# ADDITIONAL CADDISFLY (TRICHOPTERA) RECORDS FROM IRELAND INCLUDING NEW RECORDS OF *OXYETHIRA MIRABILIS* MORTON, 1904

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#### **Abstract**

Since the last review by O'Connor and O'Connor (2019), new distributional data for many species of Irish caddisfly are provided along with updated maps for most of the listed species. The second and third Irish records of *Oxyethira mirabilis* Morton, 1904 are reported. A total of 56 new county records are noted.

**Key words:** Trichoptera, caddisflies, Ireland, new records, distribution, *Oxyethira mirabilis* Morton, 1904.

#### Introduction

Further progress has been made in establishing the distribution of the Irish caddisflies (Trichoptera) since O'Connor and O'Connor (2019). The new data are presented here including the second and third Irish records of *Oxyethira mirabilis* Morton, 1904. A total of 56 new county records are noted. The Irish counties are shown (Fig. 1). Four figure (1km²) Irish grid references are given for each record and these can be easily located on the Discovery series of maps from the Ordnance Survey of Ireland.

The known distributions of many of the species are summarised on latitude and longitude maps with  $10 \text{km}^2$  dots plotted using DMAP for converting the Irish grid references. The more significant recent records are indicated by arrows. Unless otherwise stated, specimens were identified by the senior author. The specimens were determined using Edington and Hildrew (1995), Wallace, Wallace and Philipson (2003), Malicky (2004), Barnard and Ross (2012), Waringer and Graf (2011), Salokannel and Mattila (2018) and Neu (2019). Voucher material of the rarer species has been retained in the O'Connor collection.

#### "Addendum 3" and "Addendum 4"

"Addendum 3", which added records cited in O'Connor and O'Connor (2019) to the dataset "Caddisflies (Trichoptera) of Ireland", was uploaded by the National Biodiversity Data Centre on the 9 March 2020 <a href="https://maps.biodiversityireland.ie/Dataset/250">https://maps.biodiversityireland.ie/Dataset/250</a> (O'Connor, 2020). They and the other records may be viewed either on National Grid or latitude/longitude maps. Addendum 3 included some unpublished records from John Brophy and one unpublished record

of *Hydroptila lotensis* which are in the present paper. "Addendum 4", with all the remaining records, will be sent to the Centre for incorporation into the dataset in due course.

#### **Distribution data**

Unless stated otherwise, comments on distributions are based on data in O'Connor (2015), O'Connor and O'Connor (2016, 2017, 2018, 2019).

#### The records

#### RHYACOPHILIDAE

# Rhyacophila dorsalis (Curtis, 1834) (Fig. 2)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 31 larvae 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 6 larvae 24 October 2002. Bridge on river near Spancelhill (R3880), 6 larvae 4 March 2003. Broadford River, near Scotts Bridge (R6172), 17 larvae 24 October 2002. Glendine River, Knockloskeraun Bridge (R0577), 8 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 11 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 157 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 7 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 18 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 14 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 11 larvae 11 February 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 17 larvae 5 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Glenveagh National Park (C0018), 1♂ 10-30 July 1998, Malaise trap on blanket bog and cutover bog and 1♂ 10-30 July 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane unimproved grassland along a river, M. C. D. Speight. Gweebarra River, Pollglass Bridge (B9413), 14 larvae 15 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 6 larvae 14 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** Owendoher River, Bohernabreena (O1322), 1& 19 May 2019, collected & determined J. T. Brophy. River Dodder, upstream of the reservoir (O1120), 29 larvae 7 March 2003. River Liffey, downstream of Ballyward Bridge (O0216), 13 larvae 7 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 25 larvae 21 February 2003. Duniry River, south-west of Duniry (M7209), 32 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 64 larvae 7 November 2002. Owenglin River, bridge south-west of Clifden Lodge (L6750), 15 larvae 20 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541),  $7 \stackrel{?}{\circ} \stackrel{?}{\circ} 4 \stackrel{?}{\circ} \stackrel{?}{\circ} 29$  July-10 August 1994 &  $13 \stackrel{?}{\circ} \stackrel{?}{\circ} 4 \stackrel{?}{\circ} 21$  September-7 October 1994, Malaise traps at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 2♂♂1♀ 1-21 July 1995 & 5♂♂1-21 August 1995, Malaise traps on moor, *Ulex* thickets and unimproved montane non-calcareous grassland with a stream in a gully, M. C. D. Speight. Owenmore River, bridge at Boherboy (Q5110), 21 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 22 larvae 25 June 2003. River Flesk, bridge near Glenflesk (W0685), 6 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). **LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 9 larvae 16 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 35 larvae 8 November 2002. River Bilboa, north-west of Doon (R8151), 131 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy (Mayo) National Park (F9403), 1 degree 1-20 August 1997, Malaise trap on open, grassy trackside within a *Pinus* plantation beside the Gennamong River which flows through bogland, M. C. D. Speight. Clydagh River, near Burren (M1496), 45 larvae 31 October 2002. Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 70 larvae 14 February 2003. Keerglen River, bridge north-east of Doondragon (G0933), 6 larvae 18 February 2003. River Moy, at Bleanmore (G2600), 5 larvae 19 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 11 larvae 17 October 2002. Dunneill River, near Dromore West (G4334), 11 larvae 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 27 larvae 17 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 28 larvae 17 October 2002. Owengarve River, ford north-west of Srah Upper (G5503), 56 larvae 30 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 47 larvae 17 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 39 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TYRONE:** Cottage Farm BioBlitz, River Strule, Tattynure (H4380), adult 15 August 2015, collected CEDaR staff, determined A. Niven (NBN, 2020).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 22 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 25 larvae 25 February 2003. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 15 larvae 18 March 2003. Little Slaney, ford south of Coan (S9891), 42 larvae 29 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 20 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 10 larvae 26 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Rhyacophila munda McLachlan, 1862 New to County Sligo (Fig. 3)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 8 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CLARE:** Bow River, Bow River Bridge (R6687), 1 larva 24 October 2002. Bridge on river near Spancelhill (R3880), 2 larvae 4 March 2003. Broadford River, near Scotts Bridge (R6172), 1 larva 11 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 1 larva 12 March 2003. Sullane River, Linnamilla Bridge (W3172), 3 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eanymore Water, bridge south-west of Letterbarra (G8882), 3 larvae 12 February 2003. Gweebarra River, Pollglass Bridge (B9413), 4 larvae 15 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 8 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Shanganagh River, Kilternan (O2021), 1 \( \frac{1}{2} \) 23 September 2019, collected & determined J. T. Brophy.

GALWAY: Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 5 larvae 12 June 2003. Owendalulleegh River, ford at Inchamore (R5699), 7 larvae 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Owenriff River, Oughterard (M1142), 1 23 August 2015, 15W Actinic light-trap, M. P. Gammell.

**KERRY:** Owenmore River, bridge at Boherboy (Q5110), 1 larva 24 June 2003. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 2 larvae 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 1 larva 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 3 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** River Bilboa, north-west of Doon (R8151), 1 larva 5 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy (Mayo) National Park (F8607), 1\$\instyle{\chi}\$ 1-20 August 1997, Malaise trap on an open grassy trackside within a *Pinus* planatation. M. C. D. Speight. Cregganlar River [Behy)], bridge south-west of Bunnyconnellan (G3217), 18 larvae 9 June 2003. Keerglen River, bridge north-east of Doondragon (G0933), 6 larvae 9 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 1 larva 10 June 2003. Dunneill River, near Dromore West (G4334), 3 larvae 10 June 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 12 larvae 19 February 2003. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 9 larvae 9 June 2003. Owengarve River, ford north-west of Srah Upper (G5503), 6 larvae 10 June 2003. River Moy, bridge southeast of Cloonacool (G4916), 1 larva 9 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 9 larvae 23 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 15 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 4 larvae 27 June 2003. Little Slaney, ford south of Coan (S9891), 3 larvae 27 June 2003. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 8 larvae 26 February 2003. River Slaney, Waterloo Bridge (S9093), 1 larva 3 July 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **GLOSSOSOMATIDAE**

# Agapetus delicatulus McLachlan, 1884 New to County Sligo (Fig. 4)

**CLARE:** Graney River, Caher Bridge south of Lough Graney (R5590), 3 larvae 12 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eanymore Water, bridge south-west of Letterbarra (G8882), 1 larva 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 1 larva 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** River Blackwater, Gearha Bridge, west of Kenmare (V7872), 1 larva 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 1 larva 24 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 1 larva 25 June 2003. River Bilboa, north-west of Doon (R8151), 1 larva 5 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, near Dromore West (G4334), 1 larva 13 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 9 larvae 23 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** River Slaney, Waterloo Bridge (S9093), 2 larvae 3 July 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Agapetus fuscipes Curtis, 1834 (Fig. 5)

CLARE: Bow River, Bow River Bridge (R6687), 1 larva 5 March 2003. Bridge on river near Spancelhill (R3880), 15 larvae 4 March 2003. Glendine River, Knockloskeraun Bridge (R0577), 9 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 11 June 2003. Graney River, Caher Bridge south of Lough Graney (R5590), 1 larva 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0019),  $1 \stackrel{\frown}{} 10\text{-}30$  July 1998, Malaise trap in mature acidophilous *Quercus* forest along a river, M. C. D. Speight. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 2 larvae 10 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 3 larvae 7 November 2002. Duniry River, south-west of Duniry (M7209), 9 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 1 larva 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 3 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 3 larvae 17 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 7 larvae 5 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Agapetus ochripes Curtis, 1834 (Fig. 6)

**DUBLIN:** Dublin Zoo (O1235),  $2 \stackrel{\frown}{\hookrightarrow} 11$  September-11 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**GALWAY:** Duniry River, south-west of Duniry (M7209), 2 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 6 larvae 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 2 larvae 12 March 2003. Owenreagh River, bridge upstream of the Upper Lake (V8882), 1 larva 19 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy National Park (F8607), 13 30 May-20 June 1997, Malaise trap on unimproved, non-calcareous, humid and oligotrophic montane grassland along the Owenduff River, M. C. D. Speight.

Previously only known in County Mayo from the Robe River (M1964) at Ballinrobe.

# Glossosoma boltoni Curtis, 1834 (Fig. 7)

CLARE: Broadford River, near Scotts Bridge (R6172), 3 larvae 5 March 2003. Glendine River, Knockloskeraun Bridge (R0577), 3 larvae 23 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 1 larva 5 June 2003. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 2 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 19 larvae 11 February 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 2 larvae 12 February 2003. Gweebarra River, Pollglass Bridge (B9413), 1 larva 15 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $1 \supseteq 28$  April-19 May 1994,  $2 \supseteq 29$  July-10 August 1994 &  $3 \supseteq 21$  September-7 October 1994, Malaise traps at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KILDARE:** River Liffey, Castletown Estate, Celbridge (N9733), 1 25 September 2019 & 1 20 October 2019, J. P. O'Connor & M. A. O'Connor.

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 9 larvae 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

*Glossosoma boltoni* was only previously known from the River Maigue (R5327) in County Limerick.

**MAYO:** Clydagh River, near Burren (M1496), 1 larva 19 February 2003, collected & determined C. Bradley (Kelly-Quinn et al., 2019).

**SLIGO:** Dunneill River, near Dromore West (G4334), 1 larva 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 5 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 2 larvae 30 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 1 larva 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 6 larvae 19 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Glossosoma conformis Neboiss, 1963 New to Counties Donegal and Kerry (Fig. 8)

**DONEGAL:** Glenveagh National Park (C0019),  $1 \circlearrowleft 3 \circlearrowleft \circlearrowleft 10$ -30 July 1998, Malaise trap in mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♀ 1-21 July 1995, Malaise trap on moor, *Ulex* thickets and unimproved montane non-calcareous grassland with a stream in a gully, M. C. D. Speight.

**MAYO:** Ballycroy National Park (F8607), 1 30 May-20 June 1997, Malaise trap on unimproved, non-calcareous, humid and oligotrophic montane grassland along the Owenduff River, M. C. D. Speight.

Previously only known in County County Mayo from the Owengarve River (F9101).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 1 larva 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

Previously only known in County Wexford from the Maudlins Stream near New Ross (\$7328).

## **HYDROPTILIDAE**

# Hydroptila angulata Mosely, 1922

**DONEGAL:** Glenveagh National Park (C0221), 2♂♂ 10-30 July 1998, Malaise trap on blanket bog and cutover blanket bog with pools, M. C. D. Speight.

This is the second record for County Donegal.

## Hydroptila cornuta Mosley, 1922 New to County Mayo (Fig. 9)

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $1 \stackrel{\frown}{} 30$  May-20 June 1997, Malaise trap on cutover blanket bog along a river, M. C. D. Speight.

## Hydroptila forcipata (Eaton, 1873) (Fig. 10)

**GALWAY:** Owenriff River, Oughterard (M1142),  $16 \stackrel{\frown}{\hookrightarrow} 23$  August 2015, 15W Actinic light-trap, M. P. Gammell. Rosroe [Barrna-nOra] (L7541),  $64 \stackrel{\frown}{\circlearrowleft} 48 \stackrel{\frown}{\hookrightarrow} 29$  July-10 August 1994 &  $37 \stackrel{\frown}{\circlearrowleft} 7 \stackrel{\frown}{\hookrightarrow} 21$  September-7 October 1994, Malaise traps at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $18 \circlearrowleft \circlearrowleft 6 \circlearrowleft \circlearrowleft 30$  May-20 June 1997 &  $3 \circlearrowleft \circlearrowleft 1$ -20 July 1997, Malaise traps on an open grassy trackside within a *Pinus* planatation beside the Gennamong River which flows through bogland, M. C. D. Speight.

# Hydroptila lotensis Mosely, 1930 New to Counties Dublin and Waterford (Fig. 11)

**DUBLIN:** Dublin Zoo (O1235),  $1 \circlearrowleft 2 \circlearrowleft \varphi = 9-22$  August 2019 &  $1 \circlearrowleft 7 \circlearrowleft \varphi = 23$  August-10 September 2019, Rothamsted Insect Survey light-trap per A. Riley.

**WATERFORD:** Belle Lake (S6605),  $1 \stackrel{\frown}{} 1$  July 2019, light-trap at the pump house beside the lake, A. Walshe.

The Waterford record was included in Addendum 3.

# Hydroptila simulans Mosely, 1920 (Fig. 12)

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $4 \stackrel{?}{\circlearrowleft} \stackrel{?}{\circlearrowleft} 30$  May-20 June 1997 &  $5 \stackrel{?}{\circlearrowleft} \stackrel{?}{\circlearrowleft} 2 \stackrel{?}{\hookrightarrow} 1$ -20 July 1997, Malaise traps on an open grassy trackside within a *Pinus* planatation beside the Gennamong River which flows through bogland, M. C. D. Speight.

# Hydroptila sparsa Mosely, 1920 (Fig. 13)

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $1 \stackrel{\frown}{} 29$  July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

## Hydroptila tineoides Dalman, 1819 (Fig. 14)

**DONEGAL:** Glenveagh National Park (C0019), 1\$\igres\$ 10-30 June 1998 & 1\$\igres\$ 10-30 July 1998, Malaise traps in acidophilous *Quercus* forest along a river, M. C. D. Speight.

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $2 \stackrel{?}{\circ} \stackrel{?}{\circ} 28$  April-19 May 1994,  $3 \stackrel{?}{\circ} \stackrel{?}{\circ} 1 \stackrel{?}{\circ} 29$  July-10 August 1994 &  $10 \stackrel{?}{\circ} \stackrel{?}{\circ} 1 \stackrel{?}{\circ} 21$  September-7 October 1994, Malaise traps at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**MAYO:** Ballycroy (Mayo) National Park (F9403),  $10 \circlearrowleft \circlearrowleft 4 \hookrightarrow 9$  30 May-20 June 1997,  $1 \circlearrowleft 1$ -20 July 1997 &  $1 \circlearrowleft 1$ -20 August 1997, Malaise traps on open, grassy trackside within a *Pinus* plantation beside the Gennamong River which flows through bogland, M. C. D. Speight.

# Hydroptila vectis Curtis, 1834 New to County Galway (Fig. 15)

**DUBLIN:** Dublin Zoo (O1235), 1♂ 9-22 August 2019, Rothamsted Insect Survey light-trap per A. Riley.

The species was previously recorded in County Dublin from the River Dodder (O1328).

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $31 \circlearrowleft \circlearrowleft 7 \circlearrowleft \circlearrowleft 29$  July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

### Ithytrichia lamellaris Eaton, 1873

**GALWAY:** Owenriff River, Oughterard (M1142),  $1 \circlearrowleft 1 \hookrightarrow 23$  August 2015, 15W Actinic light-trap, M. P. Gammell.

# Oxyethira falcata Morton, 1893 (Fig. 16) New to County Waterford

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $1 \circlearrowleft 29$  July-10 August 1994 &  $3 \circlearrowleft \circlearrowleft 21$  September-7 October 1994, Malaise traps at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**WATERFORD:** Tramore (S5701),  $1 \supseteq 11$  September 2019, 125w MV Robinson, T. Bryant. This is the first record of *Oxyethira falcata* for south-east Ireland.

