

CURRICULUM VITAE

FIONA M. DEVANEY B.Sc. (Hons.), Ph.D.

# **EDUCATION**

2002 – 2008	University College Dublin Ph.D. thesis title: "The Alder Marsh: Ecohydrology and Restoration Prospects of a Desiccating Dune Slack"
2002 - 2003	University College Dublin Postgraduate Certificate in Research Methods

1998 – 2002 University College Dublin B.Sc. (Botany), (2.1 Honours)

# **CAREER HISTORY**

## Consultant Ecologist, BEC Consultants

2009 - present

As a Consultant Ecologist for BEC Consultants, I am primarily involved at all stages of the planning, organisation and implementation of botanical and habitat surveys, including post-survey data analysis and digital mapping; special expertise in sand dune and semi-natural grassland habitats. Key duties include habitat identification and mapping, botanical survey (vascular plants and bryophytes), Annex I habitat assessment, leading survey teams, training associate ecologists and intern students, arranging access for surveys, and the collection of samples for further analysis. Other responsibilities include data quality control, GIS habitat mapping, and report writing. Selected projects contributed to include:

- Saltmarsh Angiosperm Assessment Tool for Ireland Lead Ecologist. The main objective of this
  project is to develop and apply a tool for the ecological status assessment of the angiosperm
  Biological Quality Element in coastal and transitional waters for the Water Framework Directive.
  This is a desk-based study where my main roles include investigation of potential metrics for
  inclusion in the tool, the production of GIS habitat extent maps, development of an Ecological
  Quality Ratio calculator and the writing of several technical and non-technical reports, as well as a
  Practitioner's Guide.
- Irish Semi-natural Grasslands Survey Field Ecologist/Team Leader. As a field ecologist on this
  project, I collected botanical and habitat data from over 200 grassland sites over four years. This
  entailed recording vascular plant and bryophyte species, mapping Fossitt and Annex I habitats,
  recording relevés (~725) and Annex I monitoring stops (~200), and noting details of ongoing
  management / impacts on the habitats. I was lead author on one annual report and co-author on
  several of the others. I was also co-author on the final synthesis report. I was largely responsible
  for data accuracy and consistency for the project and managed the data within Turboveg (a
  specialised database management system designed for the storage of vegetation data).
- Sand Dune Monitoring Survey Field Ecologist/Co-author of final report. This project involved monitoring 39 sites which contain a substantial proportion of the total national resource of eight Annex I sand dune habitats. I surveyed a significant number of the selected sites, produced GIS habitat extent maps, conducted data analysis for the conservation status assessments, wrote/edited a large proportion of the individual site reports and was co-author on the final report.
- *Ecological Survey of the Royal Canal* Field Ecologist/Co-author of report. This project entailed an ecological survey of the Royal Canal between Talbot Bridge, Dublin and Maynooth train station,

Kildare. I was primarily involved in the collection of vascular plant and bryophyte data, together with digital mapping of all habitats within the survey area. I assisted in the production of a full inventory of plant, mammal and bird species, which included a bat survey. I carried out data quality control and was a co-author on the report.

- National Conservation Assessments I assisted in the compilation of reports for eight Annex I sand dune habitats, four Annex I grassland habitats and one Annex I upland habitat. This involved an initial assessment and finalisation of the structure and functions criteria for one habitat, analysis of datasets to obtain up-to-date distributions, identification of the most significant pressures and threats to the Annex I habitats, calculation of the national range and area for the habitats using GIS, and the writing of backing documents.
- Woodland Monitoring Survey Field Ecologist. This project involved monitoring over 100 sites supporting two Annex I woodland habitats: 91A0 Sessile oak woods and 91E0 Alluvial forests. I carried out a number of field surveys and was involved in data entry and analysis.
- National Survey of Upland Habitats Field Ecologist and data analyst. I have worked as part of a large survey team on this project, surveying a number of upland SACs around the country. Main duties included the digital preparation of field maps using aerial photograph interpretation in GIS, vegetation mapping, relevé recording and condition assessments of Annex I habitats within the field, and data quality control checking for consistency and accuracy.

## Consultant Ecologist, Dublin City Council and University College Dublin February 2009

I was involved in Phase 2 of the St. Anne's Park Grey Squirrel Management Plan, which was jointly run by Dublin City Council and University College Dublin. My duties included the trapping and handling of grey squirrels using IUCN guidelines, the taking of vital measurements and developing public awareness to work towards the re-introduction of red squirrels to the park.

