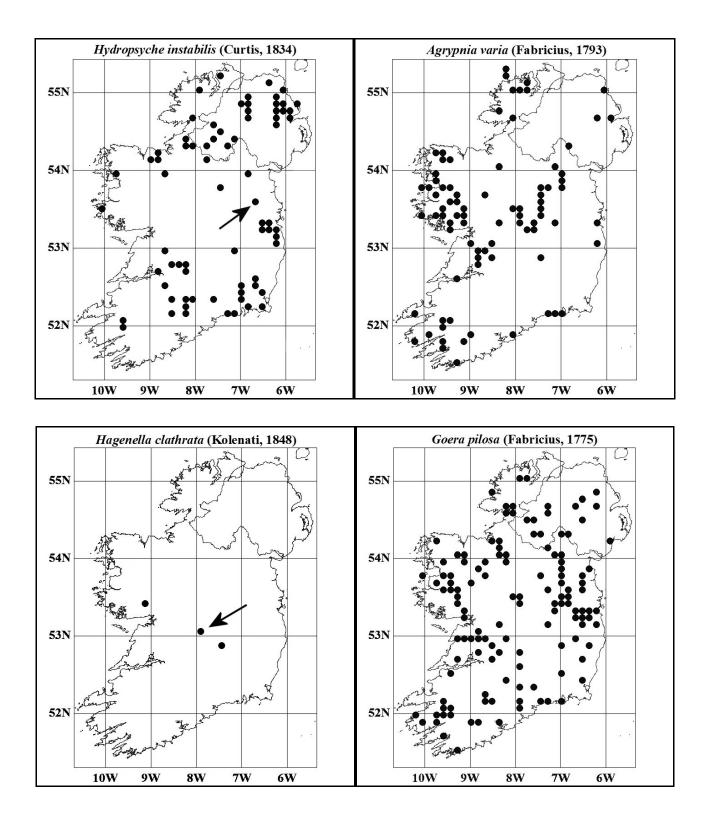
FIGURES 1-4. The known Irish distributions of *Glossosoma conformis* Neboiss, 1963, *Agraylea sexmaculata* Curtis, 1834, *Allotrichia pallicornis* (Eaton, 1873) and *Hydroptila angulata* Mosely, 1922. New county records are indicated by arrows.



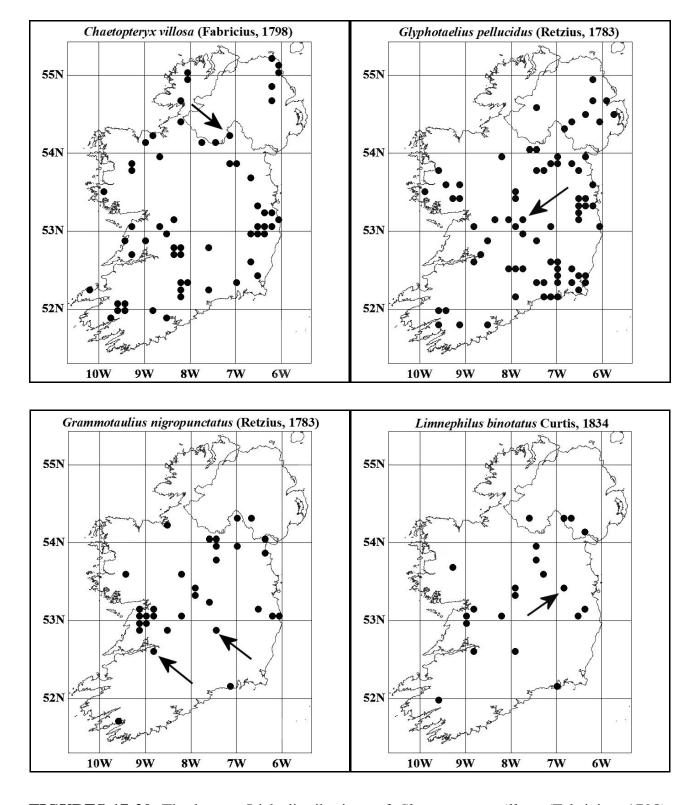
FIGURES 5-8. The known Irish distributions of *Hydroptila forcipata* (Eaton, 1873), *Hydroptila sparsa* Curtis, 1834, *Hydroptila tineoides* Dalman, 1819 and *Orthotrichia angustella* (McLachlan, 1865). New county records are indicated by arrows.