# Oxyethira flavicornis (Pictet, 1834) (Fig. 17)

**DONEGAL:** Glenveagh National Park (C0120),  $3 \stackrel{?}{\circlearrowleft} \stackrel{?}{\circlearrowleft} 10$ -30 July 1998, Malaise trap in mature acidophilous *Quercus* forest beside Lough Veagh, (C0018),  $3 \stackrel{?}{\circlearrowleft} \stackrel{?}{\circlearrowleft} 2 \stackrel{?}{\hookrightarrow} 10$ -30 June 1998 &  $1 \stackrel{?}{\circlearrowleft} 10$ -30 July 1998, Malaise traps on humid non-calcareous (*Molinia*) oligotrophic and montane unimproved grassland along a river,  $1 \stackrel{?}{\circlearrowleft} 10$ -30 July 1998, Malaise trap in mature acidophilous *Quercus* forest along a river and  $1 \stackrel{?}{\circlearrowleft} 10$ -30 July 1998, Malaise trap on blanket bog and cutover bog, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♀ 1-21 June 1995, Malaise trap on unimproved oligotrophic, montane non-calcareous grassland and montane improved grassland near the Owengariff River, M. C. D. Speight.

## Oxyethira frici Klapálek, 1891

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $3 \circlearrowleft 30$  May-20 June 1997,  $1 \circlearrowleft 2 \hookrightarrow 1$ -20 July 1997 &  $14 \circlearrowleft \circlearrowleft 6 \hookrightarrow 1$ -20 August 1997, Malaise traps on an open grassy trackside within a *Pinus* planatation. M. C. D. Speight.

Oxyethira mirabilis Morton, 1904 New to County Donegal. Second and third Irish records DONEGAL: Glenveagh National Park (C0018), 1♂ 10-30 June 1998, Malaise trap on humid non-calcareous (Molinia) oligotrophic and montane unimproved grassland along a river, M. C. D. Speight.

**MAYO:** Ballycroy (Mayo) National Park (F9403),  $1 \stackrel{?}{\circ} 1$ -20 August 1997, Malaise trap on an open grassy trackside within a *Pinus* planatation beside the Gennamong River which flows through bogland, (F8607),  $4 \stackrel{?}{\circ} 1$ -20 July 1997, Malaise trap on cutover blanket bog near the River Owenduff, M. C. D. Speight.

The above males are the first known Irish ones. An additional four females were taken in a Malaise trap in the same grid square (F8607) where the first two Irish females were discovered. However, these were trapped in July, a new month for the species in Ireland.

## Oxyethira sagittifera Ris, 1897

**DONEGAL:** Glenveagh National Park (C0018),  $4 \stackrel{\frown}{\hookrightarrow} 10$ -30 June 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane and unimproved grassland along a river, M. C. D. Speight.

# Oxyethira simplex Ris, 1897 New to County Donegal

**DONEGAL:** Glenveagh National Park (C0018), 3  $\circlearrowleft$  10-30 July 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane unimproved grassland along a river, M. C. D. Speight.

#### **PHILOPOTAMIDAE**

# Chimarra marginata (Linnaeus, 1761) (Fig. 22)

**KERRY:** Owenreagh River, bridge upstream of the Upper Lake (V8882), 7 larvae 19 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Philopotamus montanus (Donovan, 1813) New to County Leitrim (Fig. 23)

**ANTRIM:** Glendun Farm, Glendun River (D2031), adult 17 May 2018, collected & determined R. Mitchell (NBN, 2020). Quolie Reservoir (D1813), 1♂1♀ 18 September 2019, C. McNaughton.

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 2 larvae 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 2 larvae 24 October 2002. Broadford River, near Scotts Bridge (R6172), 21 larvae 24 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 2 larvae 24 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 10 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0019), 5♂♂1♀ 10-30 June 1998, 6♂♂ 10-30 July 1998 & 20♂♂♀ 12 August-2 September 1998, Malaise traps in acidophilous *Quercus* forest along a river, M. C. D. Speight. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 184 larvae 14 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN:** Stormont Estate, Belfast (J4074), adult 12 April 2018, on a wall near a stony fast flowing steam, collected & determined P. McCullough (NBN, 2020).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 1 larva 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Shanganagh River, Kilternan (O2021), 1 23 September 2019, collected & determined J. T. Brophy.

GALWAY: Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541), 1♂ 28 April-19 May 1994 & 1♀ 29 July-10 August 1994, Malaise traps at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Coomcallee, Carrauntoohil (V8084), 1  $\stackrel{\frown}{}$  22 June 2019, collected & determined J. T. Brophy; Finow River, downstream of Lough Guitane (W0185), 25 larvae 20 November 2002. Owenmore River, bridge at Boherboy (Q5110), 12 larvae 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 1 larva 19 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 48 larvae 16 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 14 larvae 8 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Clydagh River, near Burren (M1496), 1 larva 31 October 2002. Keerglen River, bridge north-east of Doondragon (G0933), 14 larvae 1 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 5 larvae 19 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glenealo River upstream of the Upper Lake, Glendalough (T0896), 1 larva 28 November 2002. Little Slaney, ford south of Coan (S9891), 26 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

Wormaldia occipitalis (Pictet, 1834) New to Counties Galway and Limerick (Fig. 24)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 2 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 1 larva 24 October 2002. Bridge on river near Spancelhill (R3880), 2 larvae 4 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL**: Glenveagh National Park (C0019),  $1 \stackrel{\frown}{=} 12$  August-2 September 1998, Malaise trap in a mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

**GALWAY:** Owenglin River, bridge south-west of Clifden Lodge (L6750), 2 larvae 20 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♂ 1-21 August 1995, Malaise trap on a moor with *Ulex* thickets, unimproved oligotrophic montane, non-calcareous grassland and a stream in a gully, 1♀ 1-21 August 1995, Malaise trap on cutover blanket bog and moor with springs, M. C. D. Speight. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 9 larvae 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 5 larvae 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 3 larvae 23 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Little Slaney, ford south of Coan (S9891), 2 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Wormaldia subnigra McLachlan, 1865

**GALWAY:** Owenriff River, Oughterard (M1142), 8♂♂1♀ 23 August 2015, 15W Actinic light-trap, M. P. Gammell.

#### **POLYCENTROPODIDAE**

## Cyrnus trimaculatus (Curtis, 1834) (Fig. 25)

**CLARE:** Glendine River, Knockloskeraun Bridge (R0577), 1 larva 4 March 2003. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 4 larvae 11 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 15 October 2002. Eanymore Water, Eanymore Bridge (G8481), 1 larva 5 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 2 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Duniry River, south-west of Duniry (M7209), 1 larva 12 June 2003. Owendalulleegh River, ford at Inchamore (R5699), 6 larvae 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Old Kenmare Road, Killarney National Park (V9582),  $2 \circlearrowleft 4 \hookrightarrow 1$ -21 August 1995, Malaise trap on a moor with *Ulex* thickets, unimproved oligotrophic montane, non-calcareous grassland and a stream in a gully, M. C. D. Speight. Owenreagh River, bridge upstream of the Upper Lake (V8882), 1 larva 24 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Clydagh River, near Burren (M1496), 1 larva 10 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 1 larva 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Holocentropus dubius (Rambur, 1842) (Fig. 26)

**GALWAY:** Connemara National Park (L7156), 2 + 9 8-26 June 1994, Malaise trap on montane, unimproved, humid and non-calcareous grassland with a stream, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♀ 1-21 June 1995, Malaise trap on cutover blanket bog and moor with spring, M. C. D. Speight.

# Holocentropus picicornis (Stephens, 1836) (Fig. 27)

**DONEGAL:** Tory Island (B8745), 9 larvae 11 June 2016, sweep/kick sample,  $1 \ ^{\circ}$  11 June 2016, hand net, collected & determined M. P. Gammell & C. M. Carlin.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♀ 1-21 August 1995, Malaise trap on a moor with *Ulex* thickets, unimproved oligotrophic montane, non-calcareous grassland and a stream in a gully, M. C. D. Speight.

# Neureclipsis bimaculata (Linnaeus, 1758)

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 2 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Plectrocnemia conspersa (Curtis, 1834) New to County Leitrim (Fig. 28)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 1 larva 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 11 larvae 5 March 2003. Broadford River, near Scotts Bridge (R6172), 10 larvae 24 October 2002. Glendine River, Knockloskeraun Bridge (R0577), 5 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 3 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 14 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 2 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 3 larvae 5 June 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 4 larvae 5 June 2003, All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Glenveagh National Park (C0019), 1♀ 10-30 June 1998, 1♀ 10-30 July 1998 & 1♂ 12 August-2 September 1998, Malaise traps in acidophilous *Quercus* forest along a river, M. C. D. Speight. River Gweebarra River, Pollglass Bridge (B9413), 7 larvae 15 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 1 larva 14 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN**: Hillsborough Estate (J2457), 1 \$\frac{1}{0}\$ 15-26 August 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 4 larvae 28 November 2002. River Liffey, downstream of Ballyward Bridge (O0216), 1 larva 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Old Kenmare Road, Killarney National Park (V9582),  $1 \circlearrowleft 4 \circlearrowleft \circlearrowleft 1$ -21 July 1995 &  $2 \circlearrowleft \circlearrowleft 1$ -21 August 1995, Malaise traps on cutover blanket bog and moor with spring,  $1 \hookrightarrow 1$ -21 June 1995, Malaise trap on unimproved oligotrophic, montane non-calcareous grassland and montane improved grassland near the Owengariff River, M. C. D. Speight. Owenmore River, bridge at Boherboy (Q5110), 1 larva 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 1 larva 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 1 larva 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 7 larvae 16 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy National Park (F9403),  $1 \circlearrowleft 1 \circlearrowleft 30$  May-20 June 1997, Malaise trap on open, grassy trackside within a *Pinus* plantation beside the Glennamong River, M. C. D. Speight. Clydagh River, near Burren (M1496), 5 larvae 31 October 2002. Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 3 larvae 14 February 2003. Keerglen River, bridge north-east of Doondragon (G0933), 1 larva 18 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 2 larvae 10 June 2003. Dunneill River, near Dromore West (G4334), 2 larvae 10 June 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 27 larvae 4 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 1 larva 9 June 2003. River Moy, bridge south-east of Cloonacool (G4916), 6 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 3 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 1 larva 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 2 larvae 28 November 2002. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 4 larvae 28 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Plectrocnemia geniculata McLachlan, 1871 New to County Cavan (Fig. 29)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 1 larva 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CLARE:** Graney River, Caher Bridge south of Lough Graney (R5590), 1 larva 12 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 3 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0019),  $1 \stackrel{\frown}{\hookrightarrow} 10\text{-}30$  June 1998 &  $3 \stackrel{\frown}{\circlearrowleft} 2 \stackrel{\frown}{\hookrightarrow} 2 \stackrel{\frown}{\hookrightarrow} 10\text{-}30$  July 1998, Malaise traps in acidophilous *Quercus* forest along a river, M. C. D. Speight. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 1 larva 14 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 6 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Rosroe [Barrna-nOra] (L7541), 3  $\circlearrowleft$  29 July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**SLIGO:** Owengarve River, ford north-west of Srah Upper (G5503), 1 larva 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glenealo River upstream of the Upper Lake, Glendalough (T0896), 5 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 6 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Polycentropus flavomaculatus (Pictet, 1834) (Fig. 30)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 7 larvae 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: bridge on river near Spancelhill (R3880), 1 larva 4 March 2003. Broadford River, near Scotts Bridge (R6172), 3 larvae 11 June 2003. Glendine River, Knockloskeraun Bridge (R0577), 6 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 8 larvae 4 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 17 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 10 larvae 15 October 2002. Gweebarra River, Pollglass Bridge (B9413), 53 larvae 15 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 1 larva 14 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 6 larvae 3 June 2003. River Liffey, downstream of Ballyward Bridge (O0216), 7 larvae 7 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). River Liffey, Ballynabrocky (O0913), 1 5 July 2019, collected & determined J. T. Brophy.

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 14 larvae 7 November 2002. Duniry River, south-west of Duniry (M7209), 25 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 25 larvae 7 November 2002. Owenglin River, bridge south-west of Clifden Lodge (L6750), 1 larva 20 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 8 larvae 20 November 2002. Owenmore River, bridge at Boherboy (Q5110), 6 larvae 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 1 larva 12 March 2003. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 2 larvae 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 2 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** River Bilboa, north-west of Doon (R8151), 11 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Clydagh River, near Burren (M1496), 8 larvae 31 October 2002. Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 21 larvae 18 October 2002. Keerglen River, bridge north-east of Doondragon (G0933), 2 larvae 1 November 2002. River Moy, at Bleanmore (G2600), 20 larvae 6 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 5 larvae 17 October 2002. Dunneill River, near Dromore West (G4334), 5 larvae 13 February 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 18 larvae 4 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 7 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 63 larvae 10 June 2003. River Moy, bridge south-east of Cloonacool (G4916), 13 larvae 17 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Nenagh River, Nenagh (R8780), 13 12 September 2019, collected & determined J. T. Brophy. Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 13 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 9 larvae 19 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 7 larvae 25 February 2003. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 36 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 5 larvae 29 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 3 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### Polycentropus irroratus (Curtis, 1835) (Fig. 31)

**CLARE:** Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 11 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL**: Glenveagh National Park (C0019), 1 d 12 August-2 September 1998, Malaise trap in a mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 2 larvae 12 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 1 larva 14 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Polycentropus kingi McLachlan, 1881 (Fig. 32)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 3 larvae 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CLARE:** Glendine River, Knockloskeraun Bridge (R0577), 1 larva 11 June 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 3 larvae 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 7 larvae 5 June 2003. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 5 June 2003. Eanymore Water, Eanymore Bridge (G8481), 2 larvae 5 June 2003. Gweebarra River, Pollglass Bridge (B9413), 4 larvae 5 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 4 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

GALWAY: Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 2 larvae 12 June 2003. Duniry River, south-west of Duniry (M7209), 1 larva 12 June 2003. Owendalulleegh River, ford at Inchamore (R5699), 1 larva 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541), 15 3 29 July-10 August 1994 & 8 3 21 September-7 October 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♂ 1-21 August 1995, Malaise trap on a moor with *Ulex* thickets, unimproved oligotrophic montane, non-calcareous grassland and a stream in a gully, M. C. D. Speight. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 4 larvae 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 2 larvae 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 1 larva 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 10 larvae 19 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 1 larva 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 7 larvae 27 June 2003. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 1 larva 3 July 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **PSYCHOMYIIDAE**

## Lype reducta (Hagen, 1868)

**KERRY**: Old Kenmare Road, Killarney National Park (V9582), 1♀ 1-21 August 1995, Malaise trap on cutover blanket bog and moor, M. C. D. Speight.

# Psychomyia pusilla (Fabricius, 1781) (Fig. 33)

**CLARE:** Bow River, Bow River Bridge (R6687), 5 larvae 11 June 2003. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 9 larvae 11 June 2003. Graney River, Caher Bridge south of Lough Graney (R5590), 2 larvae 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 1 larva 5 June 2003. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 15 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 8 larvae 4 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 10 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 2 larvae 24 June 2003. Owenmore River, bridge at Boherboy (Q5110), 19 larvae 11 March 2003. Owenreagh River, bridge upstream of the Upper Lake (V8882), 2 larvae 24 June 2003. River Flesk, bridge near Glenflesk (W0685), 4 larvae 24 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** River Bilboa, north-west of Doon (R8151), 5 larvae 23 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

MAYO: Ballycroy National Park (F9403), 1♂ 30 May-20 June 1997, Malaise trap on open, grassy trackside within a *Pinus* plantation beside the Glennamong River, M. C. D. Speight. Clydagh River, near Burren (M1496), 1 larva 31 October 2002. Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 2 larvae 9 June 2003. River Moy, at Bleanmore

(G2600), 4 larvae 19 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 2 larvae 10 June 2003. Dunneill River, near Dromore West (G4334), 12 larvae 10 June 2003. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 3 larvae 17 October 2002. Owengarve River, ford north-west of Srah Upper (G5503), 1 larva 30 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 2 larvae 9 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 1 larva 5 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** River Slaney, Waterloo Bridge (S9093), 1 larva 3 July 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Tinodes maculicornis (Pictet, 1834) New to County Sligo (Fig. 34)

**CLARE:** Graney River, Caher Bridge south of Lough Graney (R5590), 1 larva 24 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 2 larvae 10 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Tinodes waeneri (Linnaeus, 1758) (Fig. 35)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 20 May 2019, in a MV light-trap, collected & determined R. Monteith (NBN, 2020).

**CLARE:** Inis Cealtra, Lough Derg (R6984), 1 24 October 2019, collected & determined J. T. Brophy.

**DONEGAL:** Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 2 larvae 5 June 2003. Eanymore Water, Eanymore Bridge (G8481), 3 larvae 5 June 2003. Gweebarra River, Pollglass Bridge (B9413), 1 larva 5 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 2 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). River Liffey, Ballynabrocky (O0913), 1  $\circlearrowleft$  5 July 2019, collected & determined J. T. Brophy.

**GALWAY:** Owendalulleegh River, ford at Inchamore (R5699), 1 larva 12 June 2003. Owenglin River, bridge south-west of Clifden Lodge (L6750), 1 larva 20 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541),  $3 \stackrel{\wedge}{\circ} 10 \stackrel{\wedge}{\circ} 29$  July-10 August 1994 &  $1\stackrel{\wedge}{\circ} 21$  September-7 October 1994, Malaise trap at a *Picea/Pinus* plantation on cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 1 larva 24 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Old Kenmare Road, Killarney

National Park (V9582), 1 delta 1-21 July 1995, Malaise trap on cutover blanket bog and moor with spring, M. C. D. Speight.

