Appendix 7-7 Curriculum Vitaes

Proposed Ardderroo Wind Farm, Co. Galway



Planning & Environmental Consultants



CURRICULUM VITAE JOHN HYNES



John Hynes is a Senior Ecologist with McCarthy O'Sullivan Ltd. with 7 years of experience in both private practice and local authorities. John holds a B.SC in Environmental Science and a M.Sc. in Applied Ecology. Prior to taking up his position with McCarthy Keville O'Sullivan in March 2014, John worked as an Ecologist with Ryan Hanley Consulting Ltd. and Galway County Council. John has specialist knowledge in Flora and Fauna field surveys. Geographic Information Systems, data analysis, Appropriate Assessment, Ecological Impact Assessment and Environmental Impact Assessment. John's key strengths and areas of expertise are in field surveys, project management. GIS and impact assessment. Since joining MKO John has been involved as a Senior Ecologist on a significant range of energy infrastructure, commercial, national roads and private/public development projects. Within MKO John plays a large role in the management and confidence building of junior members of staff and works as part of a large multi-disciplinary team to produce EIS Reports. John has project managed a range of strategy and development projects across the Ireland and holds CIEEM membership

Current Role	Senior Ecologist/Project Manager	
	M.Sc. (Applied Ecology) (2011) University College Cork	
Qualifications	B.Sc. (Environmental Science) (2010) National University of Ireland, Galway	
Years of Experience	Seven years post graduate experience including experience as GIS Assistant in Local Authority on Western River Basin Project and as Botanical Laboratory Assistant in NUI, Galway.	
Relevant Experience	Appropriate Assessment Experience (Selected Projects)	
	 Ecological services including preparation of method statements, environmental operating plans and ecological supervision for numerous civil engineering projects including: Fior Uisce, Ennis, Co Clare. Flood Alleviation Scheme, Method Statement preparation and Ecological site supervisions. Claregalway and Milltown Sewage Schemes, Co Galway, Management plan preparation and Ecological site supervision (2015). Ballyforan Bridge Rehabilitation Works (2014) Ecological Site Supervision Kinvara Sewerage Scheme (stage One) (2016) Invasive Species surveys, management plans and supervision of removal: Vartry Water Supply scheme, Callowhill, Co. Wicklow Sites of Primary Care Centres in Wexford, Carrick on Suir and Wexford Site of new school facility in Bray, Co. Wicklow Habitats Directive Assessments (Stage I Screening and Stage II NIS) for numerous projects including: Athlone Main Drainage AA Screening and NIS (2016) NUIG, Ecological Impact Assessment and Natura Impact Statement, Proposed student accommodation facilities at Dangan, Co Galway (2015) NUIG, Screening for Appropriate Assessment, Fisheries Field Proposed Road Adjustment (2015) Roscommon County Council, Screening for Appropriate Assessment, Ballindrehid Road Improvements (2014) 	

- Mayo Co. Council, Screening for Appropriate Assessment, Ground Investigation Works, Proposed Improvement and Realignment of the N26 at Clongullane Bridge (2015)
- Ashford Castle Estate, Natura Impact Statement, Boathouse application (2015)

Additional Experience (Selected Projects)

- Office of Public Works, Arterial Drainage Activities 2014-2018. Overseeing and managing the preparation of a habitat mapping GIS database for approximately 500km of channels.
- Extensive experience regarding Habitats Directive Assessment and EIS
 preparation of a number of Windfarm developments, Flood Relief Schemes,
 Quarry developments, Interpretative center & trail developments and National
 Road Projects.
- Preparing responses to Further Information Requests (FIR) for various planning applications addressing key areas such as impact assessments (habitat loss, disturbance, and displacement), Impacts to Freshwater Pearl Mussel, Impacts to Bats, Impacts to Fisheries and general ecological concerns

Practical Skills and Aptitudes

- Botanical surveys including targeted surveys for rare aquatic and terrestrial plant species
- Invasive species surveys and management plan preparation
- Habitat survey and classification including identification and assessment of Annex I habitats.
- Fisheries potential surveys, crayfish surveys
- Mammal surveys including Otter, Squirrel & Badger
- Bat survey skills including roost inspections, activity surveys, fixed point surveys (Active contributor to the BATLAS Pilot Scheme 2015)
- Terrestrial and Aquatic invertebrate sampling and identification including Marsh Fritillary Surveys.
- Bird survey and identification; Breeding bird surveys, Wintering bird surveys, habitat suitability surveys, Hen harrier surveys, former Countryside Bird Survey contributor EPA Q value assessment of watercourses
- Proficiency with Microsoft Office Suite, ArcGIS, MapInfo Professional.
- Extensive habitat mapping and GIS database experience