## Consultant Ecologist, Forest Environmental Research and Services (FERS) 2008

I worked on a voluntary basis with FERS on two projects on various dates throughout 2008:

- *Restoration of riverside habitat* funded by a Heritage Council Biodiversity Grant. My duties included the removal of giant hogweed from the towpath and banks of the River Boyne and informing members of the public on the dangers of this species.
- A survey of nocturnal macro-moth biodiversity throughout various habitats in County Meath funded by a Heritage Council Wildlife Grant. My duties included the setting out and collection of moth boxes at various sites in evenings and mornings, identifying the species of moths found and returning them to their habitats after identification.

### Assistant Ecologist, Dr. Ciara Finnegan, University College Dublin

May 2006

The main duties of this project involved assisting Dr. Finnegan with wetland plant identification and the collection and planting of suitable wetland plants for a large-scale constructed wetland for Lakeland Dairies, Bailieborough.

### Senior Demonstrator and Student Mentor, University College Dublin 2002 – 2006

Main duties as a senior demonstrator included acting as the Ecology Laboratory Co-ordinator for first year undergraduates for two consecutive years, the supervision of students in a field and laboratory environment, demonstration of practical techniques to undergraduate students at all levels, correction of laboratory assessments and ensuring that lab and field health and safety standards were adhered to. Key elements as a student mentor included the designing, set-up and supervision of two final year student projects, and supervision and guidance of two Applied Masters students.

# SKILLS & ADDITIONAL INFORMATION

Field skills:

- Experienced in use of field equipment including digital data recording devices, GPS technology
- Expertise in the identification of a range of native Irish vascular plants, bryophytes, nocturnal macro-moths and butterflies
- Excellent knowledge of field survey techniques
- Skilled in habitat mapping using the Irish Heritage Council classification system and EU Annex I habitat codes
- Practised in carrying out conservation status assessments of EU Annex I habitats

### Technical/computer skills:

- Proficient in the use of the Microsoft Office Suite (Microsoft Word, Excel, PowerPoint, Access)
- Skilled in the set up and recording of field data using MS Excel Mobile, Turboveg CE and ArcPad
- High level of proficiency in data management using Turboveg and MS Excel
- Experienced in the use of GIS software (ArcMap 9.3)

#### Communication/interpersonal skills:

- Excellent report-writing and editing skills
- Experienced public speaker, having presented at national and international conferences
- Trained numerous students in vascular and bryophyte identification and in habitat mapping
- Conversational Irish and German language skills

### Driving:

• Full clean driving licence; own vehicle

## **SELECTED PUBLICATIONS & REPORTS**

- Brophy, J. & Devaney, F. (2013) Appropriate Assessment Screening Report for the Variation to the Wexford Town and Environs Development Plan 2009-2015 with regard to the Joint Housing Strategy 2013-2019. Report prepared for Wexford County Council, Wexford.
- Delaney, A., Devaney, F.M., Martin, J.R. & Barron, S.J. (2013) Monitoring survey of Annex I sand dune habitats in Ireland. *Irish Wildlife Manuals*, No. 75. National Parks and Wildlife Service, Dublin.
- **Devaney, F.M.**, Martin, J.R., O'Neill, F.H. & Delaney, A. (2013) *Irish Semi-natural Grasslands Survey Annual Report No. 4: Western seaboard counties (Clare, Galway, Kerry, Limerick, Mayo) & County Tipperary.* Report submitted to the National Parks & Wildlife Service, Dublin.
- Martin, J.R., **Devaney, F.M.**, O'Neill, F.H. & Delaney, A. (2013) *Irish Semi-natural Grasslands Survey Annual Report No. 5: Leinster (except Offaly, Longford, Dublin & Kildare).* Report submitted to the National Parks & Wildlife Service, Dublin.
- O'Neill, F.H., Martin, J.R., Devaney, F.M., McNutt, K.E., Perrin, P.M. & Delaney, A. (2010) Irish Seminatural Grasslands Survey Annual Report No. 3: Counties Donegal, Dublin, Kildare & Sligo. Report submitted to the National Parks & Wildlife Service, Dublin.
- O'Neill, F.H., Martin, J.R., **Devaney, F.M.** & Perrin, P.M. (2013) The Irish Semi-natural Grasslands Survey 2007-2012. *Irish Wildlife Manuals,* No. 78. National Parks and Wildlife Service, Dublin.
- O'Neill, F.H., Martin, J.R., Perrin, P.M., Delaney, A., McNutt, K.E. & Devaney, F.M. (2009) Irish Seminatural Grasslands Survey Annual Report No. 2: Counties Cavan, Leitrim, Longford & Monaghan. Report submitted to the National Parks and Wildlife Service, Dublin.