**MAYO:** Clydagh River, near Burren (M1496), 1 larva 31 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glenealo River upstream of the Upper Lake, Glendalough (T0896), 2 larvae 3 July 2003. Little Slaney, ford south of Coan (S9891), 1 larva 27 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **HYDROPSYCHIDAE**

# Cheumatopsyche lepida (Pictet, 1834) (Fig. 36)

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $1 \stackrel{\frown}{} 29$  July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 75 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** River Moy, at Bleanmore (G2600), 131 larvae 6 October 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Diplectrona felix McLachlan, 1878 New to County Leitrim (Fig. 37)

**CLARE:** Broadford River, near Scotts Bridge (R6172), 23 larvae 5 March 2003. Graney River, Caher Bridge south of Lough Graney (R5590), 11 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0019), 1 10-30 June 1998, Malaise trap in *Betula*/acidophilous *Quercus* forest with tall-herb open areas along a river, (C0018), 1 10-30 July 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane unimproved grassland along a river, M. C. D. Speight.

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 1 larva 16 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 3 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Hydropsyche angustipennis (Curtis, 1834) New to County Clare (Fig. 38)

**CLARE:** Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 11 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** River Moy, at Bleanmore (G2600), 5 larvae 6 October 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Hydropsyche contubernalis McLachlan, 1865 (Fig. 39)

**MAYO:** River Moy, at Bleanmore (G2600), 14 larvae 19 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Hydropsyche instabilis (Curtis, 1834) New to Counties Clare, Galway, Limerick and Sligo (Fig. 40)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 1 larva 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CLARE:** Broadford River, near Scotts Bridge (R6172), 7 larvae 11 June 2003. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 3 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 83 larvae 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Owenglin River, bridge south-west of Clifden Lodge (L6750), 1 larva 7 October 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 1 larva 5 June 2003, collected & determined C. Bradley (Kelly-Quinn et al., 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 4 larvae 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 36 larvae 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 26 larvae 10 June 2003. Dunneill River, near Dromore West (G4334), 4 larvae 13 February 2003. Owengarve River, ford northwest of Srah Upper (G5503), 1 larva 30 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 2 larvae 9 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 6 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Hydropsyche pellucidula (Curtis, 1834) New to County Sligo (Fig. 41)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 1 larva 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 15 larvae 24 October 2002. Broadford River, near Scotts Bridge (R6172), 46 larvae 24 October 2002. Glendine River, Knockloskeraun Bridge (R0577), 36 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 31 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 141 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 4 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 75 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 54 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 31 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 250 larvae 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 29 larvae 16 October 2002. Gweebarra River, Pollglass Bridge (B9413), 5 larvae 15 October 2002.

River Ballyhallan, bridge upstream of the Clonmany River (C3646), 85 larvae 14 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019.

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 5 larvae 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 3 larvae 7 November 2002. Duniry River, south-west of Duniry (M7209), 13 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 150 larvae 7 November 2002. Owenglin River, bridge south-west of Clifden Lodge (L6750), 7 larvae 7 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 445 larvae 20 November 2002. Owenmore River, bridge at Boherboy (Q5110), 1 larva 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 20 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 3 larvae 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 16 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 18 larvae 8 November 2002. River Bilboa, north-west of Doon (R8151), 125 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan (G3217), 10 larvae 9 June 2003. Keerglen River, bridge north-east of Doondragon (G0933), 5 larvae 18 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 23 larvae 13 February 2003. Dunneill River, near Dromore West (G4334), 4 larvae 13 February 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 41 larvae 4 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 4 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 54 larvae 30 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 1 larva 17 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 19 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 4 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 1 larva 25 February 2003. Little Slaney, ford south of Coan (S9891), 3 larvae 29 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 12 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 2 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Hydropsyche siltalai Döhler, 1963 New to County Sligo (Fig. 42)

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 77 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 9 larvae 24 October 2002. Bridge on river near Spancelhill (R3880), 139 larvae 23 October 2002. Glendine River, Knockloskeraun Bridge (R0577), 307 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 75 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 11 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 25 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 187 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 71 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 51 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 375 larvae 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 42 larvae 16 October 2002. Gweebarra River, Pollglass Bridge (B9413), 32 larvae 15 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 211 larvae 14 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 23 larvae 28 November 2002. River Liffey, downstream of Ballyward Bridge (O0216), 26 larvae 7 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

GALWAY: Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 82 larvae 7 November 2002. Duniry River, south-west of Duniry (M7209), 27 larvae 7 November 2002. Owenglin River, bridge south-west of Clifden Lodge (L6750), 20 larvae 20 February 2003. Owendalulleegh River, ford at Inchamore (R5699), 607 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Owenriff River, Oughterard (M1142), 1

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 581 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Old Kenmare Road, Killarney National Park (V9582),  $3 \stackrel{?}{\circ} 4 \stackrel{?}{\circ} 2$  1-21 July 1995 &  $1 \stackrel{?}{\circ} 1$ -21 August 1995, Malaise traps on moor, *Ulex* thickets and unimproved montane non-calcareous grassland with a stream

in a gully, M. C. D. Speight. Owenmore River, bridge at Boherboy (Q5110), 149 larvae 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 32 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 14 larvae 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 34 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** River Bilboa, north-west of Doon (R8151), 425 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

MAYO: Ballycroy (Mayo) National Park (F9403), 1♀ 1-20 August 1997, Malaise trap on open, grassy trackside within a *Pinus* plantation beside the Gennamong River which flows through bogland, M. C. D. Speight. Clydagh River, near Burren (M1496), 71 larvae 19 February 2003. Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 33 larvae 14 February 2003. Keerglen River, bridge north-east of Doondragon (G0933), 85 larvae 18 February 2003. River Moy, at Bleanmore (G2600), 87 larvae 6 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 37 larvae 13 February 2003. Dunneill River, near Dromore West (G4334), 274 larvae 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 119 larvae 4 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 42 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 129 larvae 10 June 2003. River Moy, bridge south-east of Cloonacool (G4916), 133 larvae 17 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 56 larvae 5 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 112 larvae 19 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 39 larvae 25 February 2003. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 10 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 15 larvae 27 June 2003. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 33 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 16 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **PHRYGANEIDAE**

Agrypnia varia (Fabricius, 1793) (Fig. 43)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 25 August 2015, moth trap, collected & determined R. Monteith (NBN, 2020).

**DONEGAL:** Glenveagh National Park (C0018), 1♂ 10-30 June 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane and unimproved grassland along a river, M. C. D. Speight. Tory Island (B8745), 1 larva 11 June 2016, sweep/kick sample, (B8546), 1♀ 11 June 2016, light-trap 15w Actinic, collected & determined M. P. Gammell & C. M. Carlin.

## Phryganea bipunctata Retzius, 1783

**DONEGAL:** Glenveagh National Park (C0221),  $1 \stackrel{\frown}{} 10\text{-}30$  July 1998, Malaise trap on blanket bog and cutover blanket bog with pools, M. C. D. Speight.

Phryganea grandis Linnaeus, 1758 New to County Derry (Londonderry) (Fig. 44) DERRY (LONDONDERRY): Springwell Forest (also bogland with pools) (C7626), adult 29 June 2019, moth trap, collected T. Edwards & determined S. Flint (NBN, 2020).

#### **GOERIDAE**

## Goera pilosa (Fabricius, 1775) (Fig. 45)

**CORK:** Sullane River, Linnamilla Bridge (W3172), 5 larvae 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 4 larvae 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 5 larvae 16 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 1 larva 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Duniry River, south-west of Duniry (M7209), 4 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Owenreagh River, bridge upstream of the Upper Lake (V8882), 4 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 6 larvae 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 5 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** River Moy, at Bleanmore (G2600), 9 larvae 19 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Owengarve River, ford north-west of Srah Upper (G5503), 11 larvae 30 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TYRONE:** Cottage Farm BioBlitz, River Strule, Tattynure (H4380), adult 15 August 2015, collected CEDaR staff & determined A. Niven (NBN, 2020).

# Silo nigricornis (Pictet, 1834) New to County Sligo (Fig. 46)

**CLARE:** bridge on river near Spancelhill (R3880), 10 larvae 23 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 5 larvae 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 3 larvae 13 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

*Silo pallipes* (Fabricius, 1781) New to Counties Galway, Leitrim and Limerick (Fig. 47) CAVAN: Swanlinbar River, Commas Bridge (H1424), 3 larvae 17 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 10 larvae 5 March 2003. Bridge on river near Spancelhill (R3880), 2 larvae 4 March 2003. Broadford River, near Scotts Bridge (R6172), 6 larvae 24 October 2002. Glendine River, Knockloskeraun Bridge (R0577), 40 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 6 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 87 larvae 24 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 11 larvae 12 March 2003. Sullane River, Linnamilla Bridge (W3172), 1 larva 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 1 larva 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 3 larvae 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 4 larvae 16 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 54 larvae 10 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019.

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 36 larvae 28 November 2002. River Liffey, downstream of Ballyward Bridge (O0216), 7 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

GALWAY: Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 20 larvae 7 November 2002. Duniry River, south-west of Duniry (M7209), 51 larvae 3 March 2003. Owendalulleegh River, ford at Inchamore (R5699), 30 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541), 26 3 2 2 2 29 July-10 August 1994 & 3 3 21 September-7 October 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

KERRY: Finow River, downstream of Lough Guitane (W0185), 90 larvae 2 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Old Kenmare Road, Killarney National Park (V9582), 3 d 1-21 July 1995, Malaise trap on moor, *Ulex* thickets and unimproved montane non-calcareous grassland with a stream in a gully, 2 d 1-21 June 1995,

Malaise trap on unimproved oligotrophic, montane non-calcareous grassland and montane improved grassland near the Owengariff River, M. C. D. Speight. Owenmore River, bridge at Boherboy (Q5110), 16 larvae 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 5 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 3 larvae 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 10 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 3 larvae 12 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 60 larvae 8 November 2002. River Bilboa, north-west of Doon (R8151), 21 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $2 \circlearrowleft \circlearrowleft 1 \hookrightarrow 30$  May-20 June 1997, Malaise trap on cutover blanket bog along a river,  $30 \circlearrowleft \circlearrowleft 11 \hookrightarrow 1$ -20 August 1997, Malaise trap on an open grassy trackside within a *Pinus* planatation beside the Gennamong River which flows through bogland, M. C. D. Speight. Clydagh River, near Burren (M1496), 15 larvae 31 October 2002. Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 11 larvae 14 February 2003. Keerglen River, bridge north-east of Doondragon (G0933), 3 larvae 18 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 8 larvae 17 October 2002. Dunneill River, near Dromore West (G4334), 25 larvae 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 5 larvae 13 February 2003. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 25 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 48 larvae 30 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 7 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 66 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 47 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 30 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 1 larva 29 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 90 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 28 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **LEPIDOSTOMATIDAE**

# Crunoecia irrorata (Curtis, 1834) New to County Down (Fig. 48)

**CLARE:** Broadford River, near Scotts Bridge (R6172), 1 larva 24 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 1 larva 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL**: Glenveagh National Park (C0019),  $2 \subsetneq 2$  10-30 July 1998 &  $1 \circlearrowleft 1 \subsetneq 12$  August-2 September 1998, Malaise traps in a mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

**DOWN:** Hillsborough Estate (J2457), 1\$\infty\$ 27 September-6 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 1 larva 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Lepidostoma basale (Kolenati, 1848) New to Counties Clare, Cork, Mayo, Sligo and Wicklow (Fig. 49)

**CLARE:** bridge on river near Spancelhill (R3880), 8 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 68 larvae 23 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Duniry River, south-west of Duniry (M7209), 3 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** River Flesk, bridge near Glenflesk (W0685), 1 larva 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Keerglen River, bridge north-east of Doondragon (G0933), 3 larvae 1 November 2002. River Moy, at Bleanmore (G2600), 10 larvae 6 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 11 larvae 17 October 2002. Dunneill River, near Dromore West (G4334), 2 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 13 larvae 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Lepidostoma hirtum (Fabricius, 1775) (Fig. 50)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 6 June 2016, collected & determined R. Monteith (NBN, 2020).

CLARE: Glendine River, Knockloskeraun Bridge (R0577), 61 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 23 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 55 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 181 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 40 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 344 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 310 larvae. Eanymore Water, bridge south-west of Letterbarra (G8882), 139 larvae 16 October 2002. Gweebarra River, Pollglass Bridge (B9413), 1 larva 15 October 2002. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 63 larvae 14 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019.

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 6 larvae 10 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Duniry River, south-west of Duniry (M7209), 67 larvae 12 June 2003. Owendalulleegh River, ford at Inchamore (R5699), 44 larvae 7 November 2002. Owenglin River, bridge south-west of Clifden Lodge (L6750), 40 larvae 6 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541), 5 9 9 29 July-10 August 1994 & 19 21 September-7 October 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 141 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Old Kenmare Road, Killarney National Park (V9582), 1♂ 1-21 July 1995, Malaise trap on moor, *Ulex* thickets and unimproved montane non-calcareous grassland with a stream in a gully, M. C. D. Speight. Owenmore River, bridge at Boherboy (Q5110), 13 larvae 11 March 2003. Owenreagh River, bridge upstream of the Upper Lake (V8882), 86 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 43 larvae 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 108 larvae 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** River Bilboa, north-west of Doon (R8151), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Keerglen River, bridge north-east of Doondragon (G0933), 10 larvae 18 February 2003. River Moy, at Bleanmore (G2600), 14 larvae 6 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 3 larvae 17 October 2002. Dunneill River, near Dromore West (G4334), 41 larvae 13 February 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 2 larvae 19 February 2003. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 1 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 31 larvae 10 June 2003. River Moy, bridge south-east of Cloonacool (G4916), 2 larvae 9 June 2003.

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 52 larvae 19 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 40 larvae 25 February 2003. Glenealo River, upstream of the Upper Lake, Glendalough (T0896), 1 larva 28 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 3 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 2 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## LIMNEPHILIDAE

## Drusus annulatus (Stephens, 1837) New to County Limerick (Fig. 51)

CLARE: Bow River, Bow River Bridge (R6687), 3 larvae 5 March 2003. Broadford River, near Scotts Bridge (R6172), 4 larvae 24 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 4 March 2003. Graney River, Caher Bridge south of Lough Graney (R5590), 5 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eanymore Water, Eanymore Bridge (G8481), 1 larva 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 1 larva 16 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN:** Hillsborough Estate (J2457), 1& 18-26 September 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 29 larvae 7 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Shanganagh River, Kilternan (O2021), 1 3 September 2019, collected & determined J. T. Brophy.

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 5 larvae 12 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 39 larvae 13 March 2003. River Bilboa, north-west of Doon (R8151), 5 larvae 5 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 41 larvae 14 February 2003. River Moy, at Bleanmore (G2600), 1 larva 19 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 29 larvae 13 February 2003. Dunneill River, near Dromore West (G4334), 57 larvae 10 June 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 1 larva 13 February 2003. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 5 larvae 17 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 5 larvae 5 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 11 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Little Slaney, ford downstream of Rostyduff Bridge (S9492), 1 larva 26 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

Ecclisopteryx dalecarlica Kolenati, 1848 New to Counties Dublin, Mayo and Sligo (Fig. 52) DONEGAL: Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 3 larvae 11 February 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 1 larva 12 February 2003. All collected & determined C. Bradley (Kelly-Quinn et al., 2019).

**DUBLIN:** River Liffey, downstream of Ballyward Bridge (O0216), 3 larvae 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 3 larvae 18 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 1 larva 10 June 2003. Dunneill River, near Dromore West (G4334), 28 larvae 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 3 larvae 4 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 1 larva 13 February 2003. River Moy, bridge south-east of Cloonacool (G4916), 5 larvae 17 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 3 larvae 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

Chaetopteryx villosa (Fabricius, 1798) New to Counties Donegal, Leitrim and Sligo (Fig. 53)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 6 October 2015 & adult 19 November 2017, collected & determined R. Monteith (NBN, 2020).

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 1 larva 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CLARE:** Bow River, Bow River Bridge (R6687), 1 larva 11 June 2003. Bridge on river near Spancelhill (R3880), 11 larvae 11 June 2003. Glendine River, Knockloskeraun Bridge (R0577), 1 larva 11 June 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 1 larva 11 February 2003. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 2 larvae 5 June 2003. Eanymore Water, Eanymore Bridge (G8481), 1 larva 5 June 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 2 larvae 5 June 2003. Gweebarra River, Pollglass Bridge (B9413), 1 larva 15 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 8 larvae 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River [Boleyneendorrish], north-east of Gort (M5105), 1 larva 12 June 2003. Duniry River, south-west of Duniry (M7209), 2 larvae 12 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Owenmore River, bridge at Boherboy (Q5110), 4 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 1 larva 19 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 1 larva 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 4 larvae 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Owengarve River, ford north-west of Srah Upper (G5503), 1 larva 10 June 2003. Dunneill River, near Dromore West (G4334), 1 larva 10 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 1 larva 23 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 8 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Little Slaney, ford south of Coan (S9891), 3 larvae 27 June 2003. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 5 larvae 27 June 2003. River Slaney, Waterloo

Bridge (S9093), 2 larvae 3 July 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Anabolia nervosa (Curtis, 1834) (Fig. 54)

**ANTRIM:** Quolie Reservoir (D1813), 433 18 September 2019, C. McNaughton.

**CLARE:** Inis Cealtra, Lough Derg (R6985), 1♀ 24 October 2019, collected & determined J. T. Brophy.

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 4 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN:** Hillsborough Estate (J2457), 1& 18-26 September 2019 & 1& 27 September-6 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**FERMANAGH:** Colebrooke River (H4044), adult 25 May 2013, collected & determined staff of CEDaR (NBN, 2020).