Management/ Supervision

- Project manager and lead ecologist on large scale ecological projects
- Extensive experience of construction supervision and monitoring of development sites in Mayo, Clare and Galway over past 4 years.
- Four years' experience of lead role on provision of ecological services on projects
- Accustomed to working effectively as part of larger multidisciplinary project design teams

Interpersonal & Communication Skills

- Extensive experience in successful dealings with statutory ecological consultees including NPWS, Birdwatch Ireland and Inland Fisheries Ireland usually regarding sensitive ecological sites
- Significant experience coordinating approach to sensitive ecological sites between client and ecological consultees and on-site contractors, etc.
- Development of technical working methodologies on behalf of contractors requiring understanding of both proposed works and sensitivities of site

Licenses Held

- Wildlife Act Section 23 & 23 Crayfish C22/2008, C107/2008, C116/2008, C72/2007, C01/2008, 106/2009.
- Wildlife Act Section 22 & 23 Pearl Mussel C111/2008, 75/2009, 106/2009, C067/2014, C0140/2104, C020/2015, C021/2015.

Physical / Other

- Full Clean Driving Licence
- Current Safe Pass Holder
- Mammal Tracking Workshop (National Biodiversity Data Centre, 2015)



CURRICULUM VITAE

McCarthy Keville O'Sullivan

DAVID NAUGHTON

David is an Ornithologist with McCarthy, Keville & O'Sullivan Ltd. and has been a valuable member of the team since joining in March 2017. David graduated with an honours B.Sc. Degree in Environmental Science from NUIG in 2016. David has a wide range of ecological experience including vegetation surveys, terrestrial invertebrate surveys, freshwater invertebrate surveys, river surveys for salmonids and other fish species, small mammal surveys and habitat identification. David also has experience in GIS software systems for use in interpreting ecological data, including Mapinfo, ArcGIS, QGIS, DroneDeploy/DJI and Viewshed Analysis software. David has experience in report writing and received a first class in his final year thesis during his undergraduate course. David has been involved in the production of datasets, maps, appendices and collision risk assessment of several EIAR/EIS bird chapters, as well as producing interim reports. He is also involved in the project management and communication process between surveyors, clients and other members of staff to ensure that the surveys are carried out correctly and efficiently.

Current Role	Ornithologist
Qualifications	B.Sc. (Hons) Environmental Science, 2 nd Class Honours Grade 1 National University of Ireland, Galway
Relevant Experience	 July 2014 – Inland Fisheries, Roscommon: Carrying out surveys of small rivers and tributaries around the Roscommon and Leitrim area. Also presented a display at the Ballygar Festival and performed data analysis on Salmon and Brown Trout numbers using excel. June 2014 – Teagasc, Castlerea, Roscommon: Working in the offices and going on advisory farm visits concerning environmental issues such as Agri-Environmental Schemes and HNV farmland.
Practical Skills and Aptitudes	 Experience in Collision Risk Assessment for EIAR Bird Chapters using statistical analysis as per SNH guidelines (Band Model). Proficient in using Microsoft Office Programs, Arc GIS Mapping Software through GIS modules, and Mapinfo & QGIS though working at MKO. Experience in plant identification including vegetation relevés and quadrat surveys. Experience in aquatic and terrestrial invertebrate collection and identification. Experience in habitat classification. Completed habitat management plan for Knockma woodlands in 3rd Year of undergraduate course. Undertook modules on EIAs/EISs and Appropriate Assessment in final year of undergraduate course. Involved in the production of several interim bird survey reports and EIARs/EISs. Responsible for the preparation of data and GIS maps for use in ornithology reports/EIARs. High level of proficiency in GIS and data management due to these responsibilities. Highly efficient in viewshed analysis for vantage points using, GIS software "Windfarm". Has been involved in planning Scope of Works and Fee Proposals for various bird survey tender applications. Experienced piloting a DJI phantom 4 pro Drone and implementing DroneDeploy (a third party app to allow automated flights), planning flights and interpreting maps generated from pre-planned flights.

Management Involved in the project management and survey planning of numerous windfarm /Supervision projects. During the past year has been involved in the training and management of more junior members of staff. Training responsibilities include project management, GIS, viewshed analysis and data management. Also responsible for training surveyors on GIS and data management and ensuring that their data submitted is of the highest quality. Responsible for the quality of incoming data from surveyors through supervision and quality checks of submitted data, and contacting surveyors regularly to ensure data is submitted on time and of a sufficient quality. Regular health and safety contact for surveyors during weekend surveys and is responsible for preparing health and safety risk assessments for each site. Interpersonal & Member of the sports and social committee within MKO Communication Regularly in contact with surveyors and clients as part of project management Skills for various sites and projects. Oral presentations during final year thesis (2016), as well as presentations on various microbiology, zoology and ecology modules throughout the four year undergraduate course in NUIG. Presented a display of fish species and eels for Inland Fisheries at the Ballygar festival in July 2014. Working as part of a production team for 7 months between August 2016 and March 2017 for the manufacturing of drug eluting stents in Medtronic Inc. was valuable for increasing communication skills and teamwork traits. Licenses Held Full, clean driving licence Safe Pass Holder Physical / Other Member of the MKO Sports and social committee and has been involved in the organization and running of team bonding events. Full member of Bat Conservation Ireland.

