



## CURRICULUM VITAE

JESSICA HAMILTON, BSc

### EDUCATION

- 2021-2024 **University College Dublin (UCD), Masters in Environmental Sustainability (O/L)**  
Modules studied to date: Ecology & its Application, Peatlands & Global Change, Environmental Impact Assessment 1 & 2, Data Analysis, Bioinvasions: Impact to Management, Technical Communications and Water Quality Assessment, Protection and Management.
- 2015-2019 **Munster Technological University (MTU) Bachelor of Science in Field Biology.**  
Modules studied: 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. A selection of projects I have worked on recently are listed below:

- *Survey of NPWS woodland properties in the South Western region: (2023-present)* The project entailed the mapping and monitoring of over 30 woodlands sites located in Killarney National Park, Co. Kerry. Sites included both annex and non-Annex woodlands and involved the collection of data pertaining to Old-growth Forests, Tree-related Microhabitats and Ash Dieback.
- *Coillte Bioforest (2023-present):* This project involves the survey of a range of potential biodiversity areas within the Coillte estate. These areas are assessed based on both their present and potential biodiversity value and recommendations for their management are given.
- *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. BEC are continuing to monitor the translocated turfs along with the Annex I Hay Meadows present on site.
- *National Fen Survey (2022-present):* Survey of sites across Ireland to map and attain a better understanding of both Annex and non-Annex fen habitats and communities in Ireland. This project involves fieldwork in often challenging terrain, carrying out monitoring stops, relevés to capture floristic data alongside the documenting of pressures and threats that affect these habitats. I have also assisted with some of the data checking at the end of the field season.
- *Woodland Reassessment Survey (2022-2023):* Reassessment of a selection of woodland sites that were previously proposed for designation as Natural Heritage Areas. This project involved the mapping of habitats and survey site boundaries along with collection of floristic data and assessment of the impacts of Ash Dieback which were developed for the project. My duties included fieldwork, data collection, landowner liaison and document preparation.

- *Vertigo Monitoring (July/September 2023, July 2022)* Assisted project lead with fieldwork. Tasks included data collection and sample sorting and plant identification
- *Native Woodland Monitoring (November 2022)*. Survey of native woodland sites owned by Coillte. Surveys entailed a walkover survey to re-establish baseline habitats present, notable species and advise on management issues e.g., invasive species
- *Monitoring of three Annex I Grasslands (May 2022)*: Assisted with fieldwork for the monitoring of three Annex I grassland types; *Molinia* Meadows 6410, species-rich calcareous grasslands 6210 and lowland hay meadows 6510
- *Killarney Fern Monitoring (September 2022)*: Assisted with fieldwork and data collection.

## 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 the BSBI Summer Meeting 2023: Flora of North Kerry
- 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:**

- Co-organised BSBI Summer Field Meeting, 19<sup>th</sup>-22<sup>nd</sup> May 2023
- CIEEM - QField for Ecologists and Environmental Practitioners, March 2023
- 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)