**KERRY:** River Flesk, bridge near Glenflesk (W0685), 8 larvae 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**ROSCOMMON:** Lough Ree, Rinnagan (N0056), 1 degree 12019, collected & determined J. T. Brophy.

**WICKLOW:** Little Slaney, Ford downstream of Rostyduff Bridge (S9492), 3 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Glyphotaelius pellucidus (Retzius, 1783) (Fig. 55)

**DUBLIN:** Dublin Zoo (O1235),  $1 \stackrel{\frown}{} 23$  August-10 September 2019, Rothamsted Insect Survey light-trap per A. Riley.

**GALWAY:** Duniry River, south-west of Duniry (M7209), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Limnephilus affinis Curtis, 1834 (Fig. 56)

**CORK:** Fota Wildlife Park (W7871),  $1 \stackrel{\frown}{} 16\text{-}22$  September 2019,  $1 \stackrel{\frown}{} 23\text{-}29$  September 2019 &  $1 \stackrel{\frown}{} 30$  September-6 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DUBLIN:** Dublin Zoo (O1235), 1♂ 11 September-11 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $1 \stackrel{\frown}{}$  29 July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

### Limnephilus auricula Curtis, 1834 New to County Roscommon (Fig. 57)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 1 June 2015, adult 7 October 2015 & adult 1 October 2017, collected & determined R. Monteith (NBN, 2020).

**DERRY (LONDONDERRY):** Kilmaconnell Road near the Lower Bann River (C8529), 3 adults 6 May 2018, collected & determined T. Edwards (NBN, 2020).

**DOWN:** Hillsborough Estate (J2457), 1♂ 9-21 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $3 \hookrightarrow 30$  May-20 June 1997 &  $1 \circlearrowleft 1$ -20 July 1997, Malaise traps on an open grassy trackside within a *Pinus* planatation beside the Gennamong River which flows through bogland, M. C. D. Speight.

**ROSCOMMON:** Lough Ree, Rinnagan (M9956), 1 d 4 May 2019, collected & determined J. T. Brophy.

# Limnephilus centralis Curtis, 1834 (Fig. 58)

**DONEGAL:** Glenveagh National Park (C0019), 1 \( \cap \) 10-30 July 1998, Malaise trap in mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♂ 1-21 July 1995 & 1♀ 1-21 August 1995, Malaise traps on moor with *Ulex* thickets, unimproved montane non-calcareous grassland with a stream in a gully, M. C. D. Speight.

**MAYO:** Ballycroy National Park (F9403),  $2 \circlearrowleft 2 \circlearrowleft 2 \hookrightarrow 30$  May-20 June 1997, Malaise trap on open, grassy trackside within a *Pinus* plantation beside the Glennamong River, M. C. D. Speight.

### Limnephilus decipiens (Kolenati, 1848) New to County Limerick (Fig. 59)

**LIMERICK:** Blossomhill, near Doohyle Lough (R3744),  $1 \stackrel{\frown}{} 2$  October 2019, collected & determined J. T. Brophy.

## Limnephilus elegans Curtis, 1834

**GALWAY:** Connemara National Park (L7156), 135998 8-26 June 1994, Malaise trap on montane, unimproved, humid and non-calcareous grassland with a stream, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♀ 1-21 June 1995, Malaise trap on unimproved oligotrophic, montane non-calcareous grassland and montane improved grassland near the Owengariff River, M. C. D. Speight.

# Limnephilus flavicornis (Fabricius, 1787) (Fig. 60)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 18 August 2015, adult 14 October 2015 & adult 24 May 2016, collected & determined R. Monteith (NBN, 2020). Lowwood, Belfast (J3378), 1 6-13 August 2019, light-trap in a suburban garden, P. Thomlinson.

These are only the second and third localities for County Antrim.

**DOWN:** Hillsborough Estate (J2457), 1♀ 18-26 September 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DUBLIN:** Dublin Zoo (O1235),  $2 \subsetneq 23$  August-10 September 2019 &  $2 \subsetneq 2$  11 September-11 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

## Limnephilus griseus (Linnaeus, 1758) (Fig. 61)

**GALWAY:** Connemara National Park (L7156),  $1 \circlearrowleft 1 \circlearrowleft 8-26$  June 1994, Malaise trap on montane, unimproved, humid and non-calcareous grassland with a stream, M. C. D. Speight. Rosroe [Barrna-nOra] (L7541),  $1 \circlearrowleft 29$  July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

# Limnephilus hirsutus (Pictet, 1834) New to County Kerry (Fig. 62)

**DONEGAL:** Glenveagh National Park (C0018),  $1 \stackrel{?}{\circlearrowleft} 10\text{-}30$  July 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane unimproved grassland along a river, M. C. D. Speight. Tory Island (B8447),  $1 \stackrel{?}{\circlearrowleft} 1 \stackrel{?}{\hookrightarrow} 11$  June 2016, moth trap, collected L. Clarke, determined M. P. Gammell.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582), 1♂ 1-21 July 1995, Malaise trap on moor with *Ulex* thickets, unimproved montane non-calcareous grassland with a stream in a gully, M. C. D. Speight.

**WATERFORD:** Ballin Lough, Kill (S4403), 1 degree 11 September 2019, light-trap, A. Walshe. *Limnephilus lunatus* Curtis, 1834 (Fig. 63) (Fig. 63)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), 2 adults 16 October 2013, in light-trap, & adult 27 September 2015, collected & determined R. Monteith (NBN, 2020). Lowwood, Belfast (J3378),  $1 \cite{Q}$  6-13 August 2019, light-trap in a suburban garden, P. Thomlinson. Stoneyford (reservoir) (J2169), adult 17 October 2016, collected & determined S. Belshaw (NBN, 2020). Quolie Reservoir (D1813),  $2\cite{Q}$  18 September 2019, C. McNaughton.

**ARMAGH:** Peatlands Park (H8960), adult 10 October 2013, on a building wall near an outside light, collected & determined S. Foster (NBN, 2020).

**CLARE:** bridge on river near Spancelhill (R3880), 7 larvae 11 June 2003. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 11 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Fota Wildlife Park (W7871), 1 3 23-29 September 2019, Rothamsted Insect Survey light-trap per A. Riley. Sullane River, Linnamilla Bridge (W3172), 8 larvae 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN:** Hillsborough Estate (J2457), 1 $\circlearrowleft$  27 September-6 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DUBLIN:** Dublin Zoo (O1235), 1♀ 11 September-11 October 2019, Rothamsted Insect Survey light-trap per A. Riley. St Brigids GAA Club, Castleknock (O0937), 1♂ 1 October 2019 & 1♂ 20 October 2019, resting on a wall under an outdoor light, J. P. O'Connor & M. A. O'Connor.

**GALWAY:** Owenglin River, bridge south-west of Clifden Lodge (L6750), 2 larvae 20 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 5 larvae 2 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Ballyellinan (R3149), 1♀ 2 October 2019, collected & determined J. T. Brophy. Previously only known in County Limerick from larvae.

**MAYO:** River Moy, at Bleanmore (G2600), 2 larvae 19 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, near Dromore West (G4334), 1 larva 10 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WATERFORD:** Ballin Lough, Kill (S4403), 1♀ 11 September 2019, light-trap, A. Walshe. *Limnephilus luridus* Curtis, 1834 (Fig. 64)

**GALWAY:** Connemara National Park (L7156),  $6 \circlearrowleft 37 \circlearrowleft 9$  8-26 June 1994, Malaise trap on montane, unimproved, humid and non-calcareous grassland with a stream, M. C. D. Speight. Rosroe [Barrna-nOra] (L7541),  $1 \circlearrowleft 28$  April-19 May 1994,  $8 \circlearrowleft 315 \circlearrowleft 9$  29 July-10 August 1994 &  $2 \circlearrowleft 9$  21 September-7 October 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor with a river, M. C. D. Speight.

**MAYO:** Ballycroy National Park (F9403),  $4 \stackrel{\frown}{\hookrightarrow} 30$  May-20 June 1997, Malaise trap on open, grassy trackside within a *Pinus* plantation beside the Glennamong River, M. C. D. Speight.

**WATERFORD:** Tramore (S5701), 13 31 July 2019, 125w MV Robinson, T. Bryant.

A female was previously taken in the Tramore trap.

# Limnephilus marmoratus Curtis, 1834 (Fig. 65)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 17 August 2015, in moth trap, collected & determined R. Monteith (NBN, 2020).

**CLARE:** bridge on river near Spancelhill (R3880), 1 larva 11 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Tory Island (B8745), 1 larva 11 June 2016, sweep/kick sample, collected & determined M. P. Gammell & C. M. Carlin.

**DOWN:** Hillsborough Estate (J2457),  $2 \stackrel{\frown}{} \stackrel{\frown}{} 7$ -14 August 2019,  $2 \stackrel{\frown}{} \stackrel{\frown}{} 15$ -26 August 2019,  $2 \stackrel{\frown}{} \stackrel{\frown}{} 27$  August-3 September 2019,  $1 \stackrel{\frown}{} 5$ -16 September 2019 &  $2 \stackrel{\frown}{} \stackrel{\frown}{} 1 \stackrel{\frown}{} 18$ -26 September 2019, Rothamsted Insect Survey light-trap per A. Riley.

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 1 larva 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KILDARE:** lake, Castletown Estate, Celbridge (N9833), 1♀ 25 September 2019 & 1♀ 20 October 2019, both dead in spiders' webs, J. P. O'Connor & M. A. O'Connor.

**WATERFORD:** Ballin Lough, Kill (S4403),  $3 \stackrel{\frown}{\hookrightarrow} 11$  September 2019, light-trap, A. Walshe. A male was taken on the northern shore of Ballin Lough (S4503) in 1988.

# Limnephilus nigriceps (Zetterstedt, 1840) (Fig. 66)

**ANTRIM:** Quolie Reservoir (D1813), 1 d 18 September 2019, C. McNaughton.

**WESTMEATH:** Scragh Bog (N4259), 1♂ 11 October 2019, collected & determined J. T. Brophy.

The species has previously been taken in pools on another section of Scragh Bog (N4357). *Limnephilus rhombicus* (Linnaeus, 1758) (Fig. 67)

**ANTRIM:** Stoneyford (reservoir) (J2169), adult 17 October 2016, collected & determined S. Belshaw (NBN, 2020).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Old Kenmare Road, Killarney National Park (V9582),  $1 \stackrel{\frown}{\hookrightarrow} 1$ -21 July 1995, Malaise traps on moor, *Ulex* thickets and unimproved montane non-calcareous grassland with a stream in a gully, M. C. D. Speight.

These are the second and third Kerry specimens. A  $\circlearrowleft$  was previously taken at the Owengarrif River in the same grid square.

**MAYO:** Ballycroy (Mayo) National Park (F8607), 1♀ 30 May-20 June 1997, Malaise trap on cutover blanket bog along a river, M. C. D. Speight.

**SLIGO:** River Moy, bridge south-east of Cloonacool (G4916), 2 larvae 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Little Slaney, ford downstream of Rostyduff Bridge (S9492), 1 larva 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Limnephilus sparsus Curtis, 1834 (Fig. 68)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584), adult 13 May 2014, adult 25 April 2019, in MV moth trap & adult 6 June 2015, collected & determined R. Monteith (NBN, 2020).

**DUBLIN:** Dublin Zoo (O1235),  $1 \stackrel{\frown}{} 23$  August-10 September 2019, Rothamsted Insect Survey light-trap per A. Riley.

**GALWAY:** Connemara National Park (L7156),  $3 \circlearrowleft \circlearrowleft 1 \circlearrowleft 8-26$  June 1994, Malaise trap on montane, unimproved, humid and non-calcareous grassland with a stream, M. C. D. Speight. Rosroe [Barrna-nOra] (L7541),  $1 \circlearrowleft 28$  April-19 May 1994 &  $2 \circlearrowleft \circlearrowleft 1 \hookrightarrow 29$  July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

# Limnephilus stigma Curtis, 1834

**ANTRIM:** Quolie Reservoir (D1813),  $2 \circlearrowleft 3 \circlearrowleft 2 \circlearrowleft 18$  September 2019, C. McNaughton.

Halesus digitatus (Schrank, 1781) New to Counties Clare and Sligo (Fig. 69)

**ANTRIM:** Greenmount Campus near the Six Mile Water River (J1584) adult 16 October 2013 & adult 1 October 2015, in moth traps, collected & determined R. Monteith (NBN, 2020).

**CLARE:** bridge on river near Spancelhill (R3880), 2 larvae 4 March 2003. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 1 larva 4 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 1 larva, 11 February 2003. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 4 larvae 11 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 1 larva 3 June 2003. River Liffey, downstream of Ballyward Bridge (O0216), 17 larvae 7 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 1 larva 21 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** River Flesk, bridge near Glenflesk (W0685), 8 larvae 24 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 1 larva 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** River Moy, bridge south-east of Cloonacool (G4916), 2 larvae 9 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 2 larvae 27 June 2003. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 2 larvae 27 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

### Halesus radiatus (Curtis, 1834) (Fig. 70)

**ANTRIM:** Greenmount Campus near Six Mile Water River (J1584), adult 2 November 2015, adult 21 September 2017 & adult 5 October 2018, in moth traps, collected & determined R. Monteith (NBN, 2020).

**CAVAN:** Swanlinbar River, Commas Bridge (H1424), 2 larvae 17 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

CLARE: Bow River, Bow River Bridge (R6687), 1 larva 5 March 2003. Bridge on river near Spancelhill (R3880), 19 larvae 4 March 2003. Broadford River, near Scotts Bridge (R6172), 14 larvae 5 March 2003. Glendine River, Knockloskeraun Bridge (R0577), 6 larvae 4 March 2003. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 5 larvae 4 March 2003. Graney River, Caher Bridge south of Lough Graney (R5590), 5 larvae 24 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Inis Cealtra, Lough Derg (R6985), 1♂1♀24 October 2019, collected & determined J. T. Brophy.

**CORK:** Fota Wildlife Park (W7871), 1♀ 16-22 September 2019, Rothamsted Insect Survey light-trap per A. Riley. Glengarriff River, bridge west of Skehil (V8958), 4 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 29 larvae 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 11 larvae 11 February 2003. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 14 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 3 larvae 11 February 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 14 larvae 12 February 2003. Gweebarra River, Pollglass Bridge (B9413), 2 larvae 11 February 2003. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 15 larvae 10 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN:** Bleary (J0753), adult 29 September 2016, flew into a house with a very small stream at the bottom of the garden, collected & determined S. Foster (NBN, 2020). Hillsborough Estate (J2457), 3 3 12 18-26 September 2019 & 13 9-21 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DUBLIN:** Dublin Zoo (O1235), 1♂ 11 September-11 October 2019, Rothamsted Insect Survey light-trap per A. Riley. River Dodder, Rathfarnham (O1328), 3♂ 6 October 2019, J. P. O'Connor & M. A. O'Connor; upstream of the reservoir (O1120), 2 larvae 7 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). River Liffey, downstream of Ballyward Bridge (O0216), 7 larvae 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019); River Liffey, Strawberry Beds (O0936), 1♂ 10 October 2019, freshly killed in a spider's web in the Angler's Rest carpark, J. P. O'Connor & M. A. O'Connor. **GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 9 larvae 21 February 2003. Duniry River, south-west of Duniry (M7209), 3 larvae 12 June 2003. Owendalulleegh River, ford at Inchamore (R5699), 4 larvae 21 February 2003. Owenglin River, bridge south-west of Clifden Lodge (L6750), 14 larvae 20 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Rosroe [Barrna-nOra] (L7541), 1♂ 1♀ 21 September-7 October 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 8 larvae 2 March 2003. Owenmore River, bridge at Boherboy (Q5110), 16 larvae 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 3 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 1 larva 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 6 larvae 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KILDARE:** River Liffey, Castletown Estate, Celbridge (N9733), 1♀ 20 October 2019, J. P. O'Connor & M. A. O'Connor.

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 3 larvae 5 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 16 larvae 13 March 2003. River Bilboa, north-west of Doon (R8151), 8 larvae 5 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Clydagh River, near Burren (M1496), 8 larvae 19 February 2003. Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 14 larvae 14 February 2003. Keerglen River, bridge north-east of Doondragon (G0933), 4 larvae 18 February 2003. River Moy, at Bleanmore (G2600), 6 larvae 19 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 6 larvae 13 February 2003. Dunneill River, near Dromore West (G4334), 27 larvae 13 February 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 7 larvae 4 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 3 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 1 larva 10 June 2003. River Moy, bridge south-east of Cloonacool (G4916), 22 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 7 larvae 5 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 2 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 1 larva 28 November 2002. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 2 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 10 larvae 26 February 2003. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 24 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 3 larvae 26 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Micropterna lateralis (Stephens, 1837) (Fig. 71)

**CORK:** Fota Wildlife Park (W7871),  $1 \stackrel{\frown}{} 21$ -27 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**DONEGAL:** Glenveagh National Park (C0018), 1 decorated 10-30 June 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane and unimproved grassland along a river, M. C. D. Speight.

**KERRY:** Old Kenmare Road, Killarney National Park (V9582),  $3 \circlearrowleft \circlearrowleft 1$ -21 June 1995, Malaise trap on cutover blanket bog with *Ulex* thickets,  $2 \hookrightarrow 1$ -21 June 1995, Malaise trap on unimproved oligotrophic, montane non-calcareous grassland and montane improved grassland near the Owengariff River, M. C. D. Speight.

