

**DISTRIBUTION RECORDS OF IRISH CHIRONOMIDAE (DIPTERA): PART 1 -
BUCHONOMYIINAE, PODONOMINAE, TANYPODINAE, TELMATOGETONINAE,
DIAMESINAE AND PRODIAMESINAE**

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Dedication

The senior author dedicates this work to the memory of E. J. Fittkau, 1927-2012, mentor, colleague and friend.

Abstract

The present work is the first of three papers dealing with records and distribution data for the species-level taxa of Chironomidae currently known to occur in Ireland. Distribution data has been compiled from a variety of sources but the majority of records cited have not been published previously. This paper, Part 1, contains approximately 4,360 records of 84 species in the subfamilies Buchonomyiinae, Podonominae, Tanypodinae, Telmatogetoninae, Diamesinae and Prodiamesinae. It is dedicated to the memory of E. J. Fittkau, 1927-2012.

Key words: Chironomidae, Buchonomyiinae, Podonominae, Tanypodinae, Telmatogetoninae, Diamesinae and Prodiamesinae, Ireland, records, distribution

Introduction

The most recent checklist of Irish Diptera includes 472 species of Chironomidae (Chandler *et al.*, 2008). Since then additional records of species new to the Irish fauna have been provided by Langton (2012a, b), Murray (2007, 2010, 2012a, b, c) and Murray and O'Connor (2012) but limited published information is available on the distribution throughout the country of all species known from Ireland. There has been no attempt to compile distribution data on a countrywide basis since the listing 40 years ago by Murray (1972) which is now outdated. The present work is the first of three papers dealing with records and distribution data for the species-level taxa of Chironomidae currently known to occur in Ireland. Distribution data has been compiled from a variety of sources but the majority of records cited have not been published previously. This paper, Part 1, contains approximately 4,360 records of 84 species in the subfamilies Buchonomyiinae, Podonominae, Tanypodinae, Telmatogetoninae, Diamesinae, and Prodiamesinae. Parts 2 and 3 of this work will provide data for species in the subfamilies Orthocladiinae and Chironominae respectively.

The stimulus for the current work stems from extensive information gathered during two Heritage Council of Ireland supported projects awarded to the senior author in the years 2004 and 2005. The first project was undertaken to compile a revised checklist and a slide-mounted reference collection of reliably identified chironomid species known from Ireland (Murray, 2005). The species checklist from that project was incorporated into the annotated checklist of Irish Diptera by Chandler *et al.* (2008) and the voucher reference collection is deposited in the National Museum of Ireland. The aim of the second project was to assemble data on the known occurrence and distribution of Chironomidae in Ireland (Murray, 2006a). Some 12,000 records of 497 species were assembled from published information and records in the personal collections of the senior author since the mid 1960s and from his directed research with undergraduate and postgraduate masters, and doctoral students in a variety of “grey-literature” reports and unpublished theses at University College Dublin. Other records were sourced from theses in University College Cork (Morgan, 1982), University of Ulster (McLarnon, 1997) and

National University of Ireland, Galway (Fahy, 2002). That data was submitted on CD-ROM to the Heritage Council of Ireland, Kilkenny (Murray, 2006). The records from those projects are incorporated into the present work. A wealth of additional countrywide data has been derived from further studies, including results of examination by the senior author of almost 110,000 chironomid pupal exuviae collected from Irish lakes by field research staff of the Environmental Protection Agency between 2006 and 2009 for CPET analyses (**Chironomid Pupal Exuviae Technique** – Wilson and Ruse, 2005) as part of the Agency's Lakes Monitoring Programme under the EU Water Framework Directive. Combined with personal unpublished and published records by the second author in Northern Ireland over the last decade the entire database (as of September 2013) contains 21,800 records of some 533 species-level taxa (including ten unique pupal exuviae morphotypes) for Ireland – including some off-shore islands.

Record citation format

The taxonomic sequence of subfamilies and genera follows Ashe and O'Connor (2009, with updated phylogeny in 2012) and species are documented alphabetically within genus. The status of some genus-group taxa is based on nomenclatural changes made in Cranston and Epler (2013). Distribution records for each species are presented in a format which facilitates study by political County (Fig. 1) and Hydrometric Area (Fig. 2). County names are given in bold capital font and Hydrometric Areas are identified by the relevant Hydrometric Area number (**HA ##**), also in bold font. Forty hydrometric areas are recognized on the island of Ireland by agreement between agencies in Northern Ireland and the Republic of Ireland. Each Hydrometric Area comprises a single large or a group of smaller river basins, including their neighbouring coastal areas. These Hydrometric areas are numbered from 1 to 40 beginning at the Foyle Catchment and proceeding in a clockwise direction around the island (see <www.epa.ie> for further details of hydrometric areas). International and local political (county) borders rarely coincide with river catchment boundaries and species records in many counties may belong to different hydrometric areas. Complementary distribution information provides the water body name, district and/or collection site, Irish Grid Reference (in parentheses) given as letter and six figure

number where possible, date(s) of record, collector and source of record (in parentheses). If the source is a publication, thesis or report, it is cited by author and year. Where the source is a personal unpublished record by the collector/determinator then his/her initials are given in parentheses and the “collector” entry is omitted to avoid unnecessary duplication. Where the source is attributed to a multi author citation this is preceded by the initials of the collector/determinator.

Abbreviations used in the text

AHH - A. H. Haliday; AF – A. Fitzgerald; AJOS - A. J. O'Sullivan; BC - B. Connolly; BH - B. Healy; BK - B. Kennedy; BPH - B. P. Hayes; CAD - C. A. Duigan; CB - C. Bradley; CCO - C. C. Omoku; CD - C. Dowling; CFH - C. F. Humphries; CNP - Connemara National Park; COK - C. O'Keefe; CP - C. Plant; DAM - D. A. Murray; DEM - D. E. Morgan; d/s – downstream; DJD - D. J. Douglas; EF - E. Fahy; EMcE - E. McEntee; EPA - Environmental Protection Agency; FC - F. Curran; FWE – F. W. Edwards; GF - G. Free; GM - G. Morgan; GNP - Glenveagh National Park; GO - G. Oliver; GPF - G. P. Forde; GW – G. Walton; HA – Hydrometric Area; HD - H. Daoud; IFT - Inland Fisheries Trust; JB - J. Bracken; JC - J. Casey; JNH – J. N. Halbert; JL - J. Lynch; LMcl – L. Mc Larnon; JPOC - J. P. O'Connor; JR - J. Reynolds; JRB - J-R. Baars; KB - K. Bond; KC - K. Clabby; L - Lough; LF - L. Finnegan; LJH - L. J. Heneghan; MB - M. Berrigan; MC - M. Carroll; MG - M. Grey; MH - M. Holmes; MJC - M. J. Costello; MKQ - M. Kelly-Quinn; MK - M. Kennedy; MOG - M. O'Grady; MS - M. Sommerfield; Mt – Mountain / Mount NH - N. Hackett; NMI - National Museum of Ireland; NOM - N. O'Maoilideigh; PG - P. Gargan; PHG - P. H. Grimshaw; PHL - P. H. Langton; PJA - P. J. Ashe; PMcC - P. McCreesh; POD - P. O'Dwyer; PS - P. Sweeney; R - River; RF - R. French; RH - R. Hernan; RL - R. Little; SC - S. Collins; SF - S. Fahy; SMcB - S. McBean; SR - S. Reilly; SW - S. Wistow; TOF - T. O'Flaherty; UCD - University College Dublin; u/s - upstream; UU - University of Ulster; WM - W. Murray; WEF - W. E. Frost; WMNP - Wicklow Mountains National Park; WT - W. Trodd.

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SUBFAMILY BUCHONOMYIINAE

***Buchonomyia thienemanni* Fittkau, 1955**

CARLOW: HA 12 - R. Slaney, Kilcarrig Bridge (S893624), 28 July 1981 (Hayes, 1991).

CORK: HA 18 - R. Blackwater, Killavullen (W648998), 31 August 1981 (Hayes, 1991).

KERRY: HA 22 - R. Clydagh, u/s Clydagh Bridge (W114826), 10 August 1978 (Ashe, 1982).

R. Flesk, Garries Bridge (W082835), July to September 1978 (Ashe, 1982); White Bridge

(V987904), 26 July 1974 (Murray, 1976a), 27 July 1976 (Murray and Ashe, 1981), 9 August 1981 (Ashe and Murray, 1983) and 20 July 2001, DAM/P. S. Cranston (DAM); d/s Whitebridge (V987900), 31 July 1978 (Ashe, 1982); d/s New Bridge (V963885), July to September 1978 (Ashe, 1982); u/s L. Leane (V964894), July to September 1978 (Ashe, 1982). **KILDARE: HA 9** - R. Liffey, Sallins (N881245), 15 July 1983 (Hayes, 1991) and Kilcullen (N841097), July 2006, JRB (DAM). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436), 28 August 1981 (Ashe, 1985; Hayes, 1991) and 6 September 1982 (PJA); Brownsbarn Bridge (S618391), 28 August 1981 (Hayes, 1991). **MAYO: HA 33** - R. Owenmore, Bangor Erris (F863228), 18 August 1983 (Hayes, 1991): **HA 34** - R. Moy, Ballylahan (M227992), 29 August 1982 and Cloongullaun (G348016), 30 August 1982 (Hayes, 1991). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992) and Lismore (X047988), 31 August 1981 (Hayes, 1991).

SUBFAMILY PODONOMINAE

***Lasiodiamesa sphagnicola* (Kieffer, 1925)**

OFFALY: HA 25 - Clara Bog, Clara (N244301), 20 March 1985, J. Reynolds (Ashe, 1987); 18 April 1985, M. de Courcy Williams (Ashe, 1987).

***Parochlus kiefferi* (Garrett, 1925)**

DONEGAL: HA 38 - footpath track to Lough Inshagh, Glenveagh (C035210), 13 May 1986 (Heneghan, 1986). **DUBLIN: HA 9** - R. Dodder headwaters (Maureen's Brook), Featherbed (O128175), 15 August 1950, CFH (Murray and Ashe, 1982) and 12 September 1982, PJA (PJA/NMI); R. Dodder, Upper (O126176), 18 July 1950, CFH (Murray, 2005). **WICKLOW: HA 10** - L. Tay, Luggala (O163008), 31 March 2009, EPA (Murray, 2012).

SUBFAMILY TANYPODINAE

***Ablabesmyia (Ablabesmyia) longistyla* Fittkau, 1962**

ANTRIM: Rathlin Island - pool east of lighthouse (D164520), 24 July 2000 (Langton, 2002).

CAVAN: HA 7 - L. Acurry, Baileborough (N584990), 5 July 2007, EPA (DAM): **HA 26** - R. Inny, Sheelin Bridge (N400815), 16 June 1973, JPOC (DAM): **HA 36** - Glasshouse L., Killashandra (H270060), 7 June 2007, EPA (DAM). L. Garty, Arvagh (N278978), 18 July 2007, EPA (DAM). L. Gowna (north basin), Arnagahan (N285920), 7 June 2006, EPA (DAM).

CLARE: HA 25 - L. Graney: Caher, south shore (R568907), 24 May 2003 (PHL); Doorus (R556930), 8 June, 6 July 2006 and 11 August 2009; Drumandora (R553938), 15 June 2009, EPA (DAM). L. Derg, d/s Killaloe (M705715), 17 June 2009, EPA (DAM). L. Alewnaghta, Whitegate, west shore (R758908), 16 July 2009, EPA (DAM). L. Atorick, Woodford (R637964), 24 May 2003 (PHL): **HA 27** - L. Bridget, Derrymore, Badyke, east shore (R558797), 29 July 2009, EPA (DAM). L. Bunny, Aughrim, south east shore (R377965), 10 May 2005, 7 June and 5 September 2006, 11 June and 14 September 2009, EPA (DAM). L. Castle (Castle Lake), Kilmurry, Sixmilebridge, west shore (R484690), 17 July 2009, EPA (DAM). L. Cullaun, Corrofin, mid east shore (R317905), 22 July 2009, EPA (DAM). Gortglass L., Killadysert, south shore (R223596), 7 July 2009, EPA (DAM). L. Muckanagh, Tubber, Corrofin, south east shore (R368926), 11 June 2009 and west basin (R370922), 22 July 2009, EPA (DAM). L. Rosroe, Newmarket on Fergus, north east shore (R448697), 16 June 2009, EPA (DAM): **HA 28** - L. Doo, Milltown Malbay, north west shore (R113722), 11 June 2009 and south shore (R123721), 8 July 2009, EPA (DAM). L. Keagh, Milltown Malbay, south west shore (R100811), 8 July 2009, EPA (DAM). L. Lickeen, Kilfenora (R175909), 4 July 2006, EPA (DAM). L. Naminna, Boolteagh, north west shore (R178710), 7 July 2009, EPA (DAM).

CORK: HA 19 - L. Allua, Ballingearry (W180652), 20 August 2008, EPA (DAM): **HA 20** - L. Abisdealy, Skibbieren (W136314), 17 June, 30 July and 17 September 2008, EPA (DAM). L. Ballin, Leap (W199389), 17 September 2008, EPA (DAM). L. Coolklure, Dunmanway (W177539), 11 August 2008, EPA (DAM). R. Bandon, Long Bridge, Dunmanway (W242631), 27 May and 22 August 1980; Bealabouy Bridge, Dunmanway (W257514), 30 June, 25 August and 25 September 1980; u/s Ballineen (W331537), 27 May, 30 June, 25 August and 25 September 1980; Ballineen Bridge (W434538), 27 May and 25 August; Castle Bernard, u/s

Bandon (W472546), 27 May, 30 June, 25 August and, 25 September 1980; 2.5km d/s Bandon (W516569), 27 May, 30 June and 25 September 1980 (all Morgan, 1982). R. Ilen, Drimoleague (W098454), Madore (W103419) and Hollybrook (W117363), 24 August 1983 (Hayes, 1991). **DERRY: HA 2** - R. Roe, Deerpark Wood, Limavaddy (C682203), 9 June 2000 (Langton, 2002): **HA 3** - R. Agivey, Ford at Ballynameen (C827148), 14 June 2008 (PHL). R. Bann, Coleraine (C854304), 17 May 2002 (PHL). Pond at Magherafelt Golf Course, Traad Point (H950873), 10 May 2000 (Langton, 2002). R. Moyola, New Bridge, Magherafelt (H955905), 4 July 2000 (Langton, 2002). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 23 July 2009, EPA (DAM). L. Mourne, Ballybofey (H069900), 8 September 2009, EPA (DAM). L. Derg, Pettigo (H074743), 8 July 2009, EPA (DAM): **HA 36** - L. Golagh, Ballyshannon (G965655), 7 July 2009, EPA (DAM). L. Tullynasiddagh, Ballyshannon (G983656), 7 July 2009, EPA (DAM). L. Unshin, Ballyshannon (G951637), 8 June 2009, EPA (DAM). L. Vearty, Ballyshannon (G995658), 8 July 2009, EPA (DAM): **HA 37** - L. Eske, Donegal (G973844), 14 July 2009, EPA (DAM). R. Eanymore, Drumagraa Bridge (G863822), 10 August 1982, (Hayes, 1991): **HA 38** - L. Altercan, The Rosses (B755158), 19 July 2000 (Langton, 2002). L. Dunglow, The Rosses, west shore (B782119), 17 June 2009 and 5 August 2009, EPA (DAM); east shore (B787117), 19 July 2000 (Langton, 2002). L. Anure, Loughanure, east shore (B818162), 17 June and 12 August 2009, EPA (DAM). R. Gweedore, Crolly, outflow from L. Anure (B827184), 19 July 2000 (Langton, 2002). L. Keel, Crolly (B848162), 13 August 2009, EPA (DAM). L. Nasnahida, Doocharry, Dunglow (B852076), 6 August 2009, EPA (DAM). L. Dunlewey, Dunlewy (B926193), 19 July 2000 (Langton, 2002). R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). L. Veagh, GNP, boathouse near Glenveagh Castle (C022211), 21 August 1985; Derrylahan (C038233), 18 August 1985; north east shore (C039230), 16 August 1985, POD; Glenveagh Castle shore (C038230), 24 July 1985 (all Heneghan, 1986). R. Owencarrow, d/s road bridge, Glenveagh (C043235), 18 July 2000 (Langton, 2002); Newbridge, Barnesgap (C078271), 22 August 1984 (Murray, 2005). L. Nadourcan, Glenveagh (C054228), 18 July 2000 (Langton, 2002). L. Glen, Glen (C105292), 16 June and 29 July 2009,

EPA (DAM). L. Salt, Milford (C121256), 15 July 2009, EPA (DAM). L. Keel, Kilmacrennan (C158243), 16 June 2009, EPA (DAM). L. Fallaneas, Kindrum (C173424), 27 July 2009, EPA (DAM). L. Kindrum, Kindrum, Fanad (C186430), 22 July 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 16 June 2009, EPA (DAM). L. Kiltoris, Dawros, Ardara (G675976), 17 June 2009, EPA (DAM). L. Voriskey, The Rosses (B762176), 19 July 2000 (Langton, 2002): **HA 39** - L. Gartan, Church Hill (C055159), 10 June and 22 July 2009, EPA (DAM); L. Gartan, Church Hill, north shore, (C065173), 18 July 2000 (Langton, 2002). **DOWN: HA 3** - R. Leitrim, Leitrim Bridge, Hilltown (J217285), 13 August 1998 (PHL). R. Rocky, Hilltown (J233277), 26 September 1997 (PHL). **FERMANAGH: HA 36** - L. Lattone, Kiltyclogher (H003456), 29 June 2000 and L. Macnean, Upper, Belcoo (H042403), 29 June 2000 (Langton, 2002). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 24 May 2003 (PHL): **HA 29** - L. Cutra, Gort (R485986), 24 May 2003 (PHL): **HA 30** - L. Anillaun, Maam Cross (L980470), 8 June, 1 August and 5 September 2007, EPA (DAM). L. Ballyquirke, Moycullen (M232317), 14 June and 8 August 2007, EPA (DAM). L. Beaghcauneen, Ballinaboy (L679470), 6 June and 12 September 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 7 June and 31 July 2007, EPA (DAM). L. Lettercraffroe, Oughterard (M056376), 14 June 2007, EPA (DAM). L. Maumwee, Maam Cross (L977485), 8 June 2007, EPA (DAM). L. Ross, Moycullen (M200363), 24 May 2003 (PHL). R. Grange, Grange Bridge (M428498), 16 August 1981 (Hayes, 1991): **HA 31** - L. Anaserd, Ballyconneely (L605443), 20 June 2006, 6 June and 17 July 2007, EPA (DAM). L. Aunwillan, Carraroe (L936255), 7 June and 25 July 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June and 23 July 2007, EPA (DAM). L. Ballynakill, Gorumna (L867236), 20 June, 10 July and 8 August 2006, EPA (DAM). L. Derryclare, Recess (L825485), 16 July 2007, EPA (DAM). L. Illauntrasna, Glentrasna, Garomna (L888254), 6 June and 25 July 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 7 June and 24 July 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 20 June 2006, 7 June and 1 August 2007, EPA (DAM). L. Shindilla, Derreennacreeva, south shore (L958460), 20 June 2006, EPA (DAM). R. Owentouey, Tullywee Bridge, Recess (L873474), 18

August 1981 (Hayes, 1991): **HA 32** - L. Ballynakill, Cleggan (L639581), 11 September 2007, EPA (DAM). L. Enask, Beaghcauneen (L662468), 17 July 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 17 July 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 9 July 2007, EPA (DAM). **KERRY: HA 21** - L. Cloonaghlin, Waterville (V611708), 24 July 2008, EPA (DAM). L. Currane, Waterville (V535664), 18 June and 22 July 2008, EPA (DAM). Eagles L., Knocknagantee (V674728), 9 August 2005, JRB (DAM). L. Inchiquin, Kenmare (V837629), 18 June and 1 September 2008, EPA (DAM). L. Namona, Waterville (V596711), 19 June 2008, EPA (DAM). R. Inny, Scarriff Brrdge (V504696), 24 August 1983 (Hayes, 1991): **HA 22** - L. Acoose, Slievanore, Killorglin (V755854), 9 July 2008, EPA (DAM). L. Cummernamuck, Killorglin (V745897), 20 June and 18 July 2008, EPA (DAM). Doo L., Muckross Penninsula (V949860), 5 July 1973, DJD (Douglas and Murray, 1980). L. Guitane, Crohane, Killarney (W025846), 26 June and 8 July 2008, EPA (DAM). L. Leane, Killarney, Castlough Bay (V966866), 27 June 1973 and Fossa shore (V907913), 27 July 1973 (Douglas and Murray, 1980); Killarney (V931886), 24 June 2008, EPA (DAM); Mahony's Point (V932912), 24 August 1973 and Victoria Bay (V946900), 20 June 1973 (Douglas and Murray, 1980). Muckross Lake, Dundag Bay (V964858), 12 July 1972 (Murray, 1974) and 7 July 1973 (Murray, 2005); Muckross Lake, mid lake (V950853), 16 July 2008, EPA (DAM). R. Caragh, Blackstones Bridge, d/s R. Acoose confluence (V710864), 4 August 1975, CD (Dowling *et al.*, 1981). R. Flesk, d/s Clydagh/Loo confluence (W084814), June to August 1978 (Ashe, 1982); White Bridge (V987904), 29 May 1973 (Douglas and Murray, 1980); d/s Whitebridge (V987900) and d/s New Bridge (V963885), June to August 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), June to August 1978 (Ashe, 1982). Upper Lake, Killarney (V909821), 24 June and 9 September 2008, EPA (DAM). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436), 28 August 1981 (Hayes, 1991). **LEITRIM: HA 26** - L. Acres, Drumshanbo (G968099), 9 September 2008, EPA (DAM). L. Boderg, Derrycarne, north west shore (N013915), 10 September 2008, EPA (DAM): **HA 35** - L. Annary, Dromahair (G817338), 10 June 2008, EPA (DAM). **LIMERICK: HA 24** - Bleach Lake, Pallaskenry

(R441569), 13 June 2009, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 10 September 2008, EPA (DAM). **MAYO: : HA 26** - L. Nanoge, Urlaur (M506903), 18 June and 27 August 2008, EPA: **HA 30** - L. Aille, Westport (M071807), 24 June and 8 August 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, west shore (L835681), 12 July 2006, EPA (DAM); north east shore (L834689), 22 August 2002, WM (DAM). L. Glencullin, Delphi, north west shore (L815699), 26 June 2008, EPA (DAM). R. Burleemslough, Clapper Bridge Ford, u/s Roonagh L., Cloonlaur (L754759), 5 August 2004, DAM/WM (DAM). R. Bunowen, Louisburg, u/s bridge (L807807), 5 August 2004 (DAM). L. Fin, Delphi (L841657), 28 June and 12 July 2006, EPA (DAM). R. Owengarve, Mulranny, Rosgalliv Bridge (L886962), 4 August 2004 (DAM). R. Altahoney, Newport (F950050), 8 July 1975 (DAM). L. Feeagh, Newport (L975983), 24 July 2008, EPA (DAM). R. Erriff, Ashleigh Falls (L895645), 18 August 1981 (Hayes, 1991). L. Moher, Liscarney, Westport (L977766), 24 June and 21 July 2008, EPA (DAM): **HA 33** - L. Acorrymore, Achill Island (F578057), 5 August 2004 (DAM). L. Carrowmore, Derreens, Bangor (F833299), 28 July 2008, EPA (DAM): **HA 34** - L. Conn, Brackwansha (G191098), 18 June 2008, EPA (DAM); Illannaglashy (G207070), 20 August 2008, EPA (DAM). L. Cullin, Drummon Wood (G235046), 18 June 2008, EPA (DAM). L. Lannagh, Castlebar, west shore, (M109883), 21 August 2008, EPA (DAM). L. Levally, Massbrook (G146043), 23 July 2008, EPA (DAM). L. Washpool, Ballycarra (M219842), 15 August 2008, EPA (DAM): **Clare Island** - Creggan L., Lecarrow (L689857), June to October 1998 and 1999 (Fahy, 2002). L. Poirin Fuinch (L706857), 10 August 1999 (Fahy, 2002). **MEATH: HA 7** - R. Boyne, Ardsallagh, opposite R. Skane inflow (N895628), 26 August 1984 (DAM); Slane Bridge (N965737), Oldbridge (O045761) and d/s Oldbridge (O062753), 19 July 1989 (DAM). R. Blackwater, Carnaross Bridge (N685779), 4 November 1975 (O'Flaherty, 1976). **MONAGHAN: HA 36** - Kilroosky L., Clones (H494274), 28 June 2000 (Langton, 2002). **ROSCOMMON: HA 26** - R. Suck, Ballyforan (M817464), 16 July 1981 (Hayes, 1991). L. Cavetown, Boyle (M832974), 17 July 2008, EPA (DAM). L. Key, Boyle (G838057), 6 August 2008, EPA (DAM). L. Ree, Yew Point, Barley Harbour (N018485), 13 June 2007, EPA

(DAM). **SLIGO: HA 26** - L. Gara, Cuppanagh, Cloonlough (G714013), 5 September 2008, EPA (DAM): **HA 35** - L. Easky, Ox Mountain (G446230), 17 July 2008, EPA (DAM). L. Templehouse, Ballymote (G619182), 11 June and 9 September 2008, EPA. L. Gill, Sligo (G782350), 11 June and 20 August 2008, EPA (DAM). **WATERFORD: HA 17** - Belle Lake, Dunmore East (S665049), 2 July 2009, EPA (DAM). **WESTMEATH: HA 26** - L. Owel, Mullingar (N421566), 1981 (Forde, 1985). L. Ree, Coosan (N050450), 15 August 2007 and L. Killinure, Wineport (N067458), 15 August 2007, EPA (DAM). **WEXFORD: HA 12** - R. Slaney, Edernline Bridge (S977345), 29 July 1981 (Hayes, 1991); Scarawalsh Bridge, Marshalstown (S985451), 24 July 1985 (DAM). **WICKLOW: HA 10** - L. Tay, Luggala (O163008), 28 July 2009, EPA (DAM). Roundwood Reservoir, east shore (O214002), 12 July 1983 and 14 August 1983, HD (DAM). Glendalough Lake, Laragh, WMNP (T100960), 29 July 2009, EPA (DAM). R. Avoca, Avoca Village (T203802), 7 July 1997 (Curran and Murray, 2001): **HA 12** - R. Slaney, Kilmurray (S889856), 28 July 1981 (Hayes, 1991).

Ablabesmyia (Ablabesmyia) monilis (Linnaeus, 1758)

ANTRIM: HA 4 - Dungonnell Dam, Newtown Crommelin (D193170), 20 June 2000 (Langton, 2002): **Rathlin Island** - Ally L. (D154497) and east lighthouse pool (D156516), 24 July 2000 (Langton, 2002). Outflow stream from L. Craigmacagan (D153596), 5 July 2004 (PHL): **CAVAN: HA 7** - L. Drumkeery, Baileborough (H663002), 12 June 2007, EPA (DAM). L. Drumkeery, Baileborough (H663002), 16 July 2007, EPA (DAM). L. Nadreegeal, Ballyjamesduff (N537933), 2 May and 12 June 2007, EPA (DAM). L. Acurry, Baileborough (N584990), 12 June and 5 July 2007, EPA (DAM). L. Ramor, Virginia (N612860), 24 July 2007, EPA (DAM). L. Cuilcagh, Virginia (N636895), 30 April 1968 (Murray, 1972): **HA 26** - L. Sheelin, Kilnahard (N435860), 25 July 1985 (DAM): **HA 36** - L. Garty, Arvagh (N278978), 18 July 2007, EPA (DAM). L. Macnean, Lower, Blacklion (H106378), 7 June 2007, EPA (DAM). L. Oughter, Killashandra (H349051), 6 June 2007, EPA (DAM). **CLARE: HA 25** - L. Derg, Mountshannon, west shore (R718861), 18 September 2009, EPA (DAM). L. Alewnaghta,

Whitegate, west shore (R758908), 16 July 2009, EPA (DAM). L. Alewnaghta, Whitegate, north east shore (R764914), 23 September 2009, EPA (DAM). L. Atorick, Woodford (R637964), 24 May 2003 (PHL): **HA 27** - L. Bridget, Derrymore, Badyke, east shore (R558797), 17 September 2009, EPA (DAM). L. Bunny, Aughrim, south east shore (R377965), 7 June, 4 July 2006 and 11 June, 14 July and 14 September 2009, EPA (DAM). Castle Lake, Kilmurry, Sixmilebridge, west shore (R484690), 17 July 2009, EPA (DAM). L. Cullaun, Corrofin, mid east shore (R317905), 4 July 2006, 22 July and 14 September 2009, EPA (DAM). L. Dromore, Ruan, Corrofin (R345858), 8 June 2006, EPA (DAM). Gortglass L., Killadysert, south shore (R223596), 7 July 2009, EPA (DAM); north shore (R223599), 15 September 2009, EPA (DAM). L. Inchicronan, Crusheen (R391860), 9 July 2009, EPA (DAM). L. Inchiquin, Corrofin (R270895), 4 July 2006, also 9 July and 15 July 2009, EPA (DAM). L. Muckanagh, Tubber, Corrofin, mid lake (R368926), 2 August 2006 and 22 July 2009, EPA (DAM); south east shore (R370922), 11 June and 14 September 2009, EPA (DAM). L. Rosroe, Newmarket on Fergus, south east shore (R442681), 12 August 2009, EPA (DAM); north east shore (R448697), 16 June 2009, EPA (DAM). L. Atedaun, Corrofin (R297884), 14 July 2009, EPA (DAM): **HA 28** - L. Acrow, Lisscasey (R193687), 9 May 2005, 8 June and 7 July 2006, EPA (DAM). L. Doo, Milltown Malbay, north west shore (R113722), 11 June and 15 September 2009 and south shore (R123721), 8 July 2009, EPA (DAM). L. Keagh, Milltown Malbay, south west shore (R100811), 8 July 2009 and north shore (R100813), 11 June and 15 September 2009, EPA (DAM). L. Lickeen, Kilfenora, west shore (R168909), 6 June and 4 July 2006 and mid lake (R175909), 21 July and 15 September 2009, EPA (DAM). L. Naminna, Boolteagh, north west shore (R178710), 11 June, 7 July and 15 September 2009, EPA (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 7 April and 17 June 2009, EPA (DAM). **CORK: HA 18** - R. Blackwater, Duncannon (W180931), Charles Bridge, Millstreet (W248943) and Keale Bridge, Millstreet (W294936), 2 September 1981; Ballymacquirk Bridge, Banteer (W382989); Roskeen Bridge, Banteer (W444988) and Lombardstown (W463968), 1 September 1981; Killavullen (W648998), 31 August 1981 (all Hayes, 1991): **HA 19** - L. Aderry, Castlemartyr (W935730), 4

June 1969 (Bracken and Murray, 1973). L. Allua, Ballingeary (W180652), 20 August 2008, EPA (DAM). L. Gouganebarra, Inchegeelagh (W009060), 1 August 1966 (Murray, 1972): **HA 20** - L. Ballin, Leap (W199389), 17 June and 21 August 2008, EPA (DAM). Cluhir L., Unionhall (W200325), 11 November 1966 (Murray, 1972). L. Curraghally, Drinagh, Dunmanway (W234046), 17 June 2008 and 12 August 2008, EPA (DAM). L. Skeagh (Schull Reservoir), Schull (V937338), 17 June, 27 August and 17 September 2008, EPA (DAM). L. Tooreen, Crookhaven (V790259), 17 September 2008, EPA (DAM). R. Bandon, Long Bridge, Dunmanway (W242631), 27 May 1980; Bealabouy Bridge, Dunmanway (W257514), Castle Bernard (u/s Bandon) (W472546) and 2.5km d/s Bandon (W516569), 30 June 1980 (all Morgan, 1982). R. Ovane, Pierson's Bridge (W023454), 24 August 1983 (Hayes, 1991): **HA 21** - L. Bofinna, Bantry (W041488), 8 April, 18 June and 11 September 2008, EPA (DAM). L. Glenbeg, Ardgroom (V706530), 18 June and 3 September 2008, EPA (DAM). L. Mor, Adrigole (V870500), 27 August 1968 (Murray, 1972). **DERRY: HA 1** - Upper Reservoir, Creggan, Derry (C417173), 10 and 18 May 2001, 17 May 2002 (PHL): **HA 2** - Binevenagh pond, Coleraine (C691305), 18 May 2000 (Langton, 2002) and 25 August 2001 (PHL): **HA 3** - Howell's Tarn, Ballywildrick, Coleraine (C766325), 7 July 2002 (PHL). R. Agivey, Garvagh (C838154), 30 May 2002 (PHL); Glascort Bridge (C907226), 16 July 2000, PHL (Langton, 2002); Ballynameen Ford (C827148), 14 June 2008 (PHL). Glenullin Bog, Garvagh (C795132), 29 June 2008 (PHL). Pond 1, Magherafelt Golf Course, Traad Point (H950873), 10 May 2000 (Langton, 2002). L. Neagh, unspecified (H9080), no date (McLarnon and Carter, 2000). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 9 June and 23 July 2009, EPA (DAM). L. Mourne, Ballybofey (H069900), 8 September 2009, EPA (DAM): **HA 36** - L. Golagh, Ballyshannon (G965655), 8 September 2009, EPA (DAM). L. Unshin, Ballyshannon (G951637), 8 June 2009, EPA (DAM): **HA 37** - Carn L., Blue Stack Mountains (G871886), 27 July 2005, JRB (DAM). L. Eske, Donegal (G973844), 14 July 2009, EPA (DAM). L. Shinvagh, Carricode (H005675), 24 April 2002 (PHL): **HA 38** - L. Altercan, The Rosses (B755158), 19 July 2000 (Langton, 2002). L. Dunglow, west shore (B782119), 5 August 2009, EPA (DAM);

south east shore (B783112), 12 August 1982 (BPH); east shore (B787117), 19 July 2000 (Langton, 2002). L. Anure, Loughanure (B817166), 19 July 2000 (Langton, 2002) and east shore (B818162), 17 June and 12 August 2009, EPA (DAM). L. Keel, Crolly (B848162), 17 June and 13 August 2009, EPA (DAM). L. Nabuckan, Grogan More (B850184), 27 July 2005, JRB (DAM). L. Nasnahida, Doocharry, Dunglow (B852076), 17 June and 6 August 2009, EPA (DAM). L. Nacung (Upper), Dunlewy (B904191), 19 July 2000 (Langton, 2002). L. Dunlewey, Dunlewy (B926193), 19 July 2000 (Langton, 2002). R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). L. Barra, Commeen (B935119), 10 June 2009, EPA (DAM). L. Nambraddan, Glenveagh (C022193), 30 July 1995 (Heneghan, 1986). Pond, Glenveagh (C023214), 8 July 1984 (DAM) and 22 August 1985, POD (Heneghan, 1986; Murray, 2005). L. Veagh, GNP, boathouse near Castle (C022211), 2 June, 21 July and 9 September 2009, EPA (DAM); north east shore near Visitor Centre (C033223), 19 July 2000 (Langton, 2002); north east shore (C039230), 16 August 1985, POD and 22 August 1985, LJH (Heneghan, 1986). R. Owencarrow, Glenveagh (C041229), 24 August 1985 (Heneghan, 1986). L. Nadourcan, Glenveagh (C054228), 18 July 2000 (Langton, 2002). L. an tSeisigh, Portnablagh (Sheephaven) (C043361), 16 June, 28 July and 7 September 2009, EPA (DAM). L. Glen, Glen (C105292), 16 June and 29 July 2009, EPA (DAM). L. Greenan, Loughsalt, Kilmacrennan (C117262), 16 June 2009, EPA (DAM). L. Reelan, Reelan (C131272), 15 July 2009, EPA (DAM). L. Keel, Kilmacrennan (C158243), 16 June 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 16 June, 21 July and 9 September 2009, EPA (DAM). L. Voriskey, The Rosses (B762176), 19 July 2000 (Langton, 2002): **HA 39** - L. Gartan, Church Hill (C055159), 10 June and 9 September 2009, EPA (DAM). R. Leannan, Drumaboden (C165218), 12 August 1982 (Hayes, 1991). L. Fern, Millford (C180233), 16 June 2009, EPA (DAM): **HA 40** - L. Naminn, Cloonmany (C400423), 18 August 2011 (PHL). L. Fad, Rowantree Hill, Moville (C539397), 18 August 2011 (PHL). **DUBLIN: HA 9** - water tank on roof, University College Dublin Science Centre West (O185301), 9 April 1981, PJA (DAM). R. Dodder, Fort Bridge, Bohernabreena (O009242), 21 June 1966 (Murray, 1972). **FERMANAGH: HA 36** - L.

