



CURRICULUM VITAE

ORLA DALY

B.Sc., M.Sc., PgDip., MCIEEM

EDUCATION

- 2012 – 2015 University of Ulster, Coleraine Campus
Postgraduate Diploma in Geographic Information Systems (Distinction)
- 2007 – 2008 Trinity College Dublin
M.Sc in Biodiversity and Conservation (Distinction - 1st Class Honours)
Thesis: An investigation of the of the ground flora diversity of mixed forests
- 2001 – 2006 National University of Ireland, Galway
B.Sc.in Botany (1st Class Honours)
Thesis: An investigation of the effects of light and temperature on the photosynthesis of the Fucoids (Brown Algae)

CAREER HISTORY

Senior Ecologist/Consultant Ecologist/Ecologist, BEC Consultants Ltd. (April 2010 – Present)

Duties involve project management, tender preparation, report writing, data entry/ analysis and conducting desk-based research. Field based activities involve conducting botanical surveys in a wide range of habitats, involving the collation of relevé data, environmental/ structural data, conducting habitat mapping and condition assessments. Technical responsibilities include providing company GIS project support including spatial database creation/ management, dataset cleaning and verification, digital mapping, map production and maintaining metadata. I am also an approved Native Woodland Scheme (NWS) Ecologist.

Ecological projects contributed to include:

- *Coillte's BioClass Project 2019* – Project Manager. This project involved collaborating with foresters to write management plans for 17 Coillte biodiversity areas. Habitats surveyed included woodlands, forests, bogs and heaths. The overarching aim of these plans were to enhance site biodiversity. This project involved preparing Native Woodland Scheme (NWS) forms.
- *Resurvey of the Millennium Forests 2019* – Project Manager. This project documents vegetation succession on sites that were previously afforested with non-native conifers. Main duties: fieldwork organisation, vegetation survey, data analysis and report writing.
- *Fiddandarry Ecohydrology 2018-2021* – Field Ecologist. Vegetation recording according to the Irish Vegetation Classification (IVC) within an NPWS-owned blanket bog restoration site.
- *BD Enniscorthy Appropriate Assessment (AA) screening 2018* – Field Ecologist. Main duties involved conducting otter surveys.
- *Woodland Monitoring Survey 2017-2018* – Project Manager. Main duties involve fieldwork preparation, managing and coordinating field teams, field survey of four Annex I woodlands (91A0, 91E0, 91D0 & 91J0), data analysis & report writing. Monitoring involves assessing condition and conservation status by comparing measured indicators, such as presence of indicator species, amount of dead wood and number of tree saplings, with target threshold values.
- *National Conservation Assessments (NCAs) of Annex I habitats 2018* – GIS Co-ordinator/ Author. Compiled and wrote NCA reports for two Annex I coastal habitats (1220, 2110) and four Annex I woodlands (91A0, 91E0, 91D0 and 91J0) for the purpose of Article 17 reporting. This involved assessing the condition of the habitats on a national scale and identifying the main threats/ impacts. Managed the GIS component for fifteen Annex I habitats (coastal, grasslands and woodlands) in order to obtain up-to-date national distributions.