# Micropterna sequax McLachlan, 1875

**DONEGAL:** Glenveagh National Park (C0019),  $1 \stackrel{\frown}{} 10\text{-}30$  July 1998, Malaise trap in mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

# *Potamophylax cingulatus* (Stephens, 1837) New to Counties Galway, Leitrim and Limerick (Fig. 72)

CLARE: Bow River, Bow River Bridge (R6687), 4 larvae 24 October 2002. Bridge on river near Spancelhill (R3880), 7 larvae 4 March 2003. Broadford River, near Scotts Bridge (R6172), 3 larvae 24 October 2002. Glendine River, Knockloskeraun Bridge (R0577), 2 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 9 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 14 larvae 24 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 6 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 5 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 7 larvae 11 February 2003. Eanymore Water, Eanymore Bridge (G8481), 3 larvae 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 1 larva 16 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Glenveagh National Park (C0018), 1♂1♀ 10-30 July 1998, Malaise trap on humid non-calcareous (*Molinia*) oligotrophic montane unimproved grassland along a river, M. C. D. Speight. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 24 larvae 14 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DOWN:** Hillsborough Estate (J2457), 1 5-16 September 2019, Rothamsted Insect Survey light-trap per A. Riley. RSPB Belfast Lough Reserve (J3777), 1 5 1 September 2019, light-trap, P. Thomlinson.

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 19 larvae 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 6 larvae 7 November 2002. Duniry River, south-west of Duniry (M7209), 31 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 21 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 44 larvae 20 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Old Kenmare Road, Killarney National Park (V9582), 1♂2♀♀ 1-21 August 1995, Malaise traps on cutover blanket bog and moor, M. C. D. Speight. Owenmore River, bridge at Boherboy (Q5110), 11 larvae 19 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 14 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 5 larvae 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 14 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 1 larva 12 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 11 larvae 8 November 2002. River Bilboa, north-west of Doon (R8151), 25 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $1 \supseteq 30$  May-20 June 1997, Malaise trap on cutover blanket bog along a river,  $1 \not\subset 3 \supseteq \square 1$  Lagrange 1997, Malaise trap on an open grassy trackside within a *Pinus* planatation, M. C. D. Speight. Clydagh River, near Burren (M1496), 8 larvae 31 October 2002. Keerglen River, bridge north-east of Doondragon (G0933), 1 larva 1 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 2 larvae 13 February 2003. Dunneill River, near Dromore West (G4334), 2 larvae 17 October 2002. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 2 larvae 13 February 2003. Owengarve River, ford north-west of Srah Upper (G5503), 7 larvae 30 October 2002. River Moy, bridge southeast of Cloonacool (G4916), 7 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 3 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 16 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 6 larvae 28 November 2002. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 2 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 3

larvae 29 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 8 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 8 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Potamophylax latipennis (Curtis, 1834) (Fig. 73)

**CLARE:** Glendine River, Knockloskeraun Bridge (R0577), 1 larva 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 3 larvae 4 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 5 June 2003. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 18 larvae 10 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Duniry River, south-west of Duniry (M7209), 3 larvae 3 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** River Flesk, bridge near Glenflesk (W0685), 3 larvae 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Ballycroy (Mayo) National Park (F8607),  $2 \circlearrowleft 2 \circlearrowleft 2 \circlearrowleft 30$  May-20 June 1997, Malaise trap on cutover blanket bog along a river, M. C. D. Speight.

**ROSCOMMON:** Rinnagan (M9955), 1\$\infty\$ 11 October 2019, collected & determined J. T. Brophy.

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 2 larvae 13 February 2003. Dunneill River, near Dromore West (G4334), 2 larvae 10 June 2003. Owengarve River, ford north-west of Srah Upper (G5503), 4 larvae 10 June 2003. River Moy, bridge south-east of Cloonacool (G4916), 1 larva 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WATERFORD:** Ballin Lough, Kill (S4403), ♂ 11 September 2019, light-trap, A. Walshe. Ballyristeen, stream (S4301), 4♂♂ 10 September 2019, light-trap, A. Walshe.

**WICKLOW:** Little Slaney, ford downstream of Rostyduff Bridge (S9492), 5 larvae 27 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

Stenophylax permistus McLachlan, 1895 New to County Tipperary (Fig. 74)

**CLARE:** Glendine River, Knockloskeraun Bridge (R0577), 1 larva 23 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Fota Wildlife Park (W7871), 2♂♂ 30 September-6 October 2019 & 2♂♂ 7-13 October 2019, Rothamsted Insect Survey light-trap per A. Riley.

**GALWAY:** Rosroe [Barrna-nOra] (L7541), 1\$\igred\$ 28 April-19 May 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**MAYO:** River Moy, at Bleanmore (G2600), 1 larva 19 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**ROSCOMMON:** Lough Ree, Rinnagan (M9956), 1  $\circlearrowleft$  5 May 2019, collected & determined J. T. Brophy.

**TIPPERARY:** Old Desmond Cave (R9216), 2367 July 2019, resting inside the cave which is part of the Mitchelstown complex, collected & determined M. Nolan.

#### **SERICOSTOMATIDAE**

# Sericostoma personatum (Spence, 1826) (Fig. 75)

CLARE: bridge on river near Spancelhill (R3880), 15 larvae 23 October 2002. Broadford River, near Scotts Bridge (R6172), 20 larvae 5 March 2003. Glendine River, Knockloskeraun Bridge (R0577), 18 larvae 23 October 2002. Gourna River, bridge upstream of confluence with the Owenogarney River (R4864), 8 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 5 larvae 21 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 4 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 37 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 16 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 39 larvae 15 October 2002. Eanymore Water, Eanymore Bridge (G8481), 14 larvae 11 February 2003. Eanymore Water, bridge south-west of Letterbarra (G8882), 39 larvae 16 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019). Glenveagh National Park (C0120), 1♀ 10-30 July 1998, Malaise trap in mature acidophilous *Quercus* forest beside Lough Veagh, (C0018), 2♂♂ 10-30 June 1998 & 1♂ 10-30 July 1998, Malaise traps on humid non-calcareous (*Molinia*) oligotrophic montane and unimproved grassland along a river, M. C. D. Speight. River Ballyhallan, bridge upstream of the Clonmany River (C3646), 87 larvae 10 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 2 larvae 7 March 2003. River Liffey, downstream of Ballyward Bridge (O0216), 1 larva 7 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Ballycahalan River (Boleyneendorrish), north-east of Gort (M5105), 8 larvae 21 February 2003. Duniry River, south-west of Duniry (M7209), 12 larvae 7 November 2002. Owendalulleegh River, ford at Inchamore (R5699), 31 larvae 21 February 2003. Owenglin

River, bridge south-west of Clifden Lodge (L6750), 3 larvae 7 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 25 larvae 2 March 2003. Owenmore River, bridge at Boherboy (Q5110), 5 larvae 11 March 2003. Owenreagh River, bridge upstream of the Upper Lake (V8882), 20 larvae 19 November 2002. River Blackwater, Gearha Bridge, west of Kenmare (V7872), 1 larva 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 15 larvae 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 17 larvae 12 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 10 larvae 8 November 2002. River Bilboa, north-west of Doon (R8151), 18 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

MAYO: Ballycroy (Mayo) National Park (F8607), 1♂1♀ 30 May-20 June 1997, Malaise trap on cutover blanket bog along a river, M. C. D. Speight. Cregganlar River [Behy], bridge southwest of Bunnyconnellan [Ballycommellan] (G3217), 16 larvae 14 February 2003. Keerglen River, bridge north-east of Doondragon (G0933), 5 larvae 18 February 2003. River Moy, at Bleanmore (G2600), 21 larvae 6 October 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 10 larvae 17 October 2002. Dunneill River, near Dromore West (G4334), 15 larvae 17 October 2002. Gowlan River, upstream of the confluence with the Easky River (G3826), 5 larvae 13 February 2003. Owenbeg River, upstream of ford south-west of Shancough (Bridge) (G5623), 1 larva 17 October 2002. River Moy, bridge south-east of Cloonacool (G4916), 2 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 21 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 23 larvae 19 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

WICKLOW: Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 32 larvae 25 February 2003. Glenealo River upstream of the Upper Lake, Glendalough (T0896), 3 larvae 28 November 2002. Little Slaney, ford south of Coan (S9891), 3 larvae 29 November 2002. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 15 larvae 29 November 2002. River Slaney, Waterloo Bridge (S9093), 14 larvae 29 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **BERAEIDAE**

## Berea maurus (Curtis, 1834) New to County Leitrim (Fig. 76)

CLARE: bridge on river near Spancelhill (R3880), 1 larva 23 October 2002. Broadford River, near Scotts Bridge (R6172), 1 larva 24 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0019),  $11 \stackrel{\frown}{\hookrightarrow} 10$ -30 July 1998, Malaise trap in mature acidophilous *Quercus* forest along a river, M. C. D. Speight.

This is the second record for County Donegal, the species having been previously taken on the Ballyhallan River (C3646).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 1 larva 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Rosroe [Barrna-nOra] (L7541),  $1 \stackrel{\frown}{}$  29 July-10 August 1994, Malaise trap at a *Picea/Pinus* plantation with cutover blanket bog/moor and a river, M. C. D. Speight.

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 1 larva 16 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, near Dromore West (G4334), 1 larva 13 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 1 larva 28 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Beraea pullata (Curtis, 1834) (Fig. 77)

**CLARE:** Glendine River, Knockloskeraun Bridge (R0577), 1 larva 4 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0323),  $2 \stackrel{\frown}{\hookrightarrow} 10\text{-}30$  June 1998, Malaise trap on humid, non-calcareous, oligotrophic montane unimproved grassland and scattered mature/overmature *Betula & Quercus* along a river, (C0019),  $1\stackrel{\frown}{\hookrightarrow} 10\text{-}30$  June 1998, Malaise trap in acidophilous *Quercus* forest along a river, M. C. D. Speight.

**DOWN:** Carrowcarlin (J5548), Lough Money Fen, southern part (J5345), stream near Ballynagross (J5343), stream near Corbally (J4538), larvae all 1 May-30 June 2007, collected & determined Northern Ireland Environment Agency (NBN, 2020).

#### **ODONTOCERIDAE**

## Odontocerum albicorne (Scopoli, 1763) New to County Leitrim (Fig. 78)

CLARE: Bow River, Bow River Bridge (R6687), 4 larvae 24 October 2002. Bridge on river near Spancelhill (R3880), 36 larvae 23 October 2002. Broadford River, near Scotts Bridge (R6172), 11 larvae 11 June 2003. Gourna River, bridge upstream of confluence with the

Owenogarney River (R4864), 5 larvae 23 October 2002. Graney River, Caher Bridge south of Lough Graney (R5590), 2 larvae 24 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**CORK:** Glengarriff River, bridge west of Skehil (V8958), 2 larvae 20 November 2002. Sullane River, Linnamilla Bridge (W3172), 14 larvae 20 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DERRY (LONDONDERRY):** Ballygonny Bridge, Ballymully River (H8778), 1 larva 26 June 1995, collected & determined IRTU Freshwater Survey (NBN, 2020).

**DONEGAL:** Cronaniv Burn, bridge upstream of Dunlewy Lough (B9218), 3 larvae 15 October 2002. Eany Water, downstream of the Eanybeg/Eanymore confluence (G8481), 1 larva 15 October 2002. Eanymore Water, Eanymore Bridge (G8481), 2 larvae 15 October 2002. Eanymore Water, bridge south-west of Letterbarra (G8882), 1 larva 16 October 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DUBLIN:** River Dodder, upstream of the reservoir (O1120), 1 larva 3 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**GALWAY:** Owendalulleegh River, ford at Inchamore (R5699), 1 larva 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 20 larvae 2 March 2003. Owenmore River, bridge at Boherboy (Q5110), 13 larvae 19 November 2002. River Flesk, bridge near Glenflesk (W0685), 2 larvae 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LEITRIM:** Bonet River, bridge upstream of Glenade Lough (G8247), 2 larvae 12 February 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**LIMERICK:** Funshion River, Brackbaun Bridge (R8816), 4 larvae 13 March 2003. River Bilboa, north-west of Doon (R8151), 16 larvae 7 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** Cregganlar River [Behy], bridge south-west of Bunnyconnellan [Ballycommellan] (G3217), 7 larvae 18 October 2002. Keerglen River, bridge north-east of Doondragon (G0933), 7 larvae 1 November 2002. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**SLIGO:** Dunneill River, Donaghintraine Bridge (G4334), 1 larva 13 February 2003. Dunneill River, near Dromore West (G4334), 11 larvae 10 June 2003. Gowlan River, upstream of the confluence with the Easky River (G3826), 3 larvae 13 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**TIPPERARY:** Mulkear River (Newport), bridge near Glanculloo Old School (R8368), 10 larvae 7 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WEXFORD:** Urrin River, Ballycrystal Bridge (S8648), 3 larvae 9 October 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** Glencree River, bridge upstream of the confluence with the Dargle River (O2014), 2 larvae 27 June 2003. Little Slaney, ford south of Coan (S9891), 2 larvae 27 June 2003. Little Slaney, ford downstream of Rostyduff Bridge (S9492), 5 larvae 26 February 2003. River Slaney, Waterloo Bridge (S9093), 2 larvae 26 February 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

#### **LEPTOCERIDAE**

# Athripsodes albifrons (Linnaeus, 1758) New to County Antrim (Fig. 79)

**ANTRIM:** Moreland's Meadows, River Lagan (J3369), adult 5 July 2016, collected & determined P. McErlean (NBN, 2020).

**GALWAY:** Owenriff River, Oughterard (M1142), 3♂♂1♀ 23 August 2015, 15W Actinic light-trap, M. P. Gammell.

## Athripsodes cinereus (Curtis, 1834) (Fig. 80)

**ANTRIM:** Greenmount Campus near Six Mile Water River (J1584), adult 5 July 2016, collected & determined R. Monteith (NBN, 2020).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 25 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** River Flesk, bridge near Glenflesk (W0685), 2 larvae 13 March 2003. Owenreagh River, bridge upstream of the Upper Lake (V8882), 5 larvae 24 June 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**MAYO:** River Moy, at Bleanmore (G2600), 1 larva 19 June 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Ceraclea albimacula (Rambur, 1842) (Fig. 81)

**GALWAY:** Owenriff River, Oughterard (M1142), 1♀ 23 August 2015, 15W Actinic light-trap, M. P. Gammell.

## Mystacides azurea (Linnaeus, 1761) (Fig. 82)

**ANTRIM:** Greenmount Campus near Six Mile Water (J1584), adult 1 August 2015 in moth trap, collected & determined R. Monteith (NBN, 2020). Reas Wood (J1386), adult 9 August 2018, collected & determined R. Monteith (NBN, 2020). River Lagan Towpath, Stranmillis (J3370), 2 adults 8 June 2018, collected & determined P. McErlean (NBN, 2020). Six Mile Water River (J1486), adult 18 June 2016, collected & determined R. Monteith (NBN, 2020). Quolie Reservoir (D1813), 1 \$\frac{1}{2}\$ 18 September 2019, C. McNaughton.

**ARMAGH:** Newry Canal, Dromantine area (J0636), 3 adults 11 July 2016, collected & determined D. Savage (NBN, 2020). Oxford Island, Lough Neagh (J0462), 3 adults 6 June 2017, collected & determined S. Belshaw (NBN, 2020).

**CORK:** Sullane River, Linnamilla Bridge (W3172), 7 larvae 13 March 2003, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**DONEGAL:** Glenveagh National Park (C0120), 2 3 10-30 July 1998, Malaise trap in mature acidophilous *Quercus* forest beside Lough Veagh, M. C. D. Speight.

**DUBLIN:** Glenageary (O2427), 1♀ 20 June 2019, collected D. Mangan, determined J. T. Brophy. Shanganagh River, Hackettsland (O2523), 2♂♂ 20 September 2019, collected & determined J. T. Brophy.

**FERMANAGH:** River Erne, Enniskillen (H2343), adult 31 May 2018, collected & determined A. O'Doherty (NBN, 2020).

**KERRY:** River Blackwater, Gearha Bridge, west of Kenmare (V7872), 1 larva 12 March 2003. River Flesk, bridge near Glenflesk (W0685), 5 larvae 13 March 2003. Owenreagh River, bridge upstream of the Upper Lake (V8882), 2 larvae 12 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

## Mystacides longicornis (Linnaeus, 1758) (Fig. 83)

**ANTRIM:** Reas Wood (J1386), adult 9 August 2018, collected & determined, collected & determined R. Monteith (NBN, 2020).

**ARMAGH:** Craigavon Lakes (J0557), adult 15 July 2019, collected & determined A. O'Doherty (NBN, 2020).

# Oecetis furva (Rambur, 1842) (Fig. 84)

**DONEGAL:** Tory Island (B8745), 3 larvae 11 June 2016, sweep/kick sample, 5  $\circlearrowleft$  11 June 2016, hand net, collected & determined M. P. Gammell & C. M. Carlin.

## Oecetis lacustris (Pictet, 1834) (Fig. 85)

**ANTRIM:** Greenmount Campus near Six Mile Water River (J1584), adult 5 August 2015, moth trap, collected & determined R. Monteith (NBN, 2020).

## Oecetis ochracea (Curtis, 1825) (Fig. 86)

**ANTRIM:** Greenmount Campus near Six Mile Water River (J1584), 7 August 2015, collected & determined R. Monteith (NBN, 2020).

**DONEGAL:** Tory Island (B8447), 233 10 June 2016, light-trap 15w Actinic, collected & determined M. P. Gammell & C. M. Carlin, (B8547), 233 11 June 2016, moth trap, collected L. Clarke, determined M. P. Gammell.

