



CURRICULUM VITAE

JESSICA HAMILTON, BSc

EDUCATION

- 2021-2024 **University College Dublin (UCD), Masters in Environmental Sustainability (O/L)**
Modules studied to date: Environmental Impact Assessment 1 & 2, Data Analysis and, Bioinvasions: Impact to Management, Technical Communications.
- 2015-2019 **Munster Technological University (MTU) Bachelor of Science in Field Biology.**
Modules studied include Botany; Zoology; Ecology; GIS; Habitat Studies; Field Biology and Earth Science; Habitat Conservation Management; Species ID (beetles, birds, and plants);

CAREER HISTORY

Ecologist, BEC Consultants.

March 2022 – Present

I joined BEC at the ecologist level in March 2022. I have since worked on a range of projects including the mapping and monitoring of three Annex I grasslands, survey and assessment of fen habitats- both annex and non-annex, woodland reassessment and protected species translocation.

A selection of projects I have worked on recently with BEC are listed below:

- *Woodland Reassessment Survey (2021-2023)*: BEC Consultants are reassessing a selection of woodland sites that were previously proposed for designation as Natural Heritage Areas to assess their conservation value, to map the habitats and survey site boundaries. Monitoring criteria for Ash dominated woodland and field criteria for assessing the impacts of Ash Dieback were developed. Thus far I have been involved with carrying out some of the fieldwork, along with data collection, landowner liaison and document preparation.
- *Native Woodland Monitoring (November 2022)*. Survey of native woodland sites owned by Coillte. Surveys will include a walkover to re-establish baseline habitats present, notable species and advise on management issues e.g., invasive species
- *Meadow Barley translocation (September 2022- present)*: Translocation of the protected Meadow Barley (*Hordeum secalinum*) was proposed as part of the development of pharmaceutical development at Raheen, Co. Limerick. BEC monitored the translocation of the turfs to the recipient area and provided guidance before and during the process. Follow up annual monitoring is to take place over the next 10 years which BEC will undertake.
- *Monitoring of three Annex I Grasslands (2021-2023)*: BEC is undertaking the monitoring of, and reporting on the conservation status of three Annex 1 grassland types; Molinia Meadows 6410, species-rich calcareous grasslands 6210 and lowland hay meadows 6510. Thus far I have carried out fieldwork and data collection, alongside GIS and landowner liaison.
- *National Fen Survey (2021-2024)*: The National Fen Survey is a nationwide survey that BEC are undertaking. Its aim is to obtain a better understanding/distribution of fen habitats (annex and non-annex) across the Republic of Ireland. I will be working with other ecologists carrying out fieldwork, monitoring stops, looking at the floristic communities as well as the pressures/threats that affect these habitats. I will also be performing data checks on the data as it comes in from other ecologists

- *Killarney Fern Monitoring (September 2022)*: Assisted with fieldwork and data collection
- *Vertigo Monitoring (July 2022)* Assisted Project lead with fieldwork. Tasks included data collection and sample sorting and plant identification.

PREVIOUS RELEVANT EXPERIENCE

Botanist/Research Assistant - Trinity College Dublin

June – September 2021

Monitoring of and reporting on the permanent woodland quadrats in Killarney National Park. I along with two students carried out the 2021 monitoring of the woodland plots that have been extant in Killarney National Park for the last 30 years. These plots overtime capture vegetation changes and regeneration levels across the various woodlands. My duties involved: Re-locating and surveying each of the permanent plots; Within each plot, collecting vegetation data and assessing tree regeneration, (or lack of), grazing, invasive species spread, disturbance, deer damage, as well as noting any other change; Preparation of final report which presented findings, and changes happening within the plots, along with future recommendations.

Ecologist – Envirico Ltd

July 2019 – May 2021, September 2021-March 2022

Conducted fieldwork and research for public and private clients nationwide. Authored technical scientific reports and habitat assessments. Delivered training presentations/workshops. Provided induction training to, and supervision of undergraduate work placement.