PADRAIG CREGG



Padraig Cregg is a Project Ecologist at McCarthy Keville O'Sullivan. Padraig attended National University of Ireland, Galway (NUIG) where he completed a BSc (Hons) in Zoology, he also holds an MSc in Evolutionary and Behavioural Ecology from the University of Exeter. Prior to joining the company Padraig worked as a Consultant Ornithologist for the Scottish company Energised Environments Ltd. Padraig has four years of ornithological surveying experience on a wide range of both research and commercial projects. His experience has included working as an ornithologist for a diverse array of organisations including BirdWatch Ireland, The University of Exeter and UK environmental consultancies

Proposed Role	Project Ecologist	
Qualifications	B.Sc. (Zoology) (2007) National University of Ireland, Galway M.Sc. (Evolutionary and Behavioural Ecology) (2008) University of Exeter Associate Membership, Institute of Environmental and Ecological Management (ACIEEM)	
Years of Experience	Four years, post-graduation, experience as ornithologist and ecologist	
Relevant Experience	 Currently involved in the co-ordinating of the ornithological components of over 4 Wind Farm projects nationwide at various stages including pre-planning, EISs, Appeals, Pre-commencement and condition compliance, construction and post-construction stages. Project Ecologist conducting ornithological surveys across all qualifying sites and overseeing the field work of two field surveyors. Consultant ornithologist; 2013-2015, tasked with conducting field surveys to assess the flight activity of avian communities on 8 proposed wind farm developments. Avian species with which I have surveying experience includes but is not limited to: black grouse, red grouse, golden eagle, hen harrier, osprey, peregrine falcon, merlin, red kite, barn owl, long-eared owl, short-eared owl, black and red throated diver and waders (various). Ornithologist; 2012-2013, while working as part of the both the Ornithology and Ecology team Padraig supported a diverse range of projects across a number of sectors within the UK for both private and public sector clients. Surveys conducted included a diverse array of ornithological surveys, Bat emergence and transect surveys, Otter scat and prey remains surveys and JNCC Habitat Phase 1 survey. Project examples: A catalogue of ornithological surveys (as above) for 10 wind farm developments across Scotland. Bat spp. transects and emergence, Water Vole, Otter and Badger surveys for 10 wind farm developments across Scotland. Bat spp. emergence survey for building renewal construction in Edinburgh, Scotland. Bat spp. transects survey and Reptile visual survey for motorway underpass works in Newcastle, England. 	
Practical Skills and Aptitudes	 Four years ornithological experience with three years environmental consultancy experience, with an emphasis on ornithology. Proficient in use of MS Office programs, GIS Mapping Software Expert ornithological identification skills. Mammal Identification (Field tested WSP Environmental Ltd) Bat Detector (Field tested WSP Environmental Ltd) JNCC Habitat Phase 1 Surveying (Field tested WSP Environmental Ltd) 	

Management/Supervision	 Oversee and act as QC for field surveyors during summer season 2014 and 2015. Project Coordinator for Kestrel population survey in Offaly 2012. Accustomed to working effectively as part of larger multidisciplinary project teams
Working with People & Communication Skills	 Experience of coordinating field staff for ornithological works at over 12 wind farm sites throughout the country and in Scotland. Extensive experience in successful dealings with statutory ecological consultees including NPWS, SNH and Fisheries Boards, usually regarding sensitive ecological sites Significant experience in designing survey approaches to sensitive ecological sites between client and ecological consultees. Experience in presenting at seminars for the public on environmental educational issues.
Licenses Held	 Wildlife Act Section 35 for Red Grouse tape lure survey 2015. 2013 and 2014 license holder for the surveying of Schedule 1 bird species listed on the Wildlife and Countryside Act in Scotland.
Physical / Other	Full Clean Driving Licence



CURRICULUM VITAE JULIE O'SULLIVAN



Julie is an Ecologist with McCarthy Keville O'Sullivan. She holds a BSc (Hons) in Biology from University College London and a Masters in Ecological Assessment from University College Cork. Prior to taking up her position in July 2016, Julie gained experience in practical habitat management and developed a range of field skills in plant, habitat, bird and bat surveying through working with several conservation organisations in the UK and Ireland including the RSPB, Cumbria Wildlife Trust and Bat Conservation Trust. Julie has experience surveying birds through her involvement with the RSPB in Northern Ireland. Julie is trained in bat survey, terrestrial invertebrate and freshwater macroinvertebrate sampling and in taking vegetation relevés of vascular plants and bryophytes. She also has experience in habitat identification, habitat mapping, Annex I habitat quality assessment and Phase 1 habitat survey. Since joining MKO Julie has worked on several renewable energy developments, utilising a broad range of bird survey methodologies including vantage point surveys, breeding raptor, adapted brown & shepherd and waterfowl distribution surveys. Julie is also part of a team of bird usage surveyors working on the Shannon/Fergus Estuary. Within MKO Julie is responsible for independently carrying out and planning field surveys in accordance with required Scottish Natural Heritage standards as part of the ornithology team.

