

## **RECORDS OF TRICHOPTERA COLLECTED FOR THE BIOMONITORING OF IRELAND'S LAKE NETWORK 2013-2018 AND 2019-2021**

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### **Abstract**

Records of Trichoptera are reported from Irish lakes collected as part of the EU Water Framework Directive monitoring programme. Larval material was collected during 2013-2018 and 2019-2021. Only new monad, hectad and county records are noted.

**Key words:** Trichoptera, caddisflies, larvae, Ireland, new records, distribution, lakes.

### **Introduction**

The Environmental Protection Agency conducts the national Water Framework Directive monitoring programme in Ireland (e.g. EPA 2021, 2023) by which river and lake water quality and trends are assessed with respect to ecological criteria and to physico-chemical water quality standards. This work includes the sampling of aquatic invertebrates in 117 lakes under the Acid Lakes and Surveillance Lake Monitoring Programme. Fourteen acid lakes are sampled annually and the remaining lakes are sampled once every three years.

Two lakes which encompass the major lake types in Ireland are shown (Plates 1-2): soft acid lakes (e.g. Upper Lake in Killarney, County Kerry) and hard limestone lakes (e.g. Lough Bunny in the Burren, County Clare). The former is situated in the south-west of Ireland, the latter in the west.

The Trichoptera data, reported here, are from 2013-2018 and 2019-2021. Only new monad (1km<sup>2</sup>), hectad (10km<sup>2</sup>) and county records from these data are noted in this paper. Four figure (1km<sup>2</sup>) Irish grid references are given for each new record.

Ruth Little identified the larvae using Edington and Hildrew (1995) and Wallace *et al.* (2003). Identifications to species level are only included. It was often not possible to identify many immature larval stages as they were very small and the key characteristics had not yet developed. In addition, only *Tinodes waeneri* is included as the larval key for the other species of *Tinodes* is unreliable. *Polycentropus* was also not speciated due to problems with the claw angle and other characteristics.

### **Addendum 7, Addendum 8 and Addendum 9**

Addendum 7 to the dataset “Caddisflies (Trichoptera) of Ireland”, was uploaded by the National Biodiversity Data Centre on the 8 August 2023 <<https://maps.biodiversityireland.ie/Dataset/250>> (O’Connor, 2023). There are presently 17973 records for 156 species from 930 sites. Records from Connor, O’Connor and Feeley (2024) in this *Bulletin* will be included in Addendum 8 and sent to the National Biodiversity Data Centre for incorporation into the dataset. The records in this paper will be included in a subsequent Addendum 9. Only one record will be sent if there are multiple ones from the same site.

### **Methods**

At each lake, specimens were collected using a two-minute littoral invertebrate kick-sample collected from the shoreline using a pond net (230×225mm frame with 1mm mesh). The operator shuffled over the substrate disturbing it with the foot to dislodge all benthic organisms which were subsequently retrieved in the pond net by filtering the disturbed material using a sweeping S-type movement. Collected invertebrates were then transferred to a 1-litre sample container and preserved in 70% Industrial Methylated Spirits (IMS). On return to the laboratory, the sample was washed through a 500µm sieve and sorted. All the macroinvertebrates were removed and preserved in 70% IMS for subsequent identification.

### **Records**

#### **RHYACOPHILIDAE**

##### ***Rhyacophila dorsalis* (Curtis, 1834)**

**GALWAY:** Lough Nahasleam (L9744), 1 larva 5 April 2016.

**WICKLOW:** Upper Lake (T1096), Glendalough, 1 larva 8 April 2019.

#### **GLOSSOSOMATIDAE**

##### ***Agapetus fuscipes* Curtis, 1834**

**DONEGAL:** Lough Akibbon (C0718), 1 larva 14 April 2021. Lough Derg (H0973), 29 larvae 14 April 2021. Lough Fern (C1824), 1 larva 25 April 2018. Lough Kindrum (C1943), 13 larvae 25 April 2018 & 3 larvae 22 April 2021. Lough Sessiagh (Loch an tSeisigh) (C0436), 1 larva 31 March 2015, 3 larvae 25 April 2018 & 3 larvae 22 April 2021.

**GALWAY:** Lough Aughrusbeg (L5558), 5 larvae 3 April 2013 & 7 larvae 6 April 2016. Lough Ballynakill (L6457), 14 larvae 6 April 2016 & 2 larvae 3 April 2013. Lough Corrib Lower (M2734), 1 larva 12 April 2016, (M0648), 14 larvae 12 April 2016, (M1349), 23 larvae 12 April 2016, (M1650), 2 larvae 12 April 2016. Lough Corrib Upper (M1353), 6 larvae 15 April 2019, (M1049), 7 larvae 9 April 2013, (M1349), 2 larvae 9 April 2013. Lough Kylemore

(L7658), 3 larvae 3 April 2013 & 1 larva 7 April 2016.

**LEITRIM:** Lough Gill (G7835), 1 larva 15 April 2014. Lough Glenade (G8345), 7 larvae 9 April 2014.

**MAYO:** Carrowmore Lake (F8328), 14 larvae 14 April 2014.

**ROSCOMMON:** Lough O'Flynn (M5879), 2 larvae 10 April 2014.

***Glossosoma boltoni* Curtis, 1834**

**GALWAY:** Lough Ballynakill (L6457), 1 larva 3 April 2013.

### **HYDROPTILIDAE**

***Agraylea multipunctata* Curtis, 1834**

**GALWAY:** Loughaunwillan (L9325), 1 larva 5 April 2016.

***Agraylea sexmaculata* Curtis, 1834 New to County Galway (Fig. 1)**

**GALWAY:** Ross Lake (M1936), 1 larva 11 April 2013.

***Tricholeiochiton fagesii* (Guinard, 1879) (Fig. 2)**

**GALWAY:** Lough Fadda (L6646), 47 larvae 2 April 2013, 1 larva 2 April 2019 & 1 larva 15 April 2021. Lough Maumwee (L9748), 1 larva, 4 April 2016 & 1 larva 19 April 2021.

### **ECNOMIDAE**

***Ecnomus tenellus* (Rambur, 1842) New to County Tipperary**

**CAVAN:** Lough Sheelin (N4785), 1 larva 15 April 2013. Lough Skeagh Upper (H6500), 1 larva 15 April 2013.

**CLARE:** Lough Doo (R1172), 7 larvae 19 April 2021.

**GALWAY:** Lough Ballynakill (L6457), 1 larva 3 April 2013. Lough Beaghcauneen (L6847), 4 larvae 2 April 2013 & 1 larva 2 April 2019. Lough Enask (L6646), 2 larvae 2 April 2013. Lough Fadda (L6646), 4 larvae 2 April 2013, 10 larvae 29 April 2020 & 1 larva 15 April 2021. Lough Maumwee (L9748), 2 larvae 1 May 2020 & 1 larva 19 April 2021. Lough Nahasleam (L9744), 1 larva 1 May 2020 & 1 larva 19 April 2021. Loughanillaun (L9746), 4 larvae 17 April 2019, (L9847), 1 larva 11 April 2013. Ross Lake (M1936), 1 larva 11 April 2013.

**KERRY:** Lough Brin (V7877), 2 larvae 24 April 2020. Lough Caragh (V7290), 9 larvae 27 April 2020. Upper Lake (V9282), 1 larva 8 April 2021.

**LEITRIM:** Lough Macnean Lower (H0238), 1 larva 23 March 2016.

**MAYO:** Carrowmore Lake (F8328), 1 larva 13 April 2017. Lough Aille (M0780), 2 larvae 1 May 2020. Lough Urlaur (M5089), 1 larva 7 April 2017.

**TIPPERARY:** Lough Derg (R7186), 2 larvae 12 April 2018.

**POLYCENTROPODIDAE**

***Cyrnus flavidus* McLachlan, 1864 New to County Cork**

**CAVAN:** Lough Mushlin (H6201), 6 larvae 21 March 2016.

**CORK:** Lough Allua (W1865), 8 larvae 24 April 2020.

**DONEGAL:** Lough Anure (B8116), 3 larvae 13 May 2015.

**FERMANAGH** Lough Macnean Lower (H0938), 1 larva 25 April 2019.

**GALWAY:** Lough Fadda (L6646), 2 larvae 29 April 2020 & 1 larva 15 April 2021. Lough Lettercraffroe (M0536), 5 larvae 17 April 2019.

**LEITRIM:** Lough Glenade (G8345), 1 larva 24 April 2020. Lough Macnean Upper (H0238), 1 larva 23 March 2016.

**MAYO:** Lough Beltra (M0899), 4 larvae 27 April 2020.

**ROSCOMMON:** Lough O'Flynn (M5879), 10 larvae 28 April 2020.

**SLIGO:** Lough Gill (G7132), 1 larva 28 April 2020.

**TIPPERARY:** Lough Derg (M8401), 3 larvae 21 April 2021.

***Cyrnus trimaculatus* (Curtis, 1834)**

**CAVAN:** Lough Skeagh Upper (H6500), 7 larvae 15 April 2013.

**CLARE:** Lough Lickeen (R1690), 4 larvae 19 April 2021.

**CORK:** Lough Allua (W1865), 10 larvae 12 April 2017.

**DONEGAL:** Lough Fern (C1824), 1 larva 25 April 2018. Lough Kiltooris (G6797), 1 larva 23 April 2021. Lough Nasnanida (B8507), 2 larvae 23 April 2021.