## Oecetis testacea (Curtis, 1834) (Fig. 87)

**CORK:** Sullane River, Linnamilla Bridge (W3172), 1 larva 13 March 2003. collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**KERRY:** Finow River, downstream of Lough Guitane (W0185), 24 larvae 20 November 2002. Owenreagh River, bridge upstream of the Upper Lake (V8882), 4 larvae 24 June 2003. River Flesk, bridge near Glenflesk (W0685), 8 larvae 13 March 2003. All collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

**WICKLOW:** River Slaney, Waterloo Bridge (S9093), 1 larva 29 November 2002, collected & determined C. Bradley (Kelly-Quinn *et al.*, 2019).

# Triaenodes bicolor (Curtis, 1834) (Fig. 88)

**MAYO:** Ballycroy National Park (F8607),  $1 \supseteq 1-20$  July 1997, Malaise trap on cutover blanket bog near the River Owenduff, M. C. D. Speight.

# Ylodes reuteri (McLachlan, 1880)

In Britain, the species has only been recorded in July (Barnard and Ross, 2012) but in Ireland, adults have been trapped from 7 June - 18 September.

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suitable for examination. Adrian Riley kindly sent JPOC Rothamsted Insect Survey light-trap samples taken in Ireland. The Irish distribution maps were prepared using DMAP and the authors are indebted to Dr Alan Morton for supplying the relevant programme.

#### References

- Barnard, P. and Ross, E. (2012) The adult Trichoptera (caddisflies) of Britain and Ireland. Handbooks for the Identification of British Insects 1(17): i-iv, 1-192.
- Edington, J. M. and Hildrew, A. G. (1995) A revised key to the caseless caddis larvae of the British Isles with notes on their ecology. *Scientific Publications of the Freshwater Biological Association* **Number 53**: 1-134.
- Kelly-Quinn, M. P., Bradley, C., Rippey, B. and Harrington, J. T. (2019) "Characterisation of Reference Conditions and Testing of Typology of Rivers (RIVTYPE)". Associated datasets and digitial information objects connected to this resource are available at: Secure Archive For Environmental Research Data (SAFER) managed by the Environmental Protection Agency, Ireland <a href="http://erc.epa.ie/safer/resource?id=4256cd09-2f42-102a-b1da-b128b41032cc">http://erc.epa.ie/safer/resource?id=4256cd09-2f42-102a-b1da-b128b41032cc</a>
  - <a href="http://erc.epa.ie/safer/resource?id=4256cd09-2f42-102a-b1da-b128b41032cc">http://erc.epa.ie/safer/resource?id=4256cd09-2f42-102a-b1da-b128b41032cc</a> (accessed 11 September 2019).
- Malicky, H. (2004) Atlas of European Trichoptera. 2nd edition. Springer, Dordrecht.
- NBN (2020) NBN Atlas Northern Ireland <a href="https://northernireland-records.nbnatlas.org">https://northernireland-records.nbnatlas.org</a> (accessed 27 January 2020).
- Neu, P. J. (2019) Unterscheidung der Weibchen der *Hydroptila sparsa*-Gruppe. <a href="http://www.trichoptera-rp.de/html/hydroptila\_sparsa-weibchen.html">http://www.trichoptera-rp.de/html/hydroptila\_sparsa-weibchen.html</a> (accessed 9 July 2019).
- O'Connor, J. P. (2015) A catalogue and atlas of the caddisflies (Trichoptera) of Ireland. Occasional Publication of the Irish Biogeographical Society **Number 11**. Published by the Irish Biogeograpical Society in association with the National Museum of Ireland.
- O'Connor, J. P. (2020) Caddisflies (Trichoptera) of Ireland, National Biodiversity Data Centre, Ireland <a href="https://maps.biodiversityireland.ie/Dataset/250">https://maps.biodiversityireland.ie/Dataset/250</a> (updated with Addendum 3).
- O'Connor, J. P. and Bryant, A. (2018) The brackish water caddisfly *Ylodes reuteri* (McLachlan, 1880) (Trichoptera: Leptoceridae) discovered in County Waterford, Ireland. *Bulletin of the Irish Biogeographical Society* **42**: 3-8.
- O'Connor, J. P. and O'Connor, M. A. (2016) Some new distributional records for Irish caddisflies (Trichoptera) including a species list for Lough Neagh. *Bulletin of the Irish Biogeographical Society* **40**: 164-183.

- O'Connor, J. P. and O'Connor, M. A. (2017) Further distributional and flight-period records for Irish caddisflies (Trichoptera). *Bulletin of the Irish Biogeographical Society* **41**: 51-89.
- O'Connor, J. P. and O'Connor, M. A. (2018) Records of Irish caddisflies Trichoptera) including a county list. *Bulletin of the Irish Biogeographical Society* **42**: 75-154.
- O'Connor, J. P. and O'Connor, M. A. (2019) New caddisfly (Trichoptera) data from Ireland including records for *Hydroptila lotensis* Mosely, 1930 and *Hydroptila vectis* Curtis, 1834. *Bulletin of the Irish Biogeographical Society* **43**: 57-122.
- Salokannel, J. and Mattila, K. (2018) Suomen vesiperhoset. Trichoptera of Finland. Hyönteistarvike Tibiale Oy, Helsinki.
- Wallace, I. D., Wallace, B. and Philipson, G. N. (2003) Keys to the case-bearing caddis larvae of Britain and Ireland. *Scientific Publications of the Freshwater Biological Association* **Number 61**.
- Waringer, J. and Graf, W. (2011) Atlas der mitteleuropäischen Köcherfliegenlarven Atlas of Central European Trichoptera larvae. Erik Mauch Verlag, Dinkelscherben.

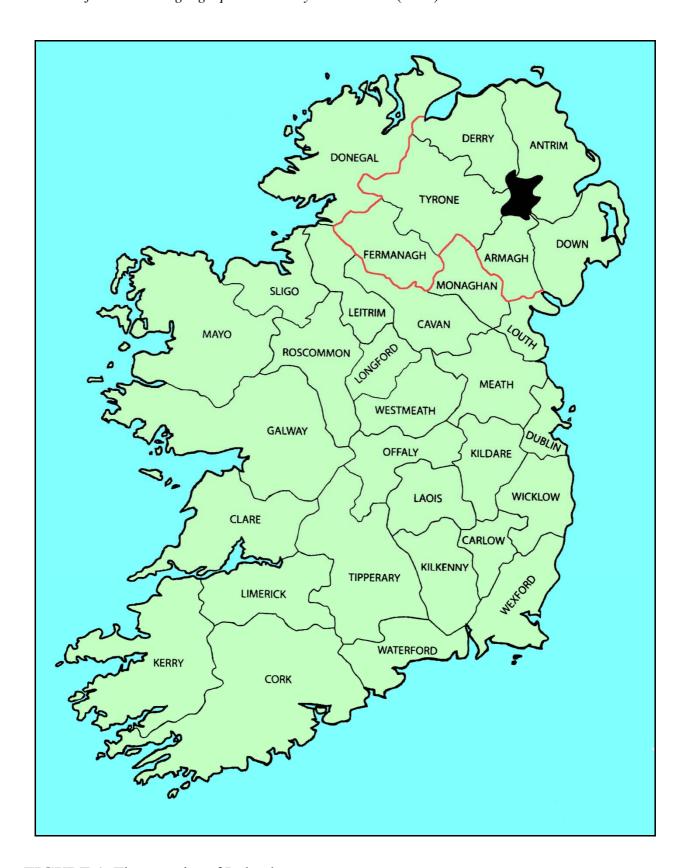
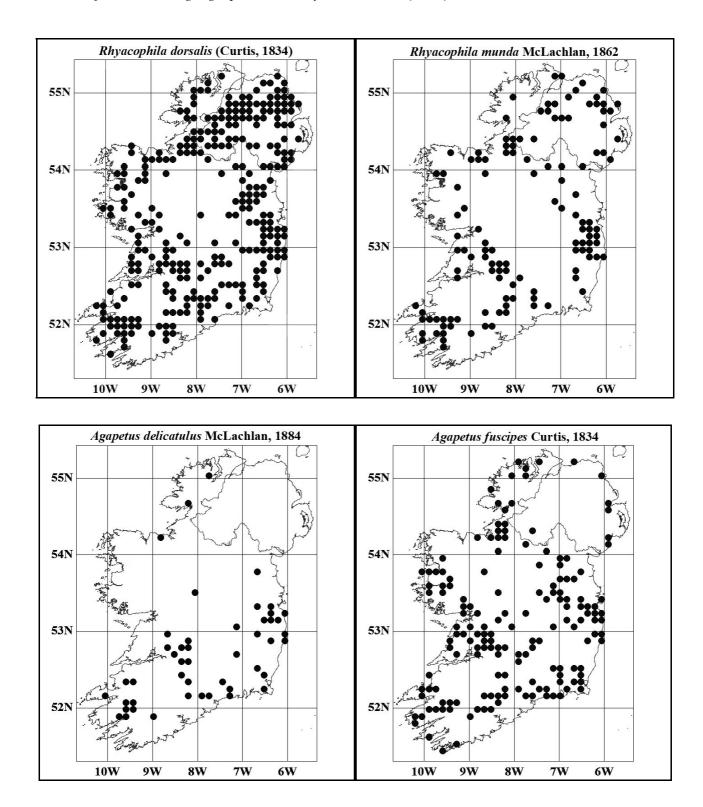
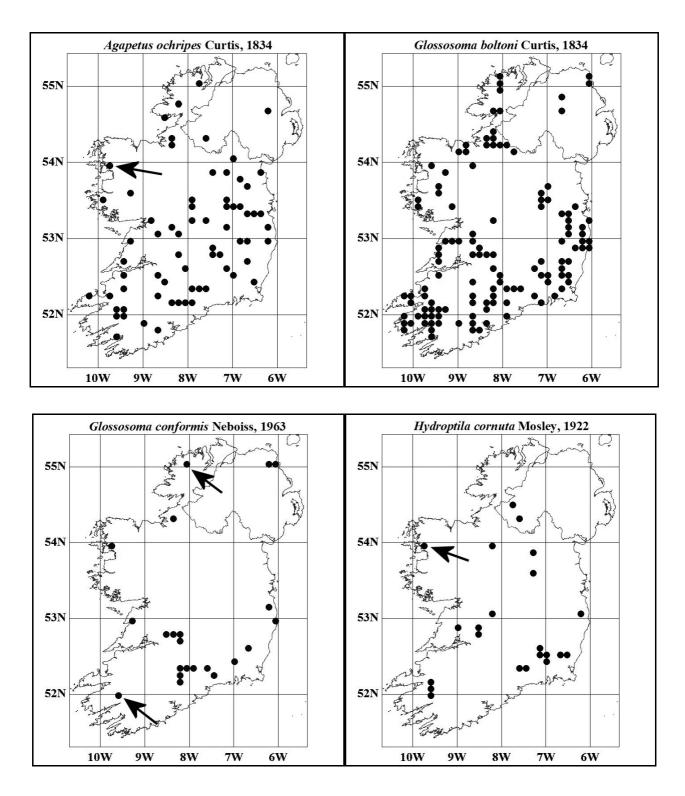


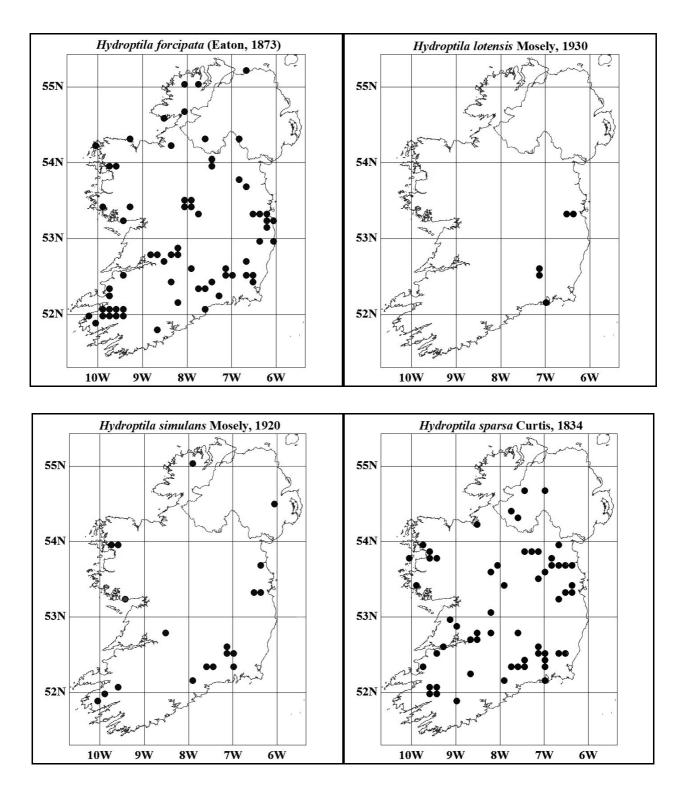
FIGURE 1. The counties of Ireland.



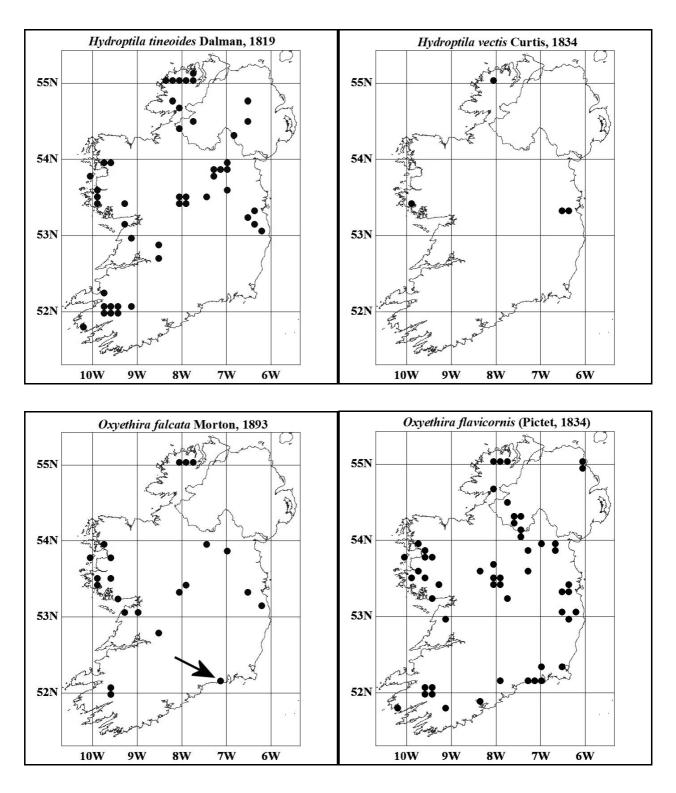
**FIGURES 2-5.** The known Irish distributions of *Rhyacophila dorsalis* (Curtis, 1834), *Rhyacophila munda* McLachlan, 1862, *Agapetus delicatulus* McLachlan, 1884 and *Agapetus fuscipes* Curtis, 1834.



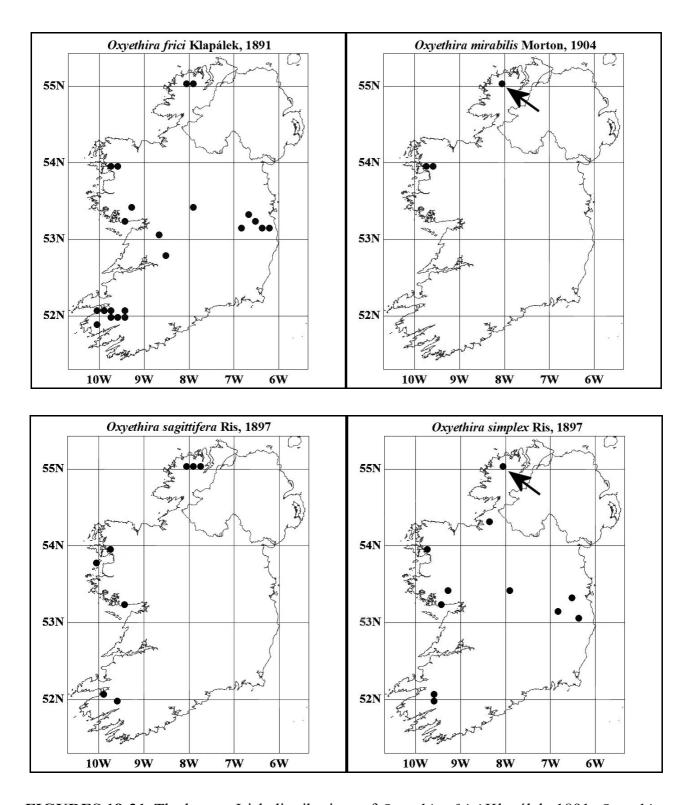
**FIGURES 6-9.** The known Irish distributions of *Agapetus ochripes* Curtis, 1834, *Glossosoma boltoni* Curtis, 1834, *Glossosoma conformis* Neboiss, 1963 and *Hydroptila cornuta* Mosley, 1922. Notable records are indicated by arrows.