Current Role	Ecologist
Qualifications	 MSc. Ecological Assessment, University College Cork, 2014 BSc. (Hons) Biology, University College London, 2009
Years of Experience	 Ecologist / Ornithologist with McCarthy Keville O'Sullivan (July 2016 – present). Peatland Restoration trainee with the RSPB/Cumbria Wildlife Trust in Cumbria (July - December 2015). Residential Warden with the RSPB at Portmore Lough in Northern Ireland (January - July 2015). Intern Ecologist with Westmeath County Council (Sept 2012 - July 2013)
Relevant Experience	Ornithologist with McCarthy Keville O'Sullivan. Responsible for carrying out a wide range of ornithological surveys using methodologies including Brown & Shepherd, O'Brien and Smith, WeBS, vantage point surveys, migratory wildfowl surveys, Hen Harrier roost surveys and wintering bird surveys, in accordance with the relevant SNH guidance and methodologies laid out in Hardy et al. (2013). Peatland Restoration trainee with the RSPB/Cumbria Wildlife Trust, UK. This involved identification and mapping of peatland erosion features remotely using GIS applications and ground truthing in the field using a mobile mapping device. Recording vegetation community, sphagnum species, peat depth and extent of erosion, in order to write management plans. Further conservation work included practical peatland restoration, dry stone walling, hedge laying and working in the juniper nursey, ecological survey of hay meadows, recording vascular plant relevés. Residential Warden, RSPB Portmore Lough, Northern Ireland. Responsible for carrying out bird surveys with the RSPB in Northern Ireland in 2015, including wintering wader and waterfowl counts, Webs survey, breeding wader surveys, Red Kite survey, farmland bird survey. Other ecological survey included an NVC survey of RSPB Portmore Lough nature reserves grassland habitats and recording vascular plant relevés as part of the long-term monitoring of restoration hay meadows. Internship with Westmeath County Council

	Carried out field research and Phase 1 habitat surveys of council owned lands.
Practical Skills and Aptitudes	 Experience in carrying out bird surveys in accordance with the relevant SNH guidance and methodologies laid out in Hardy et al. (2013). Working Independently and effectively in the field. Proficient in use of MS Office programs and GIS Mapping Software. Experience in vascular plant identification and habitat surveying.
Management/ Supervision	 Experience managing and coordinating large teams of volunteers for the RSPB Futurescapes Project. Coordination and planning of surveys with ornithology team members.
Interpersonal & Communication Skills	 Work as part of a large multidisciplinary team, collating and contributing data for inclusion in EIS. Experience in environmental education training for the general public, including school children and local community groups. Writing scientific reports both for research and professionally.
Licenses Held	Full Clean Driving LicenseCurrent Safe Pass
Physical / Other	Courses and training attended: Bat Identification Workshop (Bat Conservation Trust, 2010) National Vegetation Classification, Grasslands (Field Studies Council, 2012) Field Identification Skills Certificate (BSBI, 2012) Introduction to QGIS (CIEEM, 2012) Sedge Identification (Cedar, 2015) Mire ecology and sphagnum Identification (Ptyxis Ecology, 2015) Peatland Ecology (Natural England, 2015) Mire ecology (RSPB, 2015)



CURRICULUM VITAE ANDREW O'DONOGHUE



Andrew O'Donoghue is an Ornithologist with McCarthy O'Sullivan Ltd. Andrew holds BSc (Hons) in Zoology from University College Dublin. Prior to taking up his position with McCarthy Keville O'Sullivan in January 2017, Andrew worked as a sub-contract bird surveyor for Scott Cawley Ltd. In 2016 he completed a field biologist internship with the University of Saskatchewan in Canada and worked with Birdwatch Ireland as a Warden on a Seabird conservation project. Andrew's key strengths and areas of expertise are in bird surveying techniques, knowledge of species ecology and identification, GIS and data management. Since joining MKO Andrew has been involved as an Ornithologist on several proposed windfarm sites across Ireland, and is currently responsible for carrying out a range of survey types on a major Donegal based wind development. Within MKO Andrew is responsible for independently project managing and carrying out required surveys as part of the Ornithology team.