Macnean, Lower, Belcoo (H085384), 29 June 2000 (Langton, 2002). L. Eyes, Lisbellaw (H324434), 16 August 2011 (PHL). **GALWAY: HA 25** - R. Woodford, Woodford (M732000), 24 May 2003 (PHL): **HA 29** - L. Caherglassaun, Gort (M412061), 12 April and 18 September 2007, EPA (DAM). L. Coole, Gort (M432043), 15 June 2009, EPA (DAM). L. Rea, Loughrea, east shore (M624153), 25 May 2003 (PHL); mid lake (M615154), 14 June, 7 August and 18 September 2007, EPA (DAM): **HA 30** - L. Ballyquirke, Moycullen (M232317), 8 August 2007, EPA (DAM). L. Beaghcauneen, Ballinaboy (L679470), 6 June, 18 July and 12 September 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 7 June and 31 July 2007, EPA (DAM). L. Corrib Upper, Oughterard (M138486), 11 June and 14 August 2007, EPA (DAM). L. Corrib Lower, Moycullen (M271360), 11 June, 28 August and 18 September 2007, EPA (DAM). L. Lettercraffroe, Oughterard (M056376), 14 June and 5 September 2007, EPA (DAM). L. Maumwee, Maam Cross (L977485), 8 June and 12 July 2007, EPA (DAM). L. Ross, Moycullen (M188365), 8 August 2007, EPA (DAM); L. Ross, Moycullen (M200363), 25 May 2003 (PHL). Stream at picnic site on N59 road, Moycullen (M204326), 25 May 2003 (PHL). R. Cregg, Addergssole Bridge (M324350), 16 August 1981 (Hayes, 1991): **HA 31** - L. Ahalia, north east shore, Maam Cross (L971402), 18 June and 23 September 2009, EPA (DAM). L. Anaserd, Ballyconneely (L605443), 20 June, 10 July 2006 and 11 September 2007, EPA (DAM). L. Ardderry, Maam Cross (L982458), 25 May 2003 (PHL), 7 June and 1 August 2007, EPA (DAM). L. Aunwillan, Carraroe (L936255), 7 June and 25 July 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June, 23 July and 13 September 2007, EPA (DAM). L. Ballynakill, Gorumna (L867236), 15 May and 10 July 2006, EPA (DAM). L. Derryclare, Recess (L825485), 16 July 2007, EPA (DAM). L. Illauntrasna, Glentrasna, Garomna (L888254), 25 July and 12 September 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 7 June, 24 July and 12 September 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 16 May, 8 August, 12 September 2006, 7 June and 13 September 2007, EPA (DAM). L. Shindilla, Derreenacreeva, south shore (L958460), 7 June, 26 July and 13 September 2007, EPA (DAM): **HA 32** - L. Aughrusbeg, Cleggan (coastal) (L557582), 10 July

2007, EPA (DAM). L. Ballynakill, Cleggan (L639581), 5 June and 11 September 2007, EPA (DAM). L. Enask, Beaghcauneen (L662468), 6 June and 17 September 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 6 June, 17 July and 11 September 2007, EPA (DAM). L. Nambrackmore, Ballinaboy, Toombeola (L716454), 6 June, 27 July and 12 September 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 2 April, 5 June and 9 July 2007, EPA (DAM). L. Kylemore, Letterfrack (L771582), 5 June, 30 July and 10 September 2007, EPA (DAM). Stream near Administration Centre, CNP, Letterfrack (L715575), 16 September 1986 (Heneghan, 1987). **KERRY: HA 18** - R. Blackwater, Lacknastooka (R153008), 2 September 1981 (Hayes, 1991): **HA 21** - L. Brin, Derreeny (V780775), 18 June, 13 July and 10 September 2008, EPA (DAM). L. Clonee, Kenmare (V800639), 28 August 1968 (Murray, 1972). L. Cloonaghlin, Waterville (V611708), 19 June and 24 July 2008, EPA (DAM). L. Currane, Waterville (V535664), 18 June, 22 July 2008 and 10 September 2008, EPA (DAM). L. Derriana, north shore (V605735), 6 August 1973, JPOC (DAM). Eagles L., Knocknagantee (V674728), 9 August 2005, JRB (DAM). Erik L., Derrygarrieff (V881777), 9 August 2005, JRB (DAM). L. Inchiquin, Kenmare (V837629), 18 June, 1 and 17 September 2008, EPA (DAM). L. Namona, Waterville (V596711), 19 June 2008, EPA (DAM): **HA 22** - L. Acoose, Slievanore, Killorglin (V755854), 19 June, 9 July and 9 September 2008, EPA (DAM). L. Caragh, Killorglin (V719904), 20 June and 15 July 2008, EPA (DAM). L. Cummernamuck, Killorglin (V745897), 20 June, 18 July and 9 September 2008, EPA (DAM). L. Guitane, Crohane, Killarney (W025846), 16 May 2005, 26 June, 8 July and 9 September 2008, EPA (DAM). L. Leane, Killarney: Brickeen, (V937850), 1973 (Douglas and Murray, 1980); Castlough Bay (V966866), 27 June 1973, JPOC (Douglas and Murray, 1980) and Ross Bay (V945850), 1973 (Douglas and Murray, 1980). L. Leane, Killarney (V931886), 10 July and 18 September 2008, EPA (DAM). Muckross Lake: Dundag Bay (V964858), 12 July 1972 (Murray, 1974) and 23 July 1973 (Douglas and Murray, 1980); Goleen Bay (V963853) and Kilbeg Bay (V960860), 29 May 1973 (Douglas and Murray, 1980); mid lake (V950853), 16 July and 18 September 2008, EPA (DAM). R. Caragh, d/s confluence with R. Owenroe (V720815), Bealalaw Bridge

(V715832), Blackstones Bridge, d/s confluence with R. Acoose (V710864) and outflow from L. Caragh (V713924), 1975, CD (Dowling *et al.*, 1981). R. Flesk, White Bridge (V987904), 29 May 1973 (Douglas and Murray, 1980); d/s Whitebridge (V987900), d/s New Bridge (V963885) and u/s L. Leane (V964894), June to August 1978 (Ashe, 1982). Upper Lake, Killarney, Gallavalley (V891817), 1973 (Douglas and Murray, 1980); west basin (V909821), 1973 (Douglas and Murray, 1980) and 17 July and 9 September 2008, EPA (DAM): **HA 23** - L. Cam, Castlegregory (Q597079), 18 September 2008, EPA (DAM). **LEITRIM: HA 26** - L. Acres, Drumshanbo (G968099), 11 June 2008, EPA (DAM): **HA 35** - L. Annary, Dromahair (G817338), 23 July 2008, EPA (DAM). L. Lackagh, Boleybrack (G920320), 3 August 2005 JRB (DAM). L. Nabrack, Crocknagapple (G860477), 4 August 2005, JRB/MC (DAM). L. Sandy, Crocknagapple (G891448), 4 August 2005, JRB/MC (DAM). **LIMERICK: HA 24** - Bleach L., Pallaskenry (R441569), 13 June and 28 July 2009, EPA (DAM). L. Gur, Holycross (R646413), 13 June, 28 July and 16 September 2009, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 10 September 2008, EPA (DAM). **MAYO: HA 26** - L. Nanoge, Urlaur (M506903), 18 June and 27 August 2008, EPA (DAM): **HA 30** - L. Aille, Westport (M071807), 24 June, 8 August and 18 September 2008, EPA (DAM). L. Carra, Keel Bridge, Ballinrobe (M165680), 28 April and 19 June 2008, EPA (DAM). L. Mask, Toormakeady, west shore (M113702), 24 June 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, west shore (L835681), 12 July 2006 and 25 August 2008, EPA (DAM). L. Glencullin, Delphi, south west shore (L819696), 25 August 2008 and north west shore (L815699), 26 June 2008, EPA (DAM). R. Burleemslough, Killeen, Clapper Bridge Ford, u/s Roonagh L. (L754759), 5 August 2004, DAM/WM (DAM). L. Fin, Delphi (L841657), 19 May 2005, 28 June and 12 July 2006, EPA (DAM). R. Owengarve, Mulranny, Rosgalliv Bridge (L886962), 4 August 2004, DAM/WM (DAM). R. Altahoney, Newport (F950050), 8 July 1975 (DAM). L. Feagh, Newport (L975983), 25 June, 24 July and 17 September 2008, EPA (DAM). L. Moher, Liscarney, Westport (L977766), 24 June, 21 July and 18 September 2008, EPA (DAM). Westport L., Westport Woods Hotel (L985843), 7 May 2004, DAM/WM (DAM). L. Ballin,

north shore, Westport (L996882), 25 June 2008, EPA (DAM): **HA 33** - L. Acorrymore, Achill Island (F578057), 29 September 2004, DAM/WM (DAM), 17 June, 16 July and 17 September 2008, EPA (DAM). L. Keel, Achill Island, south west shore (F641055), 17 September 2008, EPA (DAM); south east shore (F650051), 17 June and 16 July 2008, EPA (DAM). Cross L., Drumreagh, Belmullet (F651299), 17 September 2008, EPA (DAM). Bunacurry L., Achill Island (F695048), 29 September 2004, DAM/WM (DAM). Bog pool, Achill Island (F712008), 5 August 2004, DAM/WM (DAM). R. Owenmore, Bangor Erris (F863228), 18 August 1983 (Hayes, 1991). Bog pool, Glenamoy (F896345), April, June to August and November 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **HA 34** - L. Alone, Ox Mountains (G367157), 5 August 2005, JRB/MC (DAM). L. Conn, south basin, Illannaglashy (G207070), 20 August 2008, EPA (DAM). L. Cullin, Drummon Wood (G235046), 18 June 2008, EPA (DAM). L. Lannagh, Castlebar, west shore (M109883), 21 August 2008, EPA (DAM). L. More, Ballynagoraher (G115044), 12 September 2006, EPA (DAM). Washpool L., Ballycarra (M219842), 19 June 2008, EPA (DAM): **Clare Island:** - roadside, Ballytoughey Weavers (L699870), 20 August 2002, pond, east of Maum road (L710863), 28 April and 5 June 2002 and L. Leinapollbauty, Lecarrow (L691856), 5 June 2002 (Murray and Murray, 2003). Creggan L., Lecarrow (L689857), 10 June and 7 July 1999 (Fahy, 2002) and 21 August 2002 (Murray and Murray, 2003). L. Poirin Fuinch (L706857), 7 July 1999 (Fahy, 2002). **MEATH: HA 7** - R. Boyne: Ardsallagh, adjacent to St Bridget's Well (N897635), 24 August 1984 (DAM); Stackallen Bridge (N917713), 17 August 1988 (Murray, 1988); Slane Bridge (N965737), Knowth Weir (N995720) and Oldbridge (O045761), 19 July 1989 (DAM). R. Blackwater, Carnaross Bridge (N685779), 4 November 1975 (O'Flaherty, 1976); Donaghpatrick (N819723), 9 July 1975 (DAM). **MONAGHAN: HA 36** - L. Annaghmakerrig, Newbliss (H585205), 27 June 2006, EPA (DAM). L. Avagnon, Latton, Cotehill (H688133), 11 July 2007, EPA (DAM). L. Drumlona, Rockcorry (H636176), 11 July 2007, EPA (DAM). Kilroosky L., Clones (H494274), 28 June 2000 (Langton, 2002). L. Summerhill, Clones (H490279), 26 April 2007, EPA (DAM) and Magheraveely (H490280), 28 June 2000 (Langton, 2002). **OFFALY: HA 25** -

R. Shannon, Shannon Bridge (M967254), 15 August 1981 (Hayes, 1991). **ROSCOMMON: HA 26** - L. Annaghmore, Strokestown, Elphin (M902838), 15 July and 2 September 2008, EPA (DAM). L. Cavetown, Boyle (M832974), 17 July 2008, EPA (DAM). L. Funshinagh, north of Brideswell (M933513), 13 June and 11 September 2007, EPA (DAM). L. Glinn, Loughglinn, Castlerea (M629870), 12 June, 25 August and 9 September 2008, EPA (DAM). **SLIGO: HA 26** - L. Gara, Cuppanagh, Cloonlough (G714013), 5 September 2008, EPA (DAM): **HA 34** - L. Talt, Gleneask (G402151), 18 June and 24 September 2008, EPA (DAM). R. Moy, Annagh (G466123), 30 August 1982 (Hayes, 1991): **HA 35** - L. Arrow, Ballinafad (G789123), 11 June 2008, EPA (DAM). L. Easky, Ox Mountain (G446230), 18 June, 17 July and 25 September 2008, EPA (DAM). L. Kilsallagh (Reservoir), Kilsallagh (G734393), 10 June, 23 July and 8 September 2008, EPA (DAM). L. Templehouse, Ballymote (G619182), 4 September 2008, EPA (DAM). L. Gill, Sligo (G782350), 20 August 2008, EPA (DAM). R. Easky, Easky (G377378), 19 August 1983 (Hayes, 1991). **TIPPERARY: HA 16** - R. Drish, Boolabeha Bridge (S190619), 6 July 1992 (Murray and Lynch, 1992): **HA 25** - L. Derg, Dromineer (M809858), 17 June 2009, EPA (DAM). **TYRONE: HA 1** - L. Moor, Altishane, Strabane (H446984), 17 August 2011 (PHL). L. Oak, Gortin, Newtownstewart (H498843), 16 August 2011 (PHL). L. Fingrean, Craggan, Omagh (H576775), 16 July 2011 (PHL). **WATERFORD: HA 16** - L. Ballyscanlan (Ballyscanlan Reservoir), Tramore (S540030), 19 August 2009, EPA (DAM): **HA 17** - L. Carrigavantry, Tramore (S548022), 3 July 2009, EPA (DAM): **HA 18** - R. Blackwater, Ballyduff (W964992), 31 August 1981 (Hayes, 1991). **WESTMEATH: HA 25** - R. Brosna, Cullion, 25m below fish farm (N431556), May 1990 (Murray, 1990). **HA 26** - L. Owel, Mullingar (N421566), 24 July 1973, NH (Hayes, 1980): **HA 36** - L. Bane, Collinstown (N550712), 26 April, 23 May, 26 June, 22 August and 19 September 2006, EPA (EPA). **WICKLOW: HA 10** - L. Ouler, Tonelagee (O091023), 8 August 2005, JRB (DAM). L. Bray Lower, Glenree (O140163), 16 June 2009, EPA (DAM). L. Dan, Roundwood (O157035), 15 June 2009, EPA (DAM). R. Glencullen, Knocksink (O217182), 1970, KC (Clabby and Bracken, 1976). L. Tay, Luggala (O163008), 16 June, 28 July and 2 September 2009, EPA (DAM).

Upper Glendalough Lake, Laragh, WMNP (T100960), 7 July 1973 (Murray, 2005) and 29 July 2009, EPA (DAM). R. Avonmor, Laragh Bridge (T144965), 4 July 1996, MKQ (DAM). R. Avonmore, Lion Arch Bridge (T194833), 11 July 1997, FC (Curran, 2001). R. Avoca, Avoca Village (T203802), 11 July 1997 (Curran and Murray, 2001).

***Ablabesmyia (Ablabesmyia) phatta* (Egger, 1864)**

ANTRIM: Rathlin Island - L. Craigmacagan (D154498), July 2004 (PHL). **CAVAN: HA 7** - L. Acurry, Baileborough (N584990), 5 July 2007, EPA (DAM). L. Ramor, Virginia (N603871), May 1971, DJD/DAM (Douglas, 1971). L. Mullagh, Mullagh (N680856), 23 May 1968 (Murray, 1972): **HA 36** - L. Derrybrick, Milltown, Belturbet (H346117), 3 September 2007, EPA (DAM). L. Gowna (north basin), Arnagahan (N285920), 7 June 2006, EPA (DAM). **CLARE: HA 25** - L. Alewnaghta, Whitegate, west shore (R758908), 16 July 2009, EPA (DAM): **HA 27** - L. Bunny, Aughrim, south east shore (R377965), 7 June, 4 July 2006, 11 June and 14 July 2009, EPA (DAM). L. Cullaun, Corrofin, mid east shore (R317905), 22 July 2009, EPA (DAM). L. Dromore, Ruan, Corrofin (R352864), 16 June 2009, EPA (DAM). L. Muckanagh, Tubber, Corrofin (R368926), 7 June, 22 July 2009, EPA (DAM) and south east shore (R370922), 11 June 2009, EPA (DAM). L. Rosroe, Newmarket on Fergus, south east shore (R442681), 12 August 2009, EPA (DAM); north east shore, (R448697), 16 June and 16 September 2009, EPA (DAM): **HA 28** - L. Keagh, Milltown Malbay, south west shore (R100811), 8 July 2009, EPA (DAM); north shore, 11 June and 15 September 2009, EPA (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 17 June 2009, EPA (DAM). **CORK: HA 19** - L. Aderry, Castlemartyr (W935730), 4 June 1969, NH (Bracken and Murray, 1973): **HA 20** - L. Curraghally, Drinagh, Dunmanway (W234046), 17 June and 12 August 2008, EPA (DAM): **HA 21** - L. Bofinna, Bantry (W041488), 18 June 2008, EPA (DAM). **DERRY: HA 3** - Glenuillin Bog, Garvagh (C795132), 7 June 2008 (PHL). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 23 July 2009, EPA (DAM): **HA 36** - L. Golagh, Ballyshannon (G965655), 7 July 2009, EPA (DAM): **HA 37** - L. Eske, Donegal (G973844), 14 July 2009, EPA (DAM):

HA 38 - L. Altercan, The Rosses (B755158), 19 July 2000 (Langton, 2002). L. Dunglow, Dunglow, The Rosses (B782119), 17 June 2009, EPA (DAM). L. Anure, Loughanure, east shore (B818162), 12 August 2009, EPA (DAM). L. Nasnahida, Doocharry, Dunglow (B852076), 17 June 2009, EPA (DAM). L. Barra, Commeen (B935119), 20 July 2009, EPA (DAM). L. Naweelogue, Glenveagh (B974185), 4 July 1984 (Twomey, 1984). Pond, Glenveagh (C023214), 19 June and 23 June 1986 (Heneghan, 1986) and 27 June 1988 (DAM). L. an tSeisigh, Portnablagh (Sheephaven) (C043361), 16 June 2009, EPA (DAM). L. Greenan, Kilmacrennan (C117262), 16 June 2009, EPA (DAM). L. Keel, Kilmacrennan (C158243), 16 July 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 21 July 2009, EPA (DAM). L. Voriskey, The Rosses (B762176), 19 July 2000 (Langton, 2002). **DUBLIN: HA 9** - pond, University College Dublin, Belfield (O185300), 25 April 1973 (DAM). **GALWAY: HA 29** - L. Rea, Loughrea, east shore (M624153), 25 May 2003 (PHL): **HA 30** - L. Anillaun, Maam Cross (L980470), 8 June and 5 September 2007, EPA (DAM). L. Ballyquirke, Moycullen (M232317), 14 June 2007, EPA (DAM). L. Beaghcauneen, Ballinaboy (L679470), 6 June and 18 July 2007, EPA (DAM). L. Corrib, no data (M1545), 1980, BC (DAM). L. Corrib, lower basin, Moycullen (M271360), 11 April 2007, EPA (DAM). L. Maumwee, Maam Cross (L977485), 12 July 2007, EPA (DAM). Stream at picnic site on N59 road, Moycullen (M204326), 25 May 2003 (PHL): **HA 31** - L. Anaserd, Ballyconneely (L605443), 20 June, 10 July, 17 July and 11 September 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June and 13 September 2007, EPA (DAM). L. Ballynakill, Gorumna (L867236), 20 June 2006, EPA (DAM): **HA 32** - L. Aughrusbeg, Cleggan (L557582), 5 June 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 17 July 2007, EPA (DAM). **KERRY: HA 21** - L. Cloonaghlin, Waterville (V611708), 24 July 2008, EPA (DAM). L. Currane, Waterville (V535664), 18 June and 10 September 2008, EPA (DAM). L. Derriana, north shore (V605735), 6 August 1973, JPOC (DAM): **HA 22** - L. Acoose, Slievanore, Killorglan (V755854), 19 June, 9 July and 9 September 2008, EPA (DAM). L. Leane, Killarney, Castlough Bay (V975873), 27 June 1973 (Douglas and Murray, 1980). Muckcross Lake,

Killarney, Dundag Bay (V964858), 12 July 1972 (Murray, 1974) and May 1973 (Douglas and Murray, 1980): **HA 23** - L. Cam, Castlegregory (Q597079), 18 September 2008, EPA (DAM). L. Gill, Castlegregory (Q603139), 25 June and 28 August 2008, EPA (DAM). **LIMERICK: HA 24** - L. Gur, Holycross (R646413), 13 June and 28 July 2009, EPA (DAM). **MAYO: HA 26** - L. Nanoge, Urlaur (M506903), 18 June 2008, EPA (DAM): **HA 30** - L. Carra, Keel Bridge, Ballinrobe (M165680), 19 June 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, north east shore (L834689), 22 August 2002, DAM/WM (DAM). R. Altahoney, Newport (F950050), 1969, EF (DAM). R. Owenwee, Belclare, Westport (L960820), July 1911, PHG (Grimshaw, 1912). Knappagh, Westport (L980805), July 1911, PHG (Grimshaw, 1912). L. Ballin, Westport, north shore (L996882), 25 June 2008, EPA (DAM): **HA 33** - L. Keel, Achill Island, south east shore (F650051), 17 June 2008, EPA (DAM); mid lake, (F651059), 16 July 2008, EPA (DAM). Bog pool, Achill Island (F712008), 5 August 2004, DAM/WM (DAM). Bog pools, Glenamoy (F896345), March, April, June to August and November 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **HA 34** - L. Conn, south basin, Illannaglashy (G207070), 20 August 2008, EPA (DAM). L. Cullin, Drummon Wood (G235046), 18 June and 20 August 2008, EPA (DAM). L. Lannagh, Castlebar, west shore (M109883), 21 August 2008, EPA (DAM). L. Levally, Massbrook (G146043), 23 July 2008, EPA (DAM). L. More, Ballynagoraher (G115044), 12 September 2006, EPA (DAM). L. Washpool, Ballycarra (M219842), 15 August 2008, EPA (DAM): **Clare Island: L. Poirin Fuinch (L706857)**, June and August 1999 (Fahy, 2002). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625), 18 August 1968 (Murray, 1972). **ROSCOMMON: HA 26** - L. Annaghmore, Strokestown/Elphin (M902838), 15 July 2008, EPA (DAM). L. Glinn, Loughglinn, Castlerea (M629870), 25 August and 9 September 2008 (DAM). **SLIGO: HA 26** - L. Gara, Monastredan (M708996), 5 September 2008, EPA (DAM): **HA 34** - L. Talt, Gleneask (G402151), 18 June 2008, EPA (DAM): **HA 35** - L. Arrow, Ballinafad (G789123), 11 June 2008, EPA (DAM). L. Gill, Sligo (G782350), 11 June 2008, EPA (DAM). **WATERFORD: HA 17** - L. Carrigavantry, Tramore (S548022), 3 July 2009, EPA (DAM). **WESTMEATH: HA 25** - L. Ennell, Tudenham (N415466), 31 July 1966

(Murray, 1972). **WICKLOW: HA 9** - bog pool, Sally Gap, Featherbed Mountain (O130113), 8 July 1984, CCO (Gavin, 1989): **HA 10** - outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997).

***Ablabesmyia* sp. (dark pe)**

MAYO: HA 34 - L. Conn, south basin, Illannaglashy (G207070), 20 August 2008, EPA (DAM). **KERRY: HA 21** - Eagles L., Knocknagantee (V674728), 9 August 2005, JRB (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 27 August 2008, EPA (DAM).

***Anatopynia plumipes* (Fries, 1823)**

ANTRIM: HA 5 - L. Mourne, Carrickfergus (J415924), 7 April 2012 (PHL). **CAVAN: HA 26** - L. Sheelin, Gore Point (N439817), ex trout stomach, March 1983, PG (DAM): **HA 36** - L. Derrybrick, Milltown, Belturbet (H346117), 4 April 2007, EPA (DAM). **CLARE: HA 27** - L. Atedaun, Corrofin (R297884), 21 April 2009, EPA (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 7 April 2009, EPA (DAM). **DERRY: HA 3** - Downhill Lake, Downhill Forest, Coleraine (C757354), 17 March 1999 (Langton, 2004b). **DONEGAL: HA 37** - L. Shinvagh, Carricode (H005675), 28 March 2004 (PHL). L. Narath, Ballintra (G944670), 27 March 2004, (PHL). **KILDARE: HA 9** - pond, Lyons Estate, Celbridge (N972285), 14 March 1977, DAM (Murray and Ashe, 1983; Murray, 2005).

***Apsectrotanypus trifascipennis* (Zetterstedt, 1838)**

CLARE: HA 25 - L. Alewnaghta, Whitegate, north east shore (R764914), 23 September 2009, EPA (DAM). **DUBLIN: HA 9** - pond at Woodview, University College Dublin (O186203), 21 April 1981, GF/PJA (Murray, 2005), 1 April 1984 (Omoku, 1986) and 20 April 2005 (DAM). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 24 May 2003 (PHL): **HA 29** - L. Cutra, Gort (R485986), 24 May 2003 (PHL). Ballyturin L., Ballardiggan, Gort (M496005), 24 May

2003 (PHL). **LEITRIM: HA 26** - L. Boderg, Derrycarne, north west shore (N013915), 14 May 2008, EPA (DAM): **HA 35** - L. Glenade, Manorhamilton, south east shore (G831457), 10 June, 22 July and 4 September 2008, EPA (DAM). L. Glencar, Glencar (G757435), 2 September 2008, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 25 June, 27 August and 10 September 2008, EPA (DAM). **MAYO: HA 30** - L. Mask, Toormakeady, west shore (M113702), 24 June 2008, EPA (DAM): **HA 32** - L. Fin, Delphi (L841657), 12 July 2006, EPA (DAM). L. Feeagh, Newport (L975983), 24 July 2008, EPA (DAM). **MONAGHAN: HA 6** - L. Naglack, Carrickmacross (H853026), 3 May 2007, EPA (DAM). **ROSCOMMON: HA 26** - L. Meelagh, Keadew (G901117), 12 July 2008, EPA (DAM). L. Key, pier at Park (G848040), 11 June 2008; west shore (G838057), 6 August 2008; pier at Hogs Island (G825054), 9 September 2008, all EPA (all DAM). **TIPPERARY: HA 16** - R. Breaghagh, Archerstown (S140568), 22 May 1992 (Murray and Lynch, 1992). **WESTMEATH: HA 25** - stream supply to fish farm, Cullion (N430557), Royal Canal, Cullion (N424563), and Royal Canal, east of fish farm, Cullion (N431554), May 1990 (all Murray, 1990): **HA 26** - L. Killinure, Ballaghkeernan Bay (N069445), 24 April 2007, EPA (DAM). L. Ree, Coosan (N050450), 15 August 2007, EPA (DAM): **HA 36** - L. Bane, Collinstown (N550712), 24 July 2006, EPA (DAM).

***Arctopelopia barbitarsis* (Zetterstedt, 1850)**

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 4 May 1999 and 22 August 2001 (PHL). **ARMAGH: HA 3** - L. Neagh, Oxford Island, Lurgan (J044621), 18 July 2003 (PHL). **CAVAN: HA 7** - Park R., Virginia (N591882), 18 December 1967 (Murray, 1972). L. Cuilcagh, Virginia (N636895), 30 April 1968 (Murray, 1972). L. Mullagh, Mullagh (N680856), 23 May 1968 (Murray, 1972). **CLARE: HA 25** - L. Derg, d/s Killaloe (M705715), 18 September 2009, EPA (DAM): **HA 27** - L. Cullaun, Corrofin, mid east shore (R317905), 8 April 2009, EPA (DAM): **HA 28** - L. Keagh, Milltown Malbay, north shore (R100813), 11 June 2009, EPA (DAM). L. Naminna, Boolteagh (R180710), 15 September 2009, EPA (DAM).

CORK: HA 19 - L. Gouganebarra, Inchegeelagh (W009060), 8 May 1966 (Murray, 1972): **HA 20** - L. Curragalicky, Drinagh, Dunmanway (W234046), 9 April 2008, EPA (DAM): **HA 21** - L. Bofinna, Bantry (W041488), 8 April 2008, EPA (DAM). **DERRY: HA 3** - R. Bann, Coleraine: 13 May to 7 September 1999, 3 May to 3 July 2000, 26 April 2001, 30 June 2001, 4 May 2008 (all PHL). L. Neagh (H9080), no date (McLarnon and Carter, 2000); L. Neagh, Ballyronan (H948862), 10 May and 4 July 2000 (Langton, 2002) and 7 May 2001 (PHL). **DONEGAL: HA 36** - L. Avehy, Belalt (H043664), 27 April 2002 (PHL): **HA 38** - L. Nasnahida, Doocharry, Dunglow (B852076), 7 April 2009, EPA (DAM). L. Naweelogue, Glenveagh (B974185), 5 June 1985, LJH (DAM). L. Greenan, Kilmacrennan (C117262), 16 June 2009, EPA (DAM). L. Reelan, Reelan (C131272), 6 June and 15 July 2009, EPA (DAM): **HA 40** - L. Naminn, Cloonmany (C400423), 18 August 2011 (PHL). **GALWAY: HA 30** - L. Ballyquirke, Moycullen (M232317), 14 June 2007, EPA (DAM). L. Corrib, no location data (M1545), September 1964 (Murray, 1972) and 1980, BC (DAM). L. Maumwee, Maam Cross (L977485), 17 September 2007, EPA (DAM): **HA 31** - L. Loughanaure, Kilkieran (L828320), 16 April 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 6 April 2006, EPA (DAM): **HA 32** - L. Enask, Beaghcauneen (L662468), 4 April 2007, EPA (DAM). L. Nambrackmore, Ballinaboy-Toombeola (L716454), 5 April 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 9 July 2007, EPA (DAM). **KERRY: HA 21** - L. Currane, Waterville (V535664), 10 September 2008, EPA (DAM). **MAYO: HA 32** - L. Glencullin, south west shore, Delphi (L819696), 25 August 2008, EPA (DAM). L. Moher, Lisarneey, Westport (L977766), 21 April, 21 July and 18 September 2008, EPA (DAM): **HA 34** - L. Alone, Slieve Gamph, Ox Mountains (G367157), 22 April 2005, JRB (Murray, 2005): **Clare Island** - Creggan L., Lecarrow (L689857), June to November 1998 and 1999 (Fahy, 2002). L. Poirin Fuinch (L706857), July to October 1998 and June to November 1999 (Fahy, 2002). **ROSCOMMON: HA 26** - L. Funshinagh, Brideswell (M933513), 23 April and 11 September 2007, EPA (DAM). **TIPPERARY: HA 18** - Black L., Arra Mountains (R738771), 4 May 2005, JRB (DAM). L. Curra, Galtymore Mountain (R867242), 10 August 2005, JRB (DAM).

WESTMEATH: HA 26 - L. Coosan, Athlone (N055449), 11 September 2007, EPA (DAM).

WICKLOW: HA 10 - L. Bray Lower, Glenree (O140164), 4 June 1986 (DAM).

***Arctopelopia griseipennis* (van der Wulp, 1859)**

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 4 May 1999 (PHL). Killylane Reservoir, Magherabane, Larne (J292985), 8 May 1999 (PHL): **Rathlin Island** - pool east of lighthouse (D164520), 24 July 2000 (Langton, 2002). Ally L. (D154497), 5 July 2004 (PHL). L. Craigmacagan (D154498), 24 July 2000 (Langton, 2002). *Menyanthes* pool (D123515), 6 July 2004 (PHL). **CLARE: HA 27** - L. Bunny, south east shore, Aughrim (R377965), 2 May 2006 and 14 September 2009, EPA (DAM). L. Cullaun, Corrofin, mid east shore (R317905), 14 September 2009, EPA (DAM). L. Dromore, Ruan, Corrofin (R345858), 8 June 2006, EPA (DAM). L. Gortglass (Gortglass L.), north shore, Killadysert (R223599), 15 September 2009, EPA (DAM). L. Rosroe, Newmarket on Fergus, north east shore (R449697), 16 September 2009, EPA (DAM): **HA 28** - L. Naminna, north west shore, Boolteagh (R178710), 1 April 2009, EPA (DAM). **CORK: HA 19** - L. Allua, Ballingeary (W180652), 4 April 2008, EPA (DAM). L. Gouganebarra, Inchegeelagh (W009060), 22 April 1966 and 27 July 1968 (Murray, 1972): **HA 20** - L. Coolklure, Dunmanway (W177539), 16 September 2008, EPA (DAM). L. Skeagh (Schull Reservoir), Schull (V937338), 17 September 2008, EPA (DAM). L. Tooreen, Crookhaven (V790259), 10 April and 17 September 2008, EPA (DAM). R. Bandon, Bealabouy Bridge, Dunmanway (W257514), 25 August 1980 (Morgan, 1982). **DERRY: HA 3** - R. Bann, Coleraine (C854304), 12 April 1999 to 5 May 1999, 16 July 2000, 25 April 2010, 2 May 2010, 27 July 2012 (all PHL). L. Neagh, Ballyronan (H948862), 27 April and 4 May 1999 (PHL). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 23 July 2009, EPA (DAM): **HA 38** - L. an tSeisigh, Portnablugh (Sheephaven) (C043361), 7 September 2009, EPA (DAM). **GALWAY: HA 29** - L. Rea, east shore, Loughrea (M624153), 25 May 2003 (PHL): **HA 30** - L. Corrib Lower, Hurney (M258310), 18 April 1980, BC (DAM) and Moycullen (M271360), 11 April 2007, EPA (DAM): **HA 31** - L. Ahalia, north east shore (L971402), 22 April and 23

September 2009, EPA (DAM). L. Anaserd, Ballyconneely (L605443), 20 April, 2006, 4 April and 11 September 2007, EPA (DAM). L. Ardderry, Maam Cross (L982458), 17 September 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 12 September 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 12 September 2006, EPA (DAM): **HA 32** - L. Aughrusbeg, Cleggan (coastal) (L557582), 11 September 2007, EPA (DAM). L. Ballynakill, Cleggan (L639581), 3 April 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 4 April and 11 September 2007, EPA (DAM). **KERRY: HA 21** - L. Currane, Waterville (V535664), 18 June 2008, EPA (DAM). L. Eagle (Eagles L.), Knocknagantee (V674728), 9 August 2005, JRB (DAM): **HA 22** - L. Kilbrean, Killarney (W003933), 7 July 1973 (Douglas and Murray, 1980). L. Leane, Killarney, Castlough Bay (V966866), 27 June 1973; Fossa (V907913), 27 July 1973; Mahony's Point (V932912), 1973; Victoria Bay (V946900), 1973 (all Douglas and Murray, 1980); O'Sullivan's Cascade (V916886), 17 April 1973 (DAM); Muckcross Boathouse (V965866), 29 August 1987, NOM (LJH); Killarney (V931886), 22 April 2008, EPA (DAM). L. Muckcross (Muckcross Lake), Dundag Bay (V964858), 12 July 1972, DAM (Murray, 1974); July 1973 (Douglas and Murray, 1980); Kilbeg Bay (V960860), 1973 (Douglas and Murray, 1980). R. Flesk, White Bridge (V987904), 29 May 1973 (Douglas and Murray, 1980); u/s New Bridge (Bridgeview), Killarney (V973895), 1972, DJD and DAM (Ashe, 1982): **HA 23** - L. Gill, Castlegregory (Q603139), 29 April 2008, 25 June and 28 August 2008, EPA (DAM). **MAYO: HA 26** - L. Nanoge, Urlaur (M506903), 24 April 2008, EPA (DAM): **HA 30** - L. Aille, Westport (M071807), 18 September 2008, EPA (DAM). L. Carra, Keel Bridge, Ballinrobe (M165680), 26 April 1996 (Murray, 2005) and 28 April 2008, EPA (DAM): **HA 32** - L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM): **HA 33** - L. Acorrymore, Achill Island (F578057), 29 September 2004, DAM/WM (DAM): **HA 34** - L. Conn, south basin, Illannaglashy (G207070), 20 August 2008, EPA (DAM). L. Washpool, Ballycarra (M219842), 25 September 2008, EPA (DAM): **Clare Island** - bog pool, Maum (L709863), 28 April 2000. L. Leinapollbauty, Lecarrow (L691856), 5 June 2002. L. Creggan, Lecarrow (L689857), 21 August 2002 (all Murray and Murray, 2003): **MEATH: HA 7** -

tailings pond, Randalstown, Navan (N845714), 19 July and 12 September 1994 (DAM), 29 March 1996 (Finnegan, 1998), 26 April 1996 and 18 May 1996 (DAM). **OFFALY: HA 25** - bog lake, Turraun (N172185), 19 January 1998 and 11 February 1998 (emerged in laboratory from larvae collected in November 1997), WT (DAM). **ROSCOMMON: HA 26** - L. Annaghmore, Strokestown, Elphin (M902838), 2 September 2008, EPA (DAM). L. Key, Boyle (G838057), 6 August 2008, EPA (DAM). **WESTMEATH: HA 25** - L. Ennell, Tudenham (N415466), 27 July 1979, (DAM): **HA 26** - L. Killinure, Wineport (N067458), 15 August 2007, EPA (DAM). **WICKLOW: HA 10** - outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE and DAM (McEntee, 1997).

***Arctopelopia melanosoma* (Goetghebuer, 1933)**

KERRY: HA 22 - L. Leane, Killarney, O'Sullivan's Cascade (V916886), 17 April 1973, DJD/DAM (Murray, 2010).

***Clinotanypus (Clinotanypus) nervosus* (Meigen, 1818)**

ANTRIM: Rathlin Island - Ally L. (D154497), 5 July 2004 (PHL). L. Craigmacagan (D154498), 24 July 2000 (Langton, 2002). *Menyanthes* pool (D123515), 6 July 2004 (PHL). **CAVAN: HA 36** - L. Ardan, Milltown, Belturbet (H354124), 6 June 2007, EPA (DAM). L. Oughter, Killashandra (H349051), 6 June 2007, EPA (DAM). **CLARE: HA 27** - L. Bridget, north basin, Derrymore, Badyke (R563803), 12 June 2009, EPA (DAM). Castle Lake, Kilmurry, Sixmilebridge, south west shore (R481688), 12 June 2009, west shore, 17 July 2009, EPA (DAM). L. Cullaun, Corrofin, east shore (R317905), 16 June 2009 EPA (DAM). L. Dromore, mid basin, Ruan, Corrofin (R352864), 16 June 2009, EPA (DAM). L. Inchicronan, Crusheen, east basin (R398866), 15 June 2009 and west basin (R391860), 9 July 2009, EPA (DAM). L. Rosroe, Newmarket on Fergus (R448697), 16 June 2009, EPA (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 17 June 2009, EPA (DAM). **CORK: HA 20** - L. Tooreen, Crookhaven (V790259), 17 June 2008, EPA (DAM). **DERRY: HA 3** - L. Neagh, location unspecified

(H9080), no date (McLarnon and Carter, 2000). **FERMANAGH: HA 36** - L. Erne, Upper, Crom Castle shore, Newtownbutler (H357244), 27 June 2000 (Langton, 2002). L. Inver (Inver L.), Rosslea (H518314), 28 June 2000 (Langton, 2002). Stream, Lisnaskea (H384306), 27 June 2000 (Langton, 2002). **GALWAY: HA 30** - L. Ballyquirke, Moycullen (M232317), 14 June 2007, EPA (DAM): **HA 31** - L. Aunwillan, Carraroe (L936255), 7 June 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June 2007, EPA (DAM): **HA 32** - L. Tully, Tully Cross (L695618), 19 July 2007, EPA (DAM). **KERRY: HA 22** - Muckcross Lake, Dundag Bay (V964858), 5 July 1973 (Douglas and Murray, 1980). **LIMERICK: HA 24** - L. Bleach (Bleach Lake), Pallaskenry (R441569), 13 June 2009, EPA (DAM). **MAYO: HA 30** - L. Aille, Aille, Westport (M071807), 24 June 2008, EPA (DAM). R. Owenwee, Belclare, Westport (L968826), 1910, JNH (Grimshaw, 1912). L. Moher, Liscarney, Westport (L977766), 24 June 2008, EPA (DAM): **HA 34** - L. Lannagh, Castlebar L., Castlebar (M105880), 30 June 2008, EPA (DAM). **MEATH: HA 7** - R. Blackwater, Carnaross Bridge (N685779), 4 November and 12 December 1975 and Donaghpatrick Bridge (N819723), 4 November 1975, as larvae (O'Flaherty, 1976). **MONAGHAN: HA 6** - L. Naglack, Carrickmacross (H853026), 12 July 2007, EPA (DAM): **HA 36** - L. Drumlona, Rockcorry (H636176), 11 July 2007, EPA (DAM). **OFFALY: HA 25** - bog lake, Turraun (N172185), June 1998 (DAM). **ROSCOMMON: HA 26** - L. Cavetown, Boyle (M832974), 11 June 2008, EPA (DAM). L. Glinn, Loughglinn, Castlerea (M629870), 12 June 2008, EPA (DAM). L. Grange (Grange L.), Greywood, Strokestown (M938857), 25 June 2008, EPA (DAM). **WATERFORD: HA 17** - Belle Lake, Dunmore East (S665049), 7 July 1974, DJD (DAM). **WESTMEATH: HA 26** - L. Killinure, Ballaghkeernan Bay (N069445), 26 June 2007, EPA (DAM).

***Conchapelopia (Conchapelopia) hittmairorum* Michiels and Spies, 2002**

[Pupal exuviae records for this species prior to 2002 had been determined as *Conchapelopia* sp., *Conchapelopia* Pe1 (sensu Langton, 1991) or misdetermined as *C. pallidula*. See Murray (2006b) for details.]

CARLOW: HA 12 - R. Slaney, Motabower Bridge (S832778), 28 July 1981 (Hayes, 1991). **CLARE: HA 25** - L. Derg, d/s Killaloe (M705715), 17 June 2009, EPA (DAM). **DONEGAL: HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **GALWAY: HA 30** - L. Corrib Upper, Oughterard (M138486), 11 June 2007, EPA (DAM). **KERRY: HA 22** - R. Flesk, d/s Whitebridge (V987900), July 1976 (Ashe, 1982) and 23 July 1979, PJA (Murray, 2006b); u/s New Bridge (Bridgeview), Killarney (V973895), 27 July 1973 (Murray, 2005). **MAYO: HA 30** - L. Corrib Upper, Kitteen's Bay, Oughterard (M110463), 25 June 2010, JRB (DAM). **MEATH: HA 7** - R. Boyne, Kilcarn Bridge, Navan (N884657), 18 August 1995 (DAM). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627) and Ballyforan (M817464), 16 July 1981 (Hayes, 1991). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992), 31 August 1981 (Hayes, 1991). **WEXFORD: HA 12** - R. Slaney, Edernline Bridge (S977345), 29 July 1981 (Hayes, 1991; Murray, 2005). **WICKLOW: HA 10** - R. Glencullen (Glencullen R.), Knocksink (O218180), 18 May 1987, DEM/DAM (Morgan, 1989).

