
Technical Appendix 6.1: Author Qualifications and Experience

This chapter has been reviewed and co-authored by Will Woodrow. Will is a Director at Woodrow Sustainable Solutions. Will Woodrow is an experienced ecologist with over 30 years of experience in ecological surveys and assessment. He is a Chartered Ecologist and a full member of the Chartered Institute of Ecology and Environmental Management. As such, he is required to abide by a strict code of professional conduct in all aspects of his work, as are all staff at Woodrow.

This chapter has been co-authored by Róisín NigFhloinn, with overview by Will Woodrow, and with input from the Woodrow Ecology Team. Róisín is a Senior Ecologist with Woodrow Sustainable Solutions. She has completed an honours B.Sc. specialising in Botany and M.Sc. in Ecology and Management of the Natural Environment. She is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). She regularly carries out reporting on Ecological Impact Assessment and to inform Habitats Regulations Assessments carried out by statutory authorities. Furthermore, the author has over nine years' experience in habitat surveys, mammal surveys, bird, and bat surveys for a number of large infrastructure schemes, commercial and residential projects. Róisín has also acted as an Ecological Clerk of Works (ECoW) for road maintenance schemes and windfarms during construction.

The aquatic habitat assessment was undertaken by Patrick Quinn. He is an Ecologist with Woodrow Sustainable Solutions. He has completed an honours B.Sc. in Environmental Science, a degree in Environmental Protection and a Higher Certificate in Science in Fisheries Management. Patrick is an Associate member of the Institute of Fisheries Management. He regularly carries out ecological assessment reports including Screening for Appropriate Assessment and inputs into Ecological Impact Assessments. Patrick is also an experienced Ecological Clerk of Works (ECoW) for transmission line and windfarm construction. An addendum report to this chapter is the Freshwater Pearl Mussel *Margaritifera margaritifera* survey undertaken by Gerard Hayes of Mallachy Walsh Partners (MWP). This has informed the details within the aquatic habitat assessment.

The botanical surveys were carried out by experienced Woodrow ecologists Dr. Philip Doddy, Bridget Keehan, Róisín NigFhloinn and Kristi Leyden, whom all have specific training and experience in the areas of botany and native plant identification. The latter three are all members of the Botanical Society of Britain and Ireland (BSBI).

Bridget Keehan has over ten years' experience as a botanical surveyor, and has broad experience in conducting ecological surveys and preparing impact assessments and other reports to inform planning applications in Ireland and the UK. As an Associate Member of CIEEM, she employs a high degree of competence and professional standards in her approach to environmental assessment.

Dr. Philip Doddy is an ecologist with a PhD in Aquatic Sciences (specialising in the use of bio-indicators in marl lakes). Philip has worked in the career fields of botany and horticulture for several years. He has an excellent knowledge of plants and native plant identification. His past research projects have also included assessments within limestone pavement habitats, in areas such as the Burren, Co. Clare. He is an experienced Ecologist, with training in botany in particular, in addition to phycology, and conservation management, and has published several research papers on these topics. Philip has undertaken relevé surveys and assessment to National Vegetation Classification (NVC) level in NI, as well as to provide information to inform uplands vegetation surveys in ROI according to National Guidelines.

Kristi Leyden is an Ecologist with Woodrow Sustainable Solutions. She has completed a B.Agr.Sc. (Hons) in Agri-Environmental Sciences and a M.Sc. in Ecological Assessment. Kristi is an experienced ecologist, and botanist, with over five years' experience in ecological and botanical surveys and assessment. She has carried out field work and reporting on a wide range of developments some of which include residential and commercial developments, windfarms, overhead power lines, gas lines, hydro schemes and quarries. Kristi is a Graduate member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Rachel Irwin has been volunteering and working as an Ecologist since May 2017, while completing her degree in Zoology and Conservation, for which she obtained a First Class Honours BSc. She has an excellent knowledge and understanding of current environmental legislation and policy, as well as first-hand experience of land and wildlife management in both Ireland and the U.K. Since beginning her third level training in 2015, Rachel has been furthering her experience of ecological fieldwork. She has undergone extensive training in static detector deployment as well as the use

of Kaleidoscope software for echolocation analysis. She has also completed comprehensive training through BatAbility one to one courses in the use of BatLoggers and Bat Explorer sound analysis software. At Woodrow, she now oversees the deployment and collection of static bat detectors for numerous large sites, including several windfarms, both in Ireland and Northern Ireland. Rachel has experience working as an Ecological Clerk of Works (ECoW) and her responsibilities include water monitoring on construction sites, and environmental reporting. She is the author of environmental reports, including bat assessments for Woodrow.