Current Role	Ornithologist		
Qualifications	BSc (Hons) Zoology, UCD		
Years of Experience	3 Years' Experience bird surveying and field based research positions 2015: Warden Birdwatch Ireland 2016: Field research internship University of Saskatchewan 2016: Sub-Contract surveyor for Scott Cawley Ltd. 2017-Present: Ornithologist MKO		
Relevant Experience	Sub-Contract Bird Surveyor – Scott Cawley Ltd., Blackrock, Co Dublin Conducting wintering bird surveys and monitoring at Bull Island and inland sites focusing on light bellied Brent geese. Feeding distribution surveys and recording colour rings at various sites close to proposed development. Intern Field Research Assistant– University of Saskatchewan, Canada Gathering and reporting biological data from breeding colony of black tailed prairie dogs in Grasslands National Park. Live trapping and obtaining data from individuals and data managing data to achieve colony level census to examine the threat of plague across populations. Warden – Birdwatch Ireland, Baltray Co. Louth Responsible for maximizing productivity of breeding colony by minimizing the impacts of human disturbance, predation, adverse weather events and habitat loss through habitat management. Gathering biological data from breeding colony including measurements, weighing and ringing chicks along with observational studies. Daily point count and area search surveys of all species present at site.		
Practical Skills and Aptitudes	 Experienced in carrying out bird survey methods in accordance with international guidelines. Including regular volunteer surveys for BWI and the Irish Raptor Study Group on Inland and coastal habitats Experienced in Irish bird ecology and identification Project management and planning Working independently and effectively in the field Proficient in use of MS Office programs and GIS software Knowledge of practical fieldwork techniques including animal handling experience such as bird ringing, small mammal trapping for hair and DNA sampling Experienced in practical habitat management techniques 		

Managament	 Experience carrying out Phase 1 Habitat, Aquatic and Dawn/Dusk bat surveys as volunteer ecologist. Static bat detector set-up for surveys at height
Management/ Supervision	Volunteer co-ordinator as part of work for BWI
Interpersonal & Communication Skills	 Public interaction as part of outreach/public info initiatives Effective and clear communicator Proven ability to fit into management framework and work with a team coordinating efficient collation of data to achieve project aims. Ability to work independently and manage personal deadlines. Experience working with ecologists and contributing data for inclusion in EIS Experienced liaising with landowners and public on potentially sensitive projects
Licenses Held	Full Irish Drivers licence

NAME



Harry Hussey is an assistant ornithologist at McCarthy Keville O'Sullivan, Planning & Environmental Consultants, with 17 years of experience in systematic bird surveying and experience in professional EIA work since 2004. He has watched birds for at least 26 years, and travelled widely throughout Ireland and further afield, gaining valuable experience of a wide range of species. Most notably, he has contributed to various national raptor surveys, including Hen Harrier (twice), Peregrine and Common Buzzard surveys, in addition to contributing heavily to the most recent Bird Atlas fieldwork and also monitoring sites for the I-WeBS counts. Professionally, he has carried out fieldwork in Ireland, Scotland and northern England, as well as volunteering at a raptor migration watchpoint in Israel. He has been a voting member of the Irish Rare Birds Committee since 2011, and was formerly part of the editorial team of the Cork Bird Report.

Proposed Role	Assistant Ornithologist		
Qualifications	BSc (General), University College Cork (1995).		
Years of Experience	Six years of experience in various projects in Ireland, Scotland and northern England including wind farm and related energy projects, as well as a period of voluntary work counting migrating raptors in Israel.		
Relevant Experience	 Field Ornithologist on a subcontractor basis – Inis Environmental Consultants Ltd., Co. Clare (2016). Subcontracted to undertake bird surveys as part of a proposed windfarm EIA during spring and summer 2016. Volunteer raptor counter – Israel Ornithological Centre (2012). Was part of the team monitoring southward passage of raptors, storks and pelicans over the Bet Shean valley during autumn 2012. Bird Atlas surveyor – BirdWatch Ireland (2011). Was subcontracted to cover some outstanding 10km squares to timed tetrad visit level during the winter and breeding seasons towards the end of the fieldwork period, in 2011. Joint leader of birdwatching excursions – Met participants at Ringaskiddy in June 2009 coming off of a cruise liner and organized a birdwatching itinerary, helped to show them birds and took any requests into account. Field Ornithologist on a subcontractor basis – Undertook some bird surveys as part of a proposed windfarm EIA during summer 2006. Field Ornithologist on a subcontractor basis – West Coast Energy Ltd., Edinburgh (2005). Subcontracted for two months to the Edinburgh office to undertake bird surveys at various sites in northern England and Scotland as part of proposed windfarm EIAs during summer 2005. Field Ornithologist on a subcontractor basis – Undertook some bird surveys as part of a proposed windfarm EIA during spring and summer 		

2004.