Conchapelopia (Conchapelopia) melanops (Meigen, 1818)

ANTRIM: HA 3 - R. Clogh (Clogh R.), Clough Mills (D105109), 2 July 2000 (Langton, 2002). Glenravel Water, Gartnageeragh, Newtown Crommelin (D147154), 2 July 2000 (Langton, 2002). Templewell Pond, Templepatrick (J232856), 26 July 2008 (PHL): **HA 4** - R. Bush, Conogher Bridge (C963305), 10 September 2000 and Ballyhoe Bridge (D077294), 2 July 2000 (Langton, 2002): **HA 5** - L. Mourne, Carrickfergus (J415924), 8 May 1999 (PHL). **ARMAGH: HA 3** - L. Neagh, Oxford Island, Lurgan (J044621), 18 July 2003 (PHL). **CAVAN: HA 7** - L. Drumkeery, Baileborough (H663002), 12 June 2007, EPA (DAM). L. Acurry, Baileborough (N584990), 5 July 2007, EPA (DAM). **CLARE: HA 25** - L. Graney, Drumandora, west shore (R553938), 15 June 2009, EPA (DAM): **HA 27** - L. Rosroe, Newmarket on Fergus, south east shore (R442681), 12 August 2009, EPA (DAM). L. Cullaunyeeda, Kilkishen (R488746), 13 August and 17 September 2009, EPA (DAM). **CORK: HA 20** - L. Curragalicky, Drinagh,

Dunmanway (W234046), 17 June 2008, EPA (DAM). R. Bandon, Long Bridge, Dunmanway (W242631), 25 August 1980; Bealabouty Bridge, Dunmanway (W257514), 25 August 1980; u/s Ballineen (W331537), 25 August 1980 and 25 September 1980; 2.5km d/s Bandon (W516569), 25 August 1980 and 25 September 1980 (all Morgan, 1982). **DERRY: HA 1** - Upper Reservoir, Creggan, Derry (C417173), 10 May 2001 (PHL); inflow to Upper Reservoir, Creggan, Derry (C413171), 10 May 2001, 18 May 2001 and 18 May 2002 (PHL): **HA 2** - R. Bessbrook, Limavady (C655212), 9 June 2000 (Langton, 2002). R. Roe, Largy Bridge, Limavaddy (C681202), 14 July 2000 (Langton, 2002): **HA 3** - Downhill Forest Stream, Coleraine (C759348), 21 August 2001 (PHL). R. Bann, Coleraine (C854304), 30 May, 10 June, 18 June, 24 July, 7 September 1999, 25 May, 31 May, 13 June, 16 July 2000, 16 June 2001, 27 July, 3 August, 10 August, 17 August, 24 August 2012 (PHL). L. Neagh, Ballyronan (H948862), 22 August 2001, 31 May 2011 (PHL). R. Moyola, New Bridge, Magherafelt (H955905), 7 May 2001 (PHL). **DONEGAL: HA 1** - L. Mourne, Ballybofey (H069900), 9 June 2009, EPA (DAM): **HA 38** - R. Gweedore (outflow from L. Anure), Crolly (B827184), 19 July 2000 (Langton, 2002). L. Veagh, GNP, Glenveagh, north east shore (C039230), 22 August 1985, LJH (Heneghan, 1986; Murray, 2005). Owennacally stream, Glenveagh (C043226), 19 July 2000 (Langton, 2002). L. Nadourcan, Glenveagh (C054228), 18 July 2000 (Langton, 2002). L. Greenan, Loughsalt, Kilmacrennan (C117262), 16 June 2009, EPA (DAM). L. Reelan (C131272), 6 June 2009, EPA (DAM). L. Fallaneas, Kindrum (C173424), 30 April 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 9 September 2009, EPA (DAM). **DUBLIN: HA 9** - R. Dodder, Fort Bridge, Bohernabreena (O009242), 31 May 1967 (Murray, 1972); Landsdown Road Bridge (O180327), 18 June and 7 July 1967 (Murray, 1972). Upper Bohernabreena Reservoir (O095219), 3 May 1946, 30 April 1947 and 8 July 1948, CFH (DAM). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002): **HA 36** - L. Macnean, Lower, Belcoo (H085384), 29 June 2000 (Langton, 2002). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 25 April 2003 (PHL): **HA 26** - R. Tirur, Newbridge (M492699), 16 August 1981 (Hayes, 1991): **HA 30** - L. Beaghcauneen,

Ballinaboy (L679470), 6 June 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 31 July 2007, EPA (DAM). L. Maumwee, Maam Cross (L977485), 12 July 2007, EPA (DAM). L. Ross, Moycullen (M200363), 25 May 2003 (PHL): **HA 32** - L. Nambrackmore, Ballinaboy-Toombeola (L716454), 6 June 2007, EPA (DAM). **KERRY: HA 21** - L. Derriana, Waterville (V621740), 18 June 1967, JPOC (DAM). L. Brin, Derreeny (V780775), 13 July 2008, EPA (DAM). L. Eagle (Eagles L.), Knocknagantee (V674728), 9 August 2005, JRB (DAM). L. Eirk (Erik L.), Derrygarriff (V881777), 9 August 2005, JRB (DAM): **HA 22** - L. Acoose, Slievanore, Killorglin (V755854), 9 July 2008, EPA (DAM). L. Caragh, Killorglin (V719904), 15 July 2008, EPA (DAM). L. Cummernamuck, Killorglin (V745897), 18 July 2008, EPA (DAM). L. Leane, Killarney, Peninsula Bay (V940860), 1973 and Victoria Bay (V946900), 1973 (Douglas and Murray, 1980). L. Muckcross (Muckcross Lake), Dundag Bay (V964858), 12 July 1972 (Murray, 1974) and 13 August 1973, DAM (Douglas and Murray, 1980; Murray, 2005). R. Flesk, Killarney, d/s Whitebridge (V987900), July and August 1978 (Ashe, 1982); u/s Newbridge (V978900), 25 July 1974 (Douglas and Murray, 1980). R. Loo, Aughnanus Bridge, Crohane (W045790), July and August 1978 (Ashe, 1982): **HA 23** - L. Cam, Castlegregory (Q597079), 29 August and 18 September 2008, EPA (DAM). **KILDARE: HA 9** - Royal Canal, adjacent Gleneaston Wood, Leixlip (N987365), 3 May 2006 (DAM). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436) and Brownsbarn Bridge (S618391), 28 August 1981 (Hayes, 1991). **LAOIS: HA 15** - R. Nore, Kilbricken (S362898), 27 August 1981 (Hayes, 1991). **LEITRIM: HA 26** - L. Boderg, Derrycarne, north west shore (N013915), 10 September 2008, EPA (DAM). **MAYO: HA 32** - L. Doo, Delphi, west shore (L835681), 12 July 2006, 25 August 2008, EPA (DAM). L. Glencullin, Delphi, south west shore (L819696), 25 August 2008, EPA (DAM). R. Burleemslough, Clapper Bridge Ford, Killeen (L754759), 5 August 2004, DAM/WM (DAM). L. Moher, Liscarney, Westport (L977766), 21 July 2008, EPA (DAM). L. Knappabeg, Westport (M010803), 23 July 2008, EPA (DAM): **HA 33** - bog pools, Glenamoy (F896345), August 1973, CD (Dowling, 1975; Dowling and Murray, 1981). **MEATH: HA 6** - R. Dee, Drumconrath (N910894), 27 July 1983 (Hayes, 1991): **HA 7** - R.

Boyne, Bellinter Bridge (N894625), 11 August and 31 August 1999, DAM/WM (DAM); Ardsallagh, adjacent St Bridget's Well (N897635), 16 June 1974 and 6 September 1981 (DAM), 7 July 1988, (Murray, 1988); Stackallen Bridge (N917713), Slane Bridge (N965737), Oldbridge (O045761) and d/s Oldbridge (O062753), all 19 July 1989 (all DAM): **HA 8** - Meadesbrook, Kilmoon, lawn (O040594), 5 October 1999 and stream/pond (O038594), 31 May 1974, 30 April 1992, 9 June 2006 (all DAM). R. Nanny, road bridge u/s Duleek (O035655), 6 June 2006, DAM/WM (DAM). **MONAGHAN: HA 6** - L. Naglack, Carrickmacross (H853026), 3 May 2007, EPA (DAM). **OFFALY: HA 25** - R. Little Brosna, Ryan's Cross (S053882), 2 September 1982 (Hayes, 1991). **ROSCOMMON: HA 26** - L. Cavetown, Boyle (M832974), 11 June 2008, EPA (DAM). L. Key, Boyle (pier in Forest Park) (G848040), 11 June 2008, EPA (DAM). **SLIGO: HA 26** - L. Gara, Monastredan (M708996), 5 September 2008, EPA (DAM): **HA 34** - R. Moy, Cloonacool (G493168), 30 August 1982 (Hayes, 1991): **HA 35** - L. Gill (G782350), 11 June 2008, EPA (DAM). R. Easky, Easky (G377378), 19 August 1983 (Hayes, 1991). **TIPPERARY: HA 15** - R. Nore, Clonakenny (S116805), 27 August 1981 (Hayes, 1991): **HA 16** - R. Suir, Loughmore (S120670), 6 July 1992 (Murray and Lynch, 1992); Rossestown Bridge (S134624), 6 July 1992 (Murray and Lynch, 1992). **WESTMEATH: HA 25** - stream supply to fish farm, Cullion (N430557), May 1990 (Murray, 1990). R. Brosna, 25m d/s fish farm, Cullion (N431556), May 1990; 200m d/s fish farm, Cullion (N432556), May 1990 (all Murray, 1990). Royal Canal, Cullion (N424563), May 1990 (Murray, 1990): **HA 26** - L. Ree, Coosan (N050450), 15 August 2007, EPA (DAM). **WEXFORD: HA 11** - R. Ounvarra, Ballycanew (T153519), 6 May 2006, DAM/WM (DAM). **WICKLOW: HA 10** - R. Glencullen (Glencullen R.), Knocksink (O218180), 18 May 1987, DEM/DAM (Morgan, 1989).

***Conchapelopia (Conchapelopia) pallidula* (Meigen, 1818)**

ANTRIM: HA 4 - R. Bush, Stranocum (D009307) and Ballyhoe Bridge (D077294), 2 July 2000 (Langton, 2002). R. Glendun, Drumfresky, Cushendun (D193308), 2 July 2000 (Langton,

2002). R. Glenariff, Cushendall (D215205), 2 July 2000 (Langton, 2002). **CORK: HA 18** - R. Blackwater, Duncannon (W180931), 2 September 1981 and Killavullen (W648998), 31 August 1981 (Hayes, 1991): **HA 20** - R. Bandon, u/s Ballineen (W331537), 30 June and 25 August 1980; Ballineen Bridge (W434538), 27 May and 25 August 1980; Castle Bernard (u/s Bandon) (W472546), 30 June 1980; 2.5km d/s Bandon (W516569), 27 May and 30 June 1980 (all Morgan, 1982). **DERRY: HA 2** - R. Owenbeg, Feeny (C645058), 26 June 2000 (Langton, 2002). R. Bessbrook, Limavady (C655212), 9 June 2000 (Langton, 2002). R. Roe, Deerpark Wood, Limavaddy (C682203), 9 June 2000 and Largy Bridge, Limavaddy (C681202), 14 July 2000 (Langton, 2002). Castle R., Ardmore Bridge, Limavady (C706207), 9 June 2000 (Langton, 2002). Burn at Largantea picnic area, Formoyle, Coleraine (C738287), 9 June 2000 (Langton, 2002): **HA 3** - Downhill beach stream, Coleraine (C754326), 9 June 2000 (Langton, 2002); Downhill Forest Stream, Coleraine (C759348), 25 July 1999 (PHL). R. Agivey, ford at Ballynameen (C827148), 14 June 2008 (PHL). R. Macosquin, Black Bridge, Ballylintagh (C854256), 26 May 2000 (Langton, 2002). R. Bann, Coleraine (C854304), 5 May 1999, 25 May 2000, 7 June 2000, 16 June 2001 (PHL). **DONEGAL: HA 36** - R. Erne, Ballyshannon (G878614), July 1993 (DAM): **HA 37** - R. Stragar, Duninkeely (G727792), 10 August 1982 (Hayes, 1991): **HA 38** - R. Tullaghobeg, Millmount (B933304), 12 August 1982 (Hayes, 1991): **HA 39** - R. Swilly (Swilly R.), Newmills, Letterkenny (C125092), 18 July 2000 (Langton, 2002). R. Crana, Buncrana (C347328), 15 August 1982 (Hayes, 1991). **DOWN: HA 3** - Upper R. Bann, New Bridge, Hilltown (J238288), 29 May 1998 (PHL). R. Carcullion, Hilltown (J213275), 18 June 1997 (PHL). R. Kinnahalla, Hilltown (J239292), 29 May 1998 (PHL). **DUBLIN: HA 9** - R. Dodder, Fort Bridge, Bohernabreena (O009242), 24 June 1968 and 23 August 1968 (Murray, 1972). **FERMANAGH: HA 36** - R. Colebrook, Killarbran Bridge, Killarbran (H416441), 4 June 1997 (PHL). R. Colebrook tributary, Raw (H424426), 3 October 1997 (PHL). **GALWAY: HA 30** - R. Cregg, Addergsole Bridge (M324350), 16 August 1981 (Hayes, 1991): **HA 31** - L. Nahasleam, Maam Cross, south (L972440), 7 June 2007, EPA (DAM): **HA 32** - R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes,

1991). **KERRY: HA 22** - Muckcross Lake, Dundag Bay (V964858), July 1973 (Douglas and Murray, 1980). R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Clydagh, u/s Clydagh Bridge (W114826), June to August 1978 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814), Garries Bridge (W082835) and Flesk Bridge (W034876), June to August 1978 (Ashe, 1982); White Bridge (V987904), 29 May 1973 (Douglas and Murray, 1980); d/s Whitebridge (V987900), 21 July 1978, PA (Ashe, 1982; Murray, 2005), 10 August 1978, PJA (PJA/NMI); New Bridge, Killarney (V968896), 30 May 1973 (Douglas and Murray, 1980); d/s New Bridge (V963885), June to August 1978 (Ashe, 1982); u/s L. Leane (V964894), 27 July 1976, PJA (Murray, 2005), June to August 1978 (Ashe, 1982). R. Laune, Beaufort Bridge (V880920) and Ferry Bridge (V891912), July 1973 (Douglas and Murray, 1980). R. Loo, Aughnanus Bridge, Crohane (W045790), June to August 1978 (Ashe, 1982). R. Torc, above waterfall, Killarney (V964835), 1973 (Douglas and Murray, 1980). **LAOIS: HA 15** - R. Nore, Kilbricken (S362898), 27 August 1981 (Hayes, 1991). **LEITRIM: HA 35** - R. Owenmore, Manorhamilton (G881392), June 1991, JL/DAM (DAM). **MAYO: HA 32** - Westport L., Westport Woods Hotel, Westport (L985843), 7 May 2004, DAM/WM (DAM): **HA 33** - bog pool, Sraheen, Achill Island (F716005), 6 May 2004, DAM/WM (DAM). **MEATH: HA 7** - R. Boyne, Ardsallagh, adjacent St Bridget's Well (N897635), 7 July 1988 (Murray, 1988); Kilcarn Bridge, Navan (N884657), 21 August 1988 (Murray, 1988); Knowth Weir (N995720), 19 July 1989 (DAM): **HA 8** - R. Nanny, road bridge u/s Duleek (O035655), 6 June 2006, DAM/WM (DAM). **OFFALY: HA 25** - R. Little Brosna, Milltown Park (S068907), 2 September 1982 (Hayes, 1991). **SLIGO: HA 34** - R. Moy, Cloonacool (G493168), 30 August 1982 (Hayes, 1991): **HA 35** - R. Drumcliff, Glencar (G734430), 19 August 1983 (Hayes, 1991). **TYRONE: HA 1** - Dennet Stream, Essbeg Bridge, Lisnaskee (H384306), 27 June 2000 (Langton, 2002). **WESTMEATH: HA 26** - R. Shannon, Athlone (N005405), no date (Edwards, 1929). **WEXFORD: HA 12** - R. Slaney, Ballycarney (S967488), 29 July 1981 (Hayes, 1991). **WICKLOW: HA 10** - R. Glencullen, Knocksink (O218180), 18 May 1987, DEM/DAM (Morgan, 1989). R. Avonbeg, Meetings Bridge (T188831), 11 July 1997, FC/DAM and 27 Oct

1997, FC (Curran, 2001). R. Avonmore, Lion Arch Bridge (T194833), 11 July 1997, FC/DAM (Curran, 2001). R. Avoca, Whitebridge, Tigroney (T198821), 11 July 1997 (Curran, 2001); Avoca Village (T203802), 11 July 1997 (Curran and Murray, 2001) and October 1997 (Curran, 2001): **HA 12** - R. Derry, Bridgeland (T021744), 29 July 1981 (Hayes, 1991). R. Slaney, Stratford Bridge (S895930), 28 July 1981 (Hayes, 1991).

***Conchapelopia (Conchapelopia) viator* (Kieffer, 1911)**

ANTRIM: HA 3 - R. Kells (Kells R.), Shank Bridge, Kells (J126982), 20 June 2000 (Langton, 2002). **CARLOW: HA 12** - R. Slaney, Motabower Bridge (S832778), Kilcarry Bridge (S893624) and Kildavin (S899597), 28 July 1981 (Hayes, 1991). R. Derreen, Acann Bridge (S900781), 29 July 1981 (Hayes, 1991). **CAVAN: HA 36** - R. Erne, Dingin's Bridge (N331948), 27 August 1982 (Hayes, 1991); R. Erne, Drumbarry (N462951), 17 August 1982 (Hayes, 1991). **CLARE: HA 28** - R. Annageeragh, Knocknaghila Bridge, d/s L. Doo (R057710), 9 July 1973, JPOC (DAM) and Moyglass Bridge (R078725), 30 July 1982 (Hayes, 1991). **CORK: HA 18** - R. Blackwater, Ballymacquirk Bridge, Banteer (W382989), 1 September 1981; Lombardstown (W463968), 1 September 1981; Killavullen (W648998), 31 August 1981 (all Hayes, 1991): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 25 August 1980; Bealabouy Bridge, Dunmanway (W257514), 30 June, 25 August and 25 September 1980; u/s Ballineen (W331537), Ballineen Bridge (W434538),; Castle Bernard (u/s Bandon) (W472546) and 2.5km d/s Bandon (W516569), 27 May, 30 June, 25 August and 25 September 1980 (all Morgan, 1982). R. Ilen, Drimoleague (W098454), Madore (W103419) and Hollybrook (W117363), 24 August 1983 (Hayes, 1991). R. Ovane, Pierson's Bridge (W023454), 24 August 1983 (Hayes, 1991). **DERRY: HA 3** - R. Bann, Coleraine (C854304), 23 June 1999, 17 May 2000 to 7 June 2000 (PHL). **DONEGAL: HA 37** - R. Corabber, Grenna Bridge, above L. Eske (G976863), 22 August 1984 (DAM). R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991): **HA 38** - R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). R. Owenveagh, Glenbeagh Cottage, Glenveagh (B990178), 30 June

1985 (Heneghan, 1986). Owenacally stream, Glenveagh (C043226), 19 July 2000 (Langton, 2002). R. Owencarrow, d/s road bridge, Glenveagh (C043235), 18 July 2000 (Langton, 2002). **GALWAY: HA 31** - L. Ballynahinch, Ballynahinch (L777478), 6 June 2007, EPA (DAM). R. Owentouey, Tullywee Bridge, Recess (L873474), 18 August 1981 (Hayes, 1991). **KERRY: HA 18** - R. Blackwater, Lacknastooka (R153008), 2 September 1981 (Hayes, 1991): **HA 22** - R. Caragh, Blackstones Bridge, d/s R. Acoose confluence (V710864) and at L. Caragh outflow (V713924), 4 August 1975, CD (Dowling *et al.*, 1981). R. Clydagh, u/s Clydagh Bridge (W114826), June to August 1978 and 1979 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814), Garries Bridge (W082835) and Flesk Bridge (W034876), June to August 1978 and 1979 (Ashe, 1982); White Bridge (V987904), 29 May 1973 (Douglas and Murray, 1980); d/s Whitebridge (V987900), 1 August 1974 (Murray, 2005), 26 July 1976, PJA (DAM), June to August 1978 (Ashe, 1982); u/s L. Leane (V964894), June to August 1978 (Ashe, 1982); R. Flesk, d/s New Bridge (V963885), June to August 1978 (Ashe, 1982). R. Laune, Beaufort Bridge (V880920), July 1973 (Douglas and Murray, 1980). R. Loo, Aughnanus Bridge, Crohane (W045790), June to August 1978 (Ashe, 1982). **KILDARE: HA 9** - R. Liffey, Sallins (N881245), 17 July 1983 (Hayes, 1991). **LEITRIM: HA 35** - R. Owenmore, Manorhamilton (G881392), June 1991, JL/DAM (DAM). **MAYO: HA 32** - L. Doo, Delphi, west shore (L835681), 12 July 2006, EPA (DAM). R. Carrowinsky, Killeen, Carrowinsky (L770773), 5 August 2004, DAM/WM (DAM). R. Bunowen, Louisburg (L807807), 5 August 2004, DAM/WM (DAM). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625), 23 July 1968 (Murray, 1972); Slane Bridge (N965737), Knowth Weir (N995720) and d/s Oldbridge (O062753), 19 July 1989 (DAM). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981; Athleague (M825758) and Mount Talbot (M813531), 14 August 1981; Ballyforan (M817464), 16 July 1981 and 28 July 1982; Newtown (M844346), 15 August 1981 (all Hayes, 1991). **SLIGO: HA 34** - R. Moy, Cloonacool (G493168), 30 August 1982 (Hayes, 1991). **WEXFORD: HA 12** - R. Boro, Dunamore Bridge, Enniscorthy (S963366), 29 July 1981 (Hayes, 1991). R. Slaney, Clomahon (S933534) and Ederline Bridge (S977345), 29 July 1981

(Hayes, 1991). **WICKLOW: HA 10** - R. Glencullen, Knocksink (O218180), 13 July 1987 (Gavin, 1986) and 18 May 1987, DEM/DAM (Morgan, 1989). Outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997). R. Avonmor, Laragh Bridge (T144965), 24 June 1996, MKQ (DAM): **HA 12** - R. Slaney, Knickeen, Glen of Imaal (S987948); Knockgarrigan, Glen of Imaal (S936937) and Kilmurray (S889856), 28 July 1981 (Hayes, 1991).

***Guttipelopia guttipennis* (van der Wulp, 1861)**

KERRY: HA 22 - L. Doo (Doolough), Muckross Peninsula (V949860), 5 July 1973, DAM (Douglas and Murray, 1980; Murray, 2005). **WATERFORD: HA 16** - L. Ballyscanlan (Ballyscanlan Reservoir), Tramore (S540030), 19 August 2009, EPA (DAM).

***Krenopelopia binotata* (Wiedemann, 1817)**

DONEGAL: HA 38 - R. Ray, Muckish Gap (B993268), 12 August 1982 (Hayes, 1991). **DUBLIN: HA 9** - railway foot bridge, Blackrock (O220294), 5 June 1968, DAM (Murray, 1972).

***Krenopelopia nigropunctata* (Staeger, 1839)**

GALWAY: HA 31 - L. Shindilla, Derreennacreeva, Maam Cross (L958460), 16 May and 20 June 2006, EPA (DAM). **LOUTH: HA 6** - Tinure Marsh, Collon (O020835), 14 May 1985, BH (Murray, 2005). **MAYO: HA 32** - R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972): **HA 33** - stream, Keem, Achill Island (F561045), 5 August 2004, DAM/WM (DAM): **Clare Island** - coastal roadside, Bayview Hotel (L717857), 20 August 2002 (Murray and Murray, 2003). **MEATH: HA 8** - pond, Meadesbrook, Kilmoon (O038594), 14 June 1968 (Murray, 1972).

***Labrundinia longipalpis* (Goetghebuer, 1921)**

GALWAY: HA 31 - L. Anaserd, Ballyconneely, 20 June and 10 July 2006, 6 June and 17 July 2007, EPA (Murray, 2010).

***Larsia atrocincta* (Goetghebuer, 1942)**

CLARE: HA 27 - L. Cullaun, Corrofin (mid east shore) (R317905), 4 July 2006, EPA (EPA). **DONEGAL: HA 38** - L. Glen, Glen (C105292), 29 July 2009, EPA (DAM): **HA 39** - L. Gartan, Church Hill (C055159), 22 July 2009, EPA (DAM). L. Gartan, Church Hill, north shore (C065173), 18 July 2000 (Langton, 2002). **GALWAY: HA 31** - L. Ballynahinch, Ballynahinch (L777478), 6 June 2007, EPA (DAM). **KERRY: HA 22** - L. Guitane, Crohane, Killarney (W025846), 8 July 2008, EPA (DAM). Muckcross Lake, Killarney, Dundag Bay (V964858), 12 July 1972 (Murray, 1974) and July 1973 (Douglas and Murray, 1980). R. Caragh, d/s Owenroe confluence (V720815), Bealalaw Bridge (V715832) and Blackstones Bridge, d/s R. Acoose confluence (V710864), 1975, CD (Dowling *et al.*, 1981). R. Loo, Aughnanus Bridge, Crohane (W045790), July to August 1978 and 1979 (Ashe, 1982). **LEITRIM: HA 35** - L. Annary, Dromahair (G817338), 10 June 2008, EPA (DAM). **LIMERICK: HA 24** - Bleach L., Pallaskenry (R441569), 13 June 2009, EPA (DAM). **MAYO: Clare Island** - Creggan L., Lecarrow (L689857), July to October 1998 and June to October 1999 (Fahy, 2002). L. Poirtin Fuinch (L706857), 10 June 1999 (Fahy, 2002). **MEATH: HA 7** - R. Boyne, Ardsallagh, adjacent to St Bridget's Well (N897635), 16 June 1974, 8 June and 15 June 1980 and 16 August 1984, (DAM). **SLIGO: HA 35** - L. Gill, Sligo (G782350), 11 June 2008, EPA (DAM).

***Larsia curticalcar* (Kieffer, 1918)**

GALWAY: HA 30 - L. Anillaun, Maam Cross (L980470), 8 June 2007, EPA (DAM): **HA 31** - L. Shindilla, Derreennacreeva, Maam Cross (L958460), 7 June 2007, EPA (DAM). **KERRY: HA 22** - L. Cummernamuck, Killorglin (V745897), 9 September 2008, EPA (DAM). **MAYO: HA 32** - L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM): **HA**

33 - bog pool, R. Glenamoy basin, Glenamoy (F896345), 18 August 1972, CD (Murray, 2005).

***Macropelopia (Macropelopia) adauca* Kieffer, 1916**

ANTRIM: HA 3 - L. Neagh, Lennymore Bay (J115745), March 1969 (Marks and Henderson, 1970). **CLARE: HA 27** - Gortglass L., Killydysart (R223599), 30 September 1964 (Murray, 1972). L. Muckanagh, Tubber, Corrofin (R370922), 14 September 2009, EPA (DAM): **HA 28** - L. Acrow, Lisscasey (R193687), 4 September 2006, EPA (DAM). L. Keagh, Milltown Malbay, north shore (R100813), 15 September 2009, EPA (DAM) and 19 September 2012 (DAM). Quarry pond near L. Keagh (R097809), 19 September 2012 (DAM). L. Naminna, Boolteagh (R180710), 15 September 2009, EPA (DAM). **CORK: HA 19** - L. Gouganebarra, Inchegeelagh (W009060), 3 May 1966 (Murray, 1972): **HA 20** - L. Skeagh (Schull Reservoir), Schull (V937338), 27 August and 17 September 2008, EPA (DAM). L. Tooreen, Crookhaven (V790259), 17 September 2008, EPA (DAM). R. Bandon, Ballineen Bridge (W434538), 25 August 1980, GM (Morgan, 1982): **HA 21** - L. Glenbeg, Ardgroom (V706530), 3 September 2008, EPA (DAM). **DERRY: HA 2** - pond, Binevenagh, Coleraine (C691305), 25 August 2001 (PHL): **HA 3** - Howell's Tarn, Ballywildrick, Coleraine (C766325), 7 April and 21 April 2002 (PHL). Glenullin Bog, R. Agivey catchment, Garvagh (C795132), 7 June and 29 June 2008 (PHL). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 23 July 2009, EPA (DAM): **HA 37** - Carn L., Blue Stack Mountains (G871886), 27 July 2005, JRB (DAM). R. Stragar, Killybegs (G730787), 23 August 1984 (DAM). L. Shinvagh, Carricode (H005675), 27 April 2002 (PHL): **HA 38** - L. Dunglow, west shore, Dunglow (B782119), 17 June and 5 August 2009, EPA (DAM). L. Anure, east shore, Loughanure (B818162), 17 June and 7 September 2009, EPA (DAM). L. Nabuckan, Grogan More (B850184), 27 July 2005, JRB (DAM). L. Nasnahida, Doocharry, Dunglow (B852076), 6 August 2009, EPA (DAM). L. Dunlewey, Dunlewey (B926193), 19 July 2000 (Langton, 2002). L. Barra, Commeen (B935119), 10 June 2009, EPA (DAM). L. Veagh, Glenveagh, south shore (C002187), 16 August 1985; Derrylahane, north west shore (C037233), 24 July 1985, POD (Heneghan, 1986); north east

shore, 22 August 1985 (Heneghan, 1986) and 27 June 1988, DAM (DAM). Bog pool, Glenveagh (C040203), 24 May 1986 (Heneghan, 1986). L. Nadourcan, Glenveagh (C054228), 18 July 2000 (Langton, 2002). L. Voriskey, The Rosses (B762176), 19 July 2000 (Langton, 2002): **HA 40** - L. Naminn, Cloonmany (C400423), 18 August 2011 (PHL). Bog pool, Rowantree Hill, Moville (C551401), 18 August 2011 (PHL). **DOWN: HA 3** - R. Shanky, Batts Bridge, Hilltown (J226257), 26 September 1997 (PHL). R. Rocky, Hilltown (J242268), 28 September 1998 (PHL). Glenaveagh stream, Glenaveagh Bridge (J255284), 28 August 1998 (PHL). **DUBLIN: HA 9** - Upper Reservoir, Bohernabreena (O095219), 2 April and 26 June 1947 (Fitzgerald, 1947). Bog pool, Featherbed (O115217), 26 July 1949 (Reilly, 1951); bog pool, Featherbed (O120190), March 1974, CD (Dowling, 1975; Dowling and Murray, 1981). **FERMANAGH: HA 36** - L. Atona, Cuilcagh Mountain (H110294), 29 June 2000 (Langton, 2002). **GALWAY: HA 30** - L. Anillaun, Maam Cross (L980470), 19 April, 8 June and 5 September 2007, EPA (DAM). L. Beaghcauneen, Ballinaboy (L679470), 18 July 2007, EPA (DAM). L. Lettercraffroe, Oughterard (M056376), 18 April 2007, EPA (DAM). Stream, Moycullen on N59 road (M204326), 25 May 2003 (PHL): **HA 31** - L. Anaserd, Ballyconneely (L605443), 11 September 2007, EPA (DAM). L. Ardderry, Maam Cross (L998458), 25 May 2003 (PHL). L. Ballynahinch, Ballynahinch (L777478), 17 April, 6 June and 13 September 2007, EPA (DAM). L. Derryclare, Recess (L825485), 17 April and 16 July 2007, EPA (DAM). L. Illauntrasna, Glentrasna, Garomna (L888254), 25 July and 12 September 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 7 June, 24 July and 12 September 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 16 May 2006, 19 April, 7 June and 13 September 2007, EPA (DAM). L. Shindilla, Derreenacreeva, Maam Cross (L958460), 7 June 2007, EPA (DAM): **HA 32** - L. Ballynakill, Cleggan (L639581), 11 September 2007, EPA (DAM). L. Enask, Beaghcauneen (L662468), 4 April 2007, 6 June and 17 September 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 17 July and 11 September 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 9 July 2007, EPA (DAM). **KERRY: HA 21** - L. Cloonaghlin, Waterville (V611708), 10 September 2008, EPA (DAM). Eagles L.,

Knocknagantee (V674728), 9 August 2005, JRB (DAM). Erik L., Derrygarriff (V881777), 9 August 2005, JRB (DAM). L. Inchiquin, Kenmare (V837629), 1 September and 17 September 2008, EPA (DAM): **HA 22** - bog pool, Cummeenduff Glen (V825813), 27 August 1987(DAM). L. Cummernamuck, Killorglin (V745897), 9 September 2008, EPA (DAM). L. Guitane, Crohane, Killarney (W025846), 3 July 1973 (Douglas and Murray, 1980) and 8 July 2008, EPA (DAM). Killarney, no location (V9386), 1929, FWE (Edwards, 1929). L. Leane, Killarney (V931886), 22 April and 18 September 2008, EPA (DAM); Mahony's Point (V932912), July 1973 (Douglas and Murray, 1980). Muckcross Lake, Killarney (V950853), 24 April and 18 September 2008, EPA (DAM); Muckcross Lake, Dundag Bay (V964858), 12 July 1972 (Murray, 1974), July 1973 (Douglas and Murray, 1980). R. Annascaul, Annascaul (Q593017), 9 April 1981, BPH (DAM). R. Clydagh, u/s Clydagh Bridge (W114826), 15 September 1976 (Ashe, 1982). R. Torc, above waterfall, Killarney (V964835), 24 August 1973 (DAM): **HA 23** - L. Cam, Castlegregory (Q597079), 29 April, 25 June and 18 September 2008, EPA (DAM). **LEITRIM: HA 26** - L. Natire (G966340), 3 August 2005, JRB/MC (DAM): **HA 35** - L. Lackagh, Boleybrack (G920320), 3 August 2005, JRB (DAM). L. Nabrack, Crocknagapple (G860477), 29 April 2005, JRB (DAM) and 4 August 2005, JRB/MC (DAM). L. Sandy, Crocknagapple (G891448), 4 August 2005, JRB/MC (DAM). **MAYO: HA 30** - L. Carra, Keel Bridge, Ballinrobe (M165680), 28 April 2008, EPA (DAM): **HA 32** - L. Glencullin, north west shore, Delphi (L815699), 26 June 2008, EPA (DAM). L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM). Pond, Laghta (L845759), 7 May 2004, DAM/WM (DAM). L. Fin, Delphi (L841657), 28 June 2006, EPA (DAM). L. Moher, Liscarney, Westport (L977766), 21 April 2008, EPA (DAM); Carrickvegraly Point, Roonagh (L743806), 27 April 2000, DAM/WM (Murray and Murray, 2003); south of Roonagh Pier (L744808), 27 July 2000, DAM/WM (DAM): **HA 33** - L. Acorrymore, Achill Island (F578057), 7 April and 17 June 2008, EPA (DAM). L. Bunacurry (Bunacurry Lake), Achill Island (F695048), 29 September 2004, DAM/WM (DAM). Bog pool, Achill Island (F712008), 5 August 2004, DAM/WM (DAM). Bog pool, Sraheen, Achill Island (F716005), 6 May 2004, DAM/WM (DAM). Pool,

Camport Bay, Achill Island (L677982), 29 September 2004, DAM/WM (DAM). L. Carrowmore, Derreens, Bangor Erris (F833299), 28 July 2008, EPA (DAM). Bog pool, Glenamoy basin, Glenamoy (F896345), April to July 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **Clare Island** - seepage, south of lighthouse (L695879), 20 August 2002. Pond east of Maum road, (L710863), 28 April 2000. First order stream, west of Maum road (L711861), 5 June 2002. Between Maum and Capnagower (L712857), 20 August 2002. Roadside, Bayview Hotel (L716856), 28 April 2000. Bog pool, Knockmore (L683857), 21 August 2002. Pond east of Signal Tower (L658859), 21 August 2002, DAM/WM (all Murray and Murray, 2003). **TIPPERARY: HA 18** - Black L., Arra Mountains (R738771), 10 August 2005, JRB (DAM). **TYRONE: HA 1** - L. Oak, Gortin, Newtownstewart (H498843), 16 August 2011 (PHL). **WICKLOW: HA 9** - bog pool, Featherbed Mountain, Sally Gap (O130113), 20 May 1947, CFH (DAM); 8 July 1984, CCO (Gavin, 1989) and 10 September 1996, DAM (Murray, 2005): **HA 10** - L. Ouler, Tonelagee (O091023), 8 August 2005, JRB (DAM).

Macropelopia (Macropelopia) nebulosa (Meigen, 1804)

ANTRIM: HA 3 - Glenravel Water, Gartnageeragh, Newtown Crommelin (D147154), 2 July 2000 (Langton, 2002). L. Neagh, Lennymore Bay, north (J115745), 1966, R. J. Marks (Marks and Henderson, 1970). Reservoir, Killylane, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 4** - R. Bush, Seneirl Bridge (C943362), 16 July 2000 (Langton, 2002); Conogher Bridge (C963305), 10 September 2000 (Langton, 2002); Stranocum (D009307), 2 July 2000 (Langton, 2002); Ballyhoe Bridge (D077294), 2 July 2000 (Langton, 2002). Pool at Ballyhoe Bridge (D077294), 2 July 2000 (Langton, 2002). Benvariden Pond, Benvariden Garden, Derrykeegan (C946334), 15 May 2005 (PHL). Pool at Fair Head (D185433), 21 March 1999 (PHL): **HA 5** - L. Mourne, Carrickfergus (J415924), 4 May and 8 May 1999 (PHL). **CAVAN: HA 36** - R. Erne, Drumbarry (N462951), 17 August 1982 (Hayes, 1991). **CLARE: HA 25** - Bleach R., Corlea Bridge (R605965), 3 September 1973, JPOC (DAM). L. Derg (Shannon), d/s Killaloe (M705715), 17 June and 18 September 2009, EPA (DAM). L. Graney, Drumandora,

west shore (R553938), 15 June 2009, EPA (DAM): **HA 27** - L. Bunny, south east shore, Aughrim (R377965), 6 April 2006 and 5 September 2006, EPA (EPA): **HA 28** - L. Keagh, Milltown Malbay, north shore (R100813), 15 September 2009, EPA (DAM). **CORK: HA 19** - Carrigdroihid Reservoir, Ashton (W360703), 3 April 2008, EPA (DAM): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 20 March, 25 August and 25 September 1980; Bealabouy Bridge, Dunmanway (W257514), 20 February and 20 March 1980; u/s Ballineen (W331537), 20 February, 20 March, 25 August and 25 September 1980; Ballineen Bridge (W434538), 25 August and 25 September 1980; Castle Bernard (u/s Bandon) (W472546), 20 March, 18 April, 25 August, 25 September and 31 October 1980; 2.5km d/s Bandon (W516569), 18 April, 25 August, 28 November 1980 (all Morgan, 1982): **HA 21** - L. Glenbeg, Ardgroom (V706530), 3 September 2008, EPA (DAM). **DERRY: HA 1** - pool, Creggan, Derry (C414171), 17 May 2002 (PHL). Lower Reservoir, Creggan, Derry (C422174), 26 April and 10 May 2001 (PHL): **HA 2** - R. Bessbrook, Limavady (C655212), 9 June 2000 (Langton, 2002). Pool, Roe Valley Park, Limavady (C679201), 9 June and 14 July 2000 (Langton, 2002). R. Roe, Largy Bridge, Limavaddy (C681202), 14 July 2000 (Langton, 2002). Binevenagh pond, Coleraine (C691305), 16 September 2000 and 25 August 2001 (PHL). Fire dam 1 Binevenagh Forest, Coleraine (C699304), 18 May 2000 (Langton, 2002). Castle R., Ardmore Bridge, Limavady (C706207), 9 June 2000 (Langton, 2002): **HA 3** - Downhill beach stream, Coleraine (C754326), 9 June 2000 (Langton, 2002); Downhill pond, Lions Gate, Coleraine (C762357), 22 June 2000 (Langton, 2002); Downhill Forest lake, Coleraine (C757354), 17 March and 28 July 1999, 24 March 2002 (PHL); Downhill Forest stream, Coleraine (C759348), 25 July 1999, 24 March 2002 (PHL). Howell's Tarn, Ballywildrick, Coleraine (C766325), 22 April 2001, 17 April, 21 April, and 7 July 2002 (PHL). Balinrees Reservoir, Coleraine (C794300), 9 June 2000 (Langton, 2002). Inflow to Balinrees Reservoir, Coleraine (C793307), 20 March 1999 (PHL). R. Bann, Newferry, d/s L. Beg (H990983), 13 October 2000 (Langton, 2002). Coleraine (C854304), 12 April 1999 to 1 October 1999, 6 April 2000 to 3 December 2000, 26 April and 30 June 2001, 18 April 2005, 8 April 2010 and 27 July 2012 (PHL). L. Neagh, unspecified

(H9080), no date (McLarnon and Carter, 2000). R. Moyola, New Bridge, Magherafelt (H955905), 4 July 2000 (Langton, 2002) and 7 May 2001 (PHL). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 23 July 2009, EPA (DAM): **HA 36** - L. Tullynasiddagh, Ballyshannon (G983656), 7 September 2009, EPA (DAM). L. Vearty, Ballyshannon (G995658), 7 September 2009, EPA (DAM): **HA 37** - R. Stragar, Killybegs (G730787), 23 August 1984 (DAM): **HA 38** - L. Nasnahida, Doocharry, Dunglow (B852076), 10 September 2009, EPA (DAM). L. Dunlewy, Dunlewy (B926193), 19 July 2000 (Langton, 2002). Pool, Sliev Snacht, GNP (B933153), 4 June 1986 (Heneghan, 1986). L. Greenan, Loughsalt, Kilmacrennan (C117262), 14 July 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 9 September 2009, EPA (DAM): **HA 40** - bog pool, Rowantree Hill, Merville (C551401), 18 August 2011 (PHL). R. Keenagh, Keenagh Bridge (C435555), 18 August 2011 (PHL). **DOWN: HA 3** - Upper R. Bann tributary, Tullyconnaught (J166451), 19 September 1997 (PHL); Upper R. Bann tributary, Hilltown Church (J210294), 27 March 1998 (PHL); Upper R. Bann, Katesbridge (J210407), 27 August 1998 (PHL); Upper R. Bann tributary, Tirkelly (J223364), 19 September 1997, (PHL); Upper R. Bann tributary, Shanrod House, Shanrod (J207439), 19 September 1997 and 14 August 1998 (PHL). R. Muddock, Muddock Bridge, Rathfriland (J235342), 19 September 1997 (PHL). R. Shanky, Hilltown (J221243), 26 September 1997 (PHL). **DUBLIN: HA 9** - pond, University College Dublin, Belfield (O185300), 20 March and 25 April 1973 (DAM). R. Dodder, Clonskeagh Bridge (O174306), 1946 (Grey, 1946). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002). Glen R., Garrison (G943522), 29 June 2000 (Langton, 2002): **HA 36** - L. Erne, Lower, Boa Island (H108626), 29 June 2000 (Langton, 2002); Lower, Black Bay (H072639), 27 April 2002 (PHL). R. Finn, Lisnanesnagh Bridge, Rosslea (H544337), 26 June 2000 (Langton, 2002). R. Hollybrook, Lisnaskea (H373310), 27 June 2000 (Langton, 2002). Stream, Lisnaskea (H384306), 27 June 2000 (Langton, 2002). R. Colebrook tributary, Raw (H424426), 3 October 1997 and 24 September 1998 (PHL): **HA 36** - Many Burns R., Coolrakelly (H387459), 24 June 1997 (PHL). **GALWAY: HA 26** - R. Tirur, Newbridge

(M492699), 16 August 1981 (Hayes, 1991): **HA 30** - L. Corrib, no location (M1545), 1980, BC (DAM); L. Corrib Lower, Moycullen (M271360), 18 September 2007, EPA (DAM). L. Ross, Moycullen (M188365), 13 April 2007, EPA (DAM): **HA 31** - L. Ballynahinch, Ballynahinch (L777478), 13 September 2007, EPA (DAM). R. Owentouey, Tullywee Bridge, Recess (L873474), 18 August 1981 (Hayes, 1991): **HA 32** - L. Kylemore, Letterfrack (L771582), 10 September 2007, EPA (DAM). CNP, Letterfrack (L715575), 17 September 1986 (Heneghan, 1987). **KERRY: HA 22** - Muckross Lake, Muckross, Killarney (V950853), 18 September 2008, EPA (DAM). R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Clydagh, Caherbarnagh (W202842), April to October 1978 (Ashe, 1982); u/s Clydagh Bridge (W114826), April to October 1978 (Ashe, 1982); Knocknagowan (W187837), April to October 1978 and 1979 (Ashe, 1982). R. Flesk, d/s of R. Clydagh and R. Loo confluence (W084814), April to October 1978; Garries Bridge (W082835), April to October 1978 (Ashe, 1982); Flesk Bridge (W034876), April to October 1978 (Ashe, 1982); White Bridge (V987904), 25 July 1974, DJD/DAM (DAM); d/s Whitebridge (V987900), 8 August 1978 (Ashe, 1982); u/s L. Leane (V964894), April to October 1978 (Ashe, 1982); d/s New Bridge (V963885), April to October 1978 (Ashe, 1982); R. Loo, Aughnanus Bridge, Crohane (W045790), April to October 1978 (Ashe, 1982). **KILDARE: HA 9** - R. Liffey, Straffan Bridge (N924293), 15 July 1983 (Hayes, 1991). R. Rye, Kildare Bridge, Carton (N948387), 13 July 1983 (Hayes, 1991). **LEITRIM: HA 26** - L. Allen, Mountallen, Drumshanbo (G950145), 9 September 2008, EPA (DAM): **HA 26** - L. Boderg, Dromod (N020910), 25 June 2008, EPA (DAM): **HA 35** - R. Owenmore, Manorhamilton (G881392), June 1991, JL/DAM (DAM). **LIMERICK: HA 25** - R. Mulkear, Cappamore (R775514), 8 September 1981 (Hayes, 1991). **MAYO: HA 30** - L. Aille, Aille, Westport (M071807), 18 September 2008, EPA (DAM). L. Mask, west shore, Toormakeady (M097647), 14 April and 22 September 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, north east shore (L834689), 22 August 2002, DAM/WM (DAM). L. Glencullin, Delphi, north shore (L818711), 22 September 2008, EPA (DAM). L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM). Mulranny (L840965), July 1911

(Grimshaw, 1912): **HA 33** - L. Keel, south west shore, Achill Island (F641055), 17 September 2008, EPA (DAM). Bog pool, Achill Island (F712008), 5 August 2004, DAM/WM (DAM). Achill Island, north east (F7207), 1910 (Grimshaw, 1912); Glendarary, Achill Island (L723997), July 1911 (Grimshaw, 1912). L. Carrowmore, Cloontakilla Bay, Bangor Erris (F851253), 17 June 2008, EPA (DAM). Bog pools, Glenamoy (F896345), April 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **HA 34** - L. Cullin, Drummon Wood (G235046), 18 June 2008, EPA (DAM): **Clare Island** - no location data (L6885), 1910, PHG (Grimshaw, 1912). **MEATH: HA 6** - R. Dee, Drumconrath (N910894), 27 July 1983 (Hayes, 1991): **HA 7** - R. Boyne, Ballyboggan (N638402), June 1989, JL/DAM (Murray and Lynch, 1991); adjacent to St Bridget's well, Ardsallagh (N897635), 7 July 1988 (Murray, 1988); Stackallen Bridge (N917713), 19 July 1989 (DAM); Oldbridge (O045761), 19 July 1989 (DAM); d/s Oldbridge (O062753), 19 July 1989, (DAM). Artificial tank, Ardsallagh, Navan (N896635), 2 April 2000 (Murray, 2005); marsh, Ardsallagh (N893639), 18 May 1986 (DAM). R. Blackwater, Sedenrath Bridge (N762759), 30 March 1976 (O'Flaherty, 1976). Interceptor ditch at tailings ponds, Randalstown, Navan (N857717), 22 June 1995 (Finnegan, 1998); tailings pond, Randalstown, Navan (N845714), 12 September 1994, 10 May 1995 and 29 August 1995 (Finnegan, 1998): **HA 8** - Meadesbrook, garden, Kilmoon (O040594), 11 April 1995, 28 September 2001 (DAM); Meadesbrook stream-pond, Kilmoon (O038594), 24 May 2006 (DAM). **MONAGHAN: HA 6** - L. Naglack, Carrickmacross (H853026), 3 May 2007, EPA (DAM). **OFFALY: HA 25** - R. Little Brosna, Myrtlegrove (S051852), 2 September 1982 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Suck, Ballyforan (M817464), 16 July 1981 (Hayes, 1991). L. Funshinagh, Brideswell (M933513), 13 June and 11 September 2007, EPA (DAM). **SLIGO: HA 34** - R. Moy, Cloonacool (G493168), Metal Bridge, Tobercurry (G464138) and Annagh (G466123), 30 August 1982 (Hayes, 1991). **TIPPERARY: HA 16** - R. Drish, Boolabea Bridge (S190619) and Athlummon Bridge (S177593), 6 July 1992 (Murray and Lynch, 1992). R. Suir, Loughmore (S120670), 22 May 1992 (Murray and Lynch, 1992): **HA 18** - L. Curra, Galtymore Mountain (R867242), 10 August 2005, JRB (DAM): **HA 25** - R. Kilmastulla, Kilmastulla Bridge

(R728698), 3 September 1981 (Hayes, 1991). **WATERFORD: HA 17** - Belle Lake, Dunmore East (S665049), 2 July 2009, EPA (DAM). **WICKLOW: HA 10** - outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997).