**GALWAY:** Lough Ardderry (L9746), 2 larvae 11 April 2019. Lough Aughrusbeg (L5558), 1 larva 6 April 2016. Lough Beaghcauneen (L6847), 59 larvae 2 April 2013 & 1 larva 2 April 2019. Lough Enask (L6646), 3 larvae 6 April 2016. Lough Fadda (L6646), 2 larvae 29 April 2020 & 8 larvae 15 April 2021. Lough Seecon (M0835), 4 larvae 13 April 2016. Lough Shindilla (L9545), 1 larva 9 April 2013. Ross Lake (M1936), 5 larvae 11 April 2013.

**KERRY:** Lough Cam (Q5907), 12 larvae 9 April 2014, 16 larvae 11 April 2017, 3 larvae 2 April 2019, 2 larvae 2020 & 15 larvae 13 April 2021. Lough Caragh (V7290), 1 larva 27 April 2020. Upper Lake (V9282), 2 larvae 8 April 2021.

**LEITRIM:** Lough Gill (G7835), 4 larvae 13 April 2017. Lough Glenade (G8345), 1 larva 24 April 2020. Lough Macnean Upper (H0238), 1 larva 26 April 2019.

**MAYO:** Lough Acorrymore (F5705), 1 larva 9 April 2014 & 4 larvae 29 April 2020. Lough Beltra (M0899), 1 larva 27 April 2017. Lough Carra (M1673), 10 larvae 10 April 2017.

**MONAGHAN:** Lough Muckno (H8319), 2 larvae 16 April 2013 & 33 larvae 22 March 2016.

**SLIGO:** Lough Talt (G4014), 2 larvae 9 April 2014.

**TIPPERARY:** Lough Derg (M8401), 12 larvae 21 April 2021, (R7186), 1 larva 12 April 2018.

**WICKLOW:** Lough Bray Lower (O1316), 1 larva 11 April 2018 & 8 larvae 14 April 2021.

***Holocentropus dubius* (Rambur, 1842)**

**GALWAY:** Lough Enask (L6646), 3 larvae 6 April 2016.

**SLIGO:** Lough Gill (G7132), 3 larvae 15 April 2014.

***Holocentropus picicornis* (Stephens, 1836)**

**GALWAY:** Lough Ardderry (L9746), 5 larvae 11 April 2019. Lough Ballynakill (L6457), 6 larvae 3 April 2013. Lough Fadda (L6646), 5 larvae 15 April 2021. Lough Nahasleam (L9744), 2 larvae 19 April 2021.

**KERRY:** Lough Cam (Q5907), 8 larvae 13 April 2021. Muckcross Lake (V9485), 2 larvae 30 April 2020.

**MAYO:** Lough Glencullin (L8169), 5 larvae 20 April 2021. Lough Urlaur (M5089), 1 larva 7 April 2017.

**SLIGO:** Templehouse Lake (G6118), 31 larvae 16 April 2014.

***Neureclipsis bimaculata* (Linnaeus, 1758)**

**GALWAY:** Lough Fadda (L6646), 5 larvae 15 April 2021.

***Plectrocnemia conspersa* (Curtis, 1834)**

**CAVAN:** Lough Derrybrick (H3510), 5 larvae 23 March 2016, (H3412), 2 larvae 23 March 2016. Lough Mushlin (H6201), 5 larvae 15 April 2013 & 27 larvae 21 March 2016.

**CLARE:** Lough Doo (R1172), 1 larva 19 April 2018 & 9 larvae 29 April 2020. Lough Naminna (R1871), 16 larvae 19 April 2018 & 3 larvae 19 April 2021.

**CORK:** Lough Glenbeg (V7053), 1 larva 10 April 2017.

**DONEGAL:** Lough Barra (B9212), 1 larva 24 April 2018, 1 larva 5 May 2020 & 4 larvae 23 April 2021. Lough Fern (C1824), 1 larva 25 April 2018. Lough Kindrum (C1943), 5 larvae 25 April 2018. Lough Sessiagh (Loch an tSeisigh) (C0436), 1 larva 31 March 2015.

**FERMANAGH:** Lough Macnean Lower (H1038), 1 larva 21 April 2013, (H0938), 6 larvae 23 March 2016.

**GALWAY:** Lough Ardderry (L9746), 1 larva 11 April 2019, (L9845), 9 larvae 9 April 2013. Lough Aughrusbeg (L5558), 12 larvae 3 April 2013, 3 larvae 6 April 2016 & 4 larvae 4 April 2019. Lough Ballynakill (L6457), 5 larvae 6 April 2016 & 1 larva 3 April 2019. Lough Beaghcauneen (L6847), 27 larvae 2 April 2019. Lough Bofin (M0343), 1 larva 11 April 2019 & 10 larvae 29 April 2020. Lough Corrib Lower (M2531), 5 larvae 12 April 2016, (M2734), 1 larva 22 April 2013 & 33 larvae 12 April 2016, (M2837), 5 larvae 16 April 2019, (M2737), 3 larvae 22 April 2013 & 5 larvae 12 April 2016. Lough Corrib Upper (M1049), 1 larva 15 April 2019, (M1749), 1 larva 15 April 2019, (M1349), 6 larvae 12 April 2016, (M1650), 17 larvae 12 April 2016, (M0648), 2 larvae 12 April 2016. Lough Derryclare (L8449), 3 larvae 3 April 2019. Lough Enask (L6646), 14 larvae 2 April 2013, 33 larvae 6 April 2016 & 4 larvae 2 April 2019. Lough Fadda (L6646), 51 larvae 2 April 2013, 16 larvae 6 April 2016, 12 larvae 2 April 2019,

39 larvae 29 April 2020 & 13 larvae 15 April 2021. Lough Illauntrasna (L8825), 1 larva 5 April 2016. Lough Kylemore (L7658), 1 larva 3 April 2013. Lough Lettercraffroe (M0537), 3 larvae 28 April 2016. Lough Maumwee (L9748), 1 larva 10 April 2019 & 6 larvae 19 April 2021. Lough Nahasleam (L9744), 1 larva 5 April 2016, 25 larvae 1 May 2020 & 4 larvae 19 April 2021. Lough Nambrackmore (L7145), 3 larvae 5 April 2016. Lough Rea (M6214), 1 larva 1 April 2013. Lough Seecon (M0835), 2 larvae 13 April 2016 & 3 larvae 10 April 2019. Lough Shindilla (L9545), 1 larva 9 April 2013 & 1 larva 10 April 2019. Loughaunwillan (L9325), 1 larva 8 April 2013, 2 larvae 5 April 2016 & 15 larvae 9 April 2019. Ross Lake (M1936), 2 larvae 11 April 2013 & 4 larvae 13 April 2016.

**KERRY:** Lough Acoose (V75851), 4 larvae 4 April 2014. Lough Brin (V7877), 2 larvae 9 April 2014 & 2 larvae 11 April 2017. Lough Cam (Q5907), 23 larvae 9 April 2014, 18 larvae 11 April 2017, 6 larvae 2 April 2019, 5 larvae 2020 & 28 larvae 13 April 2021. Lough Caragh (V7290), 3 larvae 11 April 2017 & 1 larva 27 April 2020. Lough Cloonaghlin (V6070), 1 larva 27 April 2020. Lough Leane (V9488), 8 larvae 12 April 2017, (V9090), 4 larvae 12 April 2017. Upper Lake (V9282), 2 larvae 30 April 2020 & 2 larvae 8 April 2021.

**LEITRIM:** Lough Gill (G7835), 3 larvae 15 April 2014 & 18 larvae 13 April 2017. Lough Glencar (G7543), 1 larva 14 April 2014 & 2 larvae 24 April 2020. Lough Melvin (G8853), 1 larva 24 April 2020.

**MAYO:** Carrowmore Lake (F8328), 4 larvae 13 April 2017. Lough Acorrymore (F5705), 7 larvae 9 April 2014, 6 larvae 13 April 2017 & 7 larvae 29 April 2020. Lough Beltra (M0899), 1 larva 10 April 2014. Lough Carra (M1673), 1 larva 11 April 2014 & 8 larvae 10 April 2017. Lough Cullin (G2301), 4 larvae 10 April 2014 & 25 larvae 21 April 2017. Lough Glencullin (L8169), 4 larvae 12 April 2017, 2 larvae 4 April 2019 & 16 larvae 1 May 2020. Lough Urlaur (M5089), 4 larvae 9 April 2014.

**MONAGHAN:** Lough Muckno (H8319), 1 larva 16 April 2013 & 10 larvae 22 March 2016.

**ROSCOMMON:** Lough Cavetown (M8317), 1 larva 10 April 2014. Lough O'Flynn (M5879), 1 larva 10 April 2014.

**SLIGO:** Lough Arrow (G7913), 2 larvae 15 April 2014. Lough Easky (G4423), 1 larva 15 April 2014, 3 larvae 12 April 2017, 1 larva 5 April 2019 & 1 larva 29 April 2020. Lough Gill (G7132), 1 larva 15 April 2014. Lough Talt (G4014), 3 larvae 9 April 2014. Templehouse Lake (G6118), 3 larvae 16 April 2014.

**TIPPERARY:** Lough Derg (R7186), 3 larvae 12 April 2018, (M8401), 2 larvae 12 April 2018.

**WESTMEATH:** Lough Owel (N4256), 1 larva 14 April 2013. Lough Sheelin (N4482), 6 larvae 15 April 2013.

**WICKLOW:** Lough Bray Lower (O1316), 3 larvae 11 April 2018 & 33 larvae 14 April 2021. Upper Lake (T1096), Glendalough, 4 larvae 27 April 2020 & 1 larva 15 April 2021.

**PSYCHOMYIIDAE**

***Lype phaeopa* (Stephens, 1836)**

**CAVAN:** Lough Derrybrick (H3412), 1 larva 22 April 2013. Lough Sheelin (N4785), 1 larva 15 April 2013. Lough Skeagh Upper (H6500) 1 larva 9 April 2019.