- *Dún Laoghaire Rathdown Wildlife Corridor Plan 2018 – GIS Co-ordinator.* Assisted with the creation of a wildlife corridor map for Dún Laoghaire Rathdown County Council through the amalgamation and stacking of existing GIS datasets.
- *Juniper Monitoring Survey 2017-* Field Ecologist. Main duties comprise participating in the mapping and monitoring of the Annex I habitat Juniper Scrub (5130).
- *Grassland Monitoring Survey 2015-2018 – Field Ecologist.* Main duties comprise participating in the monitoring of four Annex I grassland habitats (6210, *6210, 6510 and 6410).
- *Rare Plant Monitoring 2015-2018 – Field Ecologist.* Conducted a survey of rare plant species listed on annexes of the EU Habitats Directive (Marsh Saxifrage, Alpine clubmoss, Fir clubmoss, Marsh clubmoss and Stag's-horn clubmoss)
- *Loughshinny Pumping Station Invasive Species Survey – Project Manager.* Identification and mapping of Alien Invasive Species (AIS) and report writing.
- *Provision of Site-specific Conservation Objectives (SSCOs) for 33 blanket bog Special Areas of Conservation (SACs) with a suite of upland habitats - Project Manager/Lead Ecologist.* This involved the review of all data sources relating to the 33 SACs, setting targets for habitat area and distribution, and preparing supporting documents.
- *Knockree Nature Conservation Management Plan – Project Manager.* Development of a comprehensive management plan for an upland site in Co. Wicklow with a series of nature conservation issues.
- *Invasive species survey for the Gorey Water Supply Scheme – Field Ecologist.* Identification and mapping of invasive species.
- *Vegetated Shingle Monitoring 2016 - GIS Co-ordinator/ Field Ecologist.* Office based duties involved report writing, GIS management including habitat change mapping and GIS quality control. Field based duties involved vegetation mapping and conducting condition assessments for the Annex I habitat(s) of shingle beaches and sand dunes systems.
- *Turf-cutting Impact Review and Management Systems for SACs/ NHAs Designated for the Protection of Blanket Bogs - GIS Co-ordinator/ Field Ecologist / Author.* Office based duties involve report writing, and managing the GIS component of the project including sub-site identification and impact/ polygon digitisation, spatial database creation/ management, hydrological modelling, as well as the production and design of high quality maps. Field based activities include vegetation mapping (using a specifically adapted vegetation classification scheme) and turf-cutting impact identification and recording.
- *Surveys of possible Marsh Fritillary sites and habitat in the mid-west (Roscommon and Longford) – Project Manager/ GIS Co-ordinator.* Field based duties involved identification and mapping of suitable Marsh Fritillary habitat, conducting Marsh Fritillary habitat condition assessments and larval web searches. Office based duties involve report writing and data/ GIS management.
- *Surveys of possible Marsh Fritillary sites and habitat in Galway and Mayo – Project Manager/ GIS Co-ordinator.* Field based duties involved identification and mapping of suitable Marsh Fritillary habitat, conducting Marsh Fritillary habitat condition assessments and larval web searches. Office based duties involve report writing and data/ GIS management.
- *Killarney National Park Habitat Map – GIS Technician.* GIS quality control and production of the final habitat map for the National Parks and Wildlife Service (NPWS), as well as writing INSPIRE compliant metadata.
- *National Survey of Upland Habitats (Pilot Phase and Phases 1-4) – GIS Co-ordinator/ Field Ecologist/ Health and Safety Officer.* Office based duties involved managing all GIS aspects of the project including initial SAC polygon digitisation using orthorectified aerial photographs, data entry and organisation, spatial database creation/ management, preparation of metadata, as well as the production and design of high quality maps. Field based activities included vegetation mapping, relevé recording and condition assessments of Annex I habitats. Participated in the field survey of 14 upland SACs. The Health and Safety Officer role involved briefing the team regarding health

and safety issues, distributing risk assessment forms, conducting weather assessments and keeping a route planning log.

- *Surveys of possible Marsh Fritillary sites and habitat in Cos Louth, Meath & Monaghan* – Lead Ecologist/ GIS Co-ordinator. Duties on this project involved responsibility for initial tender preparation, report writing, site selection, managing and coordinating field teams, mapping of suitable Marsh Fritillary habitat, conducting Marsh Fritillary habitat condition assessments, larval web searches, data management and GIS quality control.
- *Galway City Outer Bypass Marsh Fritillary Survey* – GIS Co-ordinator/ Field Ecologist. Duties on this project involved report writing, mapping of suitable Marsh Fritillary habitat, larval web searches, data management and GIS quality control.
- *Ancient and Long-established Woodlands of Co. Cork* – Lead Ecologist. Duties involved helping to secure funding from the Heritage Council, report writing, digital mapping, co-ordinating the field season and conducting fieldwork. The resultant GIS database was combined with a provisional inventory of these habitats (conducted by BEC Consultants in 2009) to form the first National Inventory of Ancient and Long-established Woodlands in Ireland.
- *Woodland Monitoring Survey 2011-2012* – Field Ecologist. Duties involved conducting fieldwork in two of Irelands Annex I woodland types.
- *Irish Semi-natural Grassland Survey* – Field Ecologist. Duties involved vegetation mapping, relevé recording and conducting conservation assessments within semi-natural grassland habitats. Office based duties involved quality control of GIS datasets and final map production.
- *Marsh Fritillary and rare Bumblebee Survey* – Field Ecologist. Recording of butterflies and bumblebees within areas of Annex I grassland habitats.
- *Digitisation of the National Survey of Native Woodland sites* – GIS Technician.

Contract Ecologist, BEC Consultants Ltd. (Jan 2009 – Dec 2009)

- *Provisional Inventory of Ancient and Long-established Woodlands* – Lead Ecologist. This project involved the initialisation of a national inventory of ancient and long-established woodlands for the Republic of Ireland. Duties involved report writing, desk-based research, digital mapping, site selection, field surveys, data entry and developing a protocol for the identification of these habitats.

Irish Butterfly Monitoring Scheme Volunteer (Apr 2009 – Sep 2009)

Conducted bi-weekly transects to identify and record butterflies for the National Biodiversity Data Centre.

Irish Peatland Conservation Council (IPCC) Volunteer (Nov 2008 – Dec 2008)

Exercised practical conservation within the raised bog environment, activities conducted included drain blocking, tree clearance and hydrological assessments.

Research Assistant FORESTBIO Project, Trinity College Dublin (Jun 2008 – Aug 2008)

FORESTBIO was a multidisciplinary project which investigated the biodiversity of Irish forests. It also set about to identify biodiversity indicators which could be directly used to inform 'sustainable forest management' practices in Ireland. Duties on this project involved the collection of botanical and structural data within both conifer plantations and native woodlands. Other key responsibilities included data entry and organisation.