Macropelopia (Macropelopia) notata (Meigen, 1818)

DONEGAL: HA 1 - L. Mourne, Ballybofey (H069900), 8 September 2009, EPA (DAM): **HA 38** - L. Dungloe, south east shore (B783112), 12 August 1982, BPH (Murray, 2005). L. Keel, Crolly (B848162), 17 June and 13 August 2009, EPA (DAM). R. Owenveagh, Ballaghgeeha, Glenveagh (B970160), 29 July 1985 (Heneghan, 1986). **DUBLIN: HA 9** - R. Dodder, headwater (O125187), 10 June 1968 (DAM). **GALWAY: HA 25** - R. Woodford, Woodford (M732000), 24 May 2003 (PHL): **HA 30** - L. Corrib (M150450), September 1964 (Murray, 1972): **HA 31** - L. Loughanaure, Kilkieran (L828320), 16 April 2007, EPA (DAM): **HA 32** - L. Enask, Beaghcauneen (L662468), 17 September 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 11 September 2007, EPA (DAM). CNP, Letterfrack (L715575), 17 September 1986 (Heneghan, 1987). **KERRY: HA 22** - L. Cummernamuck, Killorglin (V745897), 9 September 2008, EPA (DAM). L. Leane, Killarney, Victoria Bay (V946900), July 1973 (Douglas and Murray, 1980). Muckcross Lake, Killarney, Kilbeg Bay (V960860), July 1973 (Douglas and Murray, 1980). R. Laune, Beaufort Bridge (V880920), June 1973 (Douglas and Murray, 1980). Upper Lake, Killarney (V909821), 9 September 2008, EPA (DAM). **MAYO: HA 30** - L. Mask, Cushlough Pier, Ballinrobe (M153650), 11 August 1964 (Murray, 1972): **HA 32** - R. Bunowen, Louisburg, u/s of bridge (L807807), 5 August 2004 (Murray, 2005). R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972): **HA 33** - bog pools, Glenamoy (F896345), April 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **HA 34** - L. Conn, Cloghans (G205133), 18 April 1966 and Gillaroo Bay, Massbrook (G175051), 17 October 1964 (Murray, 1972): **Clare Island** - pond east of Maum road (L710863), 20 August 2002 (Murray and Murray, 2003). Creggan L., Lecarrow (L689857), 11 June and 5 October 1998, 10 June, 7 July and 13 August 1999 (Fahy, 2002). Small tank, Knockaveen (L705856), 21 August 2002

(Murray and Murray, 2003). **MEATH: HA 7** - R. Boyne, Ardsallagh, adjacent to St Bridget's Well (N897635), 16 June 1974 (DAM): **HA 8** - Meadesbrook stream-pond area, Kilmoon (O038594), 9 June 2006 (DAM). **WESTMEATH: HA 25** - L. Ennell, Tudenham (N415466), 29 June 1966 (Murray, 1972). **WICKLOW: HA 10** - Glencree Stream, Stonecross (O141185), May 1967 (Murray, 1972). Reservoir, east shore, Roundwood (O214002), 12 July 1983, HD (DAM).

Macropelopia (Macropelopia) Pe1 sensu Langton and Viser, 2003

KERRY: HA 23 - L. Cam, Castlegregory (Q597079), 29 April 2008, EPA (Murray, 2010).

Macropelopia (Macropelopia) spec. Norwegen (?rossaroi Lencioni and Marziali, 2005)

CLARE: HA 28 - L. Keagh, Milltown Malbay (R100813), 15 September 2009, EPA and 19 September 2012, DAM (Murray, 2012).

Monopelopia (Monopelopia) tenuicalcar (Kieffer, 1918)

CORK: HA 21 - L. Mor, Adrigole (V870500), 28 August 1968 (Murray, 1972). **DONEGAL: HA 38** - duck pond, GNP, Glenveagh (C023214), 29 June 1988 (Murray, 2005). L. Veagh, north east shore, Glenveagh (C039230), 29 June 1988 (DAM). **MAYO: HA 32** - pond, Laghta (L845759), 7 May 2004, DAM/WM (DAM): **HA 33** - bog pools, Glenamoy (F896345), April 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **Clare Island** - pond east of Maum road (L710863), 5 June 2002, DAM/WM (Murray and Murray, 2003). **MEATH: HA 7** - marsh, Ardsallagh, Navan (N893639), 23 June 1974 (DAM). **MAYO: HA 34** - Castlebar L., Castlebar (M1087), July 1911, PHG (Grimshaw, 1912).

Natarsia nugax (Walker, 1856)

GALWAY: HA 30 - L. Corrib, Lower, Hurney (M258310), 18 April 1980, BC (DAM). **KERRY: HA 22** - L. Kilbrean, Killarney (W005935), 8 September 1969, NH (Bracken and

Murray, 1973). R. Loo, Aughnanus Bridge, Crohane (W048790), 24 July 1978, PJA (Ashe, 1982; Murray, 2005).

***Natarsia punctata* (Fabricius, 1805)**

CAVAN: HA 36 - L. Oughter, Killashandra (H349051), 6 June 2007, EPA (DAM). **KERRY: HA 22** - R. Flesk, Garries Bridge (W082835), 24 July 1978; Flesk Bridge (W034876), 13 August 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), 24 July and 10 August 1978 (Ashe, 1982 (NMI)). **MAYO: HA 33** - bog pools, Glenamoy (F896345), August 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **Clare Island** - Creggan L., Lecarrow (L689857), 11 June 1998 (Fahy, 2002).

***Nilotanypus dubius* (Meigen, 1804)**

ANTRIM: HA 4 - R. Brymore, Brymore Bridge (D162275), 2 July 2000 (Langton, 2002). **CARLOW: HA 12** - R. Slaney, Kilcarry Bridge (S893624), 28 July 1981 (Hayes, 1991). **CLARE: HA 28** - R. Annageeragh, Moyglass Bridge d/s L. Doo (R078725), 30 July 1982 (Hayes, 1991). R. Creegh, Mountrivers Bridge, Doonbeg (Q991659), 30 July 1982 (Hayes, 1991). R. Doonbeg, Derryard (Q979644), 30 July 1982 (Hayes, 1991). **CORK: HA 18** - R. Blackwater, Shamrock Bridge, Millstreet (W221935), 2 September 1981 and Ballymacquirk Bridge, Banteer (W382989), 1 September 1981 (Hayes, 1991): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 27 May, 30 June, 25 August, September 1980; u/s Ballineen (W331537), 27 May, 30 June; 2.5km d/s Bandon (W516569), 18 April and 30 June 1980 (all Morgan, 1982). R. Ilen, Drimoleague (W098454), 24 August 1983 and Madore (W103419), 24 August 1983 (Hayes, 1991). **DONEGAL: HA 1** - R. Deelee, Legland, Raphoe (C136028), 19 July 2000 (Langton, 2002): **HA 37** - R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991). R. Eanymore, Letterbara Bridge (G883825) and Drumagraa Bridge (G863822), 10 August 1982 (Hayes, 1991). R. Oily, Claggen (G751803), 8 August 1982 (Hayes, 1991). R. Stragar, Duninkeely (G727792), 10 August 1982 (Hayes, 1991) and Killybegs

(G730787), 29 July 1984 (Murray, 2005): **HA 38** - R. Owenwee, Derrynacarrow, Doocharry (B880078), 22 August 1984 (DAM). R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). R. Tullaghobeg, Millmount (B933304), 12 August 1982 (Hayes, 1991). R. Owenveagh, Glenbeagh Cottage, Glenveagh (B990178), 30 July 1985 (Heneghan, 1986). R. Owencarrow, d/s road bridge, Glenveagh (C043235), 18 July 2000 (Langton, 2002). R. Ray, Carrowcanon (B995325) and Crocnalaragh (B989272), 12 August 1982 (Hayes, 1991): **HA 39** - R. Glashagh, Drumbologe, Letterkenny (C096153), 18 July 2000 (Langton, 2002). R. Swilly, Newmills, Letterkenny (C125092), 18 July 2000 (Langton, 2002). R. Leannan, Kilnacrenan (C145200), 12 August 1982 (Hayes, 1991); R. Leannan, Drumaboden (C165218), 12 August 1982; Claragh (C197210), 13 August 1982 (Hayes, 1991). R. Crana, Buncrana (C347328), 15 August 1982 (Hayes, 1991); R. Crana, Ballymagan (C379344), 15 August 1982 (Hayes, 1991). **GALWAY: HA 30** - R. Loughkip, Ballyquirk, Moycullen (M224313), 17 August 1981 (Hayes, 1991): **HA 31** - L. Ahalia, Maam (L971402), 23 September 2009, EPA (DAM). R. Owentouey, Tullywee Bridge, Recess (L873474), 18 August 1981 (Hayes, 1991): **HA 32** - R. Owenglin, Clifden (L677506), 18 August 1981 (Hayes, 1991). R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes, 1991). **KERRY: HA 21** - R. Inny, Scarriff Bridge (V504696), 24 August 1983 (Hayes, 1991): **HA 22** - Muckcross Lake, Muckcross, Killarney (V950853), 24 June 2008, EPA (DAM). R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Caragh, Upper Brida Valley (V785810), Bealalaw Bridge (V715832) and Blackstones Bridge, d/s R. Acoose confluence (V710864), 1975, CD (Dowling *et al.*, 1981). R. Clydagh, Caherbarnagh (W202842), u/s Clydagh Bridge (W114826) and Knocknagowan (W187837), May to October 1978 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814), Garries Bridge (W082835) and Flesk Bridge (W034876), May to October 1978 (Ashe, 1982); White Bridge (V987904), July 1973 (Douglas and Murray, 1980); d/s Whitebridge (V987900), 21 July and 17 September 1978 (Ashe, 1982 (NMI)); d/s New Bridge (V963885) and u/s L. Leane (V964894), May to October 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), May to October 1978 (Ashe, 1982). Upper Lake,

Gortroe, Killarney (V918818), June 1973 (Douglas and Murray, 1980). **KILKENNY: HA 15** - R. Nore, Brownsbarn Bridge (S618391), 28 August 1981 (Hayes, 1991). **MAYO: HA 32** - stream at first road bridge d/s L. Nahaltora, Derrygarve, Cregganbaun (L784744), 6 June 2004, DAM/WM (DAM). R. Carrowinsky, Killeen, Carrowinsky (L770773), 5 August 2004, DAM/WM (DAM). R. Bunowen, Louisburg (L807807), 7 May and 5 August 2004 and R. Bunowen, Laghta Eighter (L852751), 30 September 2004, DAM/WM (DAM). L. Fin, Delphi (L841657), 12 July 2006, EPA (DAM). R. Owengarve, Rosgalliv Bridge, Mulranny (L886962), 4 August 2004, DAM/WM (DAM). R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972). R. Owenwee, u/s Aghamore Bridge, Westport (L972817), 5 August 2004, DAM/WM (DAM). R. Erriff, Ashleigh Falls (L895645), 18 August 1981 (Hayes, 1991): **HA 33** - R. Glenlassra, Belderg (G023407), 19 August 1983 (Hayes, 1991): **Clare Island** - Loughnapucar stream (L658848), 21 August 2002, DAM/WM (Murray and Murray, 2003; Murray, 2005). **MEATH: HA 7** - R. Boyne, Stackallen Bridge (N917713), Slane Bridge (N965737) and Knowth Weir (N995720), 19 July 1989 (DAM). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981; Athleague (M825758), 14 August 1981; Mount Talbot (M813531), 14 August 1981, Ballyforan (M817464), 16 July 1981 (all Hayes, 1991). **SLIGO: HA 35** - R. Drumcliff, Glencar (G734430), 19 August 1983 (Hayes, 1991). **TIPPERARY: HA 16** - R. Drish, Boolabea Bridge (S190619), 22 May and 6 July 1992 (Murray and Lynch, 1992). R. Suir, Rossestown Bridge (S134624) and Cabragh (S124562), 6 July 1992 (Murray and Lynch, 1992). **WEXFORD: HA 12** - R. Slaney, Clomahon (S933534) and Ballycarney (S967488), 29 July 1981 (Hayes, 1991). **WICKLOW: HA 10** - outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997). R. Glendasan, Laragh, WMNP (T100982), 24 June 1996 (DAM). R. Avonbeg, Glenmalure, Drumgoft Bridge (T105905), 4 August 1983 (Hayes, 1991); R. Avonbeg, Meetings Bridge (T188831), 11 July and 27 October 1997 (Curran, 2001). R. Avonmore, Castlehoward (T190833), 4 August 1983 (Hayes, 1991); R. Avonmore, Lion Arch Bridge (T194833), 11 July 1997 (Curran 2001). R. Avoca, Whitebridge, Tigroney (T198821), 4 August 1983 (Hayes,

1991) and 11 July 1997 (Curran, 2001). Avoca Village (T203802), 11 July 1997, FC (Curran and Murray, 2001) and October 1997 (Curran, 2001): **HA 12** - R. Slaney, Knockgarrigan, Glen of Imaal (S936937), 28 July 1981 (Hayes, 1991).

***Paramerina cingulata* (Walker, 1856)**

ANTRIM: Rathlin Island - long pool, (D148521), 24 July 2000 (Langton, 2002). *Menyanthes* pool (D123515), 6 July 2004 (PHL). L. Nachiule (D160521), 24 July 2000 (Langton, 2002): **HA 3** - L. Neagh, Antrim Bay (J135866), 28 March 2001 (PHL): **HA 4** - R. Glenariff, Cushendall (D215205), 2 July 2000 (Langton, 2002). **CAVAN: HA 7** - L. Mullagh, Mullagh (N680856), 30 April 1968 (DAM). **CLARE: HA 27** - L. Cullaun, Corrofin (mid east shore) (R317905), 22 July 2009, EPA (DAM). L. Rosroe, north east shore, Newmarket on Fergus (R449697), 16 September 2009, EPA (DAM): **HA 28** - L. Keagh, north shore, Milltown Malbay (R100813), 19 September 2012 (DAM). L. Lickeen, west shore, Kilfenora (R164908), 15 September 2009, EPA (DAM). L. Naminna, north west shore, Boolteagh (R178710), 7 July 2009, EPA (DAM). L. Naminna, mid lake, Boolteagh (R179708), 11 June and 15 September 2009, EPA (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 17 June 2009, EPA (DAM). **CORK: HA 20** - L. Ballin, Leap (W199389), 17 June and 17 September 2008, EPA (DAM). L. Coolkllure, Dunmanway (W177539), 7 April and 16 September 2008, EPA (DAM). L. Curragallicky, Drinagh, Dunmanway (W234046), 12 August 2008, EPA (DAM). L. Tooreen, Crookhaven (V790259), 17 June and 17 September 2008, EPA (DAM). **DONEGAL: HA 1** - R. Deele, Legland, Raphoe (C136028), 19 July 2000 (Langton, 2002). L. Derg, Pettigo (H074743), 8 June 2009, EPA (DAM): **HA 36** - L. Tullynasiddagh, Ballyshannon (G983656), 8 June 2009, EPA (DAM). L. Unshin, Ballyshannon (G951637), 8 June and 8 September 2009, EPA (DAM): **HA 37** - Carn L., Blue Stack Mountains (G871886), 27 July 2005, JRB (DAM). R. Stragar, Killybegs (G730787), 29 July and 23 August 1984 (DAM): **HA 38** - L. Altercan, The Rosses (B755158), 19 July 2000 (Langton, 2002). L. Dunglow, west shore, Dunglow (B782119), 5 August 2009, EPA (DAM). L. Anure, east shore, Loughanure (B818162), 17 June and 12

August 2009, EPA (DAM). L. Nasnahida, Doocharry, Dunglow (B852076), 10 September 2009, EPA (DAM). R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). L. Veagh, GNP, boathouse near Castle (C022211), 23 August 1985, LJH (Heneghan, 1986), 21 July 2009, EPA (DAM); shore near Visitor Centre, Glenveagh (C033223), 19 July 2000 (Langton, 2002); north east shore (C039230), 24 July 1985, POD, and 26 July 1985, LJH (Heneghan, 1986) also 29 June 1988 (DAM). Owennacally stream (C043226), 19 July 2000 (Langton, 2002). R. Ray, Muckish Gap (B993268), 12 August 1982 (Hayes, 1991). L. an tSeisigh, Portnablagh (Sheephaven) (C043361), 16 June, 28 July and 7 September 2009, EPA (DAM). L. Glen, Glen (C105292), 16 June and 29 July 2009, EPA (DAM). L. Greenan, Loughsalt, Kilmacrennan (C117262), 16 June 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 9 September 2009, EPA (DAM). L. Kiltoris, Dawros, Ardara (G675976), 17 June 2009, EPA (DAM): **HA 39** - R. Glashagh, Drumbologe, Letterkenny (C096153), 18 July 2000 (Langton, 2002): **HA 40** - L. Naminn, Cloonmany (C400423), 18 August 2011 (PHL). **DOWN:** **HA 3** - R. Shanky, Batts Bridge, Hilltown (J226257), 25 May 1998 (PHL). **DUBLIN:** **HA 9** - Royal Canal, Ashtown (O108378), May 1968 (Murray, 1972). Bog pool, Featherbed Mountain (O120190), 27 August 1981 (Murray, 2005). **FERMANAGH:** **HA 35** - Glen R., Garrison (G943522), 29 June 2000 (Langton, 2002): **HA 36** - L. Atona, Cuilcagh Mountain (H110294), 29 June 2000 (Langton, 2002). **GALWAY:** **HA 30** - L. Beaghcauneen, Ballinaboy (L679470), 6 June and 18 July 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 7 June 2007, EPA (DAM). L. Corrib, Knockferry (M236415), 8 May 1980, BC (DAM). L. Lettercraffroe, Oughterard (M056376), 14 June 2007, EPA (DAM): **HA 31** - L. Ahalia, north east shore, Maam (L971402), 23 September 2009, EPA (DAM). L. Anaserd, Ballyconneely (L605443), 16 May, 20 June, 11 September 2006, also 6 June, 17 July and 11 September 2007, EPA (DAM). L. Aunwillan, Carraroe (L936255), 7 June and 13 September 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June and 13 September 2007, EPA (DAM). L. Ballynakill, Gorumna (L867236), 19 September 2006, EPA (DAM). L. Derryclare, Recess (L825485), 16 July 2007, EPA (DAM). L. Illauntrasna, Glentrasna, Garomna (L888254), 16

April, 25 July and 12 September 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 12 September 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 16 May, 8 August and 12 September 2006, also 7 June and 13 September 2007, EPA (DAM): **HA 32** - L. Aughrusbeg, Cleggan (L557582), 10 July 2007, EPA (DAM). L. Ballynakill, Cleggan (L639581), 5 June and 11 September 2007, EPA (DAM). L. Enask, Beaghcauneen (L662468), 17 September 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 17 July and 11 September 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 5 June 2007, EPA (DAM). **KERRY: HA 21** - L. Brin, Derreeny (V780775), 18 June, 13 July and 10 September 2008, EPA (DAM). Eagles L., Knocknagantee (V674728), 9 August 2005, JRB (DAM): **HA 22** - L. Cummernamuck, Killorglin (V745897), 20 June and 18 July 2008, EPA (DAM). L. Leane, Killarney, Bog Bay (V963866), 1973 (Douglas and Murray, 1980). Upper Lake, Killarney (V909821), 31 July 1973 (DAM), 9 September 2008, EPA (DAM). R. Caragh, d/s Owenroe R. confluence (V720815) and Bealalaw Bridge (V715832), 1975, CD (Dowling *et al.*, 1981): **HA 23** - L. Cam, Castlegregory (Q597079), 18 September 2008, EPA (DAM). **LEITRIM: HA 35** - L. Sandy, Crocknagapple (G891448), 4 August 2005, JRB/MC (DAM). **MAYO: HA 30** - L. Aille, Aille, Westport (M071807), 24 June, 8 August and 18 September 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, north east shore (L834689), 16 June 2002, DAM/WM (Murray, 2005). L. Glencullin, Delphi, south west shore (L819696), 25 August 2008, EPA (DAM) and north shore (L818711), 22 September 2008, EPA (DAM). L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM). R. Bunowen, Louisburg (L807807), 5 August 2004, DAM/WM (DAM). R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972). L. Moher, Liscarney, Westport (L977766), 21 July 2008, EPA (DAM). Westport, Knappagh (L9880), July 1911, PHG (Grimshaw, 1912): **HA 33** - L. Acorrymore, Achill Island (F578057), 29 September 2004, DAM/WM (DAM) also 17 June, 16 July and 17 September 2008, EPA (DAM). Pool/stream, Campport Bay, Achill Island (L677982), 29 September 2004, DAM/WM (DAM). Bog pools, Glenamoy (F896345), 7 May 1970, E. Okley (DAM) and April 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **HA 34** - L. Alone, Ox Mountains

(G367157), 5 August 2005, JRB/MC (DAM). L. Washpool, Ballycarra (M219842), 25 September 2008, EPA (DAM): **Clare Island** - L. Leinapollbauty, Lecarrow (L691856), 5 June 2002 and pond east of Maum road (L710863), 20 August 2002 (Murray and Murray, 2003). Creggan L., Lecarrow (L689857), June to October 1998 and 1999 (Fahy, 2002) also 21 August 2002 (Murray and Murray, 2003). L. Poirtin Fuinch (L706857), 14 September and 5 October 1998, also 2 June, 7 July, 13 July and 20 August 1999 (Fahy, 2002). **MEATH: HA 7** - R. Boyne, Ardsallagh, adjacent to St Bridget's Well (N897635), 7 July 1988 (Murray, 1988); Stackallen Bridge (N917713), Slane Bridge (N965737), Knowth Weir (N995720) and Oldbridge (O045761), 19 July 1989 (DAM). **ROSCOMMON: HA 26** - L. Glinn, Loughglinn, Castlerea (M629870), 12 June 2008, EPA (DAM). **TIPPERARY: HA 16** - R. Drish, Athlummon Bridge (S177593), 22 May 1992 (Murray and Lynch, 1992): **HA 18** - Black L., Ox Mountains (R738771), 4 May and 10 August 2005, JRB (DAM). L. Curra, Galtymore Mountain (R867242), 10 August 2005, JRB (DAM). **WATERFORD: HA 16** - Ballyscanlan Reservoir, Tramore (S540030), 19 August and 1 September 2009, EPA (DAM): **HA 17** - Belle Lake, Dunmore East (S665049), 2 July 2009, EPA (DAM). **WICKLOW: HA 10** - L. Bray Lower, Glencree (O140163), 16 June 2009, EPA (DAM). L. Dan, Roundwood (O157035), 2 September 2009, EPA (DAM). Glencullen R., Knocksink (O218180), 29 June 1987, DEM/DAM (Morgan, 1989). R. Glenealo, Glendalough (T090962), 16 July 1996, EMcE/DAM (McEntee, 1997). Outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997). R. Glendasan, Laragh, WMNP (T100982), 24 June 1996 (DAM).

***Paramerina divisa* (Walker, 1856)**

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 23 March 2001 (PHL). **CORK: HA 18** - R. Blackwater, Charles Bridge, Millstreet (W248943), 2 September 1981, Ballymacquirk Bridge, Banteer (W382989) and Roskeen Bridge, Banteer (W444988), 1 September 1981 (Hayes, 1991): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 27 May, 30 June

1982; Bealabouy Bridge, Dunmanway (W257514), 27 May, 30 June, 25 August 1980; u/s Ballineen (W331537), 27 May, 30 June, 25 September 1980; Ballineen Bridge (W434538), 30 June 1980; Castle Bernard (u/s Bandon) (W472546), 30 June 1980; 2.5km d/s Bandon (W516569), 30 June 1980 (all Morgan, 1982). R. Ilen, Madore (W103419) and Hollybrook (W117363), 24 August 1983 (Hayes, 1991). **DONEGAL: HA 37** - L. Eske, Donegal (G973844), 14 July 2009, EPA (DAM). R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991). R. Eanymore, Drumagraa Bridge (G863822), 10 August 1982 (Hayes, 1991). R. Oily, Claggen (G751803), 8 August 1982 (Hayes, 1991). R. Stragar, Duninkeely (G727792), 10 August 1982 (Hayes, 1991): **HA 39** - L. Gartan, Church Hill (C055159), 22 July 2009, EPA (DAM). R. Leannan, Kilnacrenan (C145200) and Drumaboden (C165218), 12 August 1982; Claragh (C197210), 13 August 1982 (Hayes, 1991). R. Crana, Buncrana (C347328), 15 August 1982 (Hayes, 1991): **HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **DUBLIN: HA 9** - R. Dodder, Fort Bridge, Bohernabreena (O009242), 16 July 1968 (Murray, 1972). **GALWAY: HA 26** - R. Shiven, d/s Ballinaglass (M788494), 29 July 1981 (Hayes, 1991): **HA 30** - L. Ross, Moycullen (M200363), 25 May 2003 (PHL). Stream at picnic site on road N59, Moycullen (M204326), 25 May 2003 (PHL). R. Cregg, Addergssole Bridge (M324350), 16 August 1981 (Hayes, 1991): **HA 31** - L. Ardderry, Maam Cross (L982458), 1 August 2007, EPA (DAM): **HA 32** - L. Nambrackmore, Ballinaboy, Toombeola (L716454), 6 June 2007, EPA (DAM). **KERRY: HA 22** - R. Caragh, Bealalaw Bridge (V715832) and at L. Caragh outflow (V713924), 1975, CD (Dowling *et al.*, 1981). R. Flesk, d/s Clydagh/Loo confluence (W084814), May to October 1978 (Ashe, 1982); Garries Bridge (W082835), May to October 1978 (Ashe, 1982); Flesk Bridge (W034876), May to October 1978 (Ashe, 1982); d/s Whitebridge (V987900), May to October 1978 (Ashe, 1982), 18 August 1983, LJH (DAM); u/s Newbridge (V978900), 12 July 1974 (Murray, 2005); d/s New Bridge (V963885), May to October 1978 and 1979 (all Ashe, 1982); u/s L. Leane (V964894), May to October 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), May to October 1978 (Ashe, 1982). **LEITRIM: HA 35** - L. Glencar, Glencar

(G757435), 21 July and 2 September 2008, EPA (DAM). **MAYO: HA 32** - R. Owenwee, u/s Aghamore Bridge, Westport (L972817), 8 May 2003, DAM/WM (Murray, 2005): **HA 33** - R. Owenmore, Bangor Erris (F863228), 18 August 1983 (Hayes, 1991). R. Glenlassra, Belderg (G023407), 19 August 1983 (Hayes, 1991). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625), 18 August 1968 (Murray, 1972) and Ardsallagh, adjacent to St Bridget's Well (N897635), 7 July 1988 (Murray, 1988). **OFFALY: HA 25** - R. Little Brosna, Milltown Park (S068907), 2 September 1982 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981 (Hayes, 1991); R. Suck, Ballyforan (M817464), 16 July 1981 (Hayes, 1991). L. Funshinagh, Brideswell (M933513), 13 June 2007, EPA (DAM). **TIPPERARY: HA 16** - R. Drish, Castletown (S217635), 6 July 1992 (Murray and Lynch, 1992).

***Paramerina* sp., pe1 sensu Langton and Visser (2003)**

DONEGAL: HA 37 - R. Stragar, Killybegs (G730787), 23 August 1984 (DAM). **DUBLIN: HA 9** - R. Dodder tributary (Slade Brook), Glenasmole (O103205), 8 June 1978, PA (DAM). **KERRY: HA 22** - R. Flesk, u/s Newbridge (V978900), 12 July 1974 (DAM). **MAYO: HA 32** - R. Altahoney, Newport (F950050), August 1974 (DAM). **WICKLOW: HA 10** - R. Glendasan, Laragh, WMNP (T100982), 24 June 1996 (DAM). R. Avonbeg, Glenmalure, Drumgoft Bridge (T105905), 4 August 1983 (Hayes, 1991).

***Procladius (Holotanypus) choreus* (Meigen, 1804)**

ANTRIM: Rathlin Island - long pool (D148521), 24 July 2000 (Langton, 2002); *Menyanthes* pool (D123515), 6 July 2004 (PHL); east lighthouse pool (D156516), 24 July 2000 (Langton, 2002): **HA 3** - L. Neagh, Lennymore Bay - east (J120735), 1970 and Lennymore Bay - north (J115745), 1966 (Marks and Henderson, 1970). Reservoir, Killylane, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 5** - L. Mourne, Carrickfergus (J415924), 7 April 2012, (PHL). **CAVAN: HA 7** - L. Nadreegeal, Ballyjamesduff (N537933), 2 May 2007, EPA (DAM). L. Acurry, Baileborough (N584990), 5 July 2007, EPA (DAM). Park R., Virginia (N591882),

14 March 1968 (Murray, 1972). L. Ramor, Virginia (N595870), 7 June 1967 (Murray, 1972): **HA 36** - Glasshouse L., Killashandra (H270060), 18 July 2007, EPA (DAM). L. Annagh, Butler's Bridge (H394125), 3 July 2007, EPA (DAM). L. Cuillaghan, Ballyconnell (H303183), 13 April and 6 June 2007, EPA (DAM). L. Garty, Arvagh (N278978), 18 July 2007, EPA (DAM). L. Gowna, north basin, Arnagahan (N285920), 7 June 2006 and 24 July 2007, EPA (DAM). **CLARE: HA 25** - L. Graney, Doorus (R557924), 11 August 2009, EPA (DAM). L. Derg, Mountshannon (R718861), 18 September 2009 also d/s Killaloe (M705715), 21 April and 18 September 2009, EPA (DAM); L. Graney, east shore, Flagmount (R563932), 16 September 2009, EPA (DAM). L. Alewnaghta, west shore, Whitegate (R758908), 17 June and 16 July 2009, EPA (DAM): **HA 27** - L. Bridget, east shore, Derrymore, Badyke (R558797), 21 April and 29 July 2009, EPA (DAM). L. Cullaun, Corrofin (mid east shore) (R317905), 22 July 2009, EPA (DAM). L. Dromore, Ruan, Corrofin (R345858), 8 June 2006, EPA (DAM) and 21 July 2009, EPA (DAM). L. Gortglass, south shore, Killadysert (R223596), 2 April 2009, EPA (DAM). L. Inchiquin, south east shore, Corrofin (R272894), 16 June and 17 September 2009, EPA (DAM). L. Muckanagh, south east shore, Tubber, Corrofin (R370922), 11 June and 14 September 2009, EPA (DAM): **HA 28** - L. Keagh, Milltown Malbay, north shore (R100813), 15 September 2009, EPA (DAM) and 19 September 2012 (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 7 April and 17 June 2009, EPA (DAM). **CORK: HA 19** - Carrigdroihid Reservoir, Ashton (W360703), 3 April 2008 and 16 September 2008, EPA (DAM). L. Aderry, Castlemartyr (W935730), 27 August 1969, NH (Bracken and Murray, 1973). L. Allua, Ballingearry (W180652), 4 April, 17 June and 20 August 2008, EPA (DAM). L. Gouganebarra, Inchegeelagh (W009060), 7 April 1966, DAM (Murray, 1972): **HA 20** - L. Abisdealy, Skibbereen (W136314), 9 April, 30 July and, 17 September 2008, EPA (DAM). L. Ballin, Leap (W199389), 9 April and 17 June 2008, EPA (DAM). L. Coolklure, Dunmanway (W177539), 17 June and 11 August 2008, EPA (DAM). L. Curraghally, Drinagh, Dunmanway (W234046), 9 April, 17 June and 12 August 2008, EPA (DAM). L. Skeagh (Schull Reservoir), Schull (V937338), 17 September 2008, EPA (DAM). L. Tooreen, Crookhaven (V790259), 10

April and 17 September 2008, EPA (DAM): **HA 21** - L. Avaul, Glengarriff (V910553), 19 May 1969, NH (Bracken and Murray, 1973). L. Reenydonegan, Bantry (W000515), 19 May 1969, NH (Bracken and Murray, 1973). **DERRY: HA 1** - Upper Reservoir, Creggan (C417173), 10 May and 18 May 2001, 17 May 2002 (PHL); Lower Reservoir, Creggan (C422174), 10 May 2001 (PHL): **HA 2** - pool, Roe Valley Park, Limavady (C679201), 14 July 2000 (Langton, 2002). Pond, Binevenagh, Coleraine (C691305), 25 August 2001 (PHL); fire dam, Binevenagh Forest, Coleraine (C699304), 18 May 2000 (Langton, 2002): **HA 3** - Howell's Tarn, Ballywildrick, Coleraine (C766325), 7 April and 7 July 2002 (PHL). Pond, Downhill Forest, Lions Gate, Coleraine (C762357), 22 June 2000 (Langton, 2002). Lake, Downhill Forest Park (C757354), 25 July and 28 July 1999, 21 August 2001 (PHL). Reservoir, Balinrees, Coleraine (C794300), 9 June 2000 (Langton, 2002). R. Agivey, Garvagh (C838154), 30 May 2002 (PHL). Glenullin Bog, Garvagh (C795132), 29 June 2008 (PHL). R. Bann, Coleraine (C854304), 30 June 2001 (PHL). L. Neagh (H9080), no collection data (McLarnon and Carter, 2000). **DONEGAL: HA 36** - L. Golagh, Ballyshannon (G965655), 8 September 2009, EPA (DAM): **HA 37** - Carn L., Blue Stack Mountains (G871886), 27 July 2005, JRB (DAM). L. Eske, Donegal (G973844), 17 April 2009, EPA (DAM). R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991). R. Stragar, Killybegs (G730787), 23 August 1984, DAM (LJH). L. Shinvagh, Carricode (H005675), 27 April 2002 (PHL): **HA 38** - L. Keel, Crolly (B848162), 17 June 2009, EPA (DAM). L. Nabuckan, Grogan More (B850184), 10 May 2005, JRB (DAM). L. Dunlewey, Dunlewy (B926193), 19 July 2000 (Langton, 2002). Misty L., Glenveagh, GNP (C014228), 3 June 1986, LJH (Heneghan, 1986). L. Veagh, north east shore, Derrylahan (C038233), 24 July 1985, LJH (Heneghan, 1986). L. Nadourcan, Glenveagh (C054228), 18 July 2000 (Langton, 2002). L. Fallaneas, Kindrum (C173424), 30 April, 16 June 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 16 June, 21 July 2009, EPA (DAM). L. Voriskey, The Rosses (B762176), 19 July 2000 (Langton, 2002): **HA 39** - L. Gartan, Church Hill (C055159), 10 June 2009, EPA (DAM); L. Gartan, north shore (C065173), 18 July 2000 (Langton, 2002). R. Leannan, Drumaboden (C165218), 12 August