**CLARE:** Lough Alewnaghta (R7691), 3 larvae 17 April 2018.

**GALWAY:** Lough Shindilla (L9545), 1 larva 9 April 2013.

**TIPPERARY:** Lough Derg (R7186), 1 larva 12 April 2018.

***Lype reducta* (Hagen, 1868) New to County Cavan (Fig. 3)**

**CAVAN:** Lough Sheelin (N4785), 1 larva 15 April 2013.

***Psychomyia fragilis* (Pictet, 1834) New to County Leitrim**

**GALWAY:** Lough Corrib Lower (M2734), 5 larvae 22 April 2013 & 22 larvae 12 April 2016. Lough Corrib Upper (M1349), 5 larvae 9 April 2013, (M1650), 7 larvae 12 April 2016.

**LEITRIM:** Lough Gill (G7835), 1 larva 13 April 2017.

**MAYO:** Lough Carra (M1673), 2 larvae 11 April 2014. Lough Cullin (G2301), 1 larva 21 April 2017. Lough Urlaur (M5089), 13 larvae 9 April 2014 & 4 larvae 7 April 2017.

**ROSCOMMON:** Lough O'Flynn (M5879), 2 larvae 10 April 2014.

**SLIGO:** Lough Arrow (G7811), 1 larva 15 April 2014.

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

**GALWAY:** Lough Corrib Lower (M2837), 8 larvae 16 April 2019, (M2534), 6 larvae 16 April 2019. Lough Corrib Upper (M1749), 25 larvae 15 April 2019. Lough Rea (M6214), 28 larvae 1 April 2013.

**MAYO:** Lough Carra (M1673), 16 larvae 23 April 2020. Lough Cullin (G2304), 4 larvae 23 April 2020, (G2301), 7 larvae 24 April 2020. Lough Urlaur (M5089), 21 larvae 28 April 2020.

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

**CAVAN:** Lough Corglass (H3409), 5 larvae 22 March 2016. Lough Derrybrick (H3510), 32 larvae 22 April 2013, 33 larvae 23 March 2016 & 7 larvae 18 April 2019, (H3412), 3 larvae 22 April 2013 & 9 larvae 23 March 2016. Lough Macnean Upper (H0637), 15 larvae 26 April 2019. Lough Mushlin (H6201), 7 larvae 15 April 2013, 1 larva 21 March 2016 & 4 larvae 9 April 2019. Lough Sheelin (N4785), 1 larva 2019. Lough Skeagh (H6500), 2 larvae 21 March 2016.

**CLARE:** Lough Alewnaghta (R7691), 35 larvae 29 April 2015, 7 larvae 17 April 2018 & 12 larvae 22 April 2021. Lough Bunny (R3796), 4 larvae 20 April 2021. Lough Cullaun (R3190), 2 larvae 20 April 2021. Lough Dromore (R3485), 1 larva 21 April 2021. Lough Gortglass (R2259), 4 larvae 16 April 2018 & 3 larvae 19 April 2021. Lough Inchicronan (R3986), 1 larva 19 April 2018 & 2 larvae 21 April 2021. Lough Lickeen (R1690), 8 larvae 19 April 2021. Lough Muckanagh (R3692), 2 larvae 17 April 2018 & 5 larvae 20 April 2021. Lough Naminna

(R1871), 3 larvae 29 April 2020.

**CORK:** Lough Allua (W1865), 28 larvae 2 April 2014. Lough Glenbeg (V7053), 2 larvae 3 April 2014 & 15 larvae 24 April 2020.

**DONEGAL:** Lough Anure (B8116), 6 larvae 21 April 2021. Lough Dunglow (B7811), 1 larva 21 April 2021. Lough Fern (C1822), 6 larvae 25 April 2018 & 9 larvae 22 April 2021. Lough Glen (C0928), 2 larvae 2021. Lough Kiltooris (G6797), 1 larva 23 April 2021. Lough Kindrum (C1943), 2 larvae 22 April 2021. Lough Sessiagh (Loch an tSeisigh) (C0436), 4 larvae 31 March 2015, 37 larvae 25 April 2018 & 40 larvae 22 April 2021. Lough Unshin (G9463), 1 larva 14 April 2021.

**FERMANAGH:** Lough Macnean Lower (H1038), 24 larvae 21 April 2013, (H0938), 20 larvae 23 March 2016 & 8 larvae 25 April 2019. Lough Melvin (G9353), 1 larva 10 April 2014 & 2 larvae 24 April 2020.

**GALWAY:** Lough Aughrusbeg (L5558), 8 larvae 3 April 2013 & 39 larvae 6 April 2016. Lough Ballynakill (L6457), 4 larvae 6 April 2016. Lough Beaghcauneen (L6847), 7 larvae 2 April 2013, 6 larvae 6 April 2016 & 1 larva 2 April 2019. Lough Corrib Lower (M2531), 1 larva 12 April 2016 & 8 larvae 16 April 2019, (M2737), 2 larvae 22 April 2013 & 28 larvae 12 April 2016, (M2534), 9 larvae 16 April 2019. Lough Corrib Upper (M1049), 1 larva 9 April 2013, (M1650), 7 larvae 12 April 2016. Lough Enask (L6646), 2 larvae 2 April 2019. Lough Fadda (L6646), 1 larva 6 April 2016 & 6 larvae 29 April 2020. Lough Lettercraffroe (M0536), 2 larvae 17 April 2019. Lough Maumwee (L9748), 1 larva 10 April 2019, 8 larvae 1 May 2020 & 3 larvae 19 April 2021. Lough Nahasleam (L9744), 1 larva 1 May 2020 & 2 larvae 19 April 2021. Lough Nambrackmore (L7145), 1 larva 5 April 2016. Ross Lake (M2036), 29 larvae 16 April 2019. Lough Rea (M6214), 55 larvae 1 April 2013, 29 larvae 4 April 2016 & 17 larvae 1 April 2019. Lough Seecon (M0835), 1 larva 11 April 2013, 2 larvae 13 April 2016 & 7 larvae 10 April 2019. Loughanillaun (L9746), Maam Cross, 15 larvae 17 April 2019. Loughaunwillan (L9325), 13 larvae 8 April 2013, 6 larvae 5 April 2016 & 2 larvae 9 April 2019. Ross Lake (M1936), 8 larvae 13 April 2016.

**KERRY:** Lough Acoose (V7585), 11 larvae 27 April 2020 & 1 larva 4 April 2014. Lough Allua (W1865), 46 larvae 24 April 2020. Lough Brin (V7877), 13 larvae 9 April 2014, 4 larvae 11 April 2017 & 24 larvae 24 April 2020. Lough Cam (Q5907), 35 larvae 9 April 2014, 23 larvae 11 April 2017, 4 larvae 2 April 2019, 9 larvae 2020 & 33 larvae 13 April 2021. Lough Caragh (V7290), 2 larvae 11 April 2017 & 2 larvae 27 April 2020. Lough Cloonaghlin (V6070), 1 larva 4 April 2014. Lough Leane (V9090), 2 larvae 27 April 2020. Muckcross Lake (V9485), 2 larvae 30 April 2020.

**LEITRIM:** Lough Gill (G7835), 11 larvae 15 April 2014, 26 larvae 13 April 2017 & 2 larvae 28 April 2020. Lough Glenade (G8345), 167 larvae 9 April 2014 & 9 larvae 24 April 2020.



Lough Glencar (G7543), 2 larvae 14 April 2014 & 3 larvae 24 April 2020. Lough Macnean Upper (H0238), 3 larvae 21 April 2013. Lough Melvin (G8853), 1 larva 10 April 2014 & 5 larvae 24 April 2020, (G8255), 1 larva 24 April 2020.

**LIMERICK:** Lough Gur (R6441), 52 larvae 22 April 2021.

**MAYO:** Carrowmore Lake (F8328), 2 larvae 14 April 2014, 3 larvae 13 April 2017 & 23 larvae 27 April 2020. Lough Acorrymore (F5705), 7 larvae 9 April 2014, 40 larvae 13 April 2017 & 65 larvae 29 April 2020. Lough Aille (M0780), 11 larvae 1 May 2020. Lough Beltra (M0899), 6 larvae 27 April 2020. Lough Carra (M1970), 1 larva 11 April 2014 & 22 larvae 23 April 2020, (M1673), 12 larvae 11 April 2014, 1 larva 10 April 2017 & 33 larvae 23 April 2020. Lough Cullin (G2304), 2 larvae 10 April 2014, 1 larvae 21 April 2017 & 7 larvae 23 April 2020, (G2301), 1 larvae 10 April 2014 & 24 larvae 21 April 2017. Lough Glencullin (L8169), 1 larva 1 May 2020 & 2 larvae 20 April 2021. Lough Moher (L9777), 14 larvae 30 April 2020. Lough Urlaur (M5089), 119 larvae 9 April 2014, 32 larvae 7 April 2017 & 40 larvae 28 April 2020.

**MEATH:** Lough Bane (N5571), 15 larvae 14 April 2016.

**MONAGHAN:** Lough Egish (H7814), 10 larvae 16 April 2013 & 1 larva 12 April 2019. Lough Muckno (H8319), 1 larva 16 April 2013 & 35 larvae 22 March 2016.

**ROSCOMMON:** Lough Annaghmore (M9083), 4 larvae 5 April 2017. Lough Cavetown (M8397), 1 larva 10 April 2014. Lough Meelagh (G9011), 13 larvae 10 April 2014 & 4 larvae 23 April 2020. Lough O'Flynn (M5879), 101 larvae 10 April 2014 & 526 larvae 28 April 2020.