Examples of projects delivered/contributed to:

- Study of the Impacts of Fire in Killarney National Park which included collection of releve data from a range of habitats impacted by the recent fires, including woodland plots in burnt and unburnt locations. Other habitats surveyed included blanket bog and wet heath.
- Invasive Species Surveys
- Old Woodland Assessments, Forestry surveys
- Survey for breeding evidence of Golden-ringed Dragonfly *Cordulegaster boltonii*

Botanical Society of Britain and Ireland (BSBI) - Irish Grasslands Project

July – August 2020

- Co-produced four PDF resources delivering an overview of and detailing the primary indicator species of each of the main Irish grassland types listed on Annex I of the EU Habitats Directive: Semi-natural Dry Grasslands on Calcareous Substrates [6210], Species-rich Nardus Grasslands [6230], Molinia Meadows [6410], Lowland Hay Meadows [6510].
- Alongside the preparation of the final documents, I administered Irish BSBI social media and created content highlighting 15 grass species as part of the "Grass of the Week" series (#IrishGrassOfTheWeek). For each species I overviewed ecological and identification features, and distribution of the species within Ireland.

SKILLS & ADDITIONAL INFORMATION

- Skilled botanical recorder with good vascular plant identification. Lead local botany group which has regular outings.
- Excellent fieldworker, both as part of a team or solo, with experience working in a diverse range of terrains and habitats.
- Good broad knowledge of Irish insect groups with aim to further specialize in some of the less well-studied taxa. Regularly record invertebrates and moth trap frequently.
- Maintain contemporary knowledge of Irish botanical nomenclature, regularly attend workshops and conferences to further improve these skills.
- Equipped with proficient IT skills, comfortable with QGIS and ArcGIS software, competent user of all major social media platforms including content creation and increasing engagement. Daily user of computing systems and software e.g., Microsoft Office products. Baseline understanding of R software.
- Excellent photography skills, comfortable using a DSLR and editing software.

Membership of Professional Organisations

- Botanical Society of Britain and Ireland (BSBI) and currently sit on the BSBI Committee for Ireland.
- Working towards membership with CIEEM.

CONFERENCES AND TRAINING

Conferences/Webinars Presented at

- Presented at Tri-Biosphere Webinar 8: Plants of the Kerry Biosphere, August 2021
- Presented at the BSBI Spring Conference (online) March 2021
- Presented at the Irish National Biodiversity Conference, February 2019
- Presented at the BSBI Spring Conference, March 2018

Radio Segments Contributed To

- Mooney Goes Wild, BSBI New Year Plant Hunt, February 2022
- Radio Kerry, Saturday Supplement with Frank Lewis, Bryophytes and more, September 2020

CPD Conferences/Workshops attended:

- Rewilding Symposium (online), September 2022
- Mushrooms and Fungi, Maria Cullen (IWT webinar), September 2022
- Irish National Biodiversity Conference, June 2022
- Fen habitats, preparation for upcoming field season, In-house, April 2022
- Bryophytes in Grasslands Training, Nick Hodgetts, October 2021
- Peatlands Gathering fieldtrip, Patrick Crushell October 2021
- Marine rescue volunteer training, Seal Rescue Ireland, February 2020
- Native Woodland Scheme (Woodlands of Ireland/Forest Service, 2019).

- *Lamium* ID, Paul Green, BSBI Spring Conference, April 2019
- Overview of AA, Cawley Consulting, October 2019
- *Viola* ID workshop, Paul Green, BSBI Spring Conference, 2018

Currently Held:

- Full clean driving licence
- Manual Handling
- Safe Pass
- Marine Rescue Volunteer (Seal Rescue Ireland)
- First Aid
- Mountain Skills 1 and 2

SELECTED RECENT REPORTS AND PUBLICATIONS

Hamilton, J., Mitchell, F., Kelly, D. 2022. Monitoring of change through permanent woodland plots in killarney national park. Irish Wildlife Manuals, National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland

Crowley, C., Flood, K., Caffrey, B., Dunford, B., FitzPatrick, Ú., **Hamilton, J.** and O’Gorman, M. 2020 Engaging and empowering people in biodiversity conservation: lessons from practice. Biology and Environment: Proceedings of the Royal Irish Academy 2020

Hamilton, J., Cole, E., Pierce, S., Conaghan, J. 2020. BSBI Ireland Annex I Grassland Resources: Lowland Hay Meadows (EU Habitats Directive Code 6510).

Hamilton, J., Cole, E., Pierce, S., Conaghan, J. 2020. BSBI Ireland Annex I Grassland Resources: Species-rich *Nardus* grasslands (EU Habitats Directive Code 6210)

Hamilton, J., Cole, E., Pierce, S., Conaghan, J. 2020. BSBI Ireland Annex I Grassland Resources: Species-rich *Nardus* grasslands (EU Habitats Directive Code 6230)

Conaghan, J., **Hamilton, J.**, Cole, E., Pierce, S., 2020. BSBI Ireland Annex I Grassland Resources: *Molinia* meadows (EU Habitats Directive code 6410)