1982 (Hayes, 1991). L. Fern, Millford (C180233), 23 July 2009, EPA (DAM). R. Crana, Buncrana (C347328), 15 August 1982 (Hayes, 1991). L. Swilly, stagnant drain, Newtown Cunningham (C311197), 21 June 2000 (Langton, 2002); L. Swilly, Inch Island impoundment, Inch (C346240), 18 August 2011 (PHL): **HA 40** - bog pool, Rowantree Hill, Merville (C551401), 18 August 2011 (PHL). **DUBLIN: HA 9** - Upper Reservoir, Bohernabreena (O095219), 29 April 1947, CFH (DAM) and 9 May 1947 (Fitzgerald, 1947). **FERMANAGH: HA 36** - L. Erne (Lower), Black Bay (H072639), 27 April 2002 (PHL). L. Kilturk, south shore, Newtownbutler (H374255), 27 June 2000 (Langton, 2002). Summerhill L., Magheraveely (H490280), 28 June 2000 (Langton, 2002). Stream, Lisnaskea (H384306), 27 June 2000 (Langton, 2002). L. Eyes, Lisbellaw (H324434), 16 August 2011 (PHL). **GALWAY: HA 29** - L. Caherglassaun, Gort (M412061), 13 June, 7 August and 18 September 2007, EPA (DAM). L. Coole, Gort (M432043), 15 June 2009, EPA (DAM). L. Cutra, Gort (R485986), 24 May 2003 (PHL): **HA 30** - L. Ballyquirke, Moycullen (M232317), 8 August 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 18 April and 7 June 2007, EPA (DAM). L. Corrib (M1545), no site or collection data, 1980, BC (DAM): **HA 31** - L. Ahalia, north east shore, Maam Cross (L971402), 22 April, 18 June and 23 September 2009, EPA (DAM). L. Anaserd, Ballyconneely (L605443), 4 April, 6 June and 17 July 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 17 April and 23 July 2007, EPA (DAM). L. Ballynakill, Gorumna (L867236), 15 May and 10 July 2006, EPA (DAM). L. Derryclare, Recess (L825485), 17 April and 16 July 2007, EPA (DAM). L. Illauntrasna, Glentrasna, Gorumna (L888254), 25 July 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 16 April, 24 July and 12 September 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 16 May 2006, 19 April 2007 and 7 June 2007, EPA (DAM): **HA 32** - pond, Diamond Hill, Letterfrack, CNP (L727568), 18 September 1986 (Heneghan, 1987). L. Ballynakill, Cleggan (L639581), 11 July 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 2 April 2007, EPA (DAM). L. Kylemore, Letterfrack (L771582), 2 April and 30 July 2007, EPA (DAM). **KERRY: HA 21** - L. Cloonaghlin, Waterville (V611708), 19 June 2008, EPA (DAM). L. Currane, Waterville (V535664), 18 June 2008, EPA (DAM). Eagles L.,

Knocknagantee (V674728), 9 August 2005, JRB (DAM). L. Namona, Waterville (V596711), 19 June 2008, EPA (DAM): **HA 22** - L. Acoose, Slievanore, Killorglan (V755854), 9 July 2008, EPA (DAM). L. Caragh, Killorglin (V719904), 15 July 2008, EPA (DAM). L. Leane, Killarney (V931886), 22 April 2008, EPA (DAM); L. Leane, Ross Bay (V945850), June 1973 (Douglas and Murray, 1980): **HA 23** - L. Gill, Castlegregory (Q603139), 28 August 2008, EPA (DAM). **KILDARE: HA 9** - ditch, Lyons Estate, Celbridge (N970287), 29 March and 3 April 1982, PA (DAM). Rye Vale pond, Leixlip (N997366), 3 March 1968 (DAM). **KILKENNY: HA 15** - R. Clogh, Clogh (S565790), 10 March 1976, CD (DAM). **LEITRIM: HA 26** - L. Acres, Drumshanbo (G968099), 11 June 2008, EPA (DAM). L. Boderg, Derrycarne, north west shore (N013915), 29 July 2008, EPA (DAM). L. Bofin, Rinnafarna, Dromod (N036891), 29 July 2008, EPA (DAM); L. Bofin, Dromod (N049894), 24 June 2008, EPA (DAM). L. Rinn, Mohill (N095943), 10 April 2008, EPA (DAM): **HA 35** - L. Glenade, south east shore, Glenade, Manorhamilton (G831457), 22 July 2008, EPA (DAM): **HA 35** - L. Sandy, Crocknagapple (G891448), 28 April 2005, JRB/MC (DAM). **LIMERICK: HA 24** - Bleach L., Pallaskenry (R441569), 13 June and 28 July 2009, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 25 June 2008, EPA (DAM). **LOUTH: HA 6** - L. Mentrin, Ardee (N913879), 27 June 2005, DAM/WM (DAM). **MAYO: HA 30** - L. Aille, Aille, Westport (M071807), 8 August and 18 September 2008, EPA (DAM). L. Carra, Keel Bridge, Ballinrobe (M165680), 14 March 1974 (DAM) and 28 April 2008, EPA (DAM). L. Mask, Cushlough pier, Ballinrobe (M153650), 22 April 1964 (Murray, 1972); L. Mask, west shore, Toormakeady (M113702), 24 June 2008, EPA (DAM): **HA 32** - R. Burleemslough, Clapper Bridge Ford, Killeen (L754759), 5 August 2004, DAM/WM (DAM). L. Roonagh, Roonagh (L749759), 30 September 2004, DAM/WM (DAM). R. Bunowen, Louisburg, u/s of bridge (L807807), 5 August 2004, DAM/WM (DAM). L. Fin, Delphi (L841657), 5 April 2006, EPA (DAM). L. Feeagh, Newport (L975983), 25 June 2008, EPA (DAM). L. Carrokeel, Murrisk (L924830), 5 August 2004, DAM/WM (DAM). L. Moher, Liscarney, Westport (L977766), 21 April and 24 June 2008, EPA (DAM). Westport L., Westport Woods, Westport

(L985843), 7 May 2004, DAM/WM (DAM). L. Ballin, south shore, Westport (L994878), 22 April 2008, EPA (DAM). L. Knappabeg, Westport (M010803), 18 September 2008, EPA (DAM): **HA 33** – Achill Island: L. Acorrymore (F578057), 5 August 2004, DAM/WM (DAM) and 7 April 2008, EPA (DAM); L. Bunacurry, (F695048) and Pool/stream, Campport, Achill Island (L677982), 29 September 2004, DAM/WM (DAM). Stream at Pollranny Sweeney, Achill mainland (L755997), 6 May 2004, DAM/WM (DAM): **HA 34** - Castlebar L., north shore, Castlebar (M106879), 7 May 2004, DAM/WM (DAM). L. Conn, Cloghans (G205133), 18 April 1966 (Murray, 1972). L. Lannagh, Castlebar (M105880), 30 June and west shore (M109883), 21 August 2008, EPA (DAM). L. Levally, Massbrook (G146043), 22 April 2008, EPA (DAM). L. More, Ballynagoraher (G115044), 29 June 2006, EPA (DAM). L. Washpool, Ballycarra (M219842), 19 June, 15 August and 25 September 2008, EPA (DAM): **Clare Island** - Wetland at Ballytouhy (L696882) roadside between Maum and Capnagower (L712857) and pond east of Maum road (L710863), 20 August 2002; stream by Maum road (L711861), 5 June 2002);, (all Murray and Murray, 2003). Creggan L., Lecarrow (L689857), June to September 1998, June to November 1999 (Fahy, 2002) and 21 August 2002 (Murray and Murray, 2003). L. Poirtin Fuinch (L706857), 12 June, 4 August 1998 also 13 August and 7 September 1999 (Fahy, 2002). Pond, east of signal tower (L658859) and Pond at Bunnamohaun (L659846), 21 August 2002 (Murray and Murray, 2003). **MEATH: HA 7** - artificial tank, Ardsallagh, Navan (N896635), 3 June 2000 (DAM). R. Boyne, Slane Bridge (N965737) and Oldbridge (O045761), 19 July 1989 (DAM). Tailings pond, Randalstown, Navan (N845714), 19 July 1994 (DAM) and 12 September 1994 (Finnegan, 1998). **MONAGHAN: HA 36** - L. Annaghmakerrig, Newbliss (H585205), 25 April, 22 May and 27 June 2006, EPA (DAM). L. Drumlona, Rockcorry (H636176), 11 July 2007, EPA (DAM). L. Summerhill, Clones (H490279), 26 April 2007, EPA (DAM). **OFFALY: HA 25** - bog lake, Turraun (N172185), June 1998 (DAM). **ROSCOMMON: HA 26** - R. Suck, Newtown (M844346), 15 August 1981 (Hayes, 1991). L. Meelagh, Keadew (G901117), 15 April, 11 June 2008, EPA (DAM). L. Annaghmore, Strokestown, Elphin (M902838), 15 July 2008, EPA (DAM). L. Cavetown, Boyle (M832974),

11 June and 17 July 2008, EPA (DAM). L. Funshinagh, north of Brideswell (M933513), 23 April 2007, EPA (DAM). L. Glinn, Loughglinn, Castlerea (M629870), 12 June 2008, EPA (DAM). L. Grange (Grange L.), Greywood, Strokestown (M938857), 8 April 2008, EPA (DAM). L. O'Flynn, south east shore, Ballinlough (M585786), 12 June 2008, EPA (DAM). **SLIGO:** - L. Gara, Cuppanagh, Cloonlough (G714013), 26 June 2008, EPA (DAM); L. Gara, Monastredan (M708996), 28 April 2008, EPA (DAM): **HA 35** - L. Kilsallagh (Reservoir), Kilsallagh (G734393), 23 July 2008, EPA (DAM). L. Templehouse, Ballymote (G619182), 30 April, 11 June, 4 September and 9 September 2008, EPA (DAM). L. Gill (G782350), 20 August 2008, EPA (DAM). **TIPPERARY:** **HA 16** - R. Suir, Cabragh (S124562), 6 July 1992 (Murray and Lynch, 1992): **HA 18** - Black L., Arra Mountains (R738771), 10 August 2005, JRB (DAM). L. Curra, Galtymore Mountain (R867242), 10 August 2005, JRB (DAM): **HA 25** - R. Kilmastulla, Kilmastulla Bridge (R728698), 3 September 1981 (Hayes, 1991). **TYRONE:** **HA 1** - L. Oak, Gortin, Newtown Stewart (H498843), 16 August 2011 (PHL). L. Macrory (H575765), 16 August 2011 (PHL). **WATERFORD:** **HA 16** - Ballyscanlan Reservoir, Tramore (S540030), 3 July 2009, EPA (DAM): **HA 17** - Belle Lake, Dunmore East (S665049), 22 April and 2 July 2009, EPA (DAM). L. Carrigavantry, Tramore (S548022), 21 April and 3 July 2009, EPA (DAM). **WESTMEATH:** **HA 25** - L. Ennell, Tudenham (N415466), 3 March 1966 (Murray, 1972), 1981 (Forde, 1985). **HA 26** - L. Owel, Mullingar (N421566), 24 July 1980, NH (BPH). L. Owel, Mullingar (N421566), 1981, GPF (Forde, 1985). L. Killinure, Ballaghkeernan Bay (N069445), 24 April 2007, EPA (DAM). **WICKLOW:** **HA 10** - L. Bray Lower, Glencree (O140164), 4 June 1986 and 16 June 2009, EPA (DAM). L. Dan, Roundwood (O157035), 15 June 2009, EPA (DAM). L. Tay, Luggala (O163008), 28 July 2009, EPA (DAM). R. Glenealo, Glendalough (T090962), 16 July 1996, EMcE/DAM (McEntee, 1997). Upper Glendalough Lake, east shore (T110963), 10 July 1996 (Murray, 2005).

***Procladius (Holotanypus) crassinervis* (Zetterstedt, 1838)**

ANTRIM: **HA 5** - L. Mourne, Carrickfergus (J415924), 4 May 1999 and 7 April 2012 (PHL).

CAVAN: HA 7 - L. Acurry, Baileborough (N584990), 5 April 2007, EPA (DAM). L. Ramor, Virginia (N595870), 6 March 1989 (DAM): **HA 26** - L. Sheelin, Kilnahard (N435860), April 1988 (DAM) and Gore Point (N439817), March 1983, PG (DAM): **HA 36** - L. Derrybrick, Milltown, Belturbet (H346117), 4 April 2007, EPA (DAM). L. Gowna, south basin, Dring (N300856), 18 April 2007, EPA (DAM). L. Sillan, Shercock (H708071), 14 March 1978 (DAM) and mid lake (H705067), 19 April 2007, EPA (DAM). **CLARE: HA 27** - L. Bunny, south east shore, Aughrim (R377965), 11 June 2009, EPA (DAM). L. Cullaun, Corrofin (mid east shore) (R317905), 5 April, 7 June 2006 and 8 April 2009, EPA (DAM). L. Dromore, Ruan, Corrofin (R345858), 11 April 2006 and 8 April 2009, EPA (DAM). L. Inchicronan, west basin, Crusheen (R391860), 8 April 2009, EPA (DAM): **HA 28** - L. Lickeen, west shore, Kilfenora (R168909), 6 April 2009, EPA (DAM). L. Naminna, Boolteagh (R179708), 11 June 2009, EPA (DAM). **CORK: HA 19** - L. Allua, Ballingeary (W180652), 4 April 2008, EPA (DAM). **DERRY: HA 1** - Upper Reservoir, Creggan, Derry (C417173), 26 April 2001, 17 May 2002 (PHL); Lower Reservoir, Creggan, Derry (C422174), 23 March 2001 (PHL): **HA 3** - L. Neagh (H9080), no collection data, May to August, 1971-1974 (Carter, 1975; McLarnon and Carter, 2000). **DONEGAL: HA 37** - L. Eske, Donegal (G973844), 17 April 2009, EPA (DAM). L. Shinvagh, Carricode (H005675), 27 March 2004 (PHL): **HA 38** - L. Veagh, north east shore, Glenveagh (C039230), 22 August 1984 (DAM). R. Owencarrow, vegetation sweep near bridge, Glenveagh (C041229), 22 August 1985 (Heneghan, 1986). L. Nadourcan, Glenveagh (C054228), 23 July 1985 (Heneghan, 1986). L. an tSeisigh, Portnablagh (Sheephaven) (C043361), 1 April 2009, EPA (DAM). L. Keel, Kilmacrennan (C158243), 2 April 2009, EPA (DAM). **GALWAY: HA 30** - L. Beaghcauneen, Ballinaboy (L679470), 5 April 2007, EPA (DAM). L. Corrib Upper, Oughterard (M138486), 11 April 2007, EPA (DAM): **HA 32** - L. Augrusbeg, Cleggan (L557582), 4 April 2007, EPA (DAM). **KERRY: HA 22** - Doolough, Muckross Peninsula (V949860), 3 July 1973 (Douglas and Murray, 1980). L. Guitane, Crohane, Killarney (W025846), 21 April 2008, EPA (DAM). L. Kilbrean, Killarney (W005935), 26 August 1969, NH (Bracken and Murray, 1973). L. Leane, Killarney, Brickeen

(V937850), 4 April 1974 (Murray, 2005); Castlough Bay, north (V975873), 27 June 1973, JPOC (Douglas and Murray, 1980); Castlough Bay, south (V966866), 3 April 1974 (Douglas and Murray, 1980); Glena Bay (V930858), 27 July 1973 (Douglas and Murray, 1980); O'Sullivan's Cascade (V916886), 17 April 1973 (Douglas and Murray, 1980); Muckross Boathouse (V965866), 6 September 1997, NOM (DAM). Muckross Lake, Killarney, Dundag Bay (V964858), 1973 (Douglas and Murray, 1980). **LEITRIM: HA 26** - L. Allen, Mountallen, Drumshanbo (G950145), 28 April 2008, EPA (DAM). L. Bofin, Dromod (N049894), 10 April 2008, EPA (DAM): **HA 35** - L. Glenade, south east shore, Glenade, Manorhamilton (G831457), 31 March 2008, EPA (DAM). L. Glencar, Glencar (G748434), 1 April 2008, EPA (DAM): **HA 36** - L. Drumlaheen, Feenagh, Ballinamore (H091071), 11 April 2007, EPA (DAM). **MAYO: HA 26** - L. Nanoge, Urlaur (M506903), 24 April 2008, EPA (DAM): **HA 30** - L. Mask, west shore, Toormakeady (M097647), 14 April 2008, EPA (DAM): **HA 32** - L. Feeagh, Newport (L975983), 11 April 2008, BK/RL (DAM): **HA 34** - L. Conn, west shore (G165144), 15 April 2008, EPA (DAM). L. More, Ballynagoraher (G115044), 4 April 2006, EPA (DAM). **MONAGHAN: HA 36** - L. Drumlona, Rockcorry (H636176), 4 April 2007, EPA (DAM). **ROSCOMMON: HA 26** - L. Meelagh, Keadew (G901117), 15 April 2008, EPA (DAM). Cavetown L., Boyle (M832974), 9 April 2008, EPA (DAM). Grange L., Greywood, Strokestown (M938857), 8 April 2008, EPA (DAM). **SLIGO: HA 34** - L. Talt, Gleneask (G402151), 10 April 2008, EPA (DAM). **WESTMEATH: HA 7** - L. Lene, (N510685), 26 April 2006, EPA (DAM). **HA 26** - L. Killinure, Wineport (N067458) and Ballaghkeernan Bay (N069445), 24 April 2007, EPA (DAM). **WICKLOW: HA 9** - Pollaphuca Reservoir, Ballymore Eustace (N995080), 30 April 2009, EPA (DAM): **HA 10** - Vartry Reservoir, Roundwood (O205050), 6 April 2009, EPA (DAM).

Procladius (Holotanypus) culiciformis (Linnaeus, 1767)

MAYO: HA 32 - R. Owenwee, Belclare, Westport (L960820), July 1911, PHG (Grimshaw, 1912). Knappagh, Westport (L980805), July 1911, PHG (Grimshaw, 1912). Lough near

Westport (L9984), July 1911, PHG (Grimshaw, 1912). Demesne, Westport (L990845), July 1911, PHG (Grimshaw, 1912). L. Clogher (Clogher L.), Clogher, Westport (M035884), July 1911, PHG (Grimshaw, 1912).

***Procladius (Holotanypus) sagittalis* (Kieffer, 1909)**

ANTRIM: Rathlin Island - L. Ally (D154497), 24 July 2000 (Langton, 2002) and 5 July 2004 (PHL). L. Craigmacagan (D154498), 24 July 2000 (Langton, 2002) and 5 July 2004 (PHL). No name Lough (D095505), 24 July 2000 (Langton, 2002). *Menyanthes* pool (D123515), 6 July 2004 (PHL). L. Nachiule (D160521), 24 July 2000 (Langton, 2002): **HA 3** - Leslie Hill pool, Ballymoney (C935263), 26 September 1999 (PHL). L. Neagh, Churchtown Point (J056852), 22 August 2001 and 22 May 2011 (PHL). Templewell Pond, Templepatrick (J232856), 26 July 2008 (PHL). Killylane Reservoir, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 5** - L. Mourne, Carrickfergus (J415924), 4 May and 8 May 1999 (PHL). **CAVAN: HA 7** - L. Acurry, Baileborough (N584990), 12 June 2007, EPA (DAM): **HA 36** - Glasshouse L., Killashandra (H270060), 18 July 2007, EPA (DAM): **HA 36** - L. Gowna, south basin, Dring (N300856), 18 April 2007, EPA (DAM). **CLARE: HA 25** - L. Graney (R568907), 24 May 2003 (PHL). L. Alewnaghta, west shore, Whitegate (R758908), 16 July 2009, EPA (DAM): **HA 27** - L. Bunny, south east shore, Aughrim (R377965), 2 May 2006, EPA (EPA). L. Cullaun, Corrofin (mid east shore) (R317905), 5 April 2006, EPA (EPA). L. Muckanagh, Tubber, Corrofin (R368926), 7 June and 3 July 2006, EPA (EPA). L. Rosroe, south east shore, Newmarket on Fergus (R442681), 12 August 2009, EPA (DAM): **HA 28** - L. Acrow, Lisscasey (R193687), 8 June and 7 July 2006, EPA (DAM). **CORK: HA 19** - Iniscarra Reservoir, Coachford (W477717), 28 July 2008, EPA (DAM): **HA 21** - L. Reenydonegan, Bantry (W000515), 19 May 1969, NH (Bracken and Murray, 1973). **DERRY: HA 1** - inflow to Upper Reservoir, Creggan, Derry (C413171), 10 May 2001 (PHL): **HA 2** - Binevenagh pond, Coleraine (C691305), 18 May and 16 September 2000 (Langton, 2002), also 25 August 2001 (PHL); fire dam, Binevenagh Forest, Coleraine (C699304), 18 May 2000 (Langton, 2002): **HA**

3 - Howell's Tarn, Ballywildrick, Coleraine (C766325), 21 April and 7 July 2002 (PHL). Downhill Lake, Downhill Forest, Coleraine (C757354), 21 August 2001 and 24 March 2002 (PHL). Bishops Gate Garden, Coleraine (C762355), 21 August 2001 (PHL). Glenullin Bog, Garvagh (C795132), 7 June 2008 (PHL). R. Bann, Coleraine (C854304), 13 May, 31 May, 23 June, 4 July and 7 September 1999 (PHL), 3 July, 24 July 2000 and 26 April 2001 (PHL). Pond 1, Magherafelt Golf Course, Traad Point (H950873), 10 May 2000 (Langton, 2002). L. Neagh, Ballyronan (H948862), 4 May 1999 and 22 August 2001 (PHL). **DONEGAL: HA 36** - L. Golagh, Ballyshannon (G965655), 8 June and 7 July 2009, EPA (DAM): **HA 37** - L. Shinvagh, Carricode (H005675), 27 April 2002 (PHL): **HA 38** - L. Scalpachore, Cruit Island (B730216) and L. Mulladerg, The Rosses (B775199), 19 July 2000 (Langton, 2002). L. Naweelogue, Glenveagh (B974185), 5 June 1986 (Heneghan, 1986). L. an tSeisigh, Portnablagh (Sheephaven) (C043361), 16 June 2009, EPA (DAM). L. Voriskey, The Rosses (B762176), 19 July 2000 (Langton, 2002): **HA 39** - L. Gartan, north shore, Church Hill (C065173), 18 July 2000 (Langton, 2002). R. Leannan, Drumaboden (C165218), 12 August 1982 (Hayes, 1991). L. Fern, Milford (C182247), 18 August 2011 (PHL). L. Swilly, Inch Island empoundment, Inch (C346240), 18 August 2011 (PHL). **DOWN: HA 5** - Bow L., Ballynahinch (J354577), 22 June 2000 (Langton, 2002). **DUBLIN: HA 9** - Upper Reservoir, Bohernabreena (O095219), 9 May 1947 (Fitzgerald, 1947). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002): **HA 36** - L. Erne Upper, slipway (H362242), 27 June 2000 (Langton, 2002). L. Erne Lower, Boa Island (H108626), 29 June 2000 (Langton, 2002). L. Inver (Inver L.), Rosslea (H518314), 28 June 2000 (Langton, 2002). L. Killyfole (Mill L.), Rosslea (H464314), 28 June 2000 (Langton, 2002). L. Lattone, Kiltyclogher (H003456), 29 June 2000 (Langton, 2002). L. Eyes, Lisbellaw (H324434), 16 August 2011 (PHL). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 24 May 2003 (PHL): **HA 30** - L. Ballyquirke, Moycullen (M232317), 8 August 2007, EPA (DAM). L. Corrib, no data (M150450), 1980, BC (DAM); L. Corrib (M150450), 1 August 1964 (Murray, 1972). L. Ross, Moycullen (M200363), 24 May 2003 (PHL). **KILDARE: HA 7** - R. Boyne, Leinster Bridge (N665435), 5 July 1991 (DAM).

LOUTH: HA 6 - L. Mentrim, Ardee (N913879), 27 June 2005, DAM/WM (DAM). **MAYO: HA 33** - L. Cross, Drumreagh, Belmullet (F651299), 17 June, 14 August and 17 September 2008, EPA (DAM). L. Bunacurry, Achill Island (F695048), 29 September 2004, DAM/WM (DAM). Bog pools, Glenamoy (F896345), 1973, CD (Dowling and Murray, 1981): **Clare Island** - Creggan L., Lecarrow (L689857), June to October 1998 and June to August 1999 (Fahy, 2002). L. Poirtin Fuinch (L706857), 10 June 1999 to 20 August 1999 (Fahy, 2002). **MEATH: HA 7** - tailings pond interceptor ditch, Randalstown, Navan (N857717), 29 August 1995 (Finnegan, 1998); tailings pond, Randalstown, Navan (N845714), 22 June and 29 August 1995 (Finnegan, 1998). **MONAGHAN: HA 36** - L. Inner, Dartery, Drum (H625173), 5 April, 6 June and 9 September 2007, EPA (DAM). **OFFALY: HA 25** - bog lake 1, Turraun (N172185), 1 June 1998 (DAM) and 3 June 1999 (Murray, 2005). R. Shannon, Shannon Bridge (M967254), 15 August 1981, BPH (Hayes, 1991; Murray, 2005). **ROSCOMMON: HA 26** - L. Annaghmore, Strokestown, Elphin (M902838), 12 June 2008, EPA (DAM). **WATERFORD: HA 16** - Ballyscanlan Reservoir, Tramore (S540030), 22 April 2009, EPA (DAM). L. Knockaderry, Knockaderry (S496062), 2 April 2009, EPA (DAM): **HA 17** - Belle Lake, Dunmore East (S665049), 22 April and 1 September 2009, EPA (DAM). L. Carrigavantry, Tramore (S548022), 21 April and 3 July 2009, EPA (DAM). **WESTMEATH: HA 25** - L. Ennell, Tudenham (N415466), 26 January 1966 (Murray, 1972): **HA 36** - L. Bane, Collinstown (N550712), 26 April and 26 June 2006, EPA (EPA).

***Procladius (Holotanypus) signatus* (Zetterstedt, 1850)**

CAVAN: HA 26 - L. Sheelin, Kilnahard (N435860), 1 May 1980 (DAM): **HA 36** - L. Ardan, Milltown, Belturbet (H354124), 11 April 2007, EPA (DAM). L. Gowna, south basin, Dring (N300856), 18 April 2007, EPA (DAM). **CLARE: HA 27** - Gortglass L., south shore, Killadysert (R223596), 2 April 2009, EPA (DAM). L. Inchicronan, west basin, Crusheen (R391860), 8 April 2009, EPA (DAM). L. Rosroe, south east shore, Newmarket on Fergus (R442681), 12 August 2009, EPA (DAM). L. Atedaun, Corrofin (R297884), 21 April 2009,

EPA (DAM): **HA 28** - L. Keagh, south west shore, Milltown Malbay (R100811), 8 July 2009, EPA (DAM). **CORK: HA 19** - Iniscarra Reservoir, Coachford (W477717), 28 July 2008, EPA (DAM). **DERRY: HA 3** - L. Neagh, unspecified (H900800), no date, anon. (McLarnon and Carter, 2000). **DONEGAL: HA 36** - L. Unshin, Ballyshannon (G951637), 8 June 2009, EPA (DAM): **HA 37** - Carn L., Blue Stack Mountains (G871886), 27 July 2005, JRB (Murray, 2005): **HA 38** - L. Mulladerg, The Rosses (B775199), 19 July 2000 (Langton, 2002). L. Keel, Crolly (B848162), 17 June and 7 September 2009, EPA (DAM). L. Veagh, north east shore, Glenveagh (C038233), 31 August 1985 (Heneghan, 1986). L. Glen, Glen (C105292), 16 June 2009, EPA (DAM). L. Kinny, Fanad (C204442), 21 July 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 13 August 1982, BPH (DAM): **HA 39** - L. Nambraddan, GNP, Glenveagh (C022193), 31 July 1985 (Heneghan, 1986). **DOWN: HA 5** - L. Henney, Ballynahinch (J348586), 22 June 2000 (Langton, 2002). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002). **GALWAY: HA 29** - L. Caherglassaun, Gort (M412061), 13 June 2007, EPA (DAM): **HA 30** - L. Bofin, Maam Cross (M034441), 31 July 2007, EPA (DAM). L. Maumwee, Maam Cross (L977485), 19 April 2007, EPA (DAM). Lay-by on road N59, Moycullen (M204336), pool and nearby stream, 25 May 2003 (PHL): **HA 32** - L. Ballynakill, Cleggan (L639581), 11 July and 11 September 2007, EPA (DAM). **KERRY: HA 22** - L. Leane, Killarney, Castletlough Bay, north (V966866), 18 May 1973, DAM (Douglas and Murray, 1980; Murray, 2005); Killarney (V931886), 10 July and 18 September 2008, EPA (DAM). Upper Lake, Killarney (V909821), 17 July 2008, EPA (DAM). **LEITRIM: HA 26** - L. Boderg, Dromod (N020910), 25 June 2008, EPA (DAM): **HA 35** - L. Glenade, south east shore, Glenade, Manorhamilton (G831457), 22 July 2008, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 27 August and 10 September 2008, EPA (DAM). **MAYO: HA 32** - L. Doo, Delphi, north east shore (L834689), 22 August 2002, DAM/WM (DAM) and west shore (L835681), 12 July 2006, EPA (DAM): **HA 33** - L. Keel, Achill Island (F651059), 16 July 2008, EPA (DAM). **MONAGHAN: HA 6** - L. Monalty, Carrickmacross (H866027), 14 September 2007, EPA (DAM): **HA 36** - L.

Drumlona, Rockcorry (H636176), 5 June and 11 July 2007, EPA (DAM). **SLIGO: HA 26** - L. Gara, Cuppanagh, Cloonlough (G714013), 26 June 2008, EPA (DAM) and Monastredan (M708996), 5 September 2008, EPA (DAM): **HA 35** - L. Arrow, Ballinafad (G789123), 29 April 2008, EPA (DAM). L. Gill (G782350), 11 June and 20 August 2008, EPA (DAM). **WESTMEATH: HA 7** - L. Lene (N510685), 26 April 2006, EPA (DAM): **HA 26** - L. Owel, Mullingar (N421566), 9 August 1979, NH (Hayes, 1980). L. Killinure, Wineport (N067458), 24 April 2007, EPA (DAM).

***Procladius (Holotanypus) simplicistilus* Freeman, 1948**

ANTRIM: HA 4 - Dungonnell Dam, Newtown Crommelin (D193170), 20 June 2000 (Langton, 2002). **CAVAN: HA 36** - L. Gowna, north basin, Arnagahan (N285920), 24 July 2007, EPA (DAM). **CLARE: HA 25** - L. Graney, Doorus, west shore (R556930), 3 August 2006, EPA (DAM): **HA 27** - L. Bunny, south east shore, Aughrim (R377965), 10 May 2005, 7 June and 1 August 2006, EPA (EPA). L. Cullaun, Corrofin (mid east shore) (R317905), 7 June 2006, EPA (EPA). L. Dromore, Ruan, Corrofin, west shore (R345858), 8 April 2009 and mid lake (R352864), 16 June 2009, EPA (DAM). Gortglass L., south shore, Killadysert (R223596), 7 July 2009, EPA (DAM). L. Inchiquin, west shore, Corrofin (R266896), 15 July 2009, EPA (DAM). L. Muckanagh, Tubber, Corrofin (R368926), 3 April and 7 June 2006, EPA (DAM): **HA 28** - L. Keagh, Milltown Malbay (R100813), 1 April 2009, EPA (DAM). **CORK: HA 19** - Carrigdroihid Reservoir, Ashton (W360703), 3 April 2008, EPA (DAM). L. Allua, Ballingearry (W180652), 17 June 2008, EPA (DAM): **HA 20** - L. Skeagh (Schull Reservoir), Schull (V937338), 8 April 2008, EPA (DAM): **HA 21** - L. Bofinna, Bantry (W041488), 8 April 2008, EPA (DAM). L. Reenydonegan, Bantry (W000515), 8 September 1969, NH (Bracken and Murray, 1973). **DERRY: HA 3** - L. Neagh, Ballyronan (H948862), 10 May 2000 (Langton, 2002). **DONEGAL: HA 36** - L. Golagh, Ballyshannon (G965655), 7 July 2009, EPA (DAM): **HA 37** - L. Eske, Donegal (G973844), 17 April and 14 July 2009, EPA (DAM): **HA 38** - L. Mulladerg, The Rosses (B775199), 19 July 2000 (Langton, 2002). L. Dunglow, west shore,

Dunglow, The Rosses (B782119), 17 June 2009, EPA (DAM); L. Dunglow, east shore, Dunglow (B787117), 19 July 2000 (Langton, 2002). L. Nacung (Upper), Dunlewy (B904191), 19 July 2000 (Langton, 2002). L. Dunlewey, Dunlewy (B926193), 19 July 2000 (Langton, 2002). L. Barra, Commeen (B935119), 22 April and 10 June 2009, EPA (DAM). L. Veagh, GNP, Glenveagh Castle shore (C038230), 28 June 1984 (DAM) and north east shore (C038233), 24 July 1985 (Heneghan, 1986). L. Glen, Glen (C105292), 16 June 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 21 July 2009, EPA (DAM). L. Kiltoris, Dawros, Ardara (G675976), 17 June 2009, EPA (DAM): **HA 39** - L. Gartan, Church Hill (C055159), 10 June 2009, EPA (DAM). L. Gartan, north shore, Church Hill (C065173), 18 July 2000 (Langton, 2002). **DOWN: HA 5** - L. Henney, Ballynahinch (J348586), 22 June 2000 (Langton, 2002). Bow L., Ballynahinch (J354577), 22 June 2000 (Langton, 2002). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002): **HA 36** - L. Macnean, Upper, Belcoo (H042403) and L. Macnean, Lower (H085384), 29 June 2000 (Langton, 2002). **GALWAY: HA 30** - L. Beaghcauneen, Ballinaboy (L679470), 6 June 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 18 April and 7 June 2007, EPA (DAM). L. Corrib (M1545), 1980, BC (DAM); L. Corrib Lower, Moycullen (M271360), 11 April 2007, EPA (DAM). L. Lettercraffroe, Oughterard (M056376), 18 April and 14 June 2007, EPA (DAM). L. Ross, Moycullen (M188365), 13 April 2007, EPA (DAM): **HA 31** - L. Anaserd, Ballyconneely (L605443), 20 June and 17 July 2007, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June 2007, EPA (DAM). L. Loughanaure, Kilkieran (L828320), 7 June and 24 July 2007, EPA (DAM): **HA 32** - L. Tully, Tully Cross (L695618), 3 April 2007, EPA (DAM). L. Nambrackmore, Ballinaboy, Toombeola (L716454), 6 June 2007, EPA (DAM). **KERRY: HA 21** - L. Inchiquin, Kenmare (V837629), 15 April and 18 June 2008, EPA (DAM): **HA 22** - L. Guitane, Crohane, Killarney (W025846), 8 July 2008, EPA (DAM). **LEITRIM: HA 26** - L. Natire (G966340), 14 April 2005, JRB (DAM): **HA 35** - L. Nabrack, Crocknagapple (G860477), 29 April 2005, JRB (DAM). L. Sandy, Crocknagapple (G891448), 28 April 2005, JRB/MC (Murray, 2005): **HA 36** - L. Drumlaheen, Feenagh, Ballinamore

(H091071), 11 April and 17 July 2007, EPA (DAM). **LIMERICK: HA 24** - Bleach Lake, Pallaskenry (R441569), 28 July 2009, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 25 June 2008, EPA (DAM). L. Ree, Bleanavoher (N069445), 25 April 2007, EPA (DAM). **MAYO: HA 26** - L. Nanoge, Urlaur (M506903), 24 April 2008, EPA (DAM): **HA 30** - L. Carra, Keel Bridge, Ballinrobe (M165680), 28 April and 19 June 2008, EPA (DAM): **HA 32** - L. Moher, Lisearney, Westport (L977766), 21 April 2008, EPA (DAM): **HA 33** - L. Carrowmore, Bangor Erris, Cloontakilla Bay (F851253), 17 June 2008 and Derreens (F833299), 28 July 2008, EPA (DAM). **MONAGHAN: HA 36** - L. Annaghmakerrig, Newbliss (H585205), 19 September 2006, EPA (DAM). L. Corconnolly, Clones (H510247), 19 May 1964, NH (Murray, 1972). **ROSCOMMON: HA 26** - L. Ree, Barley Harbour, Yew Point (N018485), 25 April 2007, EPA (DAM). L. Meelagh, Keadew (G901117), 15 April 2008, EPA (DAM). L. Cavetown, Boyle (M832974), 9 April 2008, EPA (DAM). L. Key, pier, Hogs Island, Boyle (G825054), 9 September 2008, EPA (DAM). **SLIGO: HA 35** - L. Arrow, Ballinacfad (G789123), 29 April 2008, EPA (DAM). **TIPPERARY: HA 18** - Black L., Arra Mountains (R738771), 4 May 2005, JRB (DAM). **WATERFORD: HA 16** - L. Knockaderry, Knockaderry (S496062), 2 April 2009, EPA (DAM). **WESTMEATH: HA 26** - L. Killinure, Wineport (N067458), 24 April 2007, EPA (DAM): **HA 36** - L. Bane, Collinstown (N550712), 26 April 2006, EPA (EPA). **WICKLOW: HA 9** - Pollaphuca Reservoir, Ballymore Eustace (N995080), 30 April 2009, EPA (DAM).

***Procladius (Holotanypus) sagittalis/signatus* sensu Langton and Visser, 2003**

(=*Procladius (Holotanypus) Pe 3*)

CLARE: HA 27 - L. Bridget, east shore, Derrymore, Badyke (R558797), 17 September 2009, EPA (DAM). L. Muckanagh, Tubber, Corrofin (R370922), 11 June 2009, EPA (DAM): **HA 29** - L. Skeardeen, Kilcorkan (R388991), 17 June 2009, EPA (DAM): **HA 25** - L. Derg, d/s Killaloe (M705715), 21 April 2009 and Mountshannon (R718861), 18 September 2009, EPA (DAM). L. Alewnaghta, west shore, Whitegate (R758908), 17 June 2009, EPA (DAM): **HA 27**

- L. Dromore, Ruan, Corrofin, west shore (R345858), 21 July 2009 and mid lake (R352864), 16 June 2009, EPA (DAM). Gortglass L., south shore, Killadysert (R223596), 7 July 2009 and north shore, Killadysert (R223599), 11 June and 15 September 2009, EPA (DAM). L. Inchiquin, south east shore, Corrofin (R272894), 17 September 2009, EPA (DAM). L. Rosroe, Newmarket on Fergus south east shore (R442681), 12 August 2009 and north east shore (R449697), 16 September 2009, EPA (DAM): **HA 28** - L. Doo, Milltown Malbay (R123721), 8 July 2009, EPA (DAM). L. Keagh, Milltown Malbay, south west shore (R100811), 8 July 2009, also north shore (R100813), 11 June and 15 September 2009, EPA (DAM). L. Lickeen, Kilfenora, west shore (R163909), 11 June, 21 July and 15 September 2009, EPA (DAM). L. Naminna, Boolteagh (R178710), 7 July 2009, EPA and 11 June 2009, EPA (DAM). **CORK: HA 19** - Carrigdroihid Reservoir, Ashton (W360703), 14 August and 16 September 2008, EPA (DAM). Iniscarra Reservoir, Coachford (W477717), 16 June, 31 July and 16 September 2008, EPA (DAM): **HA 20** - L. Ballin, Leap (W199389), 17 June and 17 September 2008, EPA (DAM). L. Coolklure, Dunmanway (W177539), 17 June and 16 September 2008, EPA (DAM). L. Curraghally, Drinagh, Dunmanway (W234046), 17 June and 11 September 2008, EPA (DAM). L. Skeagh (Schull Reservoir), Schull (V937338), 17 September 2008, EPA (DAM). **DONEGAL: HA 1** - L. Finn, Fintown, Glenties (B911018), 23 July 2009, EPA (DAM): **HA 38** - L. Dunglow, west shore, Dunglow (The Rosses) (B782119), 17 June and 5 August 2009, EPA (DAM). L. Nasnahida, Doocharry, Dunglow (B852076), 17 June 2009, EPA (DAM). L. Kindrum, Kindrum, Fanad (C186430), 9 September 2009, EPA (DAM). L. Kiltoris, Dawros, Ardara (G675976), 17 June 2009, EPA (DAM): **HA 39** - L. Akibbon, Church Hill (C068184), 22 July and 9 September 2009, EPA (DAM). L. Fern, Millford (C180233), 23 July 2009, EPA (DAM). **GALWAY: HA 29** - L. Coole, Gort (M432043), 15 June and 27 July 2009, EPA (DAM): **HA 31** - L. Anaserd, Ballyconneely (L605443), 10 July 2006, EPA (DAM). **KERRY: HA 21** - L. Cloonaghlin, Waterville (V611708), 8 May, 19 June and 24 July 2008, EPA (DAM). L. Currane, Waterville (V535664), 22 July 2008, EPA (DAM). L. Namona, Waterville (V596711), 19 June 2008, EPA (DAM): **HA 22** - L. Guitane, Crohane, Killarney (W025846), 8

July 2008, EPA (DAM). Muckcross Lake, Muckcross, Killarney (V950853), 16 July 2008, EPA (DAM): **HA 23** - L. Gill, Castlegregory (Q603139), 29 April and 28 August 2008, EPA (DAM). **LIMERICK: HA 24** - Bleach Lake, Pallaskenry (R441569), 28 July 2009, EPA (DAM). L. Gur, Holycross (R646413), 13 June 2009, EPA (DAM). **MAYO: HA 30** - L. Mask, west shore, Toormakeady (M113702), 24 June 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, west shore (L833680), 25 August 2008, EPA (DAM). L. Glencullin, Delphi, south west shore (L819696), 25 August 2008 and north shore (L818711), 26 June and 22 September 2008, EPA (DAM): **HA 33** - L. Keel, Achill Island, south east shore (F650051), 17 June 2008, EPA (DAM): **HA 34** - L. Conn, Brackwansha (G191098), 18 June 2008, EPA (DAM): **HA 26** - L. Nanoge, Urlaur (M506903), 27 August 2008, EPA (DAM): **HA 30** - L. Carra, Keel Bridge, Ballinrobe (M165680), 28 April 2008, EPA (DAM): **HA 32** - L. Feeagh, Newport (L975983), 25 June, 24 July and 17 September 2008, EPA (DAM). L. Moher, Liscarney, Westport (L977766), 21 July and 18 September 2008, EPA (DAM). L. Knappabeg, Westport (M010803), 23 July and 18 September 2008, EPA (DAM). **SLIGO: HA 35** - L. Easky, Ox Mountain (G446230), 18 June and 17 July 2008, EPA (DAM). **TIPPERARY: HA 25** - L. Derg, Dromineer (M809858), 17 June 2009, EPA (DAM). **WATERFORD: HA 17** - Belle Lake, Dunmore East (S665049), 2 July 2009, EPA (DAM).