**SLIGO:** Lough Arrow (G7811), 1 larva 28 April 2020, (G7913), 2 larvae 15 April 2014 & 5 larvae 28 April 2020. Lough Easky (G4423), 1 larva 15 April 2014 & 12 larvae 29 April 2020. Lough Gill (G7132), 8 larvae 15 April 2014 & 7 larvae 28 April 2020. Lough Talt (G4014), 1 larva 9 April 2014. Templehouse Lake (G6118), 2 larvae 16 April 2014 & 1 larva 30 April 2020.

**TIPPERARY:** Lough Derg (M8401), 9 larvae 12 April 2018 & 67 larvae 21 April 2021, (R7186), 40 larvae 12 April 2018 & 22 larvae 21 April 2021.

**WESTMEATH:** Lough Owel (N4256), 2 larvae 14 April 2016. Lough Sheelin (N4482), 15 larvae 15 April 2013.

**WICKLOW:** Lough Bray Lower (O1316), 6 larvae 11 April 2018.

## **HYDROPSYCHIDAE**

### ***Hydropsyche siltalai* Döhler, 1963 New to County Roscommon**

**ROSCOMMON:** Lough Annaghmore (M9083), 1 larva 23 April 2020.

The specimen was probably washed into the turlough from a feeder stream.

### **PHRYGANEIDAE**

***Agrypnia obsoleta* (Hagen, 1864)**

**MAYO:** Lough Carra (M1673), 1 larva 11 April 2014.

***Agrypnia varia* (Fabricius, 1793)**

**MAYO:** Lough Carra (M1673), 1 larva 23 April 2020.

***Phryganea grandis* Linnaeus, 1758**

**CLARE:** Lough Bunny (R3796), 1 larva 17 April 2018.

### **GOERIDAE**

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

**CAVAN:** Lough Corglass (H3409), 1 larva 22 March 2016. Lough Derrybrick (H3510), 1 larva 23 March 2016, (H3412), 8 larvae 23 March 2016.

**CLARE:** Lough Lickeen (R1690), 1 larva 18 April 2018.

**DONEGAL:** Lough Akibbon (C0718), 1 larva 25 April 2018.

**FERMANAGH:** Lough Melvin (G9353), 1 larva 24 April 2020.

**GALWAY:** Lough Bofin (M0343), 1 larva 29 April 2020. Loughaunwillan (L9325), 1 larva 8 April 2013.

**LEITRIM:** Lough Glenade (G8345), 2 larvae 9 April 2014.

**MAYO:** Lough Beltra (M0899), 3 larvae 27 April 2020.

**TIPPERARY:** Lough Derg (M8401), 2 larvae 21 April 2021.

**WESTMEATH:** Lough Lene (N5368), 1 larva 14 April 2016.

### **LEPIDOSTOMATIDAE**

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

**CAVAN:** Lough Corglass (H3409), 3 larvae 22 March 2016. Lough Derrybrick (H3510), 1 larva 22 April 2013.

**CLARE:** Lough Alewnaghta (R7691), 1 larva 17 April 2018 & 1 larva 22 April 2021. Lough Gortglass (R2259), 1 larva 16 April 2018 & 1 larva 19 April 2021. Lough Naminna (R1871), 3 larvae 2019.

**DONEGAL:** Lough Akibbon (C0718), 3 larvae 14 April 2021. Lough Anure (B8116), 5 larvae 21 April 2021. Lough Barra (B9212), 6 larvae 24 April 2018 & 1 larva 23 April 2021. Lough Beagh (Veagh) (C0221), 1 larva 25 April 2018. Lough Derg (H0973), 13 larvae 14 April 2021. Lough Gartan (C0616), 14 larvae 14 April 2021. Lough Glen (C0928), 2 larvae 2021. Lough Kiltorris (G6797), 6 larvae 23 April 2021. Lough Kindrum (C1943), 2 larvae 25 April 2018 & 1 larva 22 April 2021. Lough Sessiagh (Loch an tSeisigh) (C0436), 3 larvae 25 April 2018 & 3 larvae 22 April 2021. Lough Unshin (G9463), 8 larvae 14 April 2021.

**FERMANAGH:** Lough Macnean Lower (H0938), 1 larva 23 March 2016. Lough Melvin (G9353), 2 larvae 24 April 2020.

**GALWAY:** Ballynahinch Lake (L7847), 8 larvae 2 April 2013, 3 larvae 5 April 2016 & 8 larvae 3 April 2019. Lough Ardderry (L9845), 7 larvae 9 April 2013 & 3 larvae 4 April 2016. Lough Aughrusbeg (L5558), 1 larva 3 April 2013 & 4 larvae 6 April 2016. Lough Ballynakill (L6457), 24 larvae 3 April 2013, 24 larvae 6 April 2016 & 13 larvae 3 April 2019. Lough Beaghcauneen (L6847), 4 larvae 2 April 2013 & 1 larva 6 April 2016. Lough Bofin (M0343), 3 larvae 9 April 2013. Lough Corrib Lower (M2734), 8 larvae 22 April 2013 & 14 larvae 12 April 2016, (M2837), 41 larvae 16 April 2019, (M2737), 3 larvae 22 April 2013 & 7 larvae 12 April 2016, (M2534), 3 larvae 16 April 2019, (M2531), 2 larvae 12 April 2016. Lough Corrib Upper (M1049), 1 larva 9 April 2013 & 6 larvae 15 April 2019, (M0648), 2 larvae 12 April 2016, (M1349), 2 larvae 9 April 2013, (M1749), 1 larva 15 April 2019. Lough Derryclare (L8449), 19 larvae 3 April 2019 & 8 larvae 2 April 2013, (M0649), 9 larvae 22 April 2016. Lough Enask (L6646), 1 larva 6 April 2016 & 1 larva 2 April 2019. Lough Fadda (L6646), 4 larvae 2 April 2013, 20 larvae 6 April 2016, 5 larvae 2 April 2019 & 13 larvae 15 April 2021. Lough Fern (C1822), 5 larvae 22 April 2021. Lough Kylemore (L7658), 1 larva 4 April 2016 & 2 larvae 3 April 2019. Lough Lettercraffroe (M0537), 7 larvae 11 April 2013 & 17 larvae 28 April 2016. Lough Maumwee (L9748), 2 larvae 9 April 2013 & 5 larvae 4 April 2016. Lough Nahasleam (L9744), 10 larvae 8 April 2013 & 7 larvae 5 April 2016. Lough Nambrackmore (L7145), 20 larvae 5 April 2016 & 6 larvae 2 April 2019. Lough Pollacappul (L7558), 3 larvae 3 April 2013 & 5 larvae 7 April 2016. Lough Rea (M6214), 4 larvae 1 April 2013 & 6 larvae 4 April 2016. Lough Seecon (M0835), 4 larvae 13 April 2016. Lough Shindilla (L9545), 2 larvae 5 April 2016 & 1 larva 10 April 2019. Loughanillaun (L9847), 6 larvae 11 April 2013, (L9746), 4 larvae 17 April 2019, (L9847), 54 larvae 13 April 2016. Loughaunwillan (L9325), 8 larvae 8 April 2013, 6 larvae 5 April 2016 & 7 larvae 9 April 2019. Ross Lake (M2036), 5 larvae 16 April 2019, (M1936), 5 larvae 13 April 2016.

**KERRY:** Lough Acoose (V7585), 2 larvae 4 April 2014, 5 larvae 10 April 2017 & 3 larvae 27 April 2020. Lough Cam (Q5907), 1 larva 11 April 2017 & 5 larvae 2 April 2019. Lough Caragh (V7290), 11 larvae 11 April 2017 & 6 larvae 27 April 2020. Lough Caum (Q5907), 1 larva 13 April 2021. Lough Leane (V9090), 1 larva 10 April 2014.

**LEITRIM:** Lough Glenade (G8345), 7 larvae 9 April 2014. Lough Glencar (G7543), 19 larvae 14 April 2014. Lough Gill (G7835), 5 larvae 15 April 2014, 26 larvae 13 April 2017 & 1 larva 28 April 2020. Lough Melvin (G8853), 1 larva 10 April 2014.

**MAYO:** Carrowmore Lake (F8328), 50 larvae 14 April 2014 & 6 larvae 27 April 2020. Lough Aille (M0780), 1 larva 1 May 2020. Lough Beltra (M0899), 6 larvae 10 April 2014, 9 larvae 27 April 2017 & 9 larvae 27 April 2020. Lough Bofin (M0343), 1 larva 29 April 2020 & 8 larvae

19 April 2021. Lough Carra (M1970), 1 larva 11 April 2014, (M1673), 1 larva 11 April 2014 & 10 larvae 10 April 2017. Lough Cullin (G2304), 4 larvae 10 April 2014, (G2301), 52 larvae 10 April 2014 & 3 larvae 21 April 2017. Lough Doo (L8368), 2 larvae 11 April 2014, 3 larvae 12 April 2017 & 4 larvae 1 May 2020. Lough Glencullin (L8169), 24 larvae 4 April 2014 & 246 larvae 12 April 2017.

**MEATH:** Lough Bane (N5571), 1 larva 14 April 2016.

**MONAGHAN:** Lough Egish (H7814), 1 larva 16 April 2013 & 1 larva 22 March 2016.

**ROSCOMMON:** Lough Cavetown (M8397), 1 larva 10 April 2014. Lough Meelagh (G9011), 2 larvae 10 April 2014. Lough O'Flynn (M5879), 5 larvae 28 April 2020.

**SLIGO:** Lough Arrow (G7913), 3 larvae 15 April 2014. Lough Easky (G4423), 45 larvae 12 April 2017, 6 larvae 5 April 2019, 25 larvae 29 April 2020 & 28 larvae 16 April 2021. Lough Gill (G7132), 1 larva 15 April 2014.