Practical Skills and Over 25 years of experience observing birds, both throughout Ireland **Aptitudes** and further afield, with field experience of hundreds of bird species and a keen aptitude for, and interest in, all aspects of bird identification. Overall responsibility for quality control of EIS, Landscape, Waste and Monitoring reports and mapping produced by company Proficient in use of MS Office programs, GIS Mapping Software and Adobe Photoshop Management/Supervision Has experience of using initiative when plotting routes for birdwatching tours, making changes based on conditions on the ground. Working with People Voting member of the Irish Rare Birds Committee since 2011, and has extensive experience of communicating his own thoughts in a **Communication Skills** constructive manner. Effective and clear communicator Formerly on the editorial committee of the Cork Bird Report. Formerly the P.R.O. of the Cork branch of BirdWatch Ireland. Has co-presented a talk at the Tawas Birding Festival (Michigan) in Co-lead a short tour of bird sites in east Cork for interested parties whose liner had docked at Ringaskiddy, making sure that everyone was satisfied and dealing with any requests made. • Significant experience in writing, editing and reviewing various short notes and papers, and in proof-reading reports and papers Have effectively collaborated with others in writing papers Licenses/Certs SafePass Physical / Other Proven ability to systematically make precise field observations and then to translate that into raw data and collate said data. Also a proven ability to work as a member of a team.



CURRICULUM VITAE

JOHN HEHIR



John Hehir is an Assistant Ornithologist with McCarthy Keville O'Sullivan Ltd. John has over 5 years of experience working on a number of conservation projects in Ireland. John took up his position with McCarthy Keville O'Sullivan in November 2016. Prior to joining McCarthy Keville O'Sullivan John worked as an intern ecologist for Westmeath County Council. John also has over four years of experience working as a conservation support worker for Birdwatch Ireland. John's key strengths include bird identification, various field surveying methodologies, data management and report writing. In his time with McCarthy Keville O'Sullivan, John has performed bird surveys for nine different windfarm applications.

Current Role	Assistant Ornithologist.		
Qualifications	Bsc. Wildlife Biology, Institute of Technology, Tralee, Co. Kerry (2015).		
Quatifications	bsc. Within biology, filstitute of reclinology, fratee, co. Kerry (2015).		
Years of Experience	2 years of experience in McCarthy Keville O'Sullivan		
Relevant Experience	Relevant Work Experience: 2016 - Present - Assistant Ornithologist, McCarthy, Keville, O'Sullivan. 2016 - Intern Ecologist, Westmeath, Co. Council. 2015 - Conservation Support Worker, Birdwatch Ireland. 2014 - Conservation Support Worker, Irish Grey Partridge Conservation Trust. 2008 - 2011 - Conservation Support Worker, Birdwatch Ireland. Relevant Surveys for MKO: Carrownagowan Windfarm, County Clare (Client: Coillte) - Carried out Vantage point surveys and breeding raptor surveys for this site. Cullenagh Windfarm, County Laois (Client: Coillte) - Carried out Vantage point surveys, winter walkover, breeding walkovers, breeding raptor surveys and breeding woodcock surveys for this site. Garryhinch Windfarm, County Offaly (Client: Bord na Mona) - Carried out Vantage point surveys and winter walkovers for this site. Cloncreen Windfarm, County Offaly (Client: Bord na Mona) - Carried out Vantage point surveys, waterfowl surveys and hen harrier roost surveys for this site. Derrryadd Windfarm, County Longford (Client: Bord na Mona) - Carried out Vantage point surveys, breeding walkovers and breeding raptor surveys for this site. Timahoe Solar, County Laois (Client: Bord na Mona) - Carried out breeding walkover surveys for this site. Coole Windfarm, County Westmeath (Site located on raised bogs) - Carried out Vantage pint surveys, Greenland white-fronted goose surveys and waterfowl distribution surveys for this site. Clonbern Windfarm, County Galway - Carried out Vantage point surveys, waterfowl surveys and hen harrier roost surveys for this site. Cahermurphy Windfarm, County Clare (Client: Enerco Ltd.) - Carried out Vantage point surveys and breeding walkovers for this site.		

Practical Skills and Aptitudes	 Assistant Ornithologist on a number of energy infrastructure projects. Proficient in GIS and MapInfo software. Very high level of bird identification. Experienced in the collation and analysis of data for use in reports and EIARs. Proficient in use of Excel and other Microsoft Software. Vast amounts of experience in various different survey methodologies, including Vantage point surveys, walkover surveys, raptor surveys, hen harrier roost surveys and waterfowl/waders surveys.
Management/ Supervision	 Responsible for organizing and managing staff training events in the past during time spent with Birdwatch Ireland. Experience coordinating and liaising with volunteers/surveyors with Birdwatch Ireland and McCarthy Keville O'Sullivan.
Interpersonal & Communication Skills	 John has good presentation skills which he developed through his time in college and also working with Birdwatch Ireland. John has good communication skills through working with Birdwatch Ireland, Westmeath County Council, and McCarthy Keville O'Sullivan. During these posts John has been a key line of communication for the public, clients, landowners, and other surveyors/members of staff. Compiled a bi-weekly article on biodiversity and important ecological issues.
Licenses Held	Full Clean Driving LicenceSafe Pass