Procladius (Holotanypus) Pe4 (sensu Langton and Visser, 2003)

CLARE: HA 25 - L. Graney, Doorus (R557924), 11 August 2009, EPA (DAM): **HA 27** - L. Bridget, Derrymore, Badyke (R558797), 29 July 2009, EPA (DAM). L. Bunny, south east shore, Aughrim (R377965), 4 July 2006 and 14 July 2009, EPA (DAM). L. Cullaun, Corrofin, east shore (R317905), 22 July 2009, EPA (DAM). L. Dromore, west shore, Ruan, Corrofin (R345858), 21 July 2009, EPA (DAM). L. Inchiquin, south east shore, Corrofin (R272894), 16 June 2009, EPA (DAM). **CORK: HA 19** - Iniscarra Reservoir, Coachford (W477717), 28 and 31 July 2008, EPA (DAM). **GALWAY: HA 29** - L. Coole, Gort (M432043), 15 June 2009, EPA (DAM). **LEITRIM: HA 35** - L. Glenade, south east shore, Glenade, Manorhamilton

(G831457), 22 July 2008, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 25 June and 27 August 2008, EPA (DAM). **MAYO: HA 34** - L. Conn, south basin, Illannaglashy (G207070), 20 August 2008, EPA (DAM). L. Lannagh, west shore, Castlebar (M109883), 21 August 2008, EPA (DAM). L. Washpool, Ballycarra (M219842), 15 August 2008, EPA (DAM): **HA 30** - L. Carra, Keel Bridge, Ballinrobe (M165680), 19 June 2008, EPA (DAM): **HA 32** - L. Moher, Liscarney, Westport (L977766), 24 June 2008, EPA (DAM). **SLIGO: HA 26** - L. Gara, Monastredan (M708996), 28 April 2008, EPA (DAM): **HA 34** - L. Talt, Gleneask (G402151), 15 July 2008, EPA (DAM).

***Procladius (Holotanypus) sp. nr vesus* Roback (sensu Langton, 1991)**

GALWAY: HA 30 - L. Corrib Upper, Oughterard (M138486), 14 August 2007, EPA (Murray, 2010).

***Procladius (Psilotanypus) flavifrons* Edwards, 1929**

CAVAN: HA 7 - L. Nadreegeal, Ballyjamesduff (N537933), 2 May 2007, EPA (DAM). L. Acurry, Baileborough (N584990), 12 June 2007, EPA (DAM): **HA 36** - L. Cuillaghan, Ballyconnell (H303183), 6 June 2007, EPA (DAM). **CORK: HA 19** - L. Allua, Ballingearry (W180652), 17 June 2008, EPA (DAM). **DONEGAL: HA 36** - L. Vearty, Ballyshannon (G995658), 8 July 2009, EPA (DAM). **GALWAY: HA 30** - L. Anillaun, Maam Cross (L980470), 8 June 2007, EPA (DAM). L. Ballyquirke, Moycullen (M232317), 8 August 2007, EPA (DAM): **HA 31** - L. Ballynahinch, Ballynahinch (L777478), 6 June 2007, EPA (DAM). L. Derryclare, Recess (L825485), 16 July 2007, EPA (DAM): **HA 32** - L. Aughrusbeg, Cleggan (L557582), 10 July 2007, EPA (DAM). L. Ballynakill, Cleggan (L639581), 11 July 2007, EPA (DAM). L. Pollacappul, Kylemore (L754582), 9 July 2007, EPA (DAM). **KERRY: HA 22** - Killarney (V9080), 1929, FWE (Edwards, 1929). L. Leane, Killarney, Castlelough Bay, east (V975873), 27 June 1973, JPOC (Douglas and Murray, 1980); L. Leane, Killarney, Castlelough Bay, north (V966866), 27 June 1973, DJD/DAM (Murray, 2005). Muckcross Lake, Dundag Bay

(V964858), 23 July 1973 (Murray, 2005) and 30 July 1973 (DAM). **LEITRIM: HA 35** - L. Glencar, Glencar (G757435), 10 June 2008, EPA (DAM). **MAYO: HA 32** - L. Moher, Lisscarney, Westport (L977766), 24 June, 21 July and 18 September 2008, EPA (DAM). L. Ballin, north shore, Westport (L996882), 25 June and 18 September 2008, EPA (DAM): **HA 34** - L. Lannagh, west shore, Castlebar (M109883), 23 April 2008, EPA (DAM). L. Washpool, Ballycarra (M219842), 19 June 2008, EPA (DAM). **ROSCOMMON: HA 26** - L. Meelagh, Keadew (G901117), 11 June 2008, EPA (DAM).

***Procladius (Psilotanypus) lugens* Kieffer, 1915**

CAVAN: HA 7 - L. Drumkeery, Baileborough (H663002), 1 May 2007, EPA (DAM). L. Mullagh, Mullagh (N680856), 23 May 1968 (Murray, 1972); L. Mullagh, Mullagh (N680856), 9 May 1994 (Murray, 2005): **HA 36** - L. Sillan, Shercock (H705067), 19 April 2007, EPA (DAM). **GALWAY: HA 30** - L. Corrib (M150450), 1980, BC (DAM). **MAYO: HA 32** - L. Knappabeg, Westport (M010803), 21 April and 24 June 2008, EPA (DAM). **MONAGHAN: HA 36** - L. Annaghmakerrig, Newbliss (H585205), 22 May 2006, EPA (DAM). L. Avagnon, Latton, Cotehill (H688133), 11 July 2007, EPA (DAM). L. Drumore, Drum (H614164), 2 May 2007, EPA (DAM). L. Inner, Dartery, Drum (H625173), 5 April 2007, EPA (DAM). **WATERFORD: HA 16** - Ballyscanlan Reservoir, Tramore (S540030), 22 April 2009, EPA (DAM). L. Ballyshunnock (Reservoir), Portlaw (S455095), 20 April 2009, EPA (DAM): **HA 17** - Belle Lake, Dunmore East (S665049), 22 April 2009, EPA (DAM).

***Procladius (Psilotanypus) rufovittatus* (van der Wulp, 1874)**

ANTRIM: Rathlin Island - Ushet L. (D154485), 5 July 2004 (PHL). **CAVAN: HA 7** - L. Mullagh, Mullagh (N680856), 14 June 1968, DAM (Murray, 1972): **HA 36** - L. Garty, Arvagh (N278978), 7 June and 18 July 2007, EPA (DAM). L. Gowna, north basin, Arnagahan (N285920), 7 June 2006 and 24 July 2007, EPA (DAM). L. Sillan, Shercock (H705067), 19 April 2007, EPA (DAM). **CLARE: HA 25** - L. Graney, Doorus, west shore (R556930), 6 July

2006, EPA (DAM). L. Alewnaghta, west shore, Whitegate (R758908), 17 June 2009, BK (DAM): **HA 27** - L. Bridget, east shore, Derrymore, Badyke (R558797), 29 July 2009, EPA (DAM). Gortglass L., Killadysert, south shore (R223596), 7 July 2009 and north shore (R223599), 11 June 2009, EPA (DAM). L. Inchiquin, Corrofin, west shore (R266896), 15 July 2009, EPA (DAM). **CORK: HA 19** - Carrigdroihid Reservoir, Ashton (W360703), 16 September 2008, EPA (DAM). Iniscarra Reservoir, Coachford (W477717), 31 July and 16 September 2008, EPA (DAM). L. Aderry, Castlemartyr (W935730), 27 August 1969, NH (Bracken and Murray, 1973). L. Allua, Ballingearry (W180652), 17 June 2008, EPA (DAM): **HA 20** - L. Curraghally, Drinagh, Dunmanway (W234046), 12 August and 11-September 2008, EPA (DAM): **HA 21** - L. Avaul, Glengarriff (V910553), 1969, NH (Bracken and Murray, 1973). L. Bofinna, Bantry (W041488), 18 June and 13 August 2008, EPA (DAM). **DERRY: HA 3** - reservoir, Balinrees, Coleraine (C794300), 9 June 2000 (Langton, 2002). **DONEGAL: HA 37** - L. Eske, Donegal (G973844), 14 July 2009, EPA (DAM): **HA 38** - L. Dunglow, The Rosses, west shore (B782119), 7 September 2009, EPA (DAM): **HA 39** - L. Gartan, Church Hill (C055159), 10 June 2009, EPA (DAM). L. Akibbon, Church Hill (C068184), 11 June 2009, EPA (DAM). L. Fern, Milford (C182247), 18 July 2011 (PHL). **DOWN: HA 5** - L. Henney, Ballynahinch (J348586), 22 June 2000 (Langton, 2002). **FERMANAGH: HA 36** - L. Erne Upper, slipway (H362242), 27 June 2000 (Langton, 2002). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 24 May 2003 (PHL): **HA 29** - L. Coole, Gort (M425037), 27 July 2009, EPA (DAM): **HA 30** - L. Corrib (M1545), 1980, BC (DAM). L. Ross, Moycullen (M188365), 8 August and 5 September 2007, EPA (DAM): **HA 31** - L. Aunwillan, Carraroe (L936255), 25 July 2007, EPA (DAM). **KERRY: HA 22** - L. Caragh, Killorglan (V719904), 20 June and 15 July 2008, EPA (DAM). Doolough, Muckross Peninsula (V949860), 3 July 1973 (Douglas and Murray, 1980). L. Guitane, Crohane, Killarney (W025846), 8 July 2008, EPA (DAM). L. Leane, Killarney, Castlelough Bay, north (V966866), 27 June 1973, JPOC (Douglas and Murray, 1980; Murray, 2005); Juniper Bay (V949863), 11 June 1973 (Douglas and Murray, 1980); Killarney (V931886), 24 June 2008, EPA (DAM); Boathouse (V965866), 29 August

1987, NOM (DAM). Muckcross Lake, Muckcross, Killarney (V950853), 16 July 2008, EPA (DAM). **LEITRIM: HA 26** - L. Boderg, Derrycarne, north west shore (N013915), 29 July 2008, EPA (DAM). L. Bofin, Dromod (N049894), 24 June 2008, EPA (DAM): **HA 35** - L. Belhavel, Killarga, Dromahair (G878288), 26 August 2008, EPA (DAM). L. Glenade, south east shore, Glenade, Manorhamilton (G831457), 10 June and 22 July 2008, EPA (DAM). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 25 June, 27 August and 10 September 2008, EPA (DAM). **MAYO: HA 30** - L. Corrib Upper, Oughterard, Kitten's Bay (M110463), 25 June 2010, JRB (DAM): **HA 32** - L. Knappabeg, Westport (M010803), 23 July 2008, EPA: **HA 34** - L. Levally, Massbrook (G146043), 25 June 2008, EPA (DAM). **MONAGHAN: HA 36** - L. Annaghmakerrig, Newbliss (H585205), 27 June 2006, EPA (DAM). L. Corconnolly, Clones (H510247), 19 May 1964, NH (Murray, 1972). L. Drumlona, Rockcorry (H636176), 5 June 2007, EPA (DAM). L. Inner, Dartery, Drum (H625173), 5 April 2007, EPA (DAM). **ROSCOMMON: HA 26** - L. Meelagh, Keadew (G901117), 11 June 2008, EPA (DAM). L. Annaghmore, Strokestown, Elphin (M902838), 15 July 2008, EPA (DAM). L. Cavetown, Boyle (M832974), 11 June and 17 July 2008, EPA (DAM). L. Glinn, Loughglinn, Castlerea (M629870), 12 June 2008, EPA (DAM). L. Key, Boyle (G838057), 6 August 2008, EPA (DAM) and (G848040), 11 June 2008, EPA (DAM). L. O'Flynn, south east shore, Ballinlough (M585786), 12 June 2008, EPA (DAM). **SLIGO: HA 35** - L. Templehouse, Ballymote (G619182), 11 June and 9 September 2008, EPA (DAM). **TIPPERARY: HA 25** - L. Derg, Dromineer (M809858), 17 June 2009, EPA (DAM). **WATERFORD: HA 16** - Ballyscanlan Reservoir, Tramore (S540030), 19 August 2009, EPA (DAM). Ballyshunnock Reservoir, Portlaw (S455095), 20 April, 19 August and 2 September 2009, EPA (DAM). L. Knockaderry, Knockaderry (S496062), 2 April, 1 July, 19 August and 2 September 2009, EPA (DAM): **HA 17** - Belle Lake, Dunmore East (S665049), 22 April 2009, EPA (DAM). **WESTMEATH: HA 26** - L. Killinure, Wineport (N067458), 26 June 2007, EPA (DAM). L. Ree, Coosan (N050450), 15 August 2007, EPA (DAM): **HA 36** - L. Bane, Collinstown (N550712), 26 June 2006, EPA (EPA). **WICKLOW: HA 10** - Vartry Reservoir,

Roundwood, east shore (O214002), 12 July 1983, HD (DAM) and north basin (O205050), 2 July 2009, EPA (DAM).

***Psectrotanypus varius* (Fabricius, 1787)**

ANTRIM: HA 3 - Leslie Hill pool, Ballymoney (C935263), 26 September 1999 and 6 October 2002 (PHL): **HA 5** - L. Mourne, Carrickfergus (J415924), 4 May 1999 (PHL). **CAVAN: HA 7** - L. Drumkeery, Baileborough (H663002), 12 June 2007, EPA (DAM). L. Mullagh, Mullagh (N680856), 27 June 2005, DAM/WM (DAM). **CORK: HA 20** - L. Skahannagh, Unionhall (W212332), 17 June 1964 (Murray, 1972). L. Skeagh (Schull Reservoir), Schull (V937338), 27 August 2008, EPA (DAM). R. Bandon, u/s Ballineen (W331537), 27 May 1980 (Morgan, 1982): **HA 21** - L. Avaul, Glengarriff (V910553), 1969, NH (Bracken and Murray, 1973). **DERRY: HA 1** - pool, Creggan, Derry (C414171), 7 May 2002 (PHL): **HA 2** - pool, Roe Valley Park, Limavady (C679201), 9 June 2000 (Langton, 2002): **HA 3** - Howell's Tarn, Ballywildrick, Coleraine (C766325), 7 April, 21 April and 7 July 2002 (PHL). Downhill Lake, Downhill Forest, Coleraine (C757354), 25 July, 28 July, 30 August 1999, also 21 August 2001 and 24 March 2002 (PHL). Magherafelt Golf Course, pond 1, Traad Point (H950873), 10 May 2000 (Langton, 2002); pond 2 (H954873), 10 May 2000 (Langton, 2002). L. Neagh, unspecified (H9080), no date, anon. (McLarnon and Carter, 2000). University Pond, University of Ulster, Coleraine (C846339), 8 June 2003 (PHL). **DONEGAL: HA 38** - R. Owenveagh, Glenbeagh Cottage, Glenveagh (B990178), 5 August 1983, H. Twomey (DAM): **HA 39** - stagnant drain, L. Swilly, Newtown Cunningham (C311197), 21 June 2000 (Langton, 2002). **DUBLIN: HA 9** - Grecian urn, University College Dublin, Belfield (O184298), April 1984, R. French (CCO); Woodview Pond, University College Dublin (O186203), 4 July 1966 and 27 July 1967 (Murray, 1972). R. Dodder, Clonskeagh Bridge (O174306), 1946 (Grey, 1946). Bog pool, Featherbed (O115217), 26 July 1949 (Reilly, 1951). Bog pool, Kilakee (O125180), 13 December 1949, CFH (DAM). **FERMANAGH: HA 36** - stream, Lisnaskea (H384306), 27 June 2000 (Langton, 2002). **KERRY: HA 22** - R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991).

KILDARE: HA 9 - Rye Vale Pond, Leixlip (N997366), 3 March 1968 (Murray, 1972).
LONGFORD: HA 26 - R. Camlin tributary, Longford Racecourse (N149767), June 1965 (Murray, 1965). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625), 28 August 1981 (DAM). Artificial tank, Ardsallagh, Navan (N896635), 2 April 2000, 8 May 2005 (DAM). R. Blackwater, Carnaross Bridge (N685779), 12 December 1975, and Tatestown (N831715), 30 March 1976 (O’Flaherty, 1976). Tailings pond, Randalstown, Navan (N845714), 10 March 1995 (Finnegan, 1998): **HA 8** - pond, Meadesbrook, Kilmoon, Ashbourne (O040594), 23 April 2012 (DAM). **OFFALY: HA 25** - bog lake 1, Turraun (N172185), June 1998 (DAM). **WESTMEATH:** - Royal Canal, Cullion (N424563) and below fish farm (N431554), May 1990 (Murray, 1990). **WEXFORD: HA 12** - Barkers stream, Bunclody (S881573), 1970 (DAM). **WICKLOW: HA 10** - Glencullen R., Brockey (O169207) and Glencullen Bridge (O195193), 1970 (Clabby and Bracken, 1976).

***Rheopelopia eximia* (Edwards, 1929)**

CARLOW: HA 12 - R. Slaney, Motabower Bridge (S832778) and Kilcarrig Bridge (S893624), 28 July 1981 (Hayes, 1991). **CORK: HA 20** - R. Ilen, Drimoleague (W098454) and Madore (W103419), 24 August 1983 (Hayes, 1991). R. Ovane, Pierson’s Bridge (W023454), 24 August 1983 (Hayes, 1991). **DONEGAL: HA 38** - R. Owenwee, Derrynacarrow, Doocherry (B880078), 22 August 1984 (Murray, 2005). **KILDARE: HA 9** - R. Liffey, Straffan Bridge (N924293), 15 July 1983 (Hayes, 1991). **MAYO: HA 32** - R. Altahoney, Newport (F950050), 1968-1971 (Fahy and Murray, 1972). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981 (Hayes, 1991). **WICKLOW: HA 10** - R. Avonmore, Castlehoward (T190833), 4 August 1983, BPH (Hayes, 1991; Murray, 2005). R. Derry, Bridgeland (T021744), 29 July 1981 (Hayes, 1991). R. Slaney, Knockgarrigan, Glen of Imaal (S936937), 28 July 1981 (Hayes, 1991).

***Rheopelopia maculipennis* (Zetterstedt, 1838)**

ANTRIM: HA 3 - Kells R., Shank Bridge, Kells (J126982), 20 June 2000 (Langton, 2002).
CARLOW: HA 12 - R. Slaney, Kildavin (S899597), 28 July 1981 (Hayes, 1991). R. Derreen, Acann Bridge (S900781), 29 July 1981 (Hayes, 1991). **CAVAN: HA 36** - R. Erne, Kilsarin (N362910), 27 May 1982 (Hayes, 1991). **CLARE: HA 28** - R. Annageeragh, Moyglass Bridge, d/s L. Doo (R078725), 30 July 1982 (Hayes, 1991). **CORK: HA 18** - R. Blackwater, Duncannon (W180931), Shamrock Bridge, Millstreet (W221935), Charles Bridge, Millstreet (W248943) and Keale Bridge, Millstreet (W294936), 2 September 1981 (Hayes, 1991); Ballymacquirk Bridge, Banteer (W382989), Roskeen Bridge, Banteer (W444988) and Lombardstown (W463968), 1 September 1981 (Hayes, 1991); Killavullen (W648998), 31 August 1981 (Hayes, 1991); **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 25 August and 25 September 1980; Bealabouy Bridge, Dunmanway (W257514), 25 August and 25 September 1980; u/s Ballineen (W331537), 30 June, 25 August 1980; Ballineen Bridge (W434538), 27 May and 25 August 1980; Castle Bernard, u/s Bandon (W472546), 27 May, 30 June 1980; 2.5km ds Bandon (W516569), 27 May, 30 June, 25 August 1980 (all Morgan, 1982). **DERRY: HA 3** - R. Bann, Coleraine (C854304), 10 June to 8 August 1999 (PHL); 17 May to 16 July 2000 (PHL); 24 July 2012 (PHL). R. Moyola, New Bridge, Magherafelt (H955905), 4 July 2000 (Langton, 2002). **DONEGAL: HA 37** - R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991). R. Eanymore, Drumagraa Bridge (G863822), 10 August 1982 (Hayes, 1991); **HA 38** - R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). R. Tullaghobeg, Millmount (B933304), 12 August 1982 (Hayes, 1991). R. Owencarrow, Glenveagh (C043235), 18 July 2000 (Langton, 2002); **HA 39** - R. Leannan, Claragh (C197210), 13 August 1982 (Hayes, 1991). R. Crana, Ballymagan (C379344), 15 August 1982 (Hayes, 1991); **HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **FERMANAGH: HA 35** - Glen R., Garrison (G943522), 29 June 2000 (Langton, 2002). **GALWAY: HA 26** - R. Tirur, Newbridge (M492699), 16 August 1981 (Hayes, 1991); **HA 30** - R. Loughkip, Ballyquirk, Moycullen (M224313), 17 August 1981 (Hayes, 1991); **HA 31** - L.

Ahalia, Maam Cross, north east shore (L971402), 22 April 2009, EPA (DAM). R. Owentouey, Tullywee Bridge, Recess (L873474), 18 August 1981 (Hayes, 1991): **HA 32** - R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes, 1991). **KERRY: HA 22** - R. Caragh, d/s Owenroe R. confluence (V720815); Blackstones Bridge, d/s R. Acoose confluence (V710864); outflow from L. Caragh (V713924), 1975 (all Dowling *et al.*, 1981). R. Clydagh, Caherbarnagh (W202842), u/s Clydagh Bridge (W114826), Knocknagowan (W187837) and d/s Clydagh/Loo confluence (W084814), June to August 1978, (Ashe, 1982). R. Flesk, Garries Bridge (W082835), Flesk Bridge (W034876), d/s Whitebridge (V987900), d/s New Bridge (V963885) and u/s L. Leane (V964894), June to August 1978 (Ashe, 1982); White Bridge (V987904), 1973 (Douglas and Murray, 1980). R. Loo, Aughnanus Bridge, Crohane (W045790), June to August 1978 (Ashe, 1982). **KILDARE: HA 9** - R. Liffey, Sallins (N881245), 17 July 1983 (Hayes, 1991). **KILKENNY: HA 15** - R. Nore, Ballyragget (S445707), Norelands Bridge (S547436) and Brownsbarn Bridge (S618391), 28 August 1981 (Hayes, 1991). **LAOIS:** R. Nore, Castletown Bridge (S326930) and Kilbricken (S362898), 27 August 1981 also Athanagh (S423763), 28 August 1981 (Hayes, 1991). **MAYO: HA 32** - R. Owenwee, u/s Aghamore Bridge, Westport (L972817), 5 August 2004, DAM/WM (DAM). R. Erriff, Ashleigh Falls (L895645), 18 August 1981 (Hayes, 1991). Seashore at stream outflow, Killary (L869694), 5 June 2002, DAM/WM (DAM): **HA 33** - R. Owenmore, Bangor Erris (F863228), 18 August 1983 (Hayes, 1991): **HA 34** - R. Moy, Bellanacurra (G403047), Cloongullaun (G348016) and Ballylahan (M227992), 29 August 1982 (Hayes, 1991). **MEATH: HA 7** - R. Boyne, Trim Castle, Trim (N805566), 5 September 1988 (Murray, 1988); Newtown, Trim (N815571), 9 July 1981 (Hayes, 1991); Bellinter Bridge (N894626), 21 August 1988 (Murray, 1988), 11 August 1999, DAM/WM (DAM); Ardsallagh, adjacent to St Bridget's Well (N897635), 7 July 1988 (Murray, 1988); Kilcarn Bridge, Navan (N884657), 21 August 1988 (Murray, 1988); railway bridge, Navan (N874674), 5 July 2006 (DAM); New Bridge, Navan (N873679), 18 August 1988 (Murray, 1988); Stackallen Bridge (N917713), 17 August 1988 (Murray, 1988) and 19 July 1989 (DAM); Slane Bridge (N965737), Knowth Weir (N995720)

and Oldbridge (O045761), 19 July 1989 (DAM). R. Blackwater, Donaghpatrick (N819723), 19 August 1988 and Poolboy Bridge, Navan (N871681), 18 August 1988 (Murray, 1988). **OFFALY: HA 25** - R. Little Brosna, New Bridge (N016088), 2 September 1982 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981; Mount Talbot (M813531), 14 August 1981; Ballyforan (M817464), 16 July 1981; Newtown (M844346), 15 August 1981 (all Hayes, 1991). **SLIGO: HA 34** - R. Moy, Metal Bridge, Tobercurry (G464138), 30 August 1982 (Hayes, 1991); **HA 35** - R. Drumcliff, Glencar (G734430), 19 August 1983 (Hayes, 1991); **HA 35** - R. Easky, Easky (G377378), 19 August 1983 (Hayes, 1991). **TIPPERARY: HA 16** - R. Drish, Boolabeha Bridge (S190619), 6 July 1992 (Murray and Lynch, 1992). R. Drish, Athlummon Bridge (S177593), 6 July 1992 (Murray and Lynch, 1992). R. Suir, d/s Thurles (S128581), 22 May 1992, Cabragh (S124562), 6 July 1992, JL (Murray and Lynch, 1992). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992) and Lismore (X047988), 31 August 1981 (Hayes, 1991). **WEXFORD: HA 12** - R. Slaney, Clomahon (S933534) and Ballycarney (S967488), 29 July 1981 (Hayes, 1991). **WICKLOW: HA 10** - R. Avonmore, Lion Arch Bridge (T194833), 11 July 1997 (Curran, 2001). R. Avoca, Avoca Village (T203802), July 1997 (Curran and Murray, 2010); **HA 12** - R. Slaney, Knickeen, Glen of Imaal (S987948) and Kilmurray (S889856), 28 July 1981, BPH (Hayes, 1991; Murray, 2005).

***Rheopelopia ornata* (Meigen, 1838)**

CAVAN: HA 36 - R. Erne, Dingin's Bridge (N331948), 27 August 1982 (Hayes, 1991). **DERRY: HA 3** - R. Bann, Coleraine (C854304), 20 May to 7 September 1999, 17 May to 16 July 2000, 16 June 2001, 10 August, 17 August and 24 August 2012 (PHL). R. Moyola, New Bridge, Magherafelt (H955905), 4 July 2000 (Langton, 2002). **DONEGAL: HA 38** - R. Ray, Crocnalaragh (B989272), 12 August 1982 (Hayes, 1991). **KILDARE: HA 9** - R. Liffey, Sallins (N881245), 17 July 1983 and Straffan Bridge (N924293), 15 July 1983 (Hayes, 1991). **MEATH: HA 7** - R. Boyne, Ardsallagh, adjacent to St Bridget's Well (N897635), 8 July 1968,

23 June 1974 (Murray, 2005) and 7 July 1988 (Murray, 1988); Stackallen Bridge (N918713), 12 July 1981 (Hayes, 1991), 17 August 1988 (Murray, 1988) and 19 July 1989 (DAM); Slane Bridge (N965737), 19 July 1989 (DAM). R. Blackwater, Bloomsbury Bridge, Oristown (N793741) and Donaghpatrick (N819723), 19 August 1988 (Murray, 1988). **OFFALY: HA 25** - R. Shannon, Shannon Bridge (M967254), 15 August 1981 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981; Mount Talbot (M813531), 14 August 1981 and Ballyforan (M817464), 16 July 1981 (Hayes, 1991). R. Lung, Lung Old Bridge, Tibohine (M652928), 15 June 1999 (DAM).

***Tanypus (Tanypus) kraatzi* (Kieffer, 1912)**

CORK: HA 19 - L. Allua, Ballingearry (W180652), 20 August 2008, EPA (DAM). **MAYO: HA 32** - L. Knappabeg, Westport (M010803), 24 June 2008, EPA (DAM).

***Tanypus (Tanypus) punctipennis* Meigen, 1818**

KERRY: HA 22 - L. Leane, Killarney, Ross Bay (V945850), 7 July 1973 (Douglas and Murray, 1980). **LEITRIM: HA 26** - L. Rinn, Mohill (N095943), 18 July 2008 and 10 September 2008, EPA (DAM). **MEATH: HA 7** - R. Boyne, opposite inflow of R. Skane, Ardsallagh (N895628), 8 June 1974 (DAM). **OFFALY: HA 25** - bog lake 1, Turraun (N172185), 3 June 1999 (Murray, 2005).

***Tanypus (Tanypus) vilipennis* (Kieffer, 1918)**

CAVAN: HA 7 - L. Mullagh, Mullagh (N680856), 27 June 2005, DAM/WM (DAM): **HA 36** - L. Ardan, Milltown, Belturbet (H354124), 6 June 2007, EPA (DAM). L. Cuillaghan, Ballyconnell (H303183), 6 June 2007, EPA (DAM). **FERMANAGH:** - L. Inver (Inver L.), Rosslea (H518314), 28 June 2000 (Langton, 2002). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 24 May 2003 (PHL). **LIMERICK: HA 24** - Bleach L., Pallaskenry (R441569), 13 June 2009, EPA (DAM). **LOUTH: HA 6** - L. Mentrim, Ardee (N913879), 27 June 2005,

DAM/WM (DAM): **HA 32** - L. Knappabeg, Westport (M010803), 24 June and 23 July 2008, EPA (DAM). **MONAGHAN: HA 6** - L. Naglack, Carrickmacross (H853026), 3 May 2007, EPA (DAM). L. Naglack, Carrickmacross (H853026), 11 June 2007, EPA (DAM): **HA 36** - L. Kilroosky, Clones (H494274), 28 June 2000 (Langton, 2002); Summerhill L., Magheraveely (H490280), 28 June 2000 (Langton, 2002). **ROSCOMMON: HA 26** - L. Glinn, Loughglinn, Castlerea (M629870), 12 June 2008, EPA (DAM). Grange L., Greywood, Strokestown (M938857), 25 June 2008, EPA (DAM). L. Key (wharf at Park), Boyle (G848040), 11 June 2008, EPA (DAM). **WATERFORD: HA 17** - Belle Lake, Dunmore East (S665049), 22 April and 1 September 2009, EPA (DAM). **WESTMEATH: HA 26** - L. Killinure, Ballaghkeernan Bay (N069445), 26 June 2007 and Wineport (N067458), 15 August 2007, EPA (DAM): **HA 36** - L. Bane, Collinstown (N550712), 26 June and 24 July 2006, EPA (EPA).

***Telmatopelopia nemorum* (Goetghebuer, 1921)**

MAYO: HA 32 - R. Altahoney, Srahmore, Newport (F966053), 1 July 1972, EF (Fahy and Murray, 1972; Murray, 2005).

***Thienemannimyia (Hayesomyia) tripunctata* (Goetghebuer, 1922)**

CARLOW: HA 12 - R. Slaney, Kilcarrig Bridge (S893624), 28 July 1981, BPH (Murray, 2005). **CORK: HA 20** - R. Bandon, Bealabouy Bridge, Dunmanway (W257514), 30 June 1980; Castle Bernard (u/s Bandon) (W472546), 30 June 1980 and 25 August 1980; 2.5km d/s Bandon (W516569), 30 June 1980 and 22 August 1981, GM (PJA/DAM). **DOWN: HA 3** - R. Muddock, Muddock Bridge, Rathfriland (J235342), 27 August 1998 (PHL). **MEATH: HA 7** - R. Boyne, Ardsallagh, adjacent to St Bridget's Well (N897635), 2 July 1984 (DAM). **WEXFORD: HA 12** - R. Slaney, Clomahon (S933534), Ballycarney (S967488) and Ederline Bridge (S977345), 29 July 1981 (Hayes, 1991); Scarawalsh Bridge, Marshalstown (S983450), 19 July and 9 August 1984, DAM (Murray and Fittkau, 1985 – Neotype material from 19 July 1984 deposited in Zoologische Staatssammlungen Munich).

Thienemannimyia (Thienemannimyia) carnea (Fabricius, 1805)

DOWN: HA 3 - R. Leitrim, Leitrim Bridge, Hilltown (J217285), 13 August 1998 (PHL).

MEATH: HA 7 - R. Boyne, Bellinter Bridge (N894625), 23 July 1968 (Murray, 1972).

Thienemannimyia (Thienemannimyia) festiva (Meigen, 1838)

DERRY: HA 3 - L. Neagh, unspecified location (H9080), no date (Tokeshi, 1990).

Thienemannimyia (Thienemannimyia) fusciceps (Edwards, 1929)

DERRY: HA 3 - R. Bann, Coleraine (C854304), 14 July 2013 (Langton, in press), also 19 July and 30 August 2013 (PHL).

Thienemannimyia (Thienemannimyia) geijskesi (Goetghebuer, 1934)

CLARE: HA 27 - L. Bunny, Aughrim, south east shore (R377965), 7 June 2006, EPA (EPA):
HA 3 - R. Bann, Coleraine (C854304), 3 May 2000 (PHL). L. Neagh, Ballyronan (H948862),
27 April 1999 (PHL). **WICKLOW: HA 10** - R. Glencullen, Knocksink (O218180), 17 May
1987, DEM/DAM (Morgan, 1989; Murray, 2005).

Thienemannimyia (Thienemannimyia) laeta (Meigen, 1818)

GALWAY: HA 30 - R. Loughkip, Ballyquirk, Moycullen (M224313), 16 August 1995, BPH
(Murray, 2005). **MAYO: HA 32** - R. Burleemslough, Clapper Bridge Ford, Killeen (L754759),
5 August 2004, DAM/WM (DAM). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625),
18 August 1968, DAM (Murray, 1972) and 21 August 1988 (Murray, 1988); Kilcarn Bridge,
Navan (N884657), 21 August 1988 (Murray, 1988); Stackallen Bridge (N917713), 17 August
1988 (Murray, 1988), 19 July 1989 (DAM); Slane Bridge (N965737) and Oldbridge (O045761),
19 July 1989 (DAM). R. Blackwater, Bloomsbury Bridge, Oristown (N793741) and
Donaghpatrick (N819723), 19 August 1988 (Murray, 1988); Poolboy Bridge, Navan
(N871681), 18 August 1988 (Murray, 1988). **WEXFORD: HA 13** - R. Corrock, Goff's Bridge,

Horetown (S870185), 12 June 2012, DAM/WM (DAM).

Thienemannimyia (Thienemannimyia) lentiginosa (Fries, 1823)

DONEGAL: HA 38 - R. Owenveagh, Glenbeagh Cottage, Glenveagh (B990178), 27 July 1985, LJH (Heneghan, 1986). **DUBLIN: HA 9** - Upper Reservoir, Bohernabreena (O095219), 3 May 1946, CFH (DAM): **HA 22** - L. Leane, Killarney (V931886), 24 June 2008, EPA (DAM). R. Flesk, d/s Clydagh/Loo confluence (W084814), 10 August 1978 (PJA). **MAYO: HA 30** - L. Mask, west shore, Toormakeady (M113702), 24 June 2008, EPA (DAM): **HA 32** - R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972). **MEATH: HA 7** - R. Boyne, Kilcarn Bridge, Navan (N884657), 16 October 1994 (DAM) and 16 August 1995 (Murray, 2005). **ROSCOMMON: HA 26** - L. Key, Boyle, Hogs Island Pier (G825054), 9 September 2008, EPA (DAM).

Thienemannimyia (Thienemannimyia) northumbrica (Edwards, 1929)

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 22 July 2001 and Churchtown Point (J056852), 22 August 2001 (PHL). **CAVAN: HA 26** - L. Sheelin, Gore Point (N439817), July 1982, PG (DAM): **HA 36** - Glasshouse L., Killashandra (H270060), 7 June 2007, EPA (DAM). L. Garty, Arvagh (N278978), 7 June 2007, EPA (DAM). L. Gowna, north basin, Arnagahan (N285920), 7 June 2006, EPA (DAM). **CLARE: HA 25** - L. Graney, Doorus, west shore (R556930), 4 May and 8 June 2006; mid lake (R557924), 11 August 2009, EPA (DAM): **HA 27** - L. Bunny, south east shore, Aughrim (R377965), 5 September 2006, EPA (EPA). L. Cullaun, Corrofin, mid east shore (R317905), 16 June and 22 July 2009, EPA (DAM). L. Muckanagh, Tubber, Corrofin (R370922), 11 June 2009, EPA (DAM). **CORK: HA 21** - L. Glenbeg, Ardgroom (V706530), 3 September 2008, EPA (DAM). **DERRY: HA 3** - R. Bann, Coleraine (C854304), 7 June 2000 (PHL) and 13 June 2000 (PHL). L. Neagh, Ballyronan (H948862), 4 July 2000 (Langton, 2002), 22 August 2001 and 31 May 2011 (PHL). **DONEGAL: HA 36** - L. Tullynasiddagh, Ballyshannon (G983656), 7 July 2009, EPA (DAM). L. Vearty, Ballyshannon

(G995658), 8 July 2009, EPA (DAM): **HA 37** - L. Eske, Donegal (G973844), 14 July 2009, EPA (DAM): **HA 38** - L. Dunglow, west shore, Dunglow, The Rosses (B782119), 5 August 2009, EPA (DAM). L. Anure, east shore, Loughanure (B818162), 17 June 2009, EPA (DAM). L. Veagh, boathouse near Castle, Glenveagh (C022211), 21 July 2009, EPA (DAM); pond, Glenveagh (C023214), 23 June 1986 (Heneghan, 1986). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 21 July 2009, EPA (DAM). **GALWAY: HA 29** - L. Rea, east shore, Loughrea (M624153), 25 May 2003 (PHL): **HA 30** - L. Anillaun, Maam Cross (L980470), 8 June and 5 September 2007, EPA (DAM). L. Corrib Upper, Oughterard (M138486), 14 August 2007, and L. Corrib Lower, Moycullen (M271360), 11 June 2007, EPA (DAM): **HA 31** - L. Anaserd, Ballyconneely (L605443), 9 August 2006 and 17 July 2007, EPA (DAM). L. Nahasleam, Maam Cross South (L972440), 8 August 2006, EPA (DAM): **HA 32** - L. Aughrusbeg, Cleggan (coastal) (L557582), 11 September 2007, EPA (DAM). L. Enask, Beaghcauneen (L662468), 17 July 2007, EPA (DAM). **KERRY: HA 21** - L. Currane, Waterville (V535664), 18 June 2008, EPA (DAM): **HA 21** - Erik L., Derrygarriff (V881777), 9 August 2005, JRB (Murray, 2005): **HA 22** - L. Leane, Killarney, Brickeen (V937850) and Castlough Bay, north (V966866), 30 July 1973 (Douglas and Murray, 1980). Muckross Lake, Dundag Bay (V964858), 12 July 1972, DAM (Murray, 1974) and 1973, DJD/DAM (Douglas and Murray, 1980); Muckross Lake, mid lake, Muckross (V950853), 16 July 2008, EPA (DAM). R. Caragh, at L. Caragh outflow (V713924), 1975, CD (Dowling *et al.*, 1981). R. Laune, Ferry Bridge (V891912), 1973 (Douglas and Murray, 1980). **LEITRIM: HA 26** - L. Allen, Mountallen, Drumshanbo (G950145), 28 April 2008, EPA (DAM): **HA 36** - L. Drumlaheen, Feenagh, Ballinamore (H091071), 18 June and 17 July 2007, EPA (DAM). **LONGFORD: HA 26** - L. Ree, Barley Harbour, Yew point (N018485), 13 June 2007 and Coosan (N050450), 15 August 2007, EPA (DAM). **MAYO: HA 30** - L. Carra, Keel Bridge, Ballinrobe (M165680), 19 June 2008, EPA (DAM): **HA 32** - L. Doo, Delphi, north east shore (L834689), 6 June 2002, DAM/WM (DAM); west shore 1, (L835681), 12 July 2006 and west shore 2 (L833680), 25 August 2008, EPA (DAM). R. Altahoney, Newport (F950050), 1968-

1971, EF (Fahy and Murray, 1972). L. Feeagh, Newport (L975983), 24 July 2008, EPA (DAM). L. Ballin, Westport, north shore (L996882), 25 June 2008, EPA (DAM): **HA 33** - Cross L., north east shore, Drumreagh, Belmullet (F651299), 17 June 2008, EPA (DAM). L. Carrowmore, Derreens, Bangor Erris (F833299), 28 July 2008, EPA (DAM): **HA 34** - L. Cullin, Drummon Wood (G235046), 18 June 2008, EPA (DAM). L. Levally, Massbrook (G146043), 25 June 2008, EPA (DAM). **MONAGHAN: HA 36** - L. Avagnon, Latton, Cotehill (H688133), 11 July 2007, EPA (DAM). **ROSCOMMON: HA 26** - L. Annaghmore, Strokestown (M902838), 12 June, 15 July and 2 September 2008, EPA (DAM). L. Cavetown, Boyle (M832974), 11 June 2008, EPA (DAM). L. Key, Boyle (G838057), 6 August 2008, EPA (DAM) and wharf at Forest Park (G848040), 11 June 2008, EPA (DAM). L. Gara, Monastredan (M708996), 5 September 2008, EPA (DAM): **HA 35** - L. Easky, Ox Mountain (G446230), 17 July 2008, EPA (DAM). L. Gill, Sligo (G782350), 11 June and 20 August 2008, EPA (DAM). **WESTMEATH: HA 25** - L. Ennell, Tudenham (N415466), 18 July 1966 (Murray, 1972). **HA 26** - L. Owel, Mullingar (N421566), 9 August 1979, NH (Hayes, 1980). L. Killinure, Wineport (N067458), 26 June 2007, EPA (DAM): **HA 36** - L. Bane, Collinstown (N550712), 22 August 2006, EPA (EPA).