**TIPPERARY:** Lough Derg (R7186), 7 larvae 12 April 2018, (M8401), 1 larva 21 April 2021.

**WESTMEATH:** Lough Sheelin (N4482), 1 larva 15 April 2013.

**WICKLOW:** Lough Bray Lower (O1316), 12 larvae 11 April 2018 & 74 larvae 14 April 2021. Lough Tay (O1607), 178 larvae 13 April 2021. Upper Lake (T1096), Glendalough, 1 larva 12 April 2018 & 1 larva 27 April 2020.

#### **APATANIIDAE**

##### ***Apatania auricula* (Forsslund, 1930)**

**KERRY:** Lough Acoose (V7585), 2 larvae 10 April 2017 & 4 larvae 11 April 2017. Lough Brin (V7877), 2 larvae 9 April 2014.

##### ***Apatania wallengreni* McLachlan, 1871 New to County Cavan (Fig. 4)**

**CAVAN:** Lough Derrybrick (H3412), 3 larvae 23 March 2016.

#### **LIMNEPHILIDAE**

##### ***Drusus annulatus* (Stephens, 1837)**

**GALWAY:** Lough Corrib Upper (M1353), 2 larvae 15 April 2019, (M1749), 9 larvae 15 April 2019, (M1049), 1 larva 9 April 2013, (M1349), 3 larvae 9 April 2013.

**LEITRIM:** Lough Gill (G7835), 1 larva 13 April 2017.

##### ***Chaetopteryx villosa* (Fabricius, 1798)**

**KERRY:** Lough Caragh (V7088), 1 larva 4 April 2014.

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

**CAVAN:** Lough Derrybrick (H3510), 2 larvae 22 April 2013 & 8 larvae 23 March 2016, (H3412), 11 larvae 23 March 2016. Lough Mushlin (H6201), 1 larva 9 April 2019.

**CLARE:** Lough Cullaun (R3190), 1 larva 20 April 2021. Lough Muckanagh (R3692), 2 larvae

17 April 2018.

**DONEGAL:** Lough Akibbon (C0718), 2 larvae 30 March 2015. Lough Derg (H0973), 56 larvae 14 April 2021. Lough Fern (C1822), 2 larvae 22 April 2021.

**FERMANAGH:** Lough Macnean Lower (H0938), 2 larvae 23 March 2016 & 1 larva 25 April 2019, (H1038), 1 larva 21 April 2013. Lough Melvin (G9353), 14 larvae 10 April 2014.

**GALWAY:** Lough Bofin (M0343), 16 larvae 19 April 2021. Lough Corrib Lower (M2734), 9 larvae 12 April 2016.

**LEITRIM:** Lough Glenade (G8345), 3 larvae 9 April 2014. Lough Macnean Upper (H0238), 1 larva 21 April 2013, 3 larvae 23 March 2016 & 4 larvae 26 April 2019. Lough Melvin (G8255), 3 larvae 24 April 2020, (G8853), 1 larva 10 April 2014.

**LIMERICK:** Lough Gur (R6441), 14 larvae 22 April 2021.

**MAYO:** Lough Aille (M0780), 11 larvae 11 April 2014 & 1 larva 1 May 2020. Lough Carra (M1673), 1 larva 10 April 2017. Lough Cullin (G2304), 15 larvae 10 April 2014, 1 larva 21 April 2017 & 1 larva 23 April 2020, (G2301), larvae 21 April 2017. Lough Moher (L9777), 1 larva 30 April 2020. Lough Urlaur (M5089), 2 larvae 9 April 2014 & 1 larva 28 April 2020.

**MEATH:** Annagh (White) Lake (N5172), 1 larva 18 April 2019. Lough Bane (N5571), 1 larva 14 April 2016 & 4 larvae 10 April 2019.

**MONAGHAN:** Lough Egish (H7814), 11 larvae 16 April 2013 & 15 larvae 22 March 2016. Lough Muckno (H8319), 31 larvae 22 March 2016.

**ROSCOMMON:** Lough Annaghmore (M9083), 1 larva 5 April 2017. Lough Meelagh (G9011), 5 larvae 10 April 2014.

**SLIGO:** Lough Arrow (G7811), 2 larvae 15 April 2014 & 6 larvae 28 April 2020, (G7913), 1 larva 15 April 2014. Lough Gill (G7132), 1 larva 28 April 2020. Templehouse Lake (G6118), 3 larvae 16 April 2014.

**WESTMEATH:** Lough Lene (N5368), 2 larvae 14 April 2016 & 4 larvae 10 April 2019. Lough Sheelin (N4482), 9 larvae 15 April 2013.

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

**GALWAY:** Lough Ballynakill (L6457), 1 larva 3 April 2013.

***Limnephilus decipiens* (Kolenati, 1848)**

**MAYO:** Lough Cullin (G2301), 3 larvae 10 April 2014.

***Limnephilus flavicornis* (Fabricius, 1787)**

**FERMANAGH:** Lough Macnean Lower (H1038), 2 larvae 21 April 2013. Lough Melvin (G9353), 1 larva 24 April 2020.

**GALWAY:** Lough Nahasleam (L9744), 1 larva 8 April 2013.

**MAYO:** Lough Carra (M1673), 1 larva 11 April 2014.

**MEATH:** Lough Bane (N5571), 2 larvae 10 April 2019.

**MONAGHAN:** Lough Muckno (H8319), 1 larva 12 April 2019.

**ROSCOMMON:** Lough Annaghmore (M9083), 1 larva 23 April 2020.

***Limnephilus lunatus* Curtis, 1834**

**CAVAN:** Lough Derrybrick (H3510), 3 larvae 22 April 2013 & 4 larvae 23 March 2016, (H3412), 8 larvae 23 March 2016.

**CLARE:** Lough Alewnaghta (R7691), 4 larvae 29 April 2015 & 1 larva 17 April 2018. Lough Dromore (R3485), 2 larvae 21 April 2021. Lough Gortglass (R2259), 2 larvae 19 April 2021. Lough Lickeen (R1690), 1 larva 19 April 2021.

**DONEGAL:** Lough Akibbon (C0718), 4 larvae 30 March 2015, 1 larva 25 April 2018 & 10 larvae 14 April 2021. Lough Fern (C1822), 1 larva 22 April 2021.

**FERMANAGH:** Lough Macnean Lower (H0938), 26 larvae 23 March 2016 & 1 larva 25 April 2019, (H1038), 2 larvae 21 April 2013. Lough Melvin (G9353), 2 larvae 10 April 2014.

**GALWAY:** Lough Bofin (M0343), 2 larvae 4 April 2016, 1 larva 11 April 2019 & 1 larva 19 April 2021. Lough Corglass (H3409), 1 larva 22 March 2016. Lough Corrib Lower (M2837), 1 larva 16 April 2019, (M2734), 42 larvae 12 April 2016, (M2534), 4 larvae 16 April 2019. Lough Corrib Upper (M1349), 2 larvae 12 April 2016, (M1650), 7 larvae 12 April 2016, (M1049), 4 larvae 9 April 2013 & 3 larvae 15 April 2019, (M0648), 10 larvae 12 April 2016. Lough Derryclare (L8449), 1 larva 2 April 2013 & 2 larvae 22 April 2016. Lough Enask (L6646), 3 larvae 2 April 2013, 3 larvae 6 April 2016 & 1 larva 2 April 2019. Lough Fadda (L6645), 1 larva 6 April 2016. Lough Illauntrasna (L8825), 1 larva 5 April 2016. Lough Lettercraffroe (M0536), 1 larva 17 April 2019. Lough Pollacappul (L7558), 1 larva 7 April 2016 & 1 larva 3 April 2019. Lough Seecon (M0835), 2 larvae 13 April 2016 & 2 larvae 10 April 2019. Loughanillaun (L9746), 3 larvae 17 April 2019, (L9847), 7 larvae 13 April 2016. Loughaunwillan (L9325), 1 larva 5 April 2016. Ross Lake (M2036), 3 larvae 16 April 2019, (M1936), 4 larvae 13 April 2016.

**KERRY:** Lough Cam (Q5907), 2 larvae 2 April 2019. Lough Caragh (V7290), west shore, 6 larvae 11 April 2017 & 2 larvae 27 April 2020. Muckcross Lake (V9585), 4 larvae 30 April 2020. Upper Lake (V9282), 1 larva 30 April 2020.

**LEITRIM:** Lough Gill (G7835), 2 larvae 15 April 2014 & 9 larvae 13 April 2017. Lough Glenade (G8345), 9 larvae 9 April 2014. Lough Glencar (G7543), 15 larvae 14 April 2014 & 2 larvae 24 April 2020. Lough Macnean Upper (H0238), 2 larvae 23 March 2016.

**MAYO:** Lough Aille (M0780), 12 larvae 1 May 2020. Lough Carra (M1970), 8 larvae 11 April 2014 & 2 larvae 23 April 2020, (M1673), 6 larvae 10 April 2017. Lough Cullin (G2301), 1 larva 10 April 2014, 5 larvae 21 April 2017 & 4 larvae 24 April 2020, (G2304), 31 larvae 10 April 2014. Lough Moher (L9777), 2 larvae 30 April 2020. Lough Urlaur (M5089), 2 larvae 9 April 2014 & 1 larva 28 April 2020.

**MEATH:** Lough Bane (N5571), 5 larvae 14 April 2016 & 1 larva 10 April 2019.

**MONAGHAN:** Lough Egish (H7814), 1 larva 16 April 2013. White Lough (H6719), 2 larvae 22 March 2016 & 1 larva 12 April 2019.