SKILLS & ADDITIONAL INFORMATION

- Full member of the Institute of Ecology and Environmental Management (MCIEEM).
- Approved Native Woodland Scheme (NWS) Ecologist.
- Successfully completed the Mountain Skills Course 1 and 2.
- Attended a Continuous Cover Forestry (CCF) training course.
- Extensive experience in GIS including modelling experience and high quality map production.
- Proficient in the use of the Microsoft Office Suite (Word, Excel and Powerpoint).

- Experienced in using packages for analysis of ecological data such as SPSS and PC-ORD. This extends to multivariate analysis of ecological communities using non-metric multidimensional scaling (NMS), hierarchical cluster analysis and indicator species analysis.
- High level of proficiency in accurate data entry and data analysis.
- Good knowledge of field survey techniques, plant and habitat identification.
- Experienced in using a variety of field and laboratory equipment.
- Regularly attend courses as part of Continuing Professional Development (CPD).
- Work well as a team member, as well strong ability to work independently.
- Occupational First Aid qualification. Safe Pass qualification. Trained in Manual Handling.
- Full clean driving licence.

SELECTED PUBLICATIONS & REPORTS

- Daly, O.H.**, O'Neill, F.H. and Barron, S.J. (2020) The monitoring and assessment of four EU Habitats Directive Annex I woodland habitats. Irish Wildlife Manuals, No. XX. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Dublin, Ireland.
- Martin, J.R. and **Daly, O.H.** (2018) Report on Phase 1 of the Dún Laoghaire Rathdown Wildlife Corridor Plan. Unpublished report for Dún Laoghaire Rathdown County Council.
- Daly, O.H.** (2017) Alien invasive species survey for the proposed Loughshinny Pumping Station and Rising Main Project. Unpublished Report by BEC Consultants Ltd., Dublin.
- Daly, O.H.** (2016) Knockree Nature Conservation Management Plan. Unpublished report to The Heritage Council, Áras na hOidhreachta, Church Lane, Kilkenny, Ireland.
- Daly, O.H.** (2016) Surveys of possible Marsh Fritillary sites and habitat in the mid-west (Roscommon and Longford), Draft report. Unpublished Report to National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- Daly, O. H.**, Barron, S.J., Perrin, P.M. and Roche, J.R. (2015b) Blanket bog turf-cutting management system: Site Report No. 3 The Twelve Bens/Garraun Complex SAC (002031), report version 01a. Unpublished report to the National Parks and Wildlife Service.
- Daly, O. H.**, Barron, S.J., Perrin, P.M. and Roche, J.R. (2015c) Blanket bog turf-cutting management system: Site Report No. 4 Cloghernagore Bog and Glenveagh National Park SAC (002047), report version 01a. Unpublished report to the National Parks and Wildlife Service
- Daly, O.H.** and Barron, S. (2015) Surveys of possible Marsh Fritillary sites and habitat in Cos. Galway and Mayo. Unpublished Draft Report to National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- Roche, J.R., Perrin, P.M., Barron, S.J. & **Daly, O.H.** (2014) National Survey of Upland Habitats (Phase 1, 2010 - 2011) Site Report No 1: Mweelrea, Sheeffry, Erriff Complex cSAC (001932) Co. Mayo (Revision). National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.
- Perrin, P.M., Roche, J.R., Barron, S.J., **Daly, O.H.**, Hodd, R.L. & Devaney, F.M. (2014). National Survey of Upland Habitats (Phase 4, 2013-2014), Site Report No. 16: Caha Mountains cSAC (000093), Cos. Cork and Kerry. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- Daly, O.H.** & Barron, S. (2013) Surveys of possible Marsh Fritillary sites and habitat in Cos Louth, Meath & Monaghan, Interim report. Unpublished Report to National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- Daly, O.H.** (2013) Ireland's Ancient Woodlands. *Woodland*, Autumn 2013, 19-23.
- Barron, S.J., **Daly, O.H.**, Seale, E.G. & Brophy, J.T. (2013) Galway City Outer Bypass Marsh Fritillary Survey Report. Unpublished Report by BEC Consultants Ltd.
- Roche, J.R., Perrin, P.M., Barron, S.J. & **Daly, O.H.** (2012) National Survey of Upland Habitats (Phase II, 2011-2012), Site Report No. 8: Killarney National Park, Co. Kerry. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- Perrin, P.M. & **Daly, O.H.** (2010) A provisional inventory of ancient and long-established woodland in Ireland. Irish Wildlife Manuals, No. 46. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.
- Daly, O.** & Perrin, P. (2010) The ancient and long-established woodlands of County Cork. Unpublished report submitted to the Heritage Council, Church Lane, Kilkenny, Ireland.