***Thienemannimyia (Thienemannimyia) pseudocarnea* Murray, 1976**

ANTRIM: HA 3 - L. Neagh, Churchtown Point (J056852), 31 May 2011 (PHL). **CARLOW: HA 12** - R. Slaney, Kilcarr Bridge (S893624), 28 July 1981 (Hayes, 1991). **CLARE: HA 27** - L. Bunny, Aughrim, south east shore (R377965), 4 July 2006, EPA (EPA). **CORK: HA 18** - R. Blackwater, Charles Bridge, Millstreet (W248943), 2 September 1981; Roskeen Bridge, Banteer (W444988), 1 September 1981 and Killavullen (W648998), 31 August 1981 (Hayes, 1991): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 27 May and 25 August 1980; Bealabouy Bridge, Dunmanway (W257514), 27 May, 30 June and 25 August 1980; u/s Ballineen (W331537), 25 August 1980; Ballineen Bridge (W434538), 27 May, 25 August and 25 September 1980; Castle Bernard (u/s Bandon) (W472546), 27 May, 30 June and 25 August 1980; 2.5km d/s Bandon (W516569), 27 May, 30 June, 25 August and 25 September 1980 (all

Morgan, 1982). **DERRY: HA 3** - R. Bann, Coleraine (C854304): 5 May to 24 July 1999, 17 May to 30 July 2000, 16 June 2001, 27 July, 3 August, 10 August and 24 August 2012 (PHL). L. Neagh, Ballyronan (H948862), 22 May and 31 May 2011 (PHL). **DONEGAL: HA 38** - L. Mulladerg, The Rosses (B775199), 19 July 2000 (Langton, 2002): **HA 39** - L. Gartan, north shore, Church Hill (C065173), 18 July 2000 (Langton, 2002). **FERMANAGH: HA 36** - L. Erne, Lower, Boa Island (H108626), 29 June 2000 (Langton, 2002) and 17 August 2011 (PHL). L. Macnean, Upper, Belcoo (H042403) and L. Macnean, Lower, Belcoo (H085384), 29 June 2000 (Langton, 2002). **GALWAY: HA 32** - R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes, 1991). **KERRY: HA 22** - R. Caragh, Blackstones Bridge, d/s R. Acoose confluence (V710864), 1975, CD (Dowling *et al.*, 1981). R. Flesk, d/s Clydagh/Loo confluence (W084814), May to August 1978 (Ashe, 1982); White Bridge (V987904), 1973, DJD/DAM (Douglas and Murray, 1980); d/s Whitebridge (V987900), 12 July 1974 (Murray, 1976b), 27 July 1974 (Murray, 2005) and May to August 1978 (Ashe, 1982); u/s Newbridge (V978900), 30 May 1973 (Douglas and Murray, 1980); New Bridge, Killarney (V968896), 29 August 1987, NOM (LJH); d/s New Bridge (V963885) and u/s L. Leane (V964894), May to August 1978 (Ashe, 1982). **KILDARE: HA 9** - R. Liffey, Sallins (N881245), 17 July 1983 (Hayes, 1991). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436) and Brownsbarn Bridge (S618391), 28 August 1981 (Hayes, 1991). **MAYO: HA 34** - R. Moy, Cloongullaun (G348016), 30 August 1982 and Ballylahan (M227992), 29 August 1982 (Hayes, 1991). **MEATH: HA 7** - R. Boyne, Scarrif Bridge (N733527), 9 July 1981 (Hayes, 1991); Bellinter Bridge (N894626), 21 August 1988 (Murray, 1988); Ardsallagh, adjacent to St Bridget's Well (N897635), 16 June 1974 (DAM); Kilcarn Bridge, Navan (N884657), 21 August 1988 (Murray, 1988); Stackallen Bridge (N917713), 17 August 1988 (Murray, 1988) and 19 July 1989 (DAM); Oldbridge (O045761) and d/s Oldbridge (O062753), 19 July 1989 (DAM). R. Blackwater, Sedenrath Bridge (N762759), 30 March 1976 (O'Flaherty, 1976); Bloomsbury Bridge, Oristown (N793741) and Donaghpatrick (N819723), 19 August 1988 and Poolboy Bridge, Navan (N871681), 18 August 1988 (Murray, 1988). **OFFALY: HA**

25 - R. Shannon, Shannon Bridge (M967254), 15 August 1981 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627), 16 July 1981; Athleague (M825758), 14 August 1981 and Ballyforan (M817464), 15 August 1981 (Hayes, 1991). **SLIGO: HA 34** - R. Moy, Metal Bridge, Tobercurry (G464138) and Annagh (G466123), 30 August 1982 (Hayes, 1991). **TYRONE: HA 3** - L. Neagh, Washing Bay, Coalisland (H903662), 30 May 2002 (PHL). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992), 31 August 1981 (Hayes, 1991). **WEXFORD: HA 12** - R. Slaney, Edernline Bridge (S977345), 29 July 1981 (Hayes, 1991).

***Trissopelopia longimana* (Staeger, 1839)**

ANTRIM: HA 4 - R. Glenariff, Cushendall (D215205), 2 July 2000 (Langton, 2002). **CARLOW: HA 14** - R. Burren tributary, Slievebawn, Mount Leinster (S818556), 8 April 2004, JRB (DAM). **CAVAN: HA 26** - R. Owenmore tributary, Cuilcagh Mountains (H099270), 28 April 2004, JRB (DAM). R. Shannon tributary, Cuilcagh Mountains (H074314), 28 April 2004, JRB (DAM). **CLARE: HA 28** - R. Silverhill, east of Milltown Malbay (R096792), 23 April 2004, JRB (DAM). **CORK: HA 18** - R. Araglin tributary, Araglin (R969075), 15 April 2004, JRB (DAM). R. Blackwater, Charles Bridge, Millstreet (W248943) and Keale Bridge, Millstreet (W294936), 2 September 1981 (Hayes, 1991): **HA 19** - Cruppoge stream, Kilcorney (W367851), 16 April 2004, JRB (DAM): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631) and Ballineen Bridge (W434538), 25 August 1980 (Morgan, 1982). R. Ilen, Hollybrook (W117363), 24 August 1983 (Hayes, 1991): **HA 21** - L. Glenbeg, Ardgroom (V706530), 3 September 2008, EPA (DAM). **DERRY: HA 2** - fire dam, Binevenagh Forest, Coleraine (C704314), 18 May 2000 (Langton, 2002). Burn at Largantea picnic area, Formoyle, Coleraine (C738287), 9 June 2000 (Langton, 2002). **DONEGAL: HA 1** - R. Deelee, Legland, Raphoe (C136028), 19 July 2000 (Langton, 2002): **HA 36** - R. Glengariff tributary, west of Rossinver (G859501), 28 April 2004, JRB (DAM): **HA 37** - R. Eanymore, Letterbara Bridge (G883825) and Drumagraa Bridge (G863822), 10 August 1982 (Hayes, 1991). R. Stragar,

Killybegs (G730787), 29 July 1984 and 23 August 1984 (DAM): **HA 38** - R. Tullaghobeg, Millmount (B933304), 12 August 1982 (Hayes, 1991). Stream from Misty L., Glenveagh (C015216), June 1989 (Hernan, 1991). Stream, south west L. Veagh, Glenveagh (C003194), September 1989 (Hernan, 1991); stream, north east L. Veagh, 50m above lake, Glenveagh (C030218), June and September 1989 (Hernan, 1991); stream, north east L. Veagh, 250m above lake, Glenveagh (C031217), 15 August 1985 (Heneghan, 1986) and September 1989 (Hernan, 1991); stream, north east L. Veagh, 350m above lake (C031215), June, September and November 1989 (Hernan, 1991); L. Veagh, north east shore, Glenveagh (C039230), 16 August 1985, POD (Heneghan, 1986). R. Ray, Muckish Gap (B993268), 12 August 1982 (Hayes, 1991): **HA 39** - R. Swilly, Newmills, Letterkenny (C125092), 18 July 2000 (Langton, 2002). R. Leannan, Claragh (C197210), 13 August 1982 (Hayes, 1991). R. Crana, Ballymagan (C379344), 15 August 1982 (Hayes, 1991): **HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **DOWN: HA 3** - Upper Bann, New Bridge, Hilltown (J238288), 29 May 1998 (PHL); Upper Bann, Hilltown Ford, Hilltown (J222289), 27 March 1998 (PHL). R. Shanky, Hilltown (J221243), 18 June and 26 September 1997 (PHL); R. Shanky, Batts Bridge, Hilltown (J226257), 26 September 1997 (PHL). R. Rocky, d/s R. Shanky confluence, Hilltown (J233277), 26 September 1997 (PHL). R. Kinnahalla, Hilltown (J239292), 26 September 1997 (PHL). Glenaveagh stream, Glenaveagh Bridge (J255284), 29 May 1998 (PHL). **DUBLIN: HA 9** - R. Dodder tributary (Slade Brook), Glenasmole (O103205), 8 June 1978, PA (DAM). **FERMANAGH: HA 36** - R. Belbarrinagh, Belcoo (H112309), 29 June 2000 (Langton, 2002). **GALWAY: HA 25** - R. Woodford, Woodford (M732000), 24 May 2003 (PHL): **HA 30** - L. Corrib, no data (M1545), 1980, BC (DAM). Pool and stream at lay-by on road N59, Moycullen (M204336), 25 May 2003 (PHL). R. Aille tributary, Toormakeady (M022683), 7 April and 21 April 2004, JRB (DAM). R. Loughkip, Ballyquirk, Moycullen (M224313), 17 August 1981 (Hayes, 1991): **HA 32** - R. Owenglin, Clifden (L677506), 18 August 1981 (Hayes, 1991). R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes, 1991). Pond, CNP, Letterfrack (L715573), 18 September 1996 and R. Polladirik,

CNP, Letterfrack (L741565), 19 September 1986 (Heneghan, 1987). **KERRY: HA 19** - R. Bohill, Ballyvourney (W200811), 16 April 2004, JRB (DAM): **HA 22** - Curraghalia stream, Moll's Gap (V845789), 17 April 2004, JRB (DAM). R. Caragh, Upper Brida Valley (V785810), 1975, CD (Dowling *et al.*, 1981). R. Clydagh, u/s Clydagh Bridge (W114826), May to October 1978 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814), May to October 1978 (Ashe, 1982); d/s Whitebridge (V987900), May to October 1978 (Ashe, 1982) and 2 August 1983, LJH (DAM); d/s New Bridge (V963885), May to October 1978 and u/s L. Leane (V964894), 20 August 1981 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), May to October 1978 (Ashe, 1982); stream to R. Loo, d/s Aughnanus Bridge, Crohane (W048790), 10 August 1978 (Ashe, 1982). Stream to R. Gaddagh, tributary of R. Laune, Kealnafula, Knockroe, Beaufort (V809873), 17 April 2004, JRB (DAM). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436), 28 August 1981 (Hayes, 1991). **LAOIS:** - R. Nore, Athanagh (S423763), 28 August 1981 (Hayes, 1991). **LEITRIM: HA 35** - R. Bonet tributary, Manorhamilton (G861447), 22 April 2004, JRB (DAM). **MAYO: HA 31** - R. Tooreenacoona, Gleninagh (L809569), 21 April 2004, JRB (DAM): **HA 32** - L. Doo, Delphi, west shore (L833680), 25 August 2008, EPA (DAM) and north east shore (L834686), 22 September 2008, EPA (DAM). R. Burleemslough, Clapper Bridge ford, Killeen (L754759), 5 August 2004, DAM/WM (DAM). R. Bunowen, d/s Laghta Bridge, Laghta Eighter (L852751), 30 September 2004, DAM/WM (DAM). R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972) and 8 July 1975 (DAM). R. Owenwee, u/s Aghamore Bridge, Westport (L972817), 5 August 2004, DAM/WM (DAM). Westport L., Westport Woods Hotel, Westport (L985843), 7 May 2004, DAM/WM (DAM): **HA 33** - R. Owenmore, Bangor Erris (F863228), 18 August 1983 (Hayes, 1991). R. Glenlassra, Belderg (G023407), 19 August 1983 (Hayes, 1991). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625), 18 August 1968 (Murray, 1972); R. Boyne, Ardsallagh, adjacent to St Bridget's Well (N897635), 30 May 1999 (DAM); Oldbridge (O045761), 19 July 1989 (DAM); d/s Oldbridge (O062753), 19 July 1989 (DAM). Tailings pond, Randalstown, Navan (N845714), 2 May 1995 and 29 August 1995 (Finnegan,

1998): **HA 8** - stream-pond area, Meadesbrook, Kilmoon (O038594), 27 July 1968 (Murray, 1972), 5 May and 7 May 2005 (DAM). **ROSCOMMON: HA 26** - R. Frances, Castlerea (M694860), 28 April 2004, JRB (DAM). R. Suck, Castlecoote (M809627), 16 July 1981 (Hayes, 1991). **SLIGO: HA 34** - R. Moy, Carrownedden (G530205), Cloonacool (G493168), Metal Bridge, Tobercurry (G464138) and Annagh (G466123), 30 August 1982 (Hayes, 1991). **TYRONE: HA 1** - Dennet Stream, Essbeg Bridge, Lisnaskee (H384306), 27 June 2000 (Langton, 2002). **WEXFORD: HA 12** - Barkers stream, Bunclody (S881573), 8 April 2004, JRB (DAM). **WICKLOW: HA 10** - Roundwood Reservoir, east shore, Roundwood (O214002), 12 July 1983, HD (DAM). R. Glenealo, Glendalough (T090962) and outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997). R. Avonbeg, Glenmalure, Drumgoft Bridge (T105905), 4 August 1983 (Hayes, 1991).

Xenopelopia falcigera (Kieffer, 1911)

CAVAN: HA 7 - L. Mullagh, Mullagh (N680856), 16 May 1969 (Murray, 1972). **CLARE: HA 29** - L. Skeardeen, Kilcorkan (R388991), 17 June 2009, EPA (DAM). **DERRY: HA 3** - McFadyen's Garden, Coleraine (C848316), 14 April 2002 (PHL). **LIMERICK: HA 24** - L. Gur, Holycross (R646269), 16 September 2009, EPA (DAM). **MEATH: HA 7** - Headford Pond, Kells (N752763), 5 April 1968 (Murray, 1972). **SLIGO: HA 35** - L. Templehouse, Ballymote (G619182), 9 September 2008, EPA (DAM). **WEXFORD: HA 12** - Movilla stream, Screen (T082311), 6 May 2006, DAM/WM (DAM).

Xenopelopia nigricans (Goetghebuer, 1927)

ANTRIM: Rathlin Island - exit stream from L. Craigmacagan (D153596), 5 July 2004 (PHL). **CLARE: HA 27** - L. Cullaun, Corrofin, mid east shore (R317905), 14 September 2009, EPA (DAM). **CORK: HA 19** - Carrigdroihid Reservoir, Ashton (W360703), May 1976, EF (Murray, 2005). **DONEGAL: HA 38** - L. Veagh, north east shore, Glenveagh (C039230), June 1988 (DAM). **MEATH: HA 7** - pond, Headford, Kells (N752763), 5 April 1968 (Murray, 1972).

***Zavreliomyia (Zavreliomyia) barbatipes* (Kieffer, 1911)**

ANTRIM: Rathlin Island - east lighthouse pool (D156516), 24 July 2000 (Langton, 2002): **HA 5** - Raloo Water, Glenoe, Larne (J394967), 8 May 1999 (PHL). **CAVAN: HA 36** - R. Erne, Carrigan (N391935), 27 August 1982 and Drumbarry (N462951), 17 August 1982 (Hayes, 1991). **DERRY: HA 1** - Lower Reservoir, Creggan, Derry (C422174), 10 May 2001 (PHL): **HA 2** - fire dam, Binevenagh Forest, Coleraine (C704314), 18 May 2000 (Langton, 2002). **DONEGAL: HA 1** - R. Dee, Legland, Raphoe (C136028), 19 July 2000 (Langton, 2002): **HA 37** - R. Stragar, Killybegs (G730787), 23 August 1984, **DAM (DAM): HA 38** - L. Nacung, Upper, Dunlewy (B904191), 19 July 2000 (Langton, 2002). R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). L. Veagh, north east shore, Glenveagh (C039230), 28 June 1988 (DAM). Bog pool, Glenveagh (C040203), 20 May and 28 June 1988 (Heneghan, 1986). L. Nadourcan, Glenveagh (C054228), 18 July 2000 (Langton, 2002): **HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **FERMANAGH: HA 36** - R. Belbarrinagh, Belcoo (H112309), 29 June 2000 (Langton, 2002). **GALWAY: HA 30** - R. Loughkip, Ballyquirk, Moycullen (M224313), 17 August 1981 (Hayes, 1991). **KERRY: HA 22** - R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Caragh, outflow from L. Caragh (V713924), 1975, CD (Dowling *et al.*, 1981). R. Clydagh, u/s Clydagh Bridge (W114826), June to October 1978 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814) and u/s L. Leane (V964894), June to October 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), June to October 1978 (Ashe, 1982). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436), 28 August 1981 (Hayes, 1991). **MAYO: HA 32** - R. Owenwee, u/s Aghamore Bridge, Westport (L972817), 8 May 2003, DAM/WM (DAM). Coastal, Carrickvegraly Point, Roonagh (L743806), 27 April 2000, DAM/WM (Murray and Murray, 2003). South of Roonagh Pier, Roonagh (L744808), 27 July 2000, DAM/WM (DAM): **HA 33** - stream, Keem, Achill Island (F561045), 5 August 2004, DAM/WM (DAM). R. Glenlgassra, Belderg (G023407), 19 August 1983 (Hayes, 1991): **Clare Island** - bog pool west of road, Maum (L709863), 5 June 2002 (Murray and Murray, 2003). **MEATH: HA 8** -

Meadesbrook, Kilmoon (O040594), 30 May 1974 (DAM); stream - pond, Meadesbrook, Kilmoon (O038594), 15 June 1985, 25 September and 13 November 1994 (DAM). **SLIGO: HA 34** - R. Moy, Carrowheden (G530205), Cloonacool (G493168) and Metal Bridge, Tobercurry (G464138), 30 August 1982 (Hayes, 1991).

***Zavreliomyia (Zavreliomyia) hirtimana* (Kieffer, 1918)**

GALWAY: HA 30 - L. Lettercraffroe, Oughterard (M056376), 5 September 2007, EPA (DAM). **KERRY: HA 22** - L. Leane, Killarney, Juniper Bay (V949863), 11 June 1973 (Douglas and Murray, 1980). R. Flesk, d/s Whitebridge (V987900), 20 June 1978, PJA (Murray, 2005). **KILKENNY: HA 15** - R. Clogh, Clogh (S565790), 10 March 1976, CD (DAM). **MEATH: HA 7** - R. Boyne, Bellinter Bridge (N894625), 23 May 1968 (Murray, 1972). Ardsallagh, adjacent to St Bridget's Well (N897635), 16 June 1974 (DAM) and 18 October 1981 (Murray, 1988); Ardsallagh, Magazine weir (N894640), 16 October 1994 and 22 April 2005 (Murray, 2005). Tailings pond, Randalstown, Navan (N845714), 2 May 1995 (Finnegan, 1998). **TIPPERARY: HA 16** - R. Drish, Castletown (S207634), 6 July 1992, DAM/JL (Murray and Lynch, 1992).

***Zavreliomyia (Zavreliomyia) melanura* (Meigen, 1804)**

ANTRIM: Rathlin Island - east of lighthouse pool 2 (D164520), 24 July 2000 (Langton, 2002). **CAVAN: HA 7** - L. Cuilcagh, Virginia (N636895), 30 April 1968 (Murray, 1972). **CORK: HA 19** - L. Aderry, Castlemartyr (W935730), 27 August 1969, NH (Bracken and Murray, 1973). **DONEGAL: HA 37** - R. Stragar, Killybegs (G730787), 23 August 1984, DAM (DAM): **HA 38** - stream, north east L. Veagh, 250m above lake, Glenveagh (C031217), 15 August 1985 (Heneghan, 1986). **FERMANAGH: HA 36** - R. Colebrook, Tattenbuddagh Bridge, Brookeborough (H458428), 4 June 1997 (PHL). **MAYO: HA 32** - Ellis Wood, CNP, Letterfrack (L710573), 17 September 1986 (Heneghan, 1987). L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM): **HA 34** - L. Levally, Massbrook

(G146043), 23 September 2008, EPA (DAM). **SLIGO:** - R. Moy, Metal Bridge, Tobercurry (G464138), 30 August 1982 (Hayes, 1991).

***Zavrelimyia (Zavrelimyia) nubila* (Meigen, 1830)**

MEATH: HA 7 - artificial tank, Ardsallagh (N896635), 31 March 2000 (DAM); artificial tank, Ardsallagh, Navan (N896635), 20 May 1986 (DAM): **HA 8** - Meadesbrook, Kilmoon (O040594), 29 September 1997, 5 April 1999, 31 March and 8 April 2000 (DAM); Meadesbrook pond, Kilmoon (O038594), 23 July 1968 (Murray, 1972).

SUBFAMILY TELMATOGETONINAE

***Telmatogeton japonicus* Tokunaga, 1933**

CLARE: HA 27 - seashore, Diamond Rock, Kilkee (Q868600), 26 July 1999, DAM/WM (Murray, 2000).

***Thalassomya frauenfeldi* Schiner, 1856**

CLARE: HA 27 - seashore, Diamond Rock, Kilkee (Q868600), 26 July 1999, DAM/WM (Murray, 2000). **CORK: Blasket Island** - Inishtearaght (V198950), 10 May 1975, G. Walton (Murray and Ashe, 1982). **MAYO: Clare Island** - coastal marine pool, Bayview Hotel seafront (L717857), 29 April 2000 (Murray and Murray, 2003).

SUBFAMILY DIAMESINAE

***Diamesa bohemani* Goetghebuer, 1932**

DOWN: HA 3 - Upper R. Bann tributary, Dooghary (J137443), 29 September 1997 (PHL) and 3 February 2000, LMCL (PHL).

***Diamesa cinerella* Meigen, 1835**

MAYO: HA 32 - R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972).

***Diamesa incallida* (Walker, 1856)**

DUBLIN: HA 9 - R. Dodder, Firhouse (O104274), 18 June 1968 (Murray, 1972). **MEATH: HA 7** - R. Blackwater, Clavens Bridge, Kells (N715775), 31 October 1967 (Murray, 1972). **TIPPERARY: HA 16** - R. Drish, Castletown (S217635), 6 July 1992 (Murray and Lynch, 1992).

***Diamesa insignipes* Kieffer, 1908**

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 28 March 2001 (PHL). R. Sixmilewater, Templepatrick (J227867), 4 May 1999 (PHL). **DERRY: HA 1** - inflow to Upper Reservoir, Creggan, Derry (C413171), 23 March 2001 (PHL) and 26 June 2001, LMcL (PHL). **DOWN: HA 3** - Upper Bann, Poland's Bridge, Banbridge (J193428), 26 March 1998 (PHL). R. Kinnahalla, Hilltown (J239292), 25 May 1998 (PHL). **DUBLIN: HA 9** - R. Dodder, Pussy's Leap, Templeogue (O126281) and Firhouse (O104274), 8 February 1968 (Murray, 1972): **HA 9** - bog pool, Featherbed (O120190), 1974, CD (Dowling and Murray, 1981). **KERRY: HA 22** - R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). **MAYO: Clare Island** - roadside at Bayview Hotel (L716856), 28 April 2000 (Murray and Murray, 2003): **HA 32** - R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972): **HA 33** - bog pools, Glenamoy (F896345), 1973, CD (Dowling and Murray, 1981). **MEATH: HA 7** - R. Kinnegad, Kinnegad (N601448), 4 April 1989, M. O'Grady (Murray and Lynch, 1991).

***Diamesa permacra* (Walker, 1856)**

DUBLIN: HA 9 - bog pool, Featherbed (O120190), May 1950, CFH (in BMNH, London). **KERRY: HA 22** - R. Clydagh, Caherbarnagh (W202842), 12 November 1978 (Ashe, 1982).

***Diamesa tonsa* (Haliday, 1856)**

ANTRIM: HA 3 - R. Sixmilewater, Templepatrick (J227867), 4 May 1999 (PHL). Glen Burn,

Lower Glen Bridge (J263994), 4 May 1999 (PHL): **HA 5** - Raloo Water, tributary of R. Glenoe, Glenoe, Larne (J394967), 8 May 1999 (PHL). **DERRY: HA 1** - inflow to Upper Reservoir, Creggan, Derry (C413171), 10 May and 26 June 2001 (PHL): **HA 2** - tributary of R. Ballykelly, Siskatree Bridge, Clagan (C628209) and R. Ballykelly, Ballykelly (C623211), 9 June 2000 (Langton, 2002). R. Owenbeg, Feeny picnic area, Feeny (C645058), 26 June 2000. R. Bessbrook, Limavady (C655212); R. Roe, Deerpark Wood, Limavaddy (C682203); R. Curly, Artikelly Bridge, Limavady (C684247); Castle R., Ardmore Bridge, Limavady (C706207) and burn at Largantea picnic area, Formoyle, Coleraine (C738287), 9 June 2000 (all Langton, 2002): **HA 3** - Balinrees Reservoir, Coleraine (C794300), 9 June 2000 (Langton, 2002). R. Agivey, Garvagh (C838154), 30 May 2002 (PHL). R. Macosquin, Black Bridge, Ballylintagh (C854256), 26 May 2000 (Langton, 2002). R. Bann, Coleraine (C854304), 30 May 2002 (PHL). R. Agivey, Glascort Bridge (C907226), 26 May 2000 (Langton, 2002). **DOWN:** Upper Bann tributary, Hilltown (J210294), 27 March 1998 (PHL). Mourne Mountain [Type locality] (J1040), 20 February 1852, AHH (Walker, 1856). R. Carcullion, Hilltown (J213275), 18 June 1997 (PHL). R. Shanky, Batts Bridge, Hilltown (J226257), 29 May 1998 (PHL). **DUBLIN: HA 9** - R. Dodder, above Bohernabreena reservoir (O109202), 14 May 1946 (Fitzgerald, 1947) and 26 October 1946 (CFH/DAM); Fort Bridge, Bohernabreena (O009242), 15 June 1968 (Murray, 1972); Firhouse [Type locality] (O1027), 1855? AHH (Haliday in Walker, 1856). Upper Bohernabreena Reservoir (O095219), April 1947, CFH (Murray, 2005). **FERMANAGH: HA 36** - R. Colebrook tributary, Tullyweel, Fivemiletown (H416474), 23 April 1998 (PHL). **LONGFORD: HA 26** - R. Camlin, Mullagh Bridge, d/s Longford (N116760), 4 May 1965 (Murray, 1972). **TYRONE: HA 1** - Dennet Stream, Essbeg Bridge, Lisnaskee (H509978), 26 June 2000 (Langton, 2002). **WICKLOW: HA 10** - R. Glencullen, Brockey (O169207), Glencullen Bridge (O192194), Knocksink (O217182) and Enniskerry Bridge (O227173), 1970, KC (all Clabby and Bracken, 1976); R. Glencullen, Knocksink (O218180), 18 May 1987, DEM/DAM (Morgan, 1989): **HA 12** - R. Slaney, Knickeen, Glen of Imail (S987948), 28 July 1981 (Hayes, 1991).

***Potthastia gaedii* (Meigen, 1838)**

ANTRIM: HA 3 - L. Neagh, Lennymore Bay (J115745), March 1969 (Marks and Henderson, 1970); Churchtown Point (J056852), 13 October 2000 (Langton, 2002). R. Kells, Shank Bridge, Kells (J126982), 20 June 2000 (Langton, 2002): **HA 4** - R. Brymore (Brymore Water), Brymore Bridge (D162275), 2 July 2000 (Langton, 2002). **CARLOW: HA 12** - R. Slaney, Motabower Bridge (S832778), Kilcarry Bridge (S893624) and Kildavin (S899597), 28 July 1981 (Hayes, 1991). **CLARE: HA 25** - Bleach R., Corlea Bridge (R605965), 3 September 1973 (Murray, 2005). L. Graney, Doorus, west shore (R556930), 4 May 2006, EPA (DAM); L. Graney, Drumandora, west shore (R553938), 15 June 2009, EPA (DAM). L. Derg, Mountshannon, west shore (R718861) and d/s Killaloe (M705715), 18 September 2009, EPA (DAM): **HA 28** - L. Doo, Milltown Malbay, north west shore (R113722), 11 June 2009 and 15 September 2009, EPA (DAM); mid lake (R123721), 8 July 2009, EPA (DAM). R. Caher, Murrough, 5km from source (M153089), 27 October 1999, CB (Kelly-Quinn *et al.*, 2003). **CORK: HA 18** - R. Blackwater, Knocknagree (W159975), Duncannon (W180931), Shamrock Bridge, Millstreet (W221935), Charles Bridge, Millstreet (W248943) and Keale Bridge, Millstreet (W294936), 2 September 1981 (all Hayes, 1991). R. Blackwater, Roskeen Bridge, Banteer (W444988) and Lombardstown (W463968), 1 September 1981 and R. Blackwater, Killavullen (W648998), 31 August 1981 (all Hayes, 1991): **HA 20** - L. Curraghally, Drinagh, Dunmanway (W234046), 9 April 2008, EPA (DAM). R. Bandon, 2.5km d/s Bandon (W516569), 18 April, 27 May, 30 June and 25 September 1980 (all Morgan, 1982). R. Ilen, Madore (W103419) and Hollybrook (W117363), 24 August 1983 (Hayes, 1991). **DERRY: HA 2** - burn at Largantea picnic area, Formoyle, Coleraine (C738287), 9 June 2000 (Langton, 2002): **HA 3** - R. Agivey, Garvagh (C838154), 30 May 2002 (PHL). L. Neagh, unspecified (H9080), no date (McLarnon and Carter, 2000); L. Neagh, Ballyronan (H948862), 10 May 2000 (Langton, 2002). **DONEGAL: HA 37** - L. Eske, Donegal (G973844), 17 April 2009, EPA (DAM). R. Corabber, Greenan Bridge, Ardnamona (G976863), 22 August 1984 (DAM). R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991). R. Oily, Claggen (G751803), 8 August 1982

(Hayes, 1991). R. Stragar, Duninkeely (G727792), 10 August 1982 (Hayes, 1991): **HA 38** - L. Dunglow, west shore, Dunglow, The Rosses (B782119), 17 June 2009, EPA (DAM). R. Gweedore, outflow from L. Anure, Crolly (B827184), 19 July 2000 (Langton, 2002). R. Tullaghobeg, Falcarragh (B925319) and Millmount (B933304), 12 August 1982 (Hayes, 1991). R. Devlin, Dunlewy (B927190), 19 July 2000 (Langton, 2002). R. Owenveagh, u/s lake, Glenveagh (C000187), April 1989 and June 1989 (Hernan, 1991). L. Veagh, boathouse near Castle, Glenveagh (C022211), 2 June 2009, EPA (DAM). Glenveagh stream, inflow to north east shore of L. Veagh, 50m above lake (C030218), June 1989; 250m above lake (C031217), September 1989 and November 1989; 350m above lake (C031215), September 1989 (all Hernan, 1991). Owennacally stream, Glenveagh (C043226), 19 July 2000 (Langton, 2002). R. Owencarrow, d/s road bridge, Glenveagh (C043235), 18 July 2000 (Langton, 2002). R. Ray, Crocnalaragh (B989272), 12 August 1982 (Hayes, 1991). L. Glen, Glen (C105292), 29 July 2009, EPA (DAM): **HA 39** - R. Swilly, Newmills, Letterkenny (C125092), 18 July 2000 (Langton, 2002). R. Leannan, Drumaboden (C165218), 12 August 1982 and Claragh (C197210), 13 August 1982 (Hayes, 1991). L. Fern, Millford (C180233), 23 July 2009, EPA (DAM). R. Crana, Ballymagan (C379344), 15 August 1982 (Hayes, 1991): **HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **DOWN: HA 3** - Upper R. Bann, Newbridge, Hilltown (J238288), 29 May 1998 (PHL). R. Shanky, left fork at Hilltown (J221243), 26 September 1997 and Batts Bridge, Hilltown (J226257), 4 September 1998 (PHL). R. Rocky, d/s Shanky confluence, Hilltown (J233277), 26 September 1997 and 4 September 1998 (PHL) and at Hilltown (J242268), 26 September 1997 (PHL). Glenaveagh stream, Glenaveagh Bridge (J255284), 26 September 1997 and 29 May 1998 (PHL). **DUBLIN: HA 9** - R. Dodder, Fort Bridge, Bohernabreena (O009242), 3 May 1946, CFH (CFH/DAM). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002): **HA 36** - L. Erne, Lower, Boa Island (H108626), 29 June 2000 (Langton, 2002); L. Erne, Lower, Black Bay (H072639), 27 April 2002 (PHL). R. Sruh Croppa, Cuilcagh Mountains (H111329), 29 June 2000 (Langton, 2002). **GALWAY: HA 25** - L. Derg, Woodford (M794964), 24 May

2003 (PHL). R. Woodford, Woodford (M732000), 24 May 2003 (PHL): **HA 26** - R. Shiven, d/s Ballinaglass (M788494), 29 July 1981 (Hayes, 1991). R. Tirur, Newbridge (M492699), 16 August 1981 (Hayes, 1991): **HA 30** - R. Loughkip, Ballyquirk, Moycullen (M224313), 17 August 1981 (Hayes, 1991). R. Owenriff, Oughterard (M112426), 25 May 2003 (PHL). L. Adrehid, Oughterard (M055428), 25 May 2003 (PHL): **HA 31** - L. Ahalia, Maam Cross, north east shore (L971402), 22 April and 18 June 2009, EPA (DAM). L. Ballynahinch, Ballynahinch (L777478), 6 June 2007, EPA (DAM). L. Derryclare, Recess (L825485), 17 April 2007, EPA (DAM): **HA 32** - R. Owenglin, Clifden (L677506), 18 August 1981 (Hayes, 1991). R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes, 1991). Mountain stream, Diamond Hill, Letterfrack (L718564), 18 September 1986 and R. Polladirik, Letterfrack (L741565), 19 September 1986 (Heneghan, 1987). L. Kylemore, Letterfrack (L771582), 30 July 2007, EPA (DAM). **KERRY: HA 18** - R. Blackwater, Lacknastooka (R153008), 2 September 1981 (Hayes, 1991): **HA 21** - L. Brin, Derreeny (V780775), 10 September 2008, EPA (DAM): **HA 22** - L. Caragh, Killorglin (V719904), 20 June and 15 July 2008, EPA (DAM). L. Guitane, Crohane, Killarney (W025846), 9 September 2008, EPA (DAM). L. Leane, Killarney, Glena Bay (V930858), 27 July 1973 (Douglas and Murray, 1980). Killarney (V931886), 22 April, 24 June and 18 September 2008, EPA (DAM). Muckcross Lake, Killarney, mid lake (V950850), June 1973, Dundag Bay (V964858), 23 July 1973 (Douglas and Murray, 1980). R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Caragh, upper Brida Valley (V785810), lower Brida Valley (V740805), d/s Owenroe R. confluence (V720815), Blackstones Bridge, d/s R. Acoose confluence (V710864) and outflow from L. Caragh (V713924), 1975, CD (all Dowling *et al.*, 1981). R. Flesk, d/s Clydagh/Loo confluence (W084814), May to October 1978 (Ashe, 1982); Garries Bridge (W082835) and Flesk Bridge (W034876), May to October 1978 (Ashe, 1982); d/s Whitebridge (V987900), April to July 1978 (Ashe, 1982); u/s Newbridge (V978900), 30 May 1973 (Douglas and Murray, 1980); d/s New Bridge (V963885), 27 April and 6 July 1979 also 14 August 1981 (Ashe, 1982); u/s L. Leane (V964894), May to October 1978 (Ashe, 1982). R. Laune, Beaufort Bridge (V880920), 1973 (Douglas and Murray, 1980).

R. Loo, Aughnanus Bridge, Crohane (W045790), May to October 1978 (Ashe, 1982). Upper Lake, Killarney, west basin (V909821), 1973 (Douglas and Murray, 1980). **KILDARE: HA 7** - R. Boyne, Edenderry (N636346), 9 July 1981 (Hayes, 1991): **HA 9** - R. Liffey, Sallins (N881245), 17 July 1983 (Hayes, 1991). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436) and Brownsbarn Bridge (S618391), 28 August 1981 (Hayes, 1991). **LAOIS:** R. Nore, Castletown Bridge (S326930), Kilbricken (S362898) and u/s Durrow (S416787), 27 August 1981 (Hayes, 1991). **LEITRIM: HA 26** - L. Boderg, Derrycarne, north west shore (N013915), 14 May and 29 July 2008, EPA (DAM). **LIMERICK: HA 25** - R. Mulkear, Cappamore (R775514), 8 September 1981 (Hayes, 1991). **MAYO: HA 30** - L. Mask, Toormakeady, west shore (M097647), 14 April 2008, EPA (DAM): **HA 32** - R. Carrowinsky, Killeen, Carrowinsky (L770773), R. Burleemslough, Clapper Bridge Ford, Killeen, Cloonlaur (L754759) and R. Bunowen, Louisburg (L807807), 5 August 2004, DAM/WM (DAM). L. Fin, Delphi (L841657), 5 April, 9 May and 12 July 2006, EPA (DAM). R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972) and July 1975 (DAM). L. Feeagh, Newport (L975983), 25 June, 24 July and 17 September 2008, EPA (DAM). R. Owenwee, Belclare Bridge, Westport (L959822), 7 May 2004, DAM/WM (DAM). R. Erriff, Ashleigh Falls (L895645), 18 August 1981 (Hayes, 1991). Westport L., Westport Woods Hotel, Westport (L985843), 7 May 2004, DAM/WM (DAM). R. Owenduff, bridge south of Killary on road N59 (L810595), 9 May 2003, DAM/WM (DAM): **HA 33** - Sraheens Bridge, Achill Island (L718983), 6 May 2004, DAM/WM (DAM). R. Owenmore, Bangor Erris (F863228), 18 August 1983 (Hayes, 1991). R. Glenlassra, Belderg (G023407), 19 August 1983 (Hayes, 1991): **HA 34** - L. Levally, Massbrook (G146043), 23 September 2008, EPA (DAM). R. Moy, Ballylahan (M227992) and Bellanacurra (G403047), 29 August 1982 also Cloongullaun (G348016), 30 August 1982 (Hayes, 1991): **Clare Island** - no location data (L6885), 1911, PHG (Grimshaw, 1912). **MEATH: HA 7** - R. Kinnegad, Kinnegad (N601448), June 1989 (Murray and Lynch, 1991). R. Boyne, Bellinter Bridge (N894625), 26 May 1968 (Murray, 1972) and 11 August 1999, DAM/WM (DAM); Ardsallagh, at St Bridget's Well (N897635), 16

June 1985 (DAM) and 7 July 1988 (Murray, 1988); railway bridge, Navan (N874674), 5 July 2006 (DAM); New Bridge, Navan (N873679), 18 August 1988 (Murray, 1988); Stackallen Bridge (N918713), 12 July 1981 (Hayes, 1991) and 19 July 1989 (DAM); Slane Bridge (N965737) and d/s Oldbridge (O062753), 19 July 1989 (DAM). R. Blackwater, Clavens Bridge, Kells (N715775), 31 October 1967 (Murray, 1972); Bloomsbury Bridge, Oristown (N793741) and Donaghpatrick (N819723), 19 August 1988 (Murray, 1988). Yellow R., tributary to R. Blackwater, Randalstown, Navan (N835710), 22 June 1995 (Finnegan, 1998): **HA 8** - R. Nanny, road bridge u/s Duleek (O035655) and at Duleek (O050683), 6 June 2006, DAM/WM (DAM). **OFFALY: HA 25** - R. Little Brosna, bridge at Ryan's Cross (S053882), Milltown Park (S068907), Brosna Bridge (S077938), Sharavogue (S056953) and New Bridge (N016088), 2 September 1982 (all Hayes, 1991). R. Brosna, Cloghan (M046209), 2 September 1982 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Suck, Castlecoote (M809627) and Ballyforan (M817464), 16 July 1981; Mount Talbot (M813531), 14 August 1981 (all Hayes, 1991). L. Key, wharf at Forest Park, Boyle (G848040), 11 June 2008, EPA (DAM). L. Ree, Yew Point, Barley Harbour (N018485), 25 April, 13 June 2007, EPA (DAM). **SLIGO: HA 34** - R. Moy, Carrownedden (G530205), 30 August 1982 (Hayes, 1991); R. Moy, Cloonacool (G493168), Metal Bridge, Tobercurry (G464138) and Annagh (G466123), 30 August 1982 (Hayes, 1991): **HA 35** - R. Drumcliff, Glencar (G734430), 19 August 1983 (Hayes, 1991). R. Easky, Easky (G377378), 19 August 1983 (Hayes, 1991). **TIPPERARY: HA 16** - R. Suir, Rossestown Bridge (S134624), 6 July 1992 (Murray and Lynch, 1992): **HA 25** - L. Derg, Terryglass (M861008), 20 April 2009 and Dromineer (M809858), 17 June 2009, EPA (DAM). **TYRONE: HA 1** - Dennet Stream, Essbeg Bridge, Lisnaskee (H509978), 26 June 2000 (Langton, 2002). R. Glenelly, Crannagh Bridge, Crannagh (H594926), 17 August 2011 and Leaghs Bridge, Mullaghsallagh (H695940), 17 August 2011 (PHL). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992) and Lismore (X047988), 31 August 1981 (Hayes, 1991). **WESTMEATH: HA 26** - L. Killinure, Ballaghkeernan Bay (N069445), 24 April 2007, EPA (DAM). L. Ree, Coosan (N050450), 15 August 2007, EPA (DAM). **WEXFORD: HA 12** - R. Boro, Dunamore Bridge, Enniscorthy

(S963366), 29 July 1981 (Hayes, 1991). R. Slaney, Clomahon (S933534), Ballycarney (S967488) and Edernline Bridge (S977345), 29 July 1981 (Hayes, 1991). R. Sow tributary, Garylough Mill, Screen (T076302), 6 May 2006, DAM/WM (DAM). **WICKLOW: HA 10** - R. Glencullen tributary (O160212), 1970, KC (Clabby and Bracken, 1976); R. Glencullen, Brockey (O169207), u/s Glencullen Bridge (O190195), Glencullen Bridge (O192194) and Enniskerry Bridge (O227173), 1970, KC (Clabby and Bracken, 1976); R. Glencullen, Knocksink (O218180), 18 May 1987 (Morgan, 1989). Outflow from Upper Glendalough Lake, Laragh, WMNP (T109964), 16 July 1996, EMcE/DAM (McEntee, 1997). R. Avonmor, Laragh Bridge (T144965), 24 June 1996, MKQ (DAM). R. Avoca, Whitebridge, Tigroney (T198821), 11 July 1997, FC/DAM (Curran and Murray, 2001) and 27 October 1997 (Curran, 2001): **HA 12** - R. Slaney, Knickeen, Glen of Imaal (S987948), Knockgarrigan, Glen of Imaal (S936937), Stratford Bridge (S895930) and Kilmurray (S889856), 28 July 1981 (Hayes, 1991).