**ROSCOMMON:** Lough Meelagh (G9011), 8 larvae 10 April 2014.

**SLIGO:** Lough Arrow (G7811), 5 larvae 15 April 2014. Lough Gill (G7132), 1 larva 15 April 2014. Templehouse Lake (G6118), 32 larvae 16 April 2014.

**TIPPERARY:** Lough Derg (R7186), 4 larvae 12 April 2018, (M8401), 2 larvae 21 April 2021.

**WESTMEATH:** Lough Sheelin (N4482), 1 larva 15 April 2013 & 5 larvae 24 March 2016.

***Limnephilus marmoratus* Curtis, 1834**

**CAVAN:** Lough Corglass (H3409), 1 larva 22 March 2016. Lough Derrybrick (H3510), 4 larvae 22 April 2013 & 13 larvae 23 March 2016, (H3412), 10 larvae 23 March 2016. Lough Mushlin (H6201), 1 larva 15 April 2013.

**CLARE:** Lough Cullaun (R3190), 2 larvae 20 April 2021. Lough Doo (R1172), 1 larva 8 April 2019, 3 larvae 29 April 2020 & 1 larva 19 April 2021. Lough Dromore (R3485), 8 larvae 21 April 2021. Lough Inchicronan (R3986), 3 larvae 21 April 2021. Lough Muckanagh (R3692), 2 larvae 17 April 2018.

**DONEGAL:** Lough Kiltorris (G6797), 2 larvae 23 April 2021.

**FERMANAGH:** Lough Macnean Lower (H0938), 29 larvae 23 March 2016.

**GALWAY:** Lough Corrib Lower (M2534), 2 larvae 16 April 2019. Lough Lettercraffroe (M0536), 4 larvae 17 April 2019. Lough Seecon (M0835), 3 larvae 13 April 2016. Ross Lake (M1936), 1 larva 13 April 2016.

**KERRY:** Upper Lake (V9282), 1 larva 8 April 2021.

**LEITRIM:** Lough Melvin (G8255), 8 larvae 24 April 2020.

**LIMERICK:** Lough Gur (R6441), 3 larvae 22 April 2021.

**MAYO:** Lough Aille (M0780), 2 larvae 1 May 2020. Lough Carra (M1970), 1 larva 23 April 2020. Lough Cullin (G2304), 33 larvae 10 April 2014, (G2301), 1 larva 21 April 2017.

**MEATH:** Lough Bane (N5571), 1 larva 14 April 2013, 4 larvae 14 April 2016 & 4 larvae 10 April 2019.

**MONAGHAN:** Lough Egish (H7814), 3 larvae 16 April 2013 & 5 larvae 22 March 2016. Lough Muckno (H8319), 7 larvae 22 March 2016. White Lough (H6719), 2 larvae 12 April 2019.

**ROSCOMMON:** Lough Annaghmore (M9083), 1 larva 9 April 2014 & 2 larvae 23 April 2020. Lough Meelagh (G9011), 1 larva 10 April 2014.

**SLIGO:** Templehouse Lake (G6118), 2 larvae 30 April 2020.

***Limnephilus nigriceps* (Zetterstedt, 1840)**

**CAVAN:** Lough Derrybrick (H3412), 1 larva 22 April 2013.

**MEATH:** Lough Annagh (White) (N5172), 1 larva 18 April 2019. Lough Bane (N5571), 2 larvae 10 April 2019.

***Limnephilus rhombicus* (Linnaeus, 1758) New to County Meath**

**LEITRIM:** Lough Macnean Upper (H0238), 1 larva 23 March 2016.

**MEATH:** Lough Bane (N5571), 4 larvae 10 April 2019.

***Limnephilus sparsus* Curtis, 1834**

**GALWAY:** Lough Ardderry (L9845), 1 larva 4 April 2016.

***Limnephilus vittatus* (Fabricius, 1798) New to County Leitrim**

**CAVAN:** Lough Derrybrick (H3510), 8 larvae 22 April 2013 & 119 larvae 23 March 2016, (H3412), 1 larva 22 April 2013.

**FERMANAGH:** Lower Lough Macnean (H0938), 1 larva 23 March 2016.

**LEITRIM:** Lough Melvin (G8255), 1 larva 24 April 2020.

**MONAGHAN:** Lough Egish (H7814), 4 larvae 22 March 2016.

**ROSCOMMON:** Lough Meelagh (G9011), 15 larvae 10 April 2014. Lough O'Flynn (M5879), 1 larva 28 April 2020.

***Halesus digitatus* (Schrank, 1781)**

**SLIGO:** Lough Arrow (G7811), 2 larvae 28 April 2020.

***Halesus radiatus* (Curtis, 1834)**

**CAVAN:** Lough Corglass (H3409), 1 larva 22 March 2016. Lough Derrybrick (H3510), 1 larva 22 April 2013 & 3 larvae 23 March 2016. Lough Skeagh Upper (H6500), 1 larva 15 April 2013 & 2 larvae 9 April 2019.

**CLARE:** Lough Alewnaghta (R7691), 1 larva 29 April 2015. Lough Naminna (R1871), 2 larvae 19 April 2021.

**DONEGAL:** Lough Akibbon (C0718), 3 larvae 30 March 2015 & 8 larvae 25 April 2018.

**GALWAY:** Lough Corrib Lower (M2837), 1 larva 16 April 2019, (M2734), 2 larvae 12 April 2016. Lough Corrib Upper (M1049), 2 larvae 9 April 2013, (M1650), 1 larva 12 April 2016, (M0648), 11 larvae 12 April 2016. Lough Illauntrasna (L8825), 1 larva 9 April 2019. Lough Maumwee (L9748), 1 larva 19 April 2021. Lough Nambrackmore (L7145), 1 larva 5 April 2016. Lough Rea (M6214), 1 larva 1 April 2013. Loughanillaun (L9847), 1 larva 11 April 2013.

**KERRY:** Lough Brin (V7877), 1 larva 24 April 2020. Lough Cam (Q5907), 3 larvae 9 April 2014.

**LEITRIM:** Lough Gill (G7835), 1 larva 15 April 2014 & 5 larvae 13 April 2017. Lough Macnean Upper (H0238), 1 larva 21 April 2013.

**MAYO:** Lough Acorrymore (F5705), 1 larva 9 April 2014. Lough Carra (M1970), 2 larvae 11 April 2014, (M1673), 6 larvae 11 April 2014. Lough Cullin (G2304), 1 larva 10 April 2014.

**MEATH:** Lough Bane (N5571), 1 larva 14 April 2013.



**SLIGO:** Lough Arrow (G7811), 1 larva 15 April 2014 & 2 larvae 28 April 2020.

**TIPPERARY:** Lough Derg (R7186), 1 larva 12 April 2018.

**WESTMEATH:** Lough Sheelin (N4482), 4 larvae 15 April 2013.

**WICKLOW:** Lough Bray Lower (O1316), 7 larvae 14 April 2021.

***Potamophylax cingulatus* (Stephens, 1837)**

**DONEGAL:** Lough Akibbon (C0718), 11 larvae 14 April 2021.

**MAYO:** Lough Cullin (G2304), 2 larvae 21 April 2017.

***Potamophylax latipennis* (Curtis, 1834)**

**MAYO:** Lough Cullin (G2304), 1 larva 23 April 2020, (G2301), 1 larva 24 April 2020. Lough Urlaur (M5089), 1 larva 28 April 2020.

**WESTMEATH:** Lough Lene (N5368), 1 larva 14 April 2016.

**SERICOSTOMATIDAE**

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

**CAVAN:** Lough Corglass (H3409), 2 larvae 18 April 2019. Lough Derrybrick (H3510), 2 larvae 22 April 2013, 3 larvae 23 March 2016 & 1 larva 18 April 2019, (H3412), 3 larvae 23 March 2016. Lough Macnean Upper (H0637), 3 larvae 26 April 2019.

**CLARE:** Lough Alewnaghta (R7691), 1 larva 29 April 2015. Lough Dromore (R3485), 1 larva 21 April 2021. Lough Inchicronan (R3986), 1 larva 21 April 2021.

**DONEGAL:** Lough Akibbon (C0718), 1 larva 25 April 2018. Lough Anure (B8116), 1 larva 21 April 2021. Lough Barra (B9212), 1 larva 24 April 2018. Lough Derg (H0973), 5 larvae 14 April 2021. Lough Fern (C1822), 2 larvae 22 April 2021. Lough Gartan (C0616), 1 larva 14 April 2021. Lough Kindrum (C1943), 3 larvae 25 April 2018. Lough Nasnanida (B8507), 1 larva 21 April 2021. Lough Sessiagh (Loch an tSeisigh) (C0436), 4 larvae 31 March 2015 & 3 larvae 25 April 2018. Lough Unshin (G9463), 2 larvae 14 April 2021.

**FERMANAGH:** Lough Macnean Lower (H0938), 1 larva 23 March 2016.

**GALWAY:** Lough Aughrusbeg (L5558), 3 larvae 3 April 2013. Lough Ballynakill (L6457), 3 larvae 3 April 2013. Lough Bofin (M0343), 1 larva 4 April 2016, 1 larva 11 April 2019, 1 larva 29 April 2020 & 1 larva 19 April 2021. Lough Corrib Lower (M2837), 1 larva 16 April 2019, (M2737), 2 larvae 22 April 2013 & 3 larvae 12 April 2016. Lough Corrib Upper (M1650), 48 larvae 12 April 2016, (M0648), 11 larvae 12 April 2016, (M1049), 1 larva 9 April 2013 & 14 larvae 15 April 2019, (M1749), 1 larva 15 April 2019, (M1353), 6 larvae 15 April 2019, (M1349), 8 larvae 9 April 2013 & 22 larvae 12 April 2016. Lough Derryclare (L8449), 1 larva 2 April 2013 & 1 larva 22 April 2016. Lough Nambrackmore (L7145), 12 larvae 5 April 2016. Lough Rea (M6214), 2 larvae 1 April 2013 & 1 larva 4 April 2016. Lough Seecon (M0835), 1 larva 10 April 2019. Lough Shindilla (L9545), 1 larva 5 April 2016. Loughanillaun (L9847), 2

larvae 13 April 2016. Loughaunwillan (L9325), 3 larvae 8 April 2013.