Bat surveys were all carried out by Woodrow Ecologists who are trained in-house in the use of static and manual bat detectors, and bat survey techniques according to the best practice guidance. The recent survey guidance "*Bats and onshore windfarms – survey, assessment and mitigation*" (Scottish Natural Heritage 2019) has been followed to inform this project proposal. This has been adapted by Woodrow to ensure that the surveys take account of the local context for bats in the north-west of Ireland (Please refer to **Chapter 6 Biodiversity** and **TA 6.4 Further Details on Bat Survey Methodology** for further information on bat survey and assessment).

Freshwater Pearl Mussel (FPM) Surveys were carried out by licenced surveyor Gerard Hayes of Mallachy Walsh and Partners (MWP). Gerard Hayes is a Senior Aquatic Ecologist with over 13 years' experience in environmental consultancy. He is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and the Freshwater Biological Association (FBA). Gerard has a diverse ecological profile, with Phase 1 habitat, mammal (including bats), bird, amphibian, macroinvertebrate, and tree survey experience. He has had numerous responsibilities including report writing (EIAR, EclA, EA, AA Screening and NIS), waste assimilation capacity assessment and ecological monitoring. His project involvement has been primarily in the areas of wind energy development, waste water treatment plants, roads/bridges, water supply, flood defence and hydro schemes. He is co-author and/or carried out surveys for the National Parks and Wildlife Service (NPWS) Irish Wildlife Manual No's. 15, 24, 26, 37 and 45. He is a certified Freshwater Pearl Mussel (FPM) surveyor who has successfully completed Stage 1 and Stage 2 FPM survey training with Dr. Evelyn Moorkens. He has carried out FPM surveys on watercourses nationwide, including the Aherlow, Allow, Annalee, Blackwater (Munster), Brown Flesk, Derreen, Drimneen, Flesk, Finnow, Finn, Feale, Flesk, Laune, Leannan, Lee, Lickey, Moy, Nire, Owenboliska, Swanlinbar, Slaney and Thonogue Rivers. (Please refer to **Chapter 6 Biodiversity** and **TA 6.5 Freshwater Pearl Mussel Survey Report** for further details on FPM survey and assessment).

Details on qualifications are provided below.

QUALIFICATIONS:

Will Woodrow (Woodrow)

HND – Conservation Management, Farnborough College of Technology, 1989.

MSc – European Environmental Policy and Regulation, Lancaster University, 1994.

MSc (Arch) – Advanced Environmental and Energy Studies, University of East London, 2006.

Róisín NigFhloinn (Woodrow)

B.A. Mod (Hons) – Natural Sciences (specialising in Botany), Trinity College Dublin, 2008.

MSc – Ecology and Management of the Natural Environment, University of Bristol, 2011.

Patrick Quinn (Woodrow)

B. Sc. (Hons) – Environmental Science, Institute of Technology, Sligo, 2015.

B. Sc. – Environmental Protection, Institute of Technology, Sligo, 2014.

HC – Fisheries Management, Institute of Technology, Sligo 2012.

Bridget Keehan (Woodrow)

BSc (Hons) – Botany. University College of North Wales, 1992.

Dr. Philip Doddy (Woodrow)

PhD in Aquatic Sciences, GMIT, Galway. Qualified 2019.

BSc(Hons) in Applied Freshwater & Marine Biology, GMIT, Galway. Graduated 2013. Result: First class honour (1.1).

Diploma (Level 6) in Amenity Horticulture, National Botanic Gardens, Dublin 9. Graduated 2001. Result: Distinction.

Kristi Leyden (Woodrow)

B.Agr.Sc. (Hons) - Agri-Environmental Sciences. University College Dublin, 2008.

M.Sc. - Ecological Assessment. University College Cork, 2011.

Rachel Irwin

BSc. First Class (Hons) Zoology with Conservation, Bangor University, 2015 -2018.

Gerard Hayes (MWP)

BA. Sc. (Hons) - Biological Science Education, University of Limerick, 1999.