***Potthastia longimanus* Kieffer, 1922**

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 4 May 1999 and 22 August 2001 (PHL); Churchtown Point (J056852), 13 October 2000, 22 August 2001 and 31 May 2011 (PHL). Kells R., Shank Bridge, Kells (J126982), 20 June 2000 (Langton, 2002). R. Sixmilewater, Templepatrick (J227867), 4 May 1999 (PHL). Killylane Reservoir, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 4** - R. Brymore, Brymore Bridge (D162275), 2 July 2000 (Langton, 2002). R. Glendun, Drumfresky, Cushendun (D193308), 2 July 2000 (Langton, 2002). R. Glenariff (Inver/Glenariff), Cushendall (D215205), 2 July 2000 (Langton, 2002). **CARLOW: HA 12** - R. Slaney, Motabower Bridge (S832778) and Kilcarray Bridge (S893624), 28 July 1981 (Hayes, 1991). R. Derreen, Acann Bridge (S900781), 29 July 1981 (Hayes, 1991). **CAVAN: HA 7** - L. Ramor, Virginia (N603871), May 1971 (Douglas, 1971). R. Barora tributary, Relaghbeg (N679907), 5 April 1968 (Murray, 1972). **CLARE: HA 25** - L. Graney, Caher, south shore (R568907), 24 May 2003 (PHL); Doorus, west shore (R556930), 10 April and 4 May 2006, Drumandora, west shore (R553938), 15 June 2009, EPA (DAM) and

Flagmount, east shore (R563932), 16 September 2009, EPA (DAM). L. Alewnaghta, Whitegate, west shore (R758908), 16 July 2009, EPA (DAM): **HA 28** - L. Doo, Milltown Malbay, north west shore (R114722), 15 September 2009, EPA (DAM). **CORK: HA 18** - R. Blackwater, Killavullen (W648998), 31 August 1981 (Hayes, 1991): **HA 19** - L. Gouganebarra, Inchegeelagh (W009060), 6 April and 18 June 1966 (Murray, 1972): **HA 20** - R. Bandon, 2.5km d/s Bandon (W516569), April to November 1980 (Morgan, 1982). R. Ilen, Drimoleague (W098454) and Madore (W103419), 24 August 1983 (Hayes, 1991). **DERRY: HA 2** - R. Roe, Deerpark Wood, Limavaddy (C682203), 9 June 2000 and Largy Bridge, Limavaddy (C681202), 14 July 2000 (Langton, 2002): **HA 3** - R. Bann, Coleraine (C854304), 12 April to 24 July 1999, 3 May to 8 October 2000, 26 April, 16 June, 30 June 2001 and 25 April 2010 (PHL). L. Neagh: (H9080), no date (McLarnon and Carter, 2000); Ballyronan (H948862), 27 April and 4 May 1999, 10 May and 13 October 2000, 7 May and 22 August 2001, 15 May and 22 May 2011 (PHL). R. Moyola, New Bridge, Magherafelt (H955905), 4 July 2000 (Langton, 2002) and 22 August 2001 (PHL). **DONEGAL: HA 1** - L. Mourne, Ballybofey (H069900), 20 April 2009, EPA (DAM): **HA 36** - L. Tullynasiddagh, Ballyshannon (G983656), 7 July 2009, EPA (DAM): **HA 37** - R. Corabber, Greenan Bridge, Ardnamona (above L. Eske) (G976863), 22 August 1984 (DAM). R. Oily, Claggen (G751803) and L. Shinvagh, Carricode (H005675), 8 August 1982 (PHL): **HA 38** - L. Nacung, upper, Dunlewy (B904191), 19 July 2000 (Langton, 2002). R. Ray, Crocnalaragh (B989272), 12 August 1982 (Hayes, 1991). L. Glen, Glen (C105292), 29 July 2009, EPA (DAM): **HA 39** - L. Akibbon, Church Hill (C068184), 11 June and 9 September 2009, EPA (DAM). L. Fern, Millford (C180233), 16 June 2009, EPA (DAM). R. Crana, Ballymagan (C379344), 15 August 1982, BPH (Hayes, 1991). **DUBLIN: HA 9** - R. Dodder, Bohernabreena aqueduct (O101208), 31 May 1967 (Murray, 1972). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002): **HA 36** - L. Erne, Lower, Boa Island (H108626), 17 August 2011 (PHL). L. Lattone, Kiltyclogher (H003456), 29 June 2000 (Langton, 2002). R. Bannagh, Drummoney Falls, Pettigo (H168676), 17 August 2011 (PHL). **GALWAY: HA 30** - L. Beaghcauneen, Ballinaboy (L679470), 5 April, 18 July

and 12 September 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 7 June 2007, EPA (DAM). L. Lettercraffroe, Oughterard (M056376), 18 April 2007, EPA (DAM). R. Cregg, Addergsole Bridge (M324350), 16 August 1981 (Hayes, 1991): **HA 31** - L. Ahalia, Maam Cross, north east shore (L971402), 22 April 2009, EPA (DAM). L. Anaserd, Ballyconneely (L605443), 4 April 2007, EPA (DAM). L. Derryclare, Recess (L825485), 16 July 2007, EPA (DAM). L. Nahasleam, Maam Cross (L972440), 6 April, 12 September 2006 and 13 September 2007, EPA (DAM). R. Owentouey, Tullywee Bridge, Recess (L873474), 18 August 1981 (Hayes, 1991): **HA 32** - L. Enask, Beaghcauneen (L662468), 17 September 2007, EPA (DAM). L. Fadda, Beaghcauneen (L668455), 4 April 2007, EPA (DAM). R. Dawros, Tullywee Bridge, Letterfrack (L730586), 18 August 1981 (Hayes, 1991). L. Pollacappul, Kylemore (L754582), 5 June 2007, EPA (DAM). **KERRY: HA 21** - L. Currane, Waterville (V535664), 9 May, 22 July and 10 September 2008, EPA (DAM). R. Inny, Scarriff Bridge (V504696) and u/s Waterville (V525704), 24 August 1983 (Hayes, 1991): **HA 22** - L. Cummernamuck, Killorglin (V745897), 18 July 2008, EPA (DAM). R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Caragh, Upper Brida Valley (V785810), Lower Brida Valley (V740805), d/s Owenroe R. confluence (V720815), Blackstones Bridge d/s R. Acoose confluence (V710864) and outflow from L. Caragh (V713924), 1975, CD (all Dowling *et al.*, 1981). R. Clydagh, Caherbarnagh (W202842), u/s Clydagh Bridge (W114826) and Knocknagowan (W187837), May to October 1978 and 1979 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814), Garries Bridge (W082835), Flesk Bridge (W034876), d/s Whitebridge (V987900), d/s New Bridge (V963885) and u/s L. Leane (V964894), May to October 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), May to October 1978 (Ashe, 1982). **KILDARE: HA 9** - R. Liffey, Sallins (N881245), 17 July 1983 (Hayes, 1991). **LONGFORD: HA 26** - L. Forbes, Cloonard, Newtownforbes (N084821), 25 June and 10 September 2008, EPA (DAM). **MAYO: HA 32** - L. Nanoge, Urlaur (M506903), 23 September 2008, EPA (DAM). L. Doo, Delphi, west shore (L835681), 5 April and 12 July 2006, 3 April 2008, EPA (DAM); north east shore (L834689), 22 August 2002, DAM/WM (DAM). L. Glencullin, Delphi, south west shore (L819696), 25

August 2008, EPA (DAM). L. Nahaltora, Cregganbaun (L794745), 30 September 2004, DAM/WM (DAM). L. Fin, Delphi (L841657), 5 April and 9 May 2006, EPA (DAM). R. Erriff, Ashleigh Falls (L895645), 18 August 1981 (Hayes, 1991). L. Ballin, Westport (L994878), 22 April 2008, EPA (DAM): **HA 33** - L. Keel, north shore, Achill Island (F650058), 7 April 2008, EPA (DAM). L. Carrowmore, Bangor Erris, Derreens (F833299), 9 April and 28 July 2008 and west shore (F830282), 17 September 2008, EPA (DAM): **HA 34** - L. Conn, Inishlee (G182153), 1 October 1965; Longford Point, Crossmolina (G155172), 30 September 1965 and Poulwansha (G160096), 8 April 1965 (all Murray, 1972). L. Levally, Massbrook (G146043), 23 September 2008, EPA (DAM). **MEATH: HA 7** - R. Boyne, Scarriff Bridge (N733527), June 1989 (Murray and Lynch, 1991); Kilcarn Bridge, Navan (N884657), 21 August 1988 (Murray, 1988); Slane Bridge (N965737), and Knowth Weir (N995720), 19 July 1989 (DAM). **SLIGO: HA 26** - L. Gara, Monastredan (M708996), 28 April and 5 September 2008, EPA (DAM). **TIPPERARY: HA 15** - R. Nore, Clonakenny (S116805) and Nore Bridge (S133816), 27 August 1981 (Hayes, 1991): **HA 16** - R. Drish, Athlummon Bridge (S177593), 22 May 1992 (Murray and Lynch, 1992). R. Suir, Rossestown Bridge (S134624), 6 July 1992 and d/s Thurles (S128581), 22 May 1992 (Murray and Lynch, 1992). **TYRONE: HA 1** - L. Mcrory, (H575765), 16 August 2011 (PHL): **HA 3** - L. Neagh, Washing Bay, Coalisland (H903662), 15 May 2002 (PHL). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992), 31 August 1981 (Hayes, 1991). **WEXFORD: HA 12** - R. Slaney, Ballycarney (S967488), 29 July 1981 (Hayes, 1991). **WICKLOW: HA 10** - R. Glencullen tributary, Glencullen (O160212), Brockey (O169207), Glencullen Bridge (O190195), Knocksink (O217182), Enniskerry Bridge (O227173), 1970, KC (Clabby and Bracken, 1976). R. Avonbeg, Meetings Bridge (T188831), 11 July 1997 (Curran, 2001). R. Avonmore, Lion Arch Bridge (T194833), 11 July 1997 (Curran, 2001). R. Avoca, Whitebridge, Tigroney (T198821), 11 July and 27 October 1997 (Curran, 2001); R. Avoca, Avoca Village (T203802), 11 July 1997 (Curran and Murray, 2001): **HA 12** - R. Derry, Balisland (S978645), 28 July 1981 and Bridgeland (T021744), 29 July 1981 (Hayes, 1991). R. Slaney, Knickeen, Glen of Imail (S987948) and Knockgarrigan, Glen of Imail

(S936937), 28 July 1981 (Hayes, 1991).

***Potthastia montium* (Edwards, 1929)**

KERRY: HA 22 - R. Annascaul, Annascaul (Q593017), 18 April 1981 (DAM). **MAYO: HA 32** - R. Altahoney, Newport (F950050), 1968-1971, EF (Fahy and Murray, 1972). **WICKLOW: HA 10** - R. Avoca, Woodenbridge (T198767), 23 July 1997 (Curran, 2001).

***Protanypus morio* (Zetterstedt, 1838)**

ANTRIM: HA 3 - Killylane Reservoir, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 4** - Altnahinch Reservoir, Slieve (D119234), 22 August 2001 (PHL). **CLARE: HA 25** - L. Graney, Doorus, west shore (R556930), 10 April 2006, EPA (DAM). L. Atorick, Woodford (R637964), 24 May 2003 (PHL): **HA 28** - L. Keagh, Milltown Malbay (R100813), 1 April and 15 September 2009, EPA (DAM). L. Lickeen, Kilfenora, west shore (R168909), 6 April 2009, EPA (DAM). L. Naminna, Boolteagh (R178710), 1 April 2009, EPA (DAM). **CORK: HA 19** - L. Gouganebarra, Inchegeelagh (W009060), 7 April 1966 (Murray, 1972): **HA 21** - L. Bofinna, Bantry (W041488), 8 April 2008, EPA (DAM). **DERRY: HA 1** - Upper Reservoir, Creggan, Derry (C417173), 23 March, 10 May and 18 May 2001 (PHL); Lower Reservoir, Creggan, Derry (C422174), 23 March 2001 (PHL): **HA 3** - R. Bann, Coleraine (C854304), 26 April 2001 (PHL). L. Fea, Draperstown (H760868), 15 May 2002 (PHL). **DONEGAL: HA 36** - L. Tullynasiddagh, Ballyshannon (G983656), 7 September 2009, EPA (DAM): **HA 37** - L. Eske, Donegal (G973844), 17 April 2009, EPA (DAM). L. Shinvagh, Carricode (H005675), 28 March 2004 (PHL): **HA 38** - L. Nabuckan, Grogan More (B850184), 27 July 2005, JRB (DAM). L. Naweelogue, Glenveagh (B974185) and L. Maumlack, Glenveagh (B973190), 4 July 1984 (Twomey, 1984). L. Keel, Kilmacrennan (C158243), 2 April 2009, EPA (DAM). L. Shannagh, Magheradrumman, Fanad Peninsula (C216450), 9 September 2009, EPA (DAM): **HA 39** - L. Gartan, Church Hill (C055159), 9 September 2009, EPA (DAM). L. Fern, Millford (C180233), 2 April 2009, EPA (DAM). **DOWN: HA 3** - Spelga Dam, (J267274), 17 February 1998 (PHL).

DUBLIN: HA 9 - Upper Reservoir, Bohernabreena (O095219), 9 June 1947 (Fitzgerald, 1947). **FERMANAGH: HA 36** - L. Erne, Lower, Black Bay (H072639), 22 March 2003 (PHL). L. Keenaghan, Beleek (G974600), 28 March 2004 (PHL). **GALWAY: HA 30** - L. Anillaun, Maam Cross (L980470), 19 April 2007, EPA (DAM). L. Bofin, Maam Cross (M034441), 7 June 2007, EPA (DAM). L. Corrib (M150450), 1 April 1964, NH (Murray, 1972). L. Lettercraffroe, Oughterard (M056376), 18 April and 5 September 2007, EPA (DAM). L. Maumwee, Maam Cross (L977485), 19 April and 17 September 2007, EPA (DAM): **HA 31** - L. Ardderry, Maam Cross (L982458), 17 September 2007, EPA (DAM). L. Shindilla, Derreennacreeva, Maam Cross (L958460), 13 September 2007, EPA (DAM). **KERRY: HA 22** - L. Acoose, Slievanore, Killorglin (V755854), 24 April 2008, EPA (DAM). L. Coomloughra, Caher Mt., Carrauntoohil (V783849), 26 April 2005, JRB/MC (DAM). L. Guitane, Crohane, Killarney (W025846), 7 July and 14 October 1973 (Douglas and Murray, 1980). L. Leane, Killarney, O'Sullivan's Cascade (V916886), 17 April 1973, Cow Island (V925897), 27 June 1973 and mid lake (V930883), 14 July 1973 (Douglas and Murray, 1980); Killarney (V931886), 22 April and 18 September 2008, EPA (DAM). Muckcross Lake, mid lake (V950850), 1973 (Douglas and Murray, 1980). **LEITRIM: HA 26** - L. Allen, Mountallen, Drumshanbo (G950145), 28 April 2008, EPA (DAM): **HA 35** - L. Glencar, Glencar (G748434), 1 April 2008, EPA (DAM). L. Lackagh, Boleybrack (G920320), 21 April 2005, JRB (DAM). L. Nabrack, Crocknagapple (G860477), 29 April 2005, JRB (DAM). **MAYO: HA 30** - L. Mask, Toormakeady (M097647), 14 April 2008, EPA (DAM): **HA 32** - L. Glencullin, Delphi (L818711), 22 September 2008, EPA (DAM). L. Feeagh, Newport (L975983), 11 April 2008, EPA (DAM). L. Moher, Liscarney, Westport (L977766), 18 September 2008, EPA (DAM): **HA 33** - L. Acorrymore, Achill Island (F578057), 29 September 2004, DAM/WM (DAM) and 17 September 2008, EPA (DAM). L. Bunacurry, Achill Island (F695048), 29 September 2004, DAM/WM (DAM). L. Carrowmore, Bangor Erris, Gortmore (F833266), 9 April 2002, DAM (Murray, 2005) and north west shore (F830282), 17 September 2008, EPA (DAM): **HA 34** - L. Conn, Cloghans (G205133), 7 March 1965, AJOS (Murray, 1972); Illannaglashy (G207070), 7

March 1965, AJOS (DAM); Gillaroo Bay, Massbrook (G175051), 16 August 1965, AJOS (DAM). **SLIGO: HA 35** - L. Talt, east shore (G402151), 10 March 2005, DAM/WM (DAM) and Gleneask (G402151), 10 April and 24 September 2008, EPA (DAM). L. Gill, Sligo (G753335), 3 April 2008, EPA (DAM). **TYRONE: HA 1** - L. Moor, Altishane, Strabane (H446984), 17 August 2011 (PHL). **WICKLOW: HA 9** - Pollaphuca Reservoir, Ballymore Eustace (N995080), 16 October 1981, J. Shiels (Ashe/NMI) and 30 April 2009, EPA (DAM): **HA 10** - L. Bray Lower, Glencree (O140164), 4 June 1986 (DAM) and 2 April 2009, EPA (DAM). Vartry Reservoir, Roundwood: south east shore (O214020), 22 February 1982 (DAM) and 1 September 1982, HD (DAM); north basin (O205050), 6 April 2009, EPA (DAM). R. Glenealo, Glendalough (T090962), 16 July 1996, EMcE/DAM (McEntee, 1997). Outflow from Glendalough Lake Upper, WMNP, Laragh (T109964), 10 February 1980 (DAM) and 16 July 1996, EMcE/DAM (McEntee, 1997); Glendalough Lake Upper, east shore (T110963), 6 February 1980 (Murray, 2005).

***Pseudodiamesa (Pseudodiamesa) branickii* (Nowicki, 1873)**

CORK: HA 21 - L. Avaul, Glengarrif (V910553), 1969, NH (Bracken, and Murray, 1973). **GALWAY: HA 30** - L. Corrib, no data (M1545), 9 September 1964, NH (Murray, 1972). **KERRY: HA 22** - R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Flesk, d/s Clydagh/Loo confluence (W084814), 22 April 1978 (Ashe, 1982). **WICKLOW: HA 10** - R. Glencullen, Knocksink (O218180), 18 May 1987 (Morgan, 1989).

SUBFAMILY PRODIAMESINAE

***Monodiamesa bathyphila* (Kieffer, 1918)**

CORK: HA 18 - R. Blackwater, Mallow (W518975), 1 July 1966, NH (Murray, 1972). **GALWAY: HA 26** - R. Suck, Lismanny (M900255), 11 August 1966, NH (Murray, 1972). **MAYO: HA 34** - L. Conn, Longford Point, Crossmolina (G155172), 10 August and 2 September 1964, 16 June and 30 September 1965, AJOS (Murray, 1972) also Errew, west shore

(G167118), 8 April, 23 August and 1 October 1965, AJOS (Murray, 1972); Six Arch Bridge Bay (G227052), 20 August 1965, AJOS (Murray, 1972).

***Monodiamesa ekmani* (Brundin, 1949)**

ANTRIM: HA 3 - L. Neagh, Antrim Bay (J135866), 4 May 1999 and Churchtown Point (J056852), 31 May 2011 (PHL). Killylane Reservoir, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 5** - L. Mourne, Carrickfergus (J415924), 8 May 1999 (PHL). **CLARE: HA 25** - L. Graney, Doorus, west shore (R556930), 8 June 2006, EPA (DAM). **DERRY: HA 3** - L. Neagh, Toome Bay (H900800), 29 May 1995, LMCL (Langton and McLarnon, 1998); Ballyronan (H948862), 4 May and 24 July 1999 (PHL) also 10 May and 4 July 2000 (Langton, 2002) and 22 August 2001 and 15 May 2002 (PHL). **FERMANAGH: HA 35** - L. Melvin, Garrison (G938518), 29 June 2000 (Langton, 2002). **LEITRIM: HA 26** - L. Allen, Mountallen, Drumshanbo (G950145), 10 June and 7 August 2008, EPA (DAM).

***Prodiamesa olivacea* (Meigen, 1818)**

ANTRIM: HA 3 - L. Neagh, Lennymore Bay (J115745), 1966 (Marks and Henderson, 1970); L. Neagh, Antrim Bay (J135866), 17 March 2000 (Langton, 2002) and 28 March 2001 (PHL). R. Sixmilewater, Templepartick (J227867), 4 May 1999 (PHL). Killylane Reservoir, Magherabane, Larne (J292985), 8 May 1999 (PHL): **HA 4** - R. Bush, Seneirl Bridge (C943362), 16 July 2000 and Conogher Bridge (C963305), 10 September 2000 (Langton, 2002). Benvarden Pond, Benvarden Garden, Derrykeegan (C946334), 15 May 2005 (PHL): **HA 5** - L. Mourne, Carrickfergus (J415924), 4 and 8 May 1999 (PHL). Raloo Water, Glenoe, Larne (J394967), 8 May 1999 (PHL). **CAVAN: HA 7** - L. Nadreegeal, Ballyjamesduff (N537933), 2 May 2007, EPA (DAM). Park R., Virginia (N591882), 1 December 1967 (Murray, 1972). L. Ramor, Virginia (N612860), 19 September 2007, EPA (DAM): **HA 36** - R. Erne, Drumbarry (N462951), 17 August 1982 (Hayes, 1991). **CLARE: HA 25** - L. Graney, Doorus, west shore (R556930), 4 May 2006, EPA (DAM). L. Derg, d/s Killaloe (M705715), 21 April and 18

September 2009, EPA (DAM): **HA 28** - L. Lickeen, Kilfenora, west shore (R168909), 6 April 2009, EPA (DAM). R. Caher, 2.5km from source, Holywell (M173069), 29 April 2000, CB (Kelly-Quinn *et al.*, 2003). **CORK: HA 19** - L. Gouganebarra, Inchegeelagh (W009060), 8 May 1966 (Murray, 1972): **HA 20** - R. Bandon, Long Bridge, Dunmanway (W242631), 20 March, 18 April, 25 September 1980; Bealabouy Bridge, Dunmanway (W257514), 25 August and 25 September 1980; u/s Ballineen (W331537), 20 February, 20 March, 18 April, 25 August, 25 September, 31 October and 28 November 1980; Ballineen Bridge (W434538), 20 February, 20 March, 27 May, 25 August, 25 September and 31 October 1980; Castle Bernard (u/s Bandon) (W472546), 20 March, 18 April, 25 August, 25 September, 31 October and 22 December 1980; R. Bandon, 2.5km d/s Bandon (W516569), 20 February, 20 March, 25 August, 25 September, 31 October, 28 November, 22 December 1980 and 17 January 1981 (all Morgan, 1982). **DERRY: HA 1** - Upper Reservoir, Creggan, Derry (C417173), 23 March, 26 April, 10 May and 18 May 2001 (PHL); pool, Creggan, Derry (C414171), 18 May 2001 and 17 May 2002 (PHL); Lower Reservoir, Creggan, Derry (C422174), 23 March and 10 May 2001 (PHL); inflow to Upper Reservoir, Creggan, Derry (C413171), 26 April 2001 (PHL): **HA 2** - pool, Roe Valley Park, Limavady (C679201), 9 June, and 14 July 2000 (Langton, 2002); R. Roe, Largy Bridge, Limavaddy (C681202), 14 July 2000 (Langton, 2002); fire dam 1 (C699304) and fire dam 2 (C704314), Binevenagh Forest, Coleraine, 18 May 2000 (Langton, 2002): **HA 3** - Howell's Tarn, Ballywildrick, Coleraine (C766325), 7 April, 21 April and 7 July 2002 (PHL). Downhill Forest stream, Coleraine (C759348), 17 March 1999 (PHL), 25 July 1999 (PHL), 17 March 2000 (Langton, 2002), 21 August 2001 (PHL), 24 March 2002 (PHL); Downhill Lake, Bishops Gate, Coleraine (C762361) and Bishops Gate Garden, Coleraine (C762355), 18 May 2000 (Langton, 2002). Inflow to Balinrees Reservoir, Coleraine (C793307), 20 March 1999 (PHL). R. Agivey, Garvagh (C838154), 30 May 2002 (PHL); R. Agivey Ford, Ballynameen (C827148), 14 June 2008 (PHL). R. Bann, Coleraine (C854304), 18 March to 23 June and 22 September to 13 October 1999; 19 February to 7 June and 8 October 2000; 26 April 2001, 22 September 2002, 11 April to 2 May 2010 (PHL). L. Neagh, (H9080), no date (McLarnon and

Carter, 2000); L. Neagh, Ballyronan (H948862), 27 April 1999 (PHL). R. Moyola, New Bridge, Magherafelt (H955905), 13 October 2000 (Langton, 2002) and 7 May 2001 (PHL). **DONEGAL: HA 37** - R. Eany, d/s Eanybeg confluence (G842815), 10 August 1982 (Hayes, 1991); **HA 38** - R. Owenveagh upper, Ballaghgeeha, Glenveagh (B970160), 29 July 1985 (Heneghan, 1986). L. Glen, Glen (C105292), 29 July 2009, EPA (DAM); **HA 39** - L. Akibbon, Church Hill (C070185), 21 July 1983 (Reynolds, 1983); L. Akibbon, Church Hill (C068184), 9 September 2009, EPA (DAM). R. Swilly, Newmills, Letterkenny (C125092), 18 July 2000 (Langton, 2002); **HA 40** - R. Keenagh, Hugh Roe's Bridge, Umgall (C454543), 16 August 1982 (Hayes, 1991). **DOWN: HA 3** - tributary of Upper R. Bann, Tullyconnaught (J166451), 19 September 1997 (PHL); Dooghary (J137443), 27 August 1998 (PHL) and Shanrod (J215453), 14 August 1998 (PHL); Upper R. Bann, Katesbridge (J210407), 19 September 1997 (PHL); Eel Burn, Shanrod House, Shanrod (J223477), 19 September 1997 and 14 July 1998 (PHL); Upper Bann tributary, Shanrod (J207439), 19 September 1997 and 14 August 1998 (PHL); Upper Bann, Banbridge (J168443), 19 March 1998 (PHL); Upper Bann tributary, Tirkelly (J223364), 19 September 1997 (PHL). R. Muddock, Muddock Bridge, Rathfriland (J235342), 19 September 1997 (PHL). R. Rocky, d/s R. Shanky confluence, Hilltown (J233277), 26 September 1997 (PHL). Glenaveagh stream, Glenaveagh Bridge (J255284), 26 September 1997 (PHL). Drumadonnell R., Ballyward (J273383), 28 August 1997 (PHL). **DUBLIN: HA 9** - pond, University College Dublin, Belfield (O185300), 25 April 1973 (DAM). R. Dodder, Pussy's Leap, Templeogue (O126281), 8 May 1966 (Murray, 1972); Clonskeagh Bridge (O174306), 11 March 1949, CFH (Reilly, 1951) and 16 July 1967 (Murray, 1972). Lake, Zoological Gardens Dublin (O130350), July 1987, DAM/RH (Murray *et al.*, 1987). Pool near beach, Killiney (O261250), 10 December 1951, CFH (DAM). **FERMANAGH: HA 36** - R. Hollybrook, Lisnaskea (H373310), 27 June 2000 (Langton, 2002). R. Colebrook tributary, Drumcleave, Brookeborough (H367427), 15 September 1997 and 24 September 1998 (PHL); R. Colebrook, Tattenbuddagh Bridge, Brookeborough (H458428), 29 September 1997 (PHL); R. Colebrook tributary, Raw (H424426), 3 October 1997 (PHL) and

Beagh (H483480), 18 September 1998 (PHL). **GALWAY: HA 25** - R. Woodford, Woodford (M732000), 24 May 2003 (PHL): **HA 26** - R. Shiven, d/s Ballinaglass (M788494), 29 July 1981 (Hayes, 1991). R. Tirur, Newbridge (M492699), 16 August 1981 (Hayes, 1991): **HA 29** - L. Cutra, Gort (R485986), 24 May 2003 (PHL): **HA 30** - L. Ballyquirke, Moycullen (M232317), 13 April 2007, EPA (DAM). Pool at lay-by on road N59, Moycullen (M204336), 25 May 2003 (PHL): **HA 32** - L. Ballynakill, Cleggan (L639581), 3 April 2007, EPA (DAM). **KERRY: HA 22** - L. Caragh, Killorglan (V719904), 15 July 2008, EPA (DAM). Cushvally Lake, Gap of Dunloe, Killarney (V875863), 1973 (Douglas and Murray, 1980). L. Kilbrean, Killarney (W005935), 8 September 1969, NH (Bracken and Murray, 1973). L. Leane, Killarney, Muckross Boathouse (V965866), 29 August 1987, NOM (LJH). Muckross Lake, Dundag Bay (V964858), 1973 (Douglas and Murray, 1980); Muckross Lake, Muckross, Killarney (V950853), 18 September 2008, EPA (DAM). R. Annascaul, Annascaul (Q593017), 2 July 1981 (Hayes, 1991). R. Caragh, confluence with R. Acoose (V710860) and Blackstones Bridge, d/s R. Acoose confluence (V710864), 1975, CD (Dowling *et al.*, 1981). R. Clydagh, Caherbarnagh (W202842), May to October 1978 (Ashe, 1982). R. Flesk, d/s Clydagh/Loo confluence (W084814) and Flesk Bridge (W034876), May to October 1978 (Ashe, 1982); White Bridge (V987904), 25 July 1974 (DAM); New Bridge (V968896), 30 May 1973 (Douglas and Murray, 1980); d/s New Bridge (V963885), 14 May 1978 (Ashe, 1982) and u/s L. Leane (V964894), May to October 1978 (Ashe, 1982). R. Loo, Aughnanus Bridge, Crohane (W045790), May to October 1978 (Ashe, 1982): **HA 23** - L. Cam, Castlegregory (Q597079), 29 April 2008, EPA (DAM). **KILDARE: HA 7** - R. Boyne, Leinster Bridge (N665435), 6 June 1989 (Murray and Lynch, 1991). **KILKENNY: HA 15** - R. Nore, Norelands Bridge (S547436), 28 August 1981 (Hayes, 1991). **LAOIS: HA 15** - R. Nore, Castletown Bridge (S326930) and Kilbricken (S362898), 27 August 1981 (Hayes, 1991). **LEITRIM: HA 26** - L. Allen, Drumshanbo Lock (G968110), 30 March 2000 (DAM): **HA 35** - L. Belhavel, Killarga, Dromahair (G878288), 2 April 2008, EPA (DAM). L. Glencar, Glencar (G748434), 1 April 2008, EPA (DAM). **LONGFORD: HA 26** - R. Camlin, Mullagh Bridge, d/s Longford

(N116760), April 1965, 4 May 1965 (Murray, 1972) and June 1965 (DAM); R. Camlin tributary, Longford Racecourse (N149767), April and June 1965 (DAM). **MAYO: HA 32** - Louisburg (L807807), 1910, CM (Grimshaw, 1912). R. Bunowen, Louisburg, 7 May and 5 August 2004, DAM/WM (DAM). Westport L., Westport Woods Hotel, Westport (L985843), 7 May 2004, DAM/WM (DAM). L. Knappabeg, Westport (M010803), 21 April and 23 July 2008, EPA (DAM): **HA 33** - L. Keel, Achill Island (F641055), 17 September 2008, EPA (DAM). L. Bunacurry, Achill Island (F695048), 29 September 2004, DAM/WM (DAM). L. Carrowmore, Bangor Erris, Derreens, north east shore (F833299), 9 April 2008, EPA (DAM) and Cloontakilla Bay, south east shore (F851253), 17 June 2008, EPA (DAM). Bog pools, Glenamoy (F896345), July 1973, CD (Dowling, 1975; Dowling and Murray, 1981): **HA 34** - L. Conn, Cloghans, north east shore (G205133), 9 September 1968 (Murray, 1972). R. Moy, Cloongullaun (G348016), 30 August 1982 (Hayes, 1991): **Clare Island** - R. Doree, Lecarrow (L698867), 5 June 2002 (Murray and Murray, 2003) [Grimshaw (1912) reported *Prodiamesa obscurimana* Mg. from Clare Island, collected in July 1910 personally and by J. N. Halbert (Grimshaw, 1912). Murray and Murray (2003) considered these as possible records of *P. olivacea*]. **MEATH: HA 7** - R. Kinnegad, Kilwarden Bridge (N623460) and Ballyboggan (N638402), 6 June 1989 (Murray and Lynch, 1991). R. Boyne, Bellinter Bridge (N894625), 21 January 1966 (Murray, 1972); opposite inflow of R. Skane (N895628), 3 May 1982 (DAM); Stackallen Bridge (N917713), Oldbridge (O045761) and d/s Oldbridge (O062753), 19 July 1989 (DAM). Marsh, Ardsallagh, rere of garden (N893639), 9 May 1982 (DAM). R. Blackwater: Carnaross Bridge (N685779), 4 November 1975, 12 December 1975 and 30 March 1976; Sedenrath Bridge (N762759), 12 December 1975 and 30 March 1976 (all O'Flaherty, 1976); Clavens Bridge, Kells (N715775), 31 October 1967 (Murray, 1972); Donaghpatrick (N819723) and Poolboy Bridge, Navan (N871681), 18 August 1988 (Murray, 1988). Yellow R., tributary of R. Blackwater, Randalstown, Navan (N842718), 26 April 1996 (Finnegan, 1998): **HA 8** - stream/pond, Meadesbrook, Kilmoon (O038594), 3 April 1999, 15 November 2005, 9 June 2006 (DAM). **MONAGHAN: HA 6** - L. Naglack, Carrickmacross (H853026), 3 May

2007, EPA (DAM). L. Monalty, Carrickmacross (H866027), 14 September 2007, EPA (DAM): **HA 36** - L. Avagnon, Latton, Cotehill (H688133), 4 April 2007, EPA (DAM). L. Drumlona, Rockcorry (H636176), 4 April 2007, EPA (DAM). **OFFALY: HA 7** - Yellow R., tributary to R. Boyne, Garr Bridge (N532370), 6 June 1989 (Murray and Lynch, 1991). R. Boyne, Kinneged R. confluence (N680446), 6 June 1989 (Murray and Lynch, 1991): **HA 25** - R. Little Brosna, Ryan's Cross (S053882), Milltown Park (S068907) and Brosna Bridge (S077938), 2 September 1982 (Hayes, 1991). **ROSCOMMON: HA 26** - R. Frances, Castlerea (M694860), 28 April 2004, JRB (DAM). R. Suck, Castlecoote (M809627) and Ballyforan (M817464), 16 July 1981 (Hayes, 1991). Grange L., Greywood, Strokestown (M938857), 8 April 2008, EPA (DAM): **HA 30** - R. Dalgan, Clonfad (M518712), 20 August 1981 (Hayes, 1991). **SLIGO: HA 35** - L. Gill, Sligo (G753335), 3 April 2008, EPA (DAM). **TIPPERARY: HA 15** - R. Nore, Clonakenny (S116805) and Nore Bridge (S133816), 27 August 1981 (Hayes, 1991): **HA 16** - R. Breaghagh, Archerstown Bridge (S140568), 22 May 1992 (Murray and Lynch, 1992). Brownstown R., Kilclonagh (S167655), 6 September 1991 (Murray and Lynch, 1992). R. Clover, Twomileborris (S199590), 6 July 1992 (Murray and Lynch, 1992). R. Drish, Castletown (S207634), 6 September 1991 (Murray and Lynch, 1992) and Athlummon Bridge (S177593), 6 July 1992 (Murray and Lynch, 1992). R. Suir, Loughmore (S120670), 6 July 1992 (Murray and Lynch, 1992): **HA 25** - R. Ollatrim, Moneygall (S042773), 14 April 2004, JRB (DAM). R. Kilmastulla, Kilmastulla Bridge (R728698), 3 September 1981 (Hayes, 1991). **TYRONE: HA 1** - pool near R. Glenelly, Upper Barnes (H553904), 17 August 2011 (PHL). **WATERFORD: HA 18** - R. Blackwater, Ballyduff (W964992), 31 August 1981 (Hayes, 1991). **WESTMEATH: HA 7** - bog tributary of R. Kinnegad, u/s of bridge number C1/44/18-CFB (N562442), June 1989 (Murray and Lynch, 1991): **HA 25** - Lacy's Canal at L. Ennell (N420500), 4 February 1975 (DAM). L. Ennell, Tudenham (N415466), 2 May 1966 (Murray, 1972): **HA 26** - L. Killinure, Ballaghkeernan Bay (N069445), 24 April 2007, EPA (DAM). **WEXFORD: HA 11** - R. Ounvarra, Ballycanew (T153519), 6 May 2006 (DAM): **HA 12** - Crossabeg steam, Crossabeg, Castletown (T023270), 6 May 2006 (DAM): **HA 13** - R. Corrock tributary, Goff's Bridge,

Horetown (S870185), 12 June 2012, DAM/WM (DAM). **WICKLOW: HA 10** - R. Glencullen, Knocksink (O218180), 22 April 1987, DEM/DAM (Morgan, 1989). Roundwood Reservoir, Roundwood (O214002), 13 August 1983, HD (DAM). R. Glenealo, Glendalough (T090962), 16 July 1996, EMcE/DAM (McEntee, 1997). R. Avonbeg, Meetings Bridge (T188831), 27 October 1997 (Curran, 2001). R. Avoca, Whitebridge, Tigroney (T198821), 1 July 1997 (DAM) and 27 October 1997 (Curran, 2001); Avoca Village (T203802), 11 July 1997, FC/DAM (Curran and Murray, 2001) and October 1997 (Curran, 2001).

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FIGURE 1. The counties of Ireland.



FIGURE 2. The forty hydrometric areas of Ireland. Heavy lines illustrate demarcations of designated River Basin Districts (Water Resource Regions) consisting of hydrometric areas as follows: **North Western** - HA 01, 02, 36, 37, 38, 39, 40. **Neagh-Bann** - HA 03 and 06. **North Eastern** - HA 04 and 05. **Eastern** - HA 07, 08, 09, 10. **South Eastern** - HA 11, 12, 13, 14, 15, 16, 17. **South Western** - HA 18, 19, 20, 21, 22. **Shannon** - HA 23, 24, 25, 26, 27, 28. **Western** - HA 29, 30, 31, 32, 33, 34, 35. Dashed line indicates the international boundary.