**KERRY:** Lough Acoose (V7585), 1 larva 4 April 2014. Lough Cam (Q5907), 1 larva 11 April 2017 & 3 larvae 2020.

**LEITRIM:** Lough Gill (G7835), 5 larvae 15 April 2014, 8 larvae 13 April 2017 & 1 larva 28 April 2020. Lough Glenade (G8345), 2 larvae 9 April 2014. Lough Macnean Upper (H0238), 5 larvae 26 April 2019. Lough Melvin (G8853), 1 larva 10 April 2014.

**MAYO:** Lough Beltra (M0899), 5 larvae 27 April 2020. Lough Carra (M1970), 1 larva 11 April 2014 & 1 larva 23 April 2020. Lough Cullin (G2304), 9 larvae 10 April 2014, 11 larvae 21 April 2017 & 22 larvae 23 April 2020, (G2301), 19 larvae 10 April 2014, 23 larvae 21 April 2017 & 5 larvae 24 April 2020. Lough Doo (L8368), 1 larva 12 April 2017.

**MEATH:** Lough Bane (N5571), 1 larva 14 April 2013 & 1 larva 10 April 2019.

**SLIGO:** Lough Arrow (G7913), 2 larvae 28 April 2020, (G7811), 1 larva 15 April 2014. Lough Easky (G4423), 4 larvae 12 April 2017 & 48 larvae 16 April 2021.

**TIPPERARY:** Lough Derg (M8401), 10 larvae 12 April 2018 & 1 larva 21 April 2021.

**WICKLOW:** Lough Tay (O1607), 16 larvae 13 April 2021.

#### **BERAEIDAE**

##### ***Beraea pullata* (Curtis, 1834)**

**LEITRIM:** Lough Gill (G7835), 1 larva 13 April 2017.

#### **ODONTOCERIDAE**

##### ***Odontocerum albicorne* (Scopoli, 1763)**

**MAYO:** Lough Beltra (M0899), 1 larva 27 April 2017.

#### **MOLANNIDAE**

##### ***Molanna albicans* (Zetterstedt, 1840)**

**MAYO:** Lough Cullin (G2301), 1 larva 21 April 2017. Lough Urlaur (M5089), 1 larva 7 April 2017.

#### **LEPTOCERIDAE**

##### ***Adicella reducta* (McLachlan, 1865) New to County Fermanagh & County Monaghan**

**CLARE:** Lough Gortglass (R2259), 1 larva 16 April 2018. Lough Naminna (R1871), 1 larva 19 April 2018.

**DONEGAL:** Lough Barra (B9212), 1 larva 24 April 2018.

**FERMANAGH:** Lough Melvin (G9353), 3 larvae 10 April 2014.

**MONAGHAN:** White Lough (H6719), 1 larva 22 April 2013.

**TIPPERARY:** Lough Derg (R7186), 2 larvae 12 April 2018.

*Athripsodes albifrons* (Linnaeus, 1758)

**MAYO:** Lough Moher (L9777), 8 larvae 30 April 2020.

*Athripsodes aterrimus* (Stephens, 1836)

**CLARE:** Lough Alewnaghta (R7691), 6 larvae 29 April 2015.

**GALWAY:** Lough Corrib Lower (M2531), 4 larvae 12 April 2016.

**MAYO:** Lough Aille (M0780), 3 larvae 1 May 2020. Lough Carra (M1673), 3 larvae 10 April 2017

**SLIGO:** Lough Arrow (G7913), 2 larvae 28 April 2020. Lough Gill (G7132), 3 larvae 28 April 2020.

*Athripsodes cinereus* (Curtis, 1834)

**CAVAN:** Lough Corglass (H3409), 1 larva 22 March 2016. Lough Derrybrick (H3412), 1 larva 22 April 2013. Lough Garfiny (H3510), 1 larva 22 April 2013. Lough Mushlin (H6201), 1 larva 15 April 2013. Lough Skeagh Upper (H6500), 3 larvae 21 March 2016.

**CLARE:** Lough Alewnaghta (R7691), 7 larvae 29 April 2015.

**DONEGAL:** Lough Anure (B8116), 10 larvae 13 May 2015. Lough Glen (C0928), 1 larva 2021.

**FERMANAGH:** Lough Macnean Lower (H0938), 3 larvae 23 March 2016.

**GALWAY:** Lough Ballynakill (L6457), 1 larva 3 April 2013 & 2 larvae 6 April 2016. Lough Corrib Lower (M2737), 1 larva 12 April 2016. Lough Corrib Upper (M1650), 1 larva 12 April 2016. Lough Illauntrasna (L8825), 2 larvae 5 April 2016. Lough Pollacappul (L7558), 2 larvae 3 April 2013 & 1 larva 7 April 2016. Lough Seecon (M0835), 1 larva 13 April 2016 & 1 larva 10 April 2019. Lough Shindilla (L9545), 1 larva 5 April 2016. Loughaunwillan (L9325), 15 larvae 8 April 2013 & 2 larvae 5 April 2016. Ross Lake (M1936), 1 larva 11 April 2013.

**KERRY:** Lough Acoose (V7585) 1 larva 10 April 2017.

**LEITRIM:** Lough Gill (G7835), 1 larva 28 April 2020. Lough Glenade (G8345), 5 larvae 24 April 2020. Lough Glencar (G7543), 5 larvae, 24 April 2020. Lough Melvin (G8853), 15 larvae 24 April 2020.

**MAYO:** Lough Carra (M1970), 2 larvae 11 April 2014. Lough Cullin (G2301), 7 larvae 10 April 2014. Lough Doo (L8368), 1 larva 11 April 2014. Lough Glencullin (L8169), 7 larvae 4 April 2014. Lough Urlaur (M5089), 9 larvae 28 April 2020.

**MEATH:** Lough Bane (N5571), 1 larva 14 April 2016.

**ROSCOMMON:** Lough Cavetown (M8397), 1 larva 10 April 2014. Lough Meelagh (G9011), 2 larvae 10 April 2014 & 9 larvae 23 April 2020. Lough O'Flynn (M5879), 4 larvae 10 April 2014.

**SLIGO:** Lough Arrow (G7811), 2 larvae 15 April 2014 & 2 larvae 28 April 2020. Lough Gill

(G7132), 16 larvae 15 April 2014 & 2 larvae 28 April 2020. Templehouse Lake (G6118), 2 larvae 30 April 2020.

**TIPPERARY:** Lough Derg (R7186), 4 larvae 12 April 2018.

***Ceraclea albimacula* (Rambur, 1842)**

**MAYO:** Lough Moher (L9777), 2 larvae 30 April 2020.

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

**GALWAY:** Lough Nahasleam (L9744), 1 larva 1 May 2020.

**MAYO:** Lough Carra (M1970), 1 larva 23 April 2020.

***Ceraclea fulva* (Rambur, 1842)**

**GALWAY:** Lough Fadda (L6646), 3 larvae 15 April 2021.

***Ceraclea nigronervosa* (Retzius, 1783)**

**MAYO:** Lough Moher (L9777), 1 larva 30 April 2020.

***Ceraclea senilis* (Burmeister, 1839)**

**MAYO:** Lough Cullin (G2301), 1 larva 21 April 2017.

***Mystacides azurea* (Linnaeus, 1761)**

**CAVAN:** Lough Corglass (H3409), 1 larva 18 April 2019. Lough Macnean Upper (H0637), 1 larva 26 April 2019. Lough Skeagh Upper (H6500), 1 larva 15 April 2013 & 1 larva 21 March 2016.

**CLARE:** Lough Alewnaghta (R7691), 2 larvae 22 April 2021. Lough Bunny (R3796), 1 larva 20 April 2021. Lough Doo (R1172), 1 larva 29 April 2020.

**CORK:** Lough Glenbeg (V7053), 2 larvae 24 April 2020.

**DONEGAL:** Lough Anure (B8116), 1 larva 21 April 2021. Lough Barra (B9212), 1 larva 23 April 2021. Lough Beagh (Veagh) (C0221), 1 larva 5 May 2020. Lough Glen (C0928), 6 larvae, 2021. Lough Nasnanida (B8507), 2 larvae 23 April 2021.

**GALWAY:** Ballynahinch Lake (L7847), 1 larva 2 April 2013. Lough Derryclare (L8449), 1 larva 2 April 2013. Lough Illauntrasna (L8825), 6 larvae 9 April 2019. Lough Lettercraffroe (M0537), 7 larvae 11 April 2013. Lough Maumwee (L9748), 2 larvae 19 April 2021. Ross Lake (M2036), 5 larvae 16 April 2019.

**KERRY:** Lough Brin (V7877), 2 larvae 24 April 2020. Lough Cam (Q5907), 1 larva 9 April 2014, 2 larvae 11 April 2017, 7 larvae 2020 & 3 larvae 13 April 2021. Lough Caragh (V7088), 2 larvae 4 April 2014, (V7290), 4 larvae 11 April 2017 & 1 larva 27 April 2020. Upper Lake (V9282), 3 larvae 8 April 2021.

**MAYO:** Lough Acorrymore (F5705), 8 larvae 9 April 2014 & 4 larvae 29 April 2020. Lough Aille (M0780), 5 larvae 1 May 2020. Lough Cullin (G2301), 3 larvae 21 April 2017.