SUSAN DOYLE



Susan is a qualified assistant ecologist with McCarthy Keville O'Sullivan. She completed her primary degree in Zoology at Trinity College Dublin and went on to complete her masters in Ecological Assessment at University College Cork. Susan has extensive field survey skills, including winter and breeding bird survey, bat survey, small mammal survey, terrestrial invertebrate, freshwater macroinvertebrate sampling and animal radiotracking as well as vegetation relevés of vascular plants and bryophytes, habitat identification and mapping. Susan is trained in the ecological applications of GIS, MapInfo and statistics programmes used in the analysis and interpretation of ecological data. She also has experience in Annex I habitat quality assessment, Ecological Impact Assessment and Appropriate Assessment (including Natura Impact Statements).

Proposed	Role
Qualificati	ions

Assistant Ecologist

MSc Ecological Assessment, University College Cork, 2014 BA Zoology, Trinity College Dublin, 2013

Years of Experience

2 years post-graduate experience as an ecologist

Relevant Experience

- Bird Surveyor: Susan regularly carries out vantage point watch surveys and transect surveys of wintering and breeding birds since September 2015. She has also completed surveys for breeding raptors and waterbirds in the wider surroundings of proposed developments to interpret the significance of the proposed development site in the context of the wider area. Susan also contributed to the annual Countryside Bird Survey in 2016.
- Vegetation and habitat survey: Susan has undertaken botanical surveys and habitat identification and mapping for a number of Appropriate Assessment Screenings of proposed developments throughout Ireland since September 2015.
- Habitat quality assessment: Susan conducted an ecological baseline habitat quality assessment of Glencullen River Valley in 2014. Using vascular plant relevés and bryophyte quadrats, she analysed the composition and structure of Old Oak Woodland, Petrifying Springs and Alder-Ash Woodland. This information was used to determine if these potential Annex I habitats were of significant ecological value at national and European level.
- Field survey planning: Susan used GIS software to plan a field survey of the miniscule Geyer's Whorl Snail (1.9mm in height) in a 16ha fen at Finn Lough, Co. Offaly. She used GIS to map habitats within Finn Lough and overlaid this habitat map with data on calcium-rich regions and water table heights. This analysis determined the optimal areas of Finn Lough to search for individual Whorl Snails and reduced the target search area from 16ha to just 2ha, providing a more efficient and feasible survey.
- Bat surveyor: Susan designed and conducted a bat survey of Knocksink Wood during the summer of 2014, using bat detectors to identify population composition and determine activity levels and popular flight paths. In the same year, she was involved in surveying and trapping bats on the River Lee and at Carrighaphooca Castle.
- Mammal surveyor: Susan participated in bio-indices surveys for red squirrel in Wicklow Mountains National Park, 2013, for otter in Cork City, 2014, and for badger on Little Island, 2014.
- Invertebrate surveyor: Susan sampled the aquatic macroinvertebrate community (including mayfly, stonefly and caddisfly) of Glencullen

Practical Skills and Aptitudes	 River to assess the impact of Enniskerry Waste Water Treatment Plant on the hydrological quality of the river in 2013. Ecological monitoring: Susan was involved in projects monitoring the migration ecology of Barnacle Geese on the Inishkea Islands in 2015, populations of red-listed Yellowhammer in Kildare farmland in 2014, and migrant Barn Swallow at Pollardstown Fen and Ballynafagh Lake in 2014 and 2015. Ecology internship: Susan completed an internship with BirdWatch Ireland (2014-2015) in which she collected and analysed ecological information on shorebirds and waders in Dublin Bay. This data will be used by the Dublin Port Company to ensure compliance with ecological regulations during the port's upcoming development and expansion. Proficient in GIS and MapInfo software. Proficient in statistical analysis programme "R" and MS Office.
Aptitudes	 Experience in baseline ecological assessment, EcIA, AA and NIS. Training and experience in vascular plant identification and survey. Training and experience in bryophyte identification and survey. Experience surveying birds using line transects, vantage point counts, flush counts, mist netting, radio tracking and call identification. Training in bat surveying and species identification. Training in terrestrial and aquatic invertebrate sampling. Training in small mammal survey, trapping and bio-indices.
Management/Supervision	 Experience managing field sites and coordinating large teams of volunteers for the Little Tern Conservation Projects 2013 and 2015.
Working with People & Communication Skills	 Experience coordinating workloads and delegating tasks as a member of both large teams (10+) and very small teams (3) on a number of different projects, often in challenging fieldwork environments. Experience as lead author or co-author on technical project reports. Managed public relations and public outreach for the Little Tern Conservation Project in 2013 and 2015 (including an appearance on RTE series "EcoEye" in January 2016). A regular contributor to several scientific and conservation blogs and journals.
Licenses Held	Safe Pass, 2016.
Physical / Other	Trainee bird ringer with the British Trust for Ornithology.Full, clean driving license and experience driving off-road.