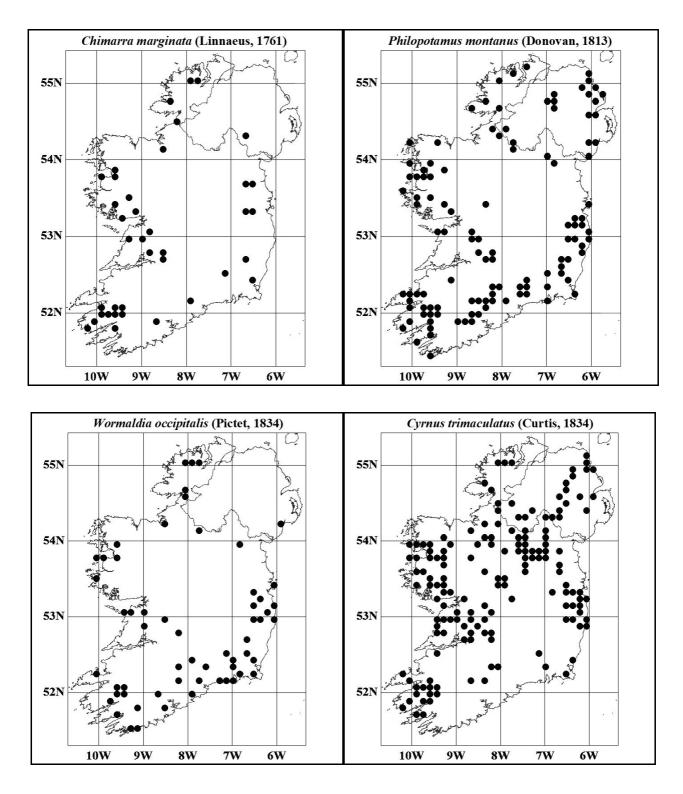
**FIGURES 10-13.** The known Irish distributions of *Hydroptila forcipata* (Eaton, 1873), *Hydroptila lotensis* Mosely, 1930, *Hydroptila simulans* Mosely, 1920 and *Hydroptila sparsa* Curtis, 1834.



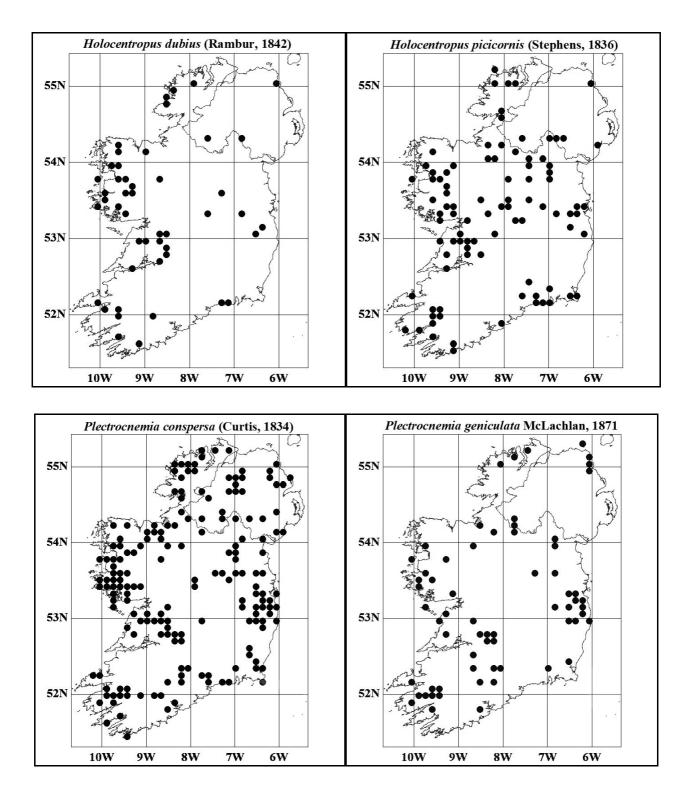
**FIGURES 14-17.** The known Irish distributions of *Hydroptila tineoides* Dalman, 1819, *Hydroptila vectis* Curtis, 1834, *Oxyethira falcata* Morton, 1893 and *Oxyethira flavicornis* (Pictet, 1834). A notable record is indicated by an arrow.



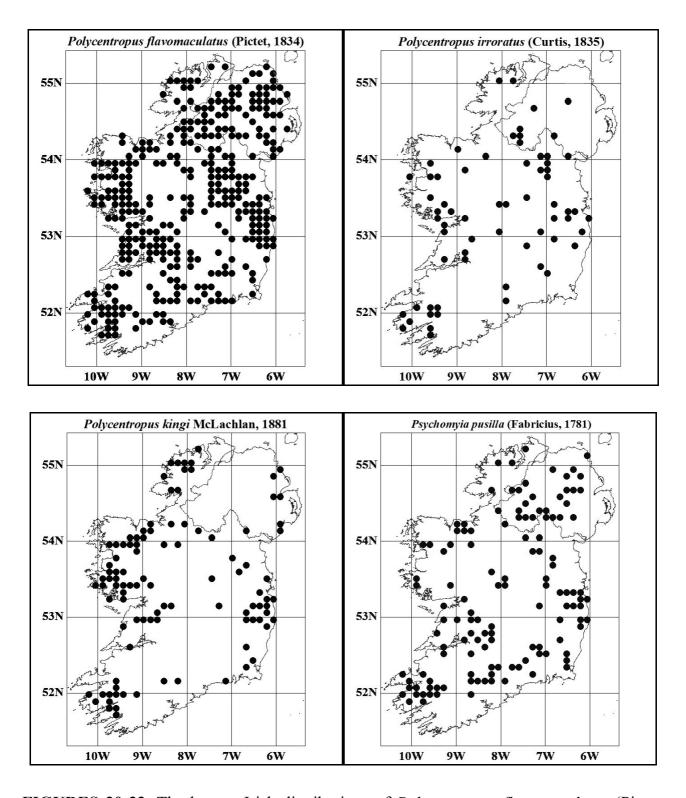
**FIGURES 18-21.** The known Irish distributions of *Oxyethira frici* Klapálek, 1891, *Oxyethira mirabilis* Morton, 1904, *Oxyethira sagittifera* Ris, 1897 and *Oxyethira simplex* Ris, 1897. Notable records are indicated by arrows.



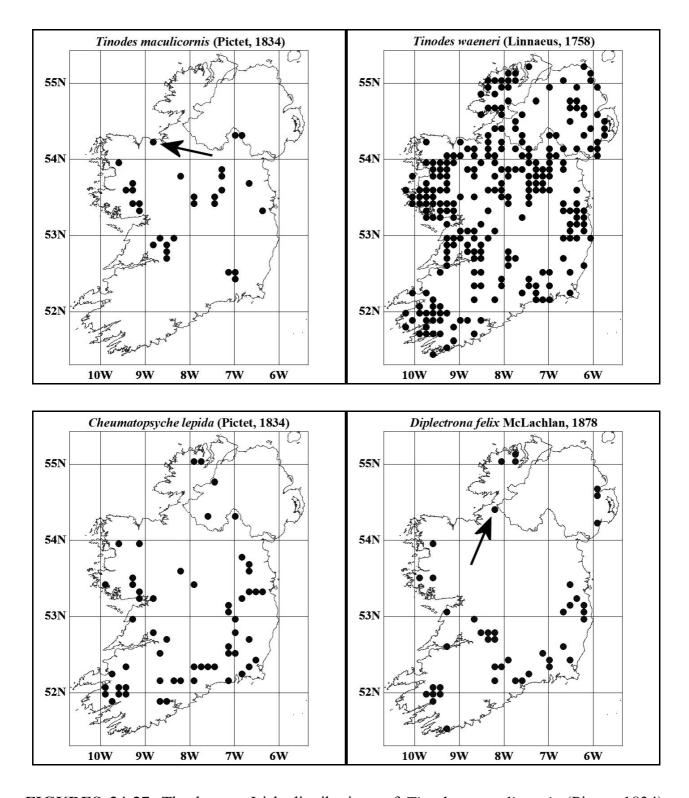
**FIGURES 22-25.** The known Irish distributions of *Chimarra marginata* (Linnaeus, 1761), *Philopotamus montanus* (Donovan, 1813), *Wormaldia occipitalis* (Pictet, 1834) and *Cyrnus trimaculatus* (Curtis, 1834).



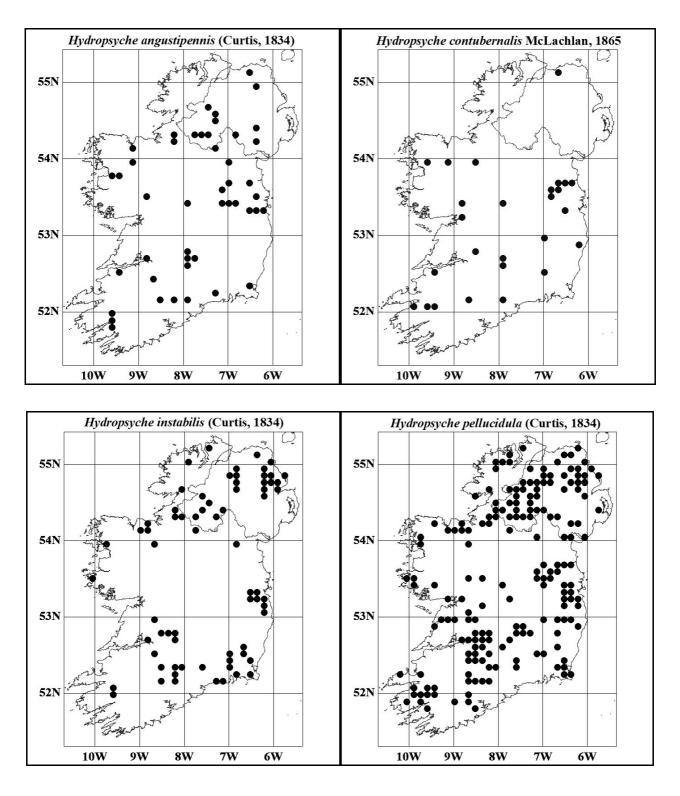
**FIGURES 26-29.** The known Irish distributions of *Holocentropus dubius* (Rambur, 1842), *Holocentropus picicornis* (Stephens, 1836), *Plectrocnemia conspersa* (Curtis, 1834) and *Plectrocnemia geniculata* McLachlan, 1871.



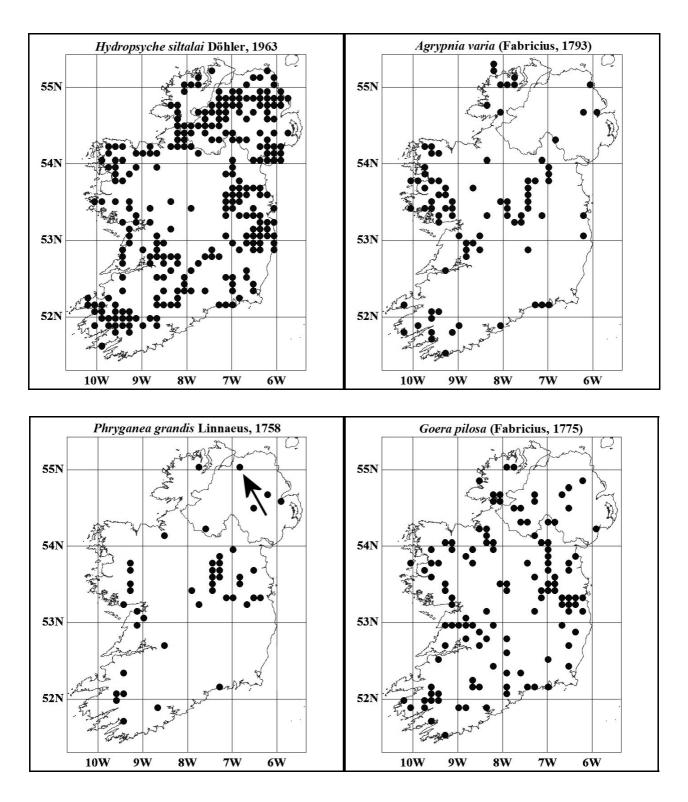
**FIGURES 30-33.** The known Irish distributions of *Polycentropus flavomaculatus* (Pictet, 1834), *Polycentropus irroratus* (Curtis, 1835), *Polycentropus kingi* McLachlan, 1881 and *Psychomyia pusilla* (Fabricius, 1781).



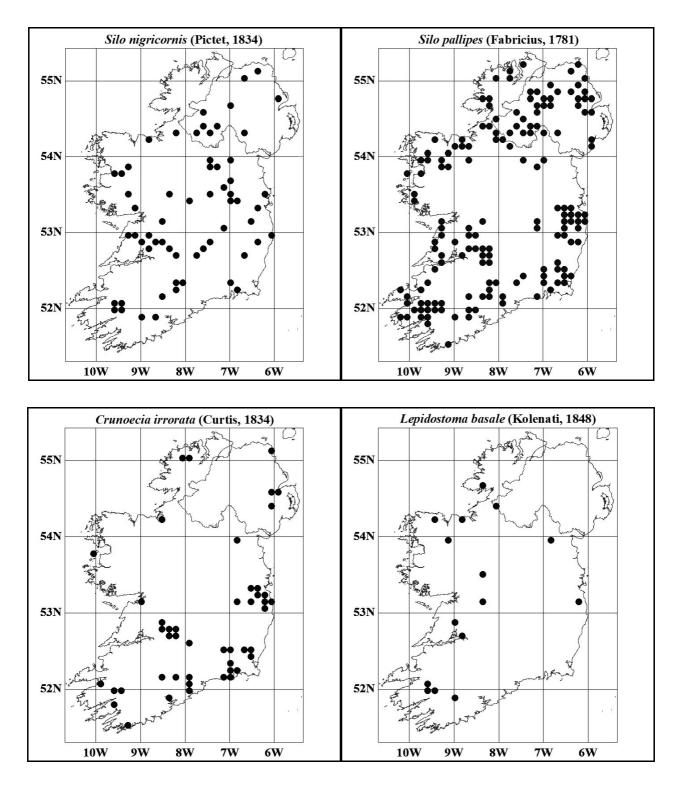
**FIGURES 34-37.** The known Irish distributions of *Tinodes maculicornis* (Pictet, 1834), *Tinodes waeneri* (Linnaeus, 1758), *Cheumatopsyche lepida* (Pictet, 1834) and *Diplectrona felix* McLachlan, 1878. Notable records are indicated by arrows.



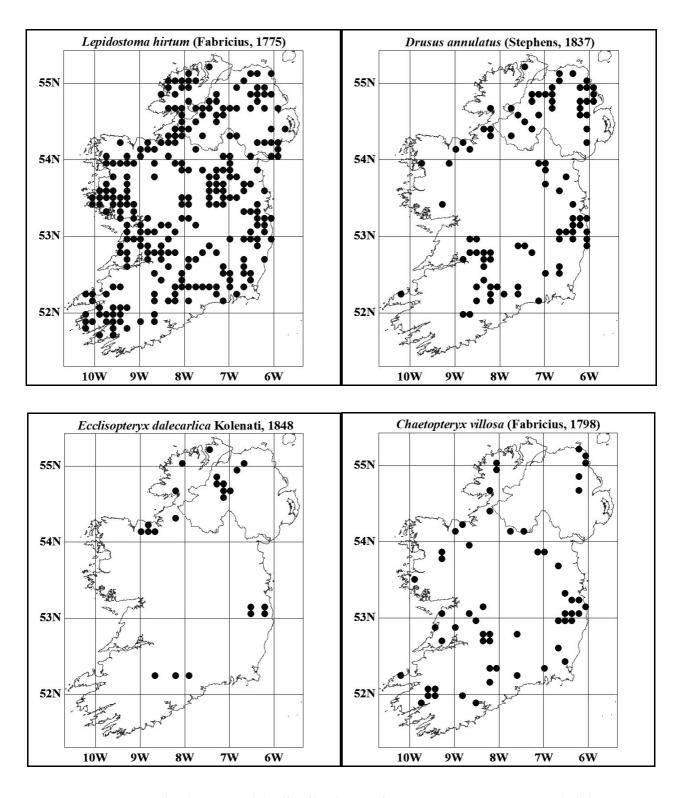
**FIGURES 38-41.** The known Irish distributions of *Hydropsyche angustipennis* (Curtis, 1834), *Hydropsyche contubernalis* McLachlan, 1865, *Hydropsyche instabilis* (Curtis, 1834) and *Hydropsyche pellucidula* (Curtis, 1834).



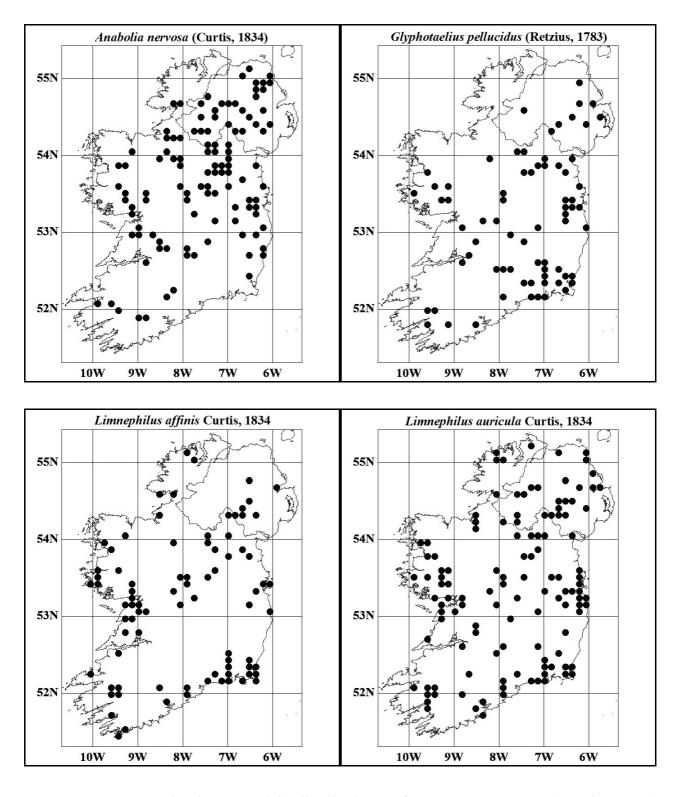
**FIGURES 42-45.** The known Irish distributions of *Hydropsyche siltalai* Döhler, 1963, *Agrypnia varia* (Fabricius, 1793), *Phryganea grandis* Linnaeus, 1758 and *Goera pilosa* (Fabricius, 1775). A notable record is indicated by an arrow.