**MONAGHAN:** Lough Egish (H7814), 1 larva 22 March 2016.

**ROSCOMMON:** Lough Annaghmore (M9083), 5 larvae 5 April 2017.

***Mystacides longicornis* (Linnaeus, 1758)**

**CAVAN:** Lough Corglass (H3409), 1 larva 22 April 2013. Lough Derrybrick (H3412), 1 larva 23 March 2016.

**DONEGAL:** Lough Akibbon (C0718), 1 larva 14 April 2021.

**FERMANAGH:** Lough Melvin (G9353), 1 larva 10 April 2014.

**GALWAY:** Ballynahinch Lake (L7847), 3 larvae 2 April 2013 & 1 larva 3 April 2019. Lough Corrib Lower (M2737), 2 larvae 22 April 2013 & 1 larva 12 April 2016, (M2734), 1 larva 22 April 2013. Lough Derryclare (L8449), 1 larva 22 April 2016. Lough Fadda (L6646), 2 larvae 29 April 2020 & 2 larvae 15 April 2021. Lough Nahasleam (L9744), 23 larvae 8 April 2013, 2 larvae 9 April 2019, 3 larvae 1 May 2020 & 2 larvae 19 April 2021. Loughanillaun (L9847), 2 larvae 11 April 2013 & 2 larvae 13 April 2016.

**KERRY:** Lough Caragh (V7088), 4 larvae 4 April 2014. Upper Lake (V9282), 6 larvae 2 April 2019, 4 larvae 30 April 2020 & 7 larvae 8 April 2021.

**LEITRIM:** Lough Melvin (G8255), 3 larvae 24 April 2020.

**LIMERICK:** Lough Gur (R6441), 18 larvae 22 April 2021.

**MAYO:** Lough Aille (M0780), 11 larvae 1 May 2020. Lough Cullin (G2301), 13 larvae 10 April 2014 & 1 larva 21 April 2017. Lough Glencullin (L8169), 1 larva 4 April 2019. Lough Moher (L9777), 1 larva 30 April 2020.

**MONAGHAN:** White Lough (H6719), 2 larvae 12 April 2019.

**SLIGO:** Lough Arrow (G7913), 1 larva 28 April 2020. Lough Gill (G7132), 3 larvae 15 April 2014 & 4 larvae 28 April 2020.

**TIPPERARY:** Lough Derg (R7186), 3 larvae 12 April 2018.

**WICKLOW:** Lough Dan (O1502), 12 larvae 2019 & 1 larva 27 April 2020. Upper Lake (T1096), Glendalough, 2 larvae 8 April 2019 & 4 larvae 15 April 2021.

***Oecetis furva* (Rambur, 1842) New to County Sligo**

**CLARE:** Lough Inchicronan (R3986), 4 larvae 19 April 2018.

**GALWAY:** Lough Bofin (M0343), 1 larva 19 April 2021.

**KERRY:** Lough Caragh (V7290), 2 larvae 11 April 2017.

**SLIGO:** Lough Gill (G7132) 1 larva 15 April 2014.

**WESTMEATH:** Lough Lene (N5368), 1 larva 14 April 2016.

***Oecetis lacustris* (Pictet, 1834)**

**KERRY:** Lough Acoose (V7585), 3 larvae 10 April 2017.

***Oecetis ochracea* (Curtis, 1825)**

**CLARE:** Lough Muckanagh (R3692), 1 larva 17 April 2018 & 1 larva 20 April 2021.

**CORK:** Lough Allua (W1865), 1 larva 2 April 2014.

**DONEGAL:** Lough Barra (B9212), 1 larva 24 April 2018.

**GALWAY:** Lough Nahasleam (L9744), 1 larva 5 April 2016.

**KERRY:** Lough Acoose (V7585), 2 larvae 10 April 2017.

**MAYO:** Lough Carra (M1673), 1 larva 10 April 2017.

***Oecetis testacea* (Curtis, 1834) New to County Leitrim**

**CAVAN:** Lough Skeagh Upper (H6500), 2 larvae 15 April 2013.

**CLARE:** Lough Alewnaghta (R7691), 1 larva 17 April 2018. Lough Carra (M1970), 1 larva 11 April 2014.

**DONEGAL:** Lough Beagh (Veagh) (C0221), 2 larvae 5 May 2020. Lough Derg (H0923), 1 larva 14 April 2021. Lough Gartan (C0616), 1 larva 14 April 2021. Lough Glen (C0928), 11 larvae 2021. Lough Kiltooris (G6797), 2 larvae 23 April 2021.

**GALWAY:** Lough Bofin (M0343), 2 larvae 29 April 2020 & 3 larvae 19 April 2021. Lough Kylemore (L7658), 1 larva 3 April 2019. Lough Pollacappul (L7558), 1 larva 3 April 2013, 8 larvae 7 April 2016 & 3 larvae 3 April 2019. Lough Shindilla (L9545), 2 larvae 10 April 2019. Ross Lake (M2036), 1 larva 16 April 2019.

**KERRY:** Lough Leane (V9090), 2 larvae 12 April 2017 & 1 larva 27 April 2020. Upper Lake (V9282), 15 larvae 30 April 2020 & 1 larva 8 April 2021.

**LEITRIM:** Lough Gill (G7835), 1 larva 13 April 2017. Lough Macnean Upper (H0238), 2 larvae 26 April 2019. Lough Melvin (G8853), 1 larva 24 April 2020.

**MAYO:** Lough Doo (L8368), 1 larva 1 May 2020.

**WICKLOW:** Lough Dan (O1502), 3 larvae 27 April 2020 & 1 larva 14 April 2021.

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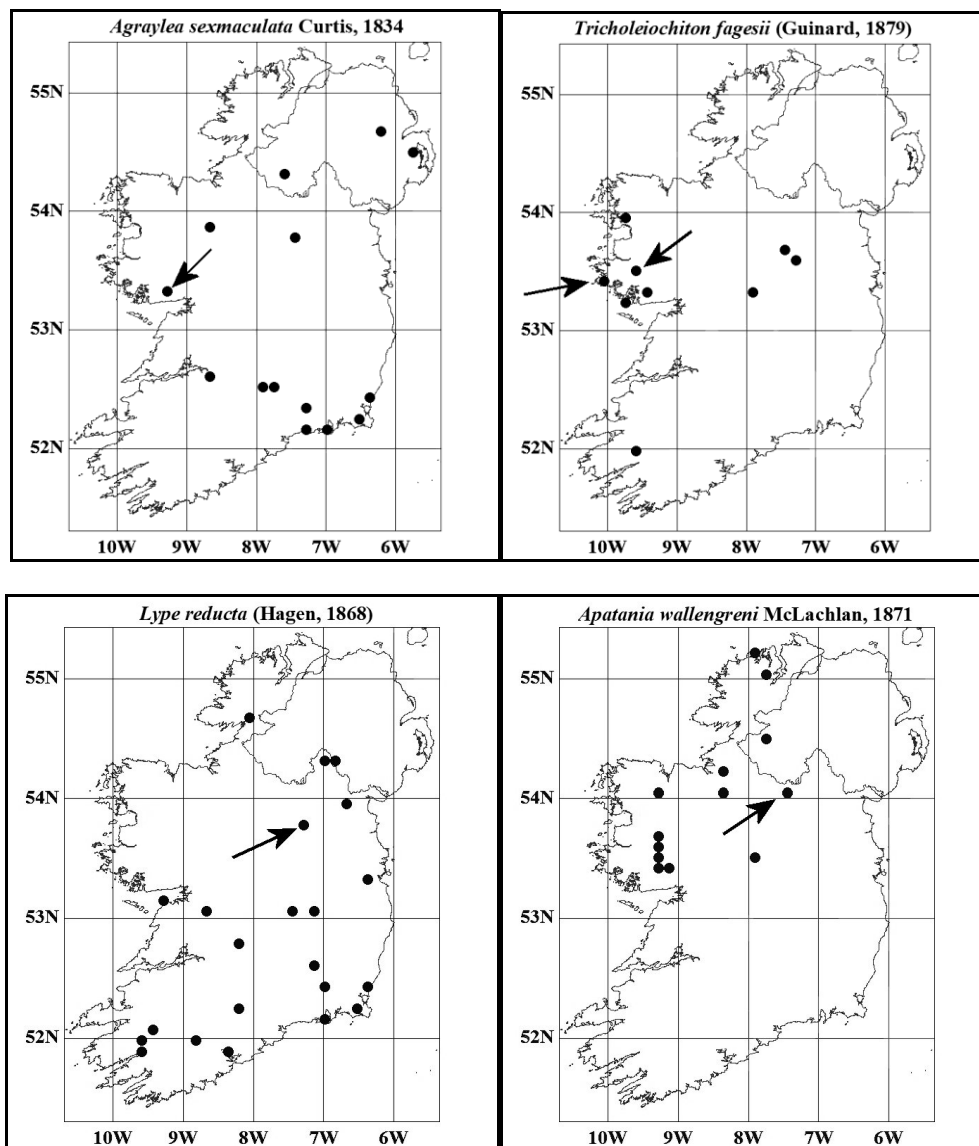
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FIGURES 1-4. The known Irish distributions of *Agraylea sexmaculata* Curtis, 1834, *Tricholeiochiton fagesii* (Guinard, 1879), *Lype reducta* (Hagen, 1868) and *Apatania wallengreni* McLachlan, 1871. The notable records are indicated by an arrow.



**PLATE 1.** An acid lake. The Upper Lake, Killarney, County Kerry. Photograph: Ruth Little.



**PLATE 2.** A hard limestone lake. Lough Bunny, County Clare. Photograph: Ruth Little.