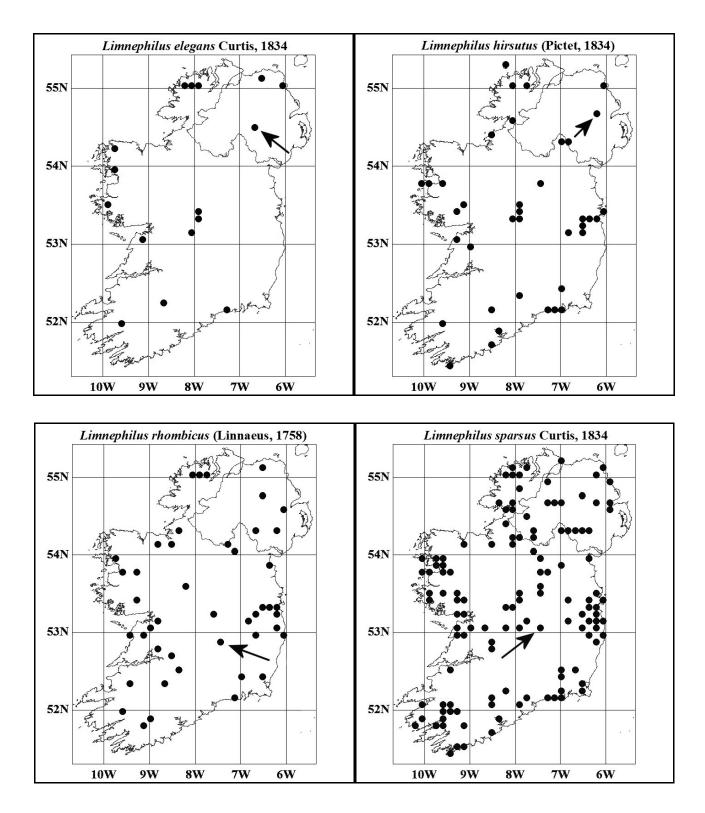
FIGURES 9-12. The known Irish distributions of *Oxyethira frici* Klapálek, 1891, *Wormaldia mediana* McLachlan, 1878, *Holocentropus dubius* (Rambur, 1842) and *Tinodes maclachlani* Kimmins, 1966. New county records are indicated by arrows.



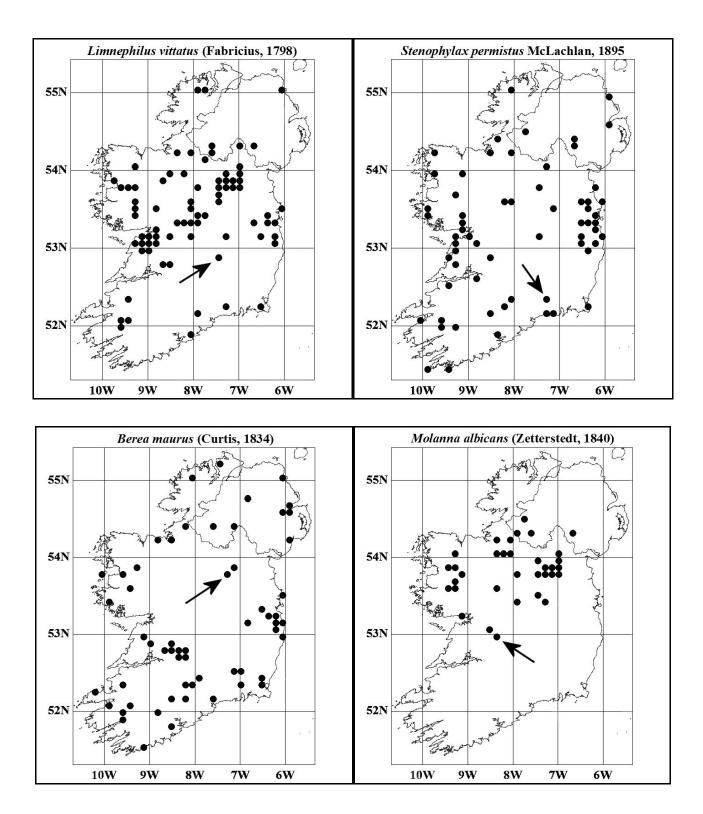
FIGURES 13-16. The known Irish distributions of *Hydropsyche instabilis* (Curtis, 1834), *Agrypnia varia* (Fabricius, 1793), *Hagenella clathrata* (Kolenati, 1848) and *Goera pilosa* (Fabricius, 1775). New county records are indicated by arrows.



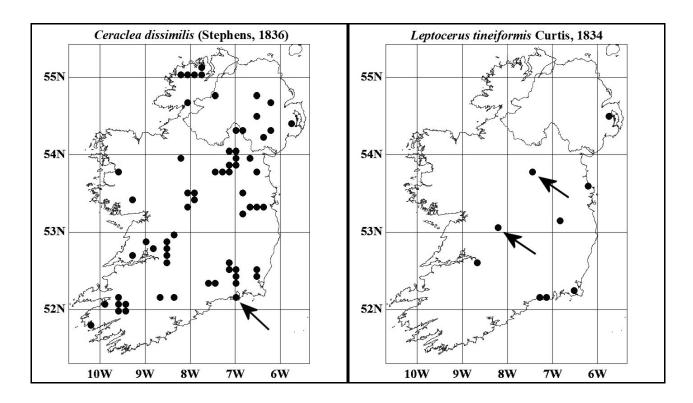
FIGURES 17-20. The known Irish distributions of *Chaetopteryx villosa* (Fabricius, 1798), *Glyphotaelius pellucidus* (Retzius, 1783), *Grammotaulius nigropunctatus* (Retzius, 1783) and *Limnephilus binotatus* Curtis, 1834. New county records are indicated by arrows



FIGURES 21-24. The known Irish distributions of *Limnephilus elegans* Curtis, 1834, *Limnephilus hirsutus* (Pictet, 1834), *Limnephilus rhombicus* (Linnaeus, 1758) and *Limnephilus sparsus* Curtis, 1834. New county records are indicated by arrows.



FIGURES 25-28. The known Irish distributions of *Limnephilus vittatus* (Fabricius, 1798), *Stenophylax permistus* McLachlan, 1895, *Beraea maurus* (Curtis, 1834) and *Molanna albicans* (Zetterstedt, 1840). New county records are indicated by arrows.



FIGURES 29-30. The known Irish distributions of *Ceraclea dissimilis* (Stephens, 1836) and *Leptocerus tineiformis* Curtis, 1834. New county records are indicated by arrows.