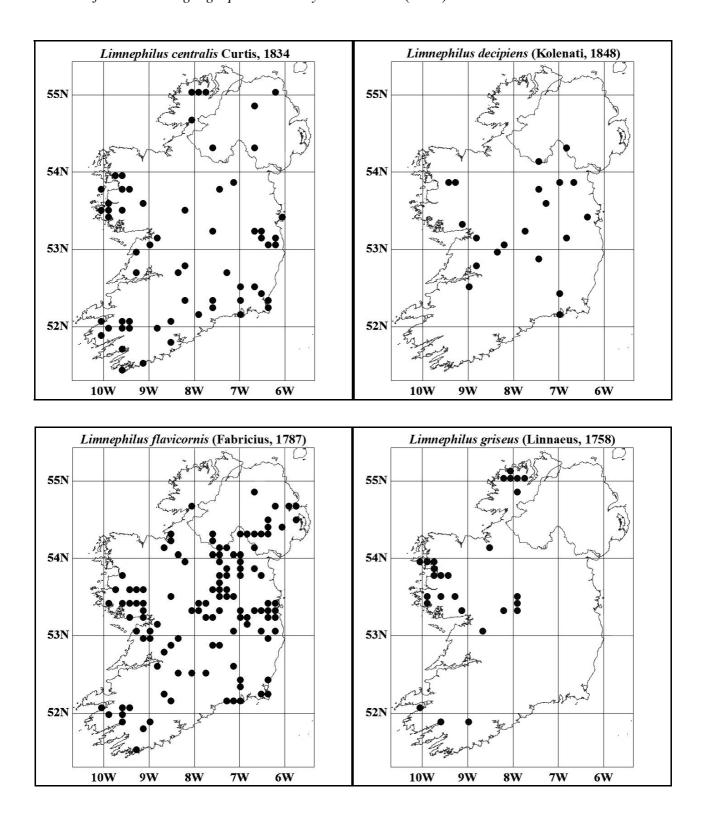
**FIGURES 46-49.** The known Irish distributions of *Silo nigricornis* (Pictet, 1834), *Silo pallipes* (Fabricius, 1781), *Crunoecia irrorata* (Curtis, 1834) and *Lepidostoma basale* (Kolenati, 1848).



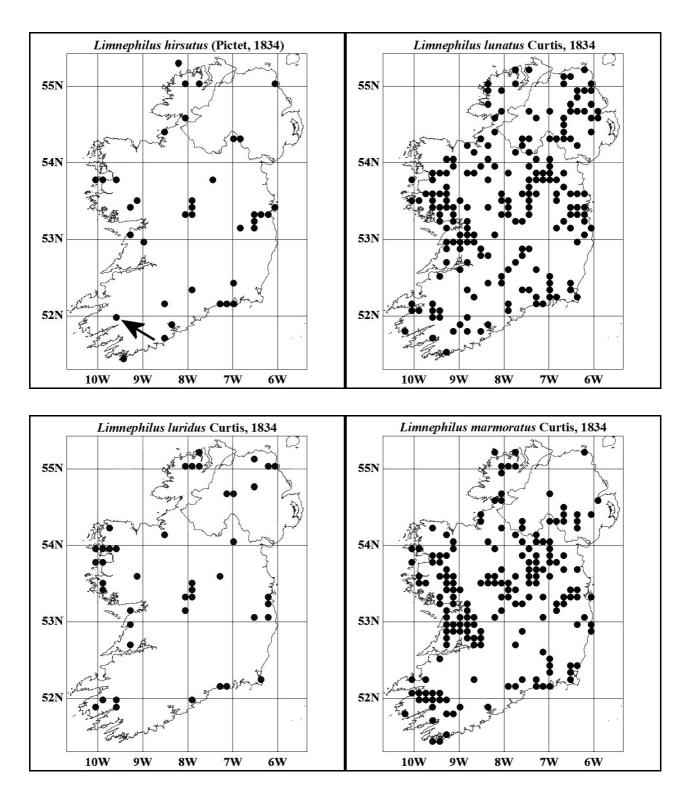
**FIGURES 50-53.** The known Irish distributions of *Lepidostoma hirtum* (Fabricius, 1775), *Drusus annulatus* (Stephens, 1837), *Ecclisopteryx dalecarlica* Kolenati, 1848 and *Chaetopteryx villosa* (Fabricius, 1798).



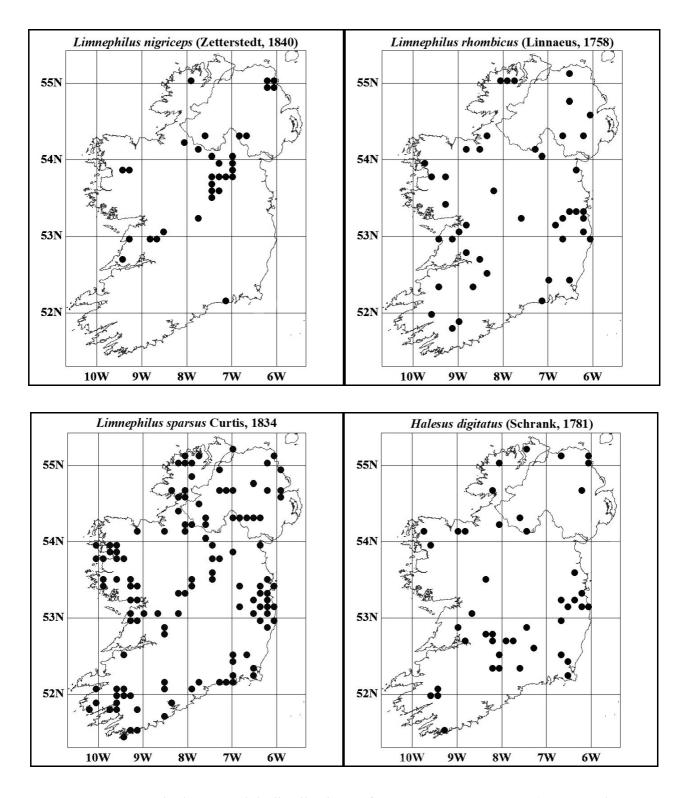
**FIGURES 54-57.** The known Irish distributions of *Anabolia nervosa* (Curtis, 1834), *Glyphotaelius pellucidus* (Retzius, 1783), *Limnephilus affinis* Curtis, 1834 and *Limnephilus auricula* Curtis, 1834.



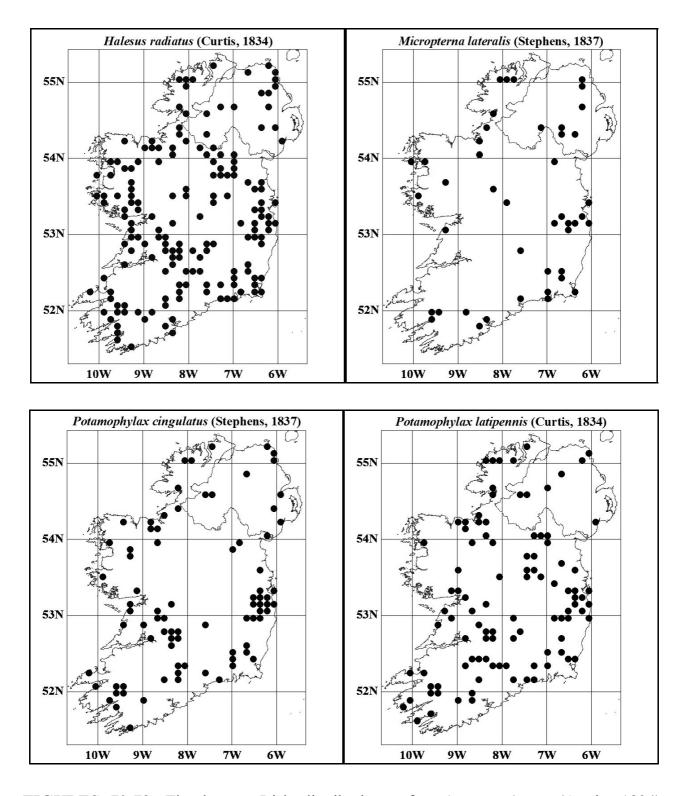
**FIGURES 58-61.** The known Irish distributions of *Limnephilus centralis* Curtis, 1834, *Limnephilus decipiens* (Kolenati, 1848), *Limnephilus flavicornis* (Fabricius, 1787) and *Limnephilus griseus* (Linnaeus, 1758).



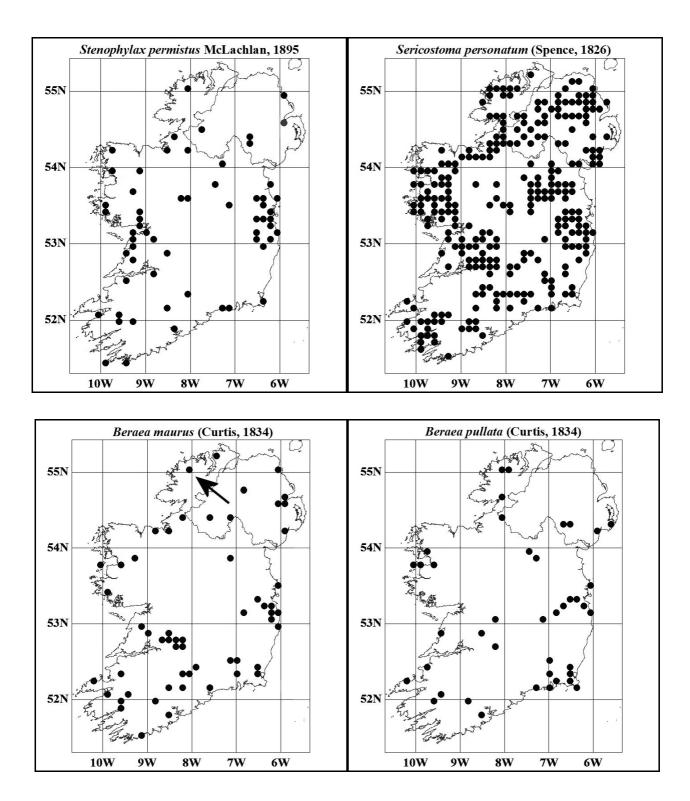
**FIGURES 62-65.** The known Irish distributions of *Limnephilus hirsutus* (Pictet, 1834), *Limnephilus lunatus* Curtis, 1834, *Limnephilus luridus* Curtis, 1834 and *Limnephilus marmoratus* Curtis, 1834. A notable record is indicated by an arrow.



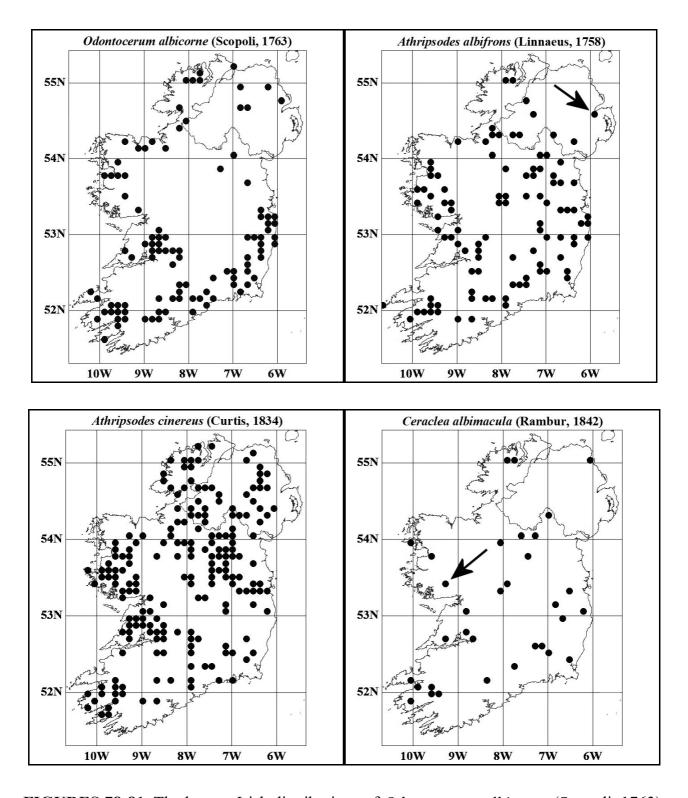
**FIGURES 66-69.** The known Irish distributions of *Limnephilus nigriceps* (Zetterstedt, 1840), *Limnephilus rhombicus* (Linnaeus, 1758), *Limnephilus sparsus* Curtis, 1834 and *Halesus digitatus* (Schrank, 1781).



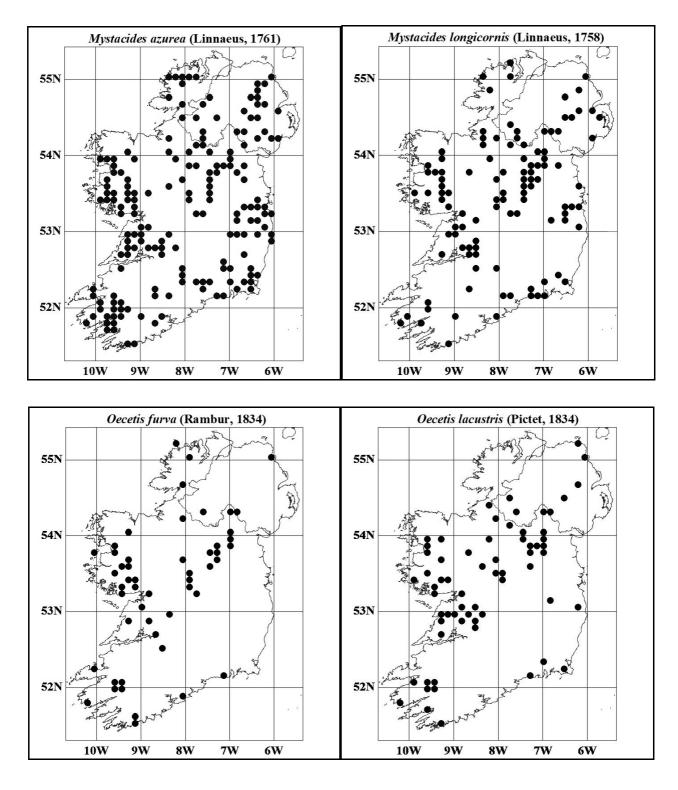
**FIGURES 70-73.** The known Irish distributions of *Halesus radiatus* (Curtis, 1834), *Micropterna lateralis* (Stephens, 1837), *Potamophylax cingulatus* (Stephens, 1837) and *Potamophylax latipennis* (Curtis, 1834).



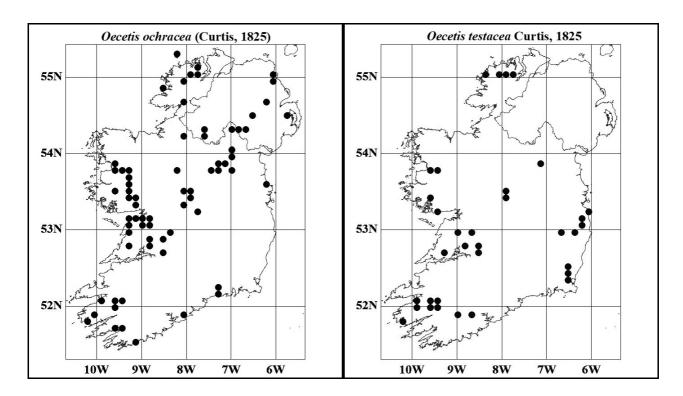
**FIGURES 74-77.** The known Irish distributions of *Stenophylax permistus* McLachlan, 1895, *Sericostoma personatum* (Spence, 1826), *Beraea maurus* (Curtis, 1834) and *Beraea pullata* (Curtis, 1834). A notable record is indicated by an arrow.

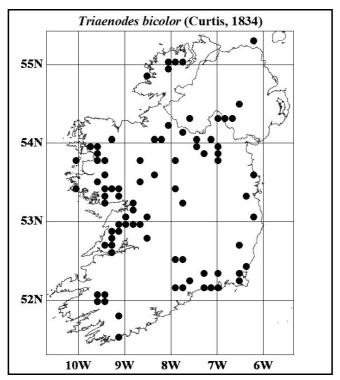


**FIGURES 78-81.** The known Irish distributions of *Odontocerum albicorne* (Scopoli, 1763), *Athripsodes albifrons* (Linnaeus, 1758), *Athripsodes cinereus* (Curtis, 1834) and *Ceraclea albimacula* (Rambur, 1842). Notable records are indicated by arrows.



**FIGURES 82-85.** The known Irish distributions of *Mystacides azurea* (Linnaeus, 1761), *Mystacides longicornis* (Linnaeus, 1758), *Oecetis furva* (Rambur, 1834) and *Oecetis lacustris* (Pictet, 1834).





**FIGURES 86-88.** The known Irish distributions of *Oecetis ochracea* (Curtis, 1825), *Oecetis testacea* Curtis, 1825 and *Triaenodes bicolor* (Curtis, 1834).