CHRIS PEPPIATT



Chris has over ten years' experience in the preparation of ecological/environmental assessments at more than 50 proposed wind energy development sites in 16 Irish counties (Cavan, Clare, Cork, Donegal, Galway, Kerry, Laois, Leitrim, Limerick, Longford, Louth, Mayo, Roscommon, Tipperary, Tyrone and Westmeath). He has also completed sixteen full EIS ecology chapters for proposed wind energy developments as well as AA scoping/NIS where relevant. In addition, he has wide experience with other types of development, including port extension within SPA (birds, Otter, cetaceans, seals), ferry crossings, roads, electricity powerlines, drainage schemes, water schemes, pipelines and buildings development.

Dropocod Polo	Ornithalogist/Ecologist	
Proposed Role Qualifications	 Ornithologist/Ecologist NUI Galway, Dept. of Earth and Ocean Sciences. Diploma (Part-time) Geology. (2006-2008) Loughborough University, Dept. of Chemical Engineering. PhD thesis (1997): ' University of Manchester Institute of Science and Technology, Dept. of Chemical Engineering & Dept. of Biochemistry and Applied Molecular Biology. MSc. Bioreactor Systems (Biotechnology University of Bristol, Dept. of Botany. BSc. (HONS) Botany. 	
Years of Experience	11	
Relevant Experience	 Has worked on ecological/environmental assessments at more than 50 proposed wind energy development sites in 16 Irish counties (Cavan, Clare, Cork, Donegal, Galway, Kerry, Laois, Leitrim, Limerick, Longford, Louth, Mayo, Roscommon, Tipperary, Tyrone and Westmeath). Completed sixteen full EIS ecology chapters for proposed wind energy developments as well as AA scoping/NIS where relevant. Experience with other types of development, including port extension within SPA (birds, Otter, cetaceans, seals), ferry crossings, roads, electricity powerlines, drainage schemes, water schemes, pipelines and buildings development. 	
Practical Skills and	BIRD WORK EXPERIENCE AND SKILLS	
Aptitudes	 Vantage point surveys for birds at wind farm sites, including raptors (Hen Harrier, Golden Eagle, White-tailed Eagle, Common Buzzard, Peregrine, Kestrel, Merlin and Sparrowhawk) and waders/other waterbirds (Golden Plover, Lapwing, Curlew and other waders, Greylag Goose, Greenland White-fronted Goose and Whooper Swan). Collison risk modelling. Transect surveys for breeding birds (Countryside Bird Survey-type surveys) and upland waders (Golden Plover, Snipe, Curlew etc.). Licensed tape luring surveys for Red Grouse. Specialist surveys for breeding Merlin and Hen Harrier winter roosts; Heronry nest count survey; Kingfisher and Dipper surveys; breeding Woodcock surveys. Surveys of wintering wildfowl and other waterbirds at lakes and other wetland sites. 	

Experience of Golden Eagle, Hen Harrier, Peregrine, Merlin, Golden Plover, Curlew, Snipe, Redshank, Ringed Plover, Red Grouse,

- Whooper Swan, Greylag Goose, Greenland White-fronted Goose and Chough at, or in the vicinity of, proposed wind farm sites.
- Assessment of impacts and recommendation of mitigation measures.
 Habitat management as mitigation for avoidance by Hen Harrier of areas adjacent to wind turbines.
- Post-construction monitoring and design of corpse-searching monitoring regimes.

BAT WORK EXPERIENCE AND SKILLS

- Bat surveys for wind developments in Cos. Clare, Cork, Galway, Kerry, Limerick, Longford, Mayo, Roscommon and Tipperary. This work has included assessment of sites for likely bat usage, bat activity surveys using heterodyne and time expansion equipment (and the live recording of bats) and the use of static bat recording devices positioned at proposed wind energy sites. Assessment of impacts and recommendation of mitigation measures.
- Assessment of bridges for bats in Cos. Donegal and Galway, including assessments for bridges to be repaired/strengthened to facilitate the construction of wind energy developments.
- Experienced bat worker, including echolocation survey work, demolition and tree felling supervision, bat box monitoring, roost counts etc.
- Scientific agent for a number of bat derogation licences.
- Holder of a general bat handling licence (DoAHG) from 2005 to present.
- Member of the Heritage Council bat panel (Buildings At Risk & Traditional Farm Buildings schemes).
- Experienced with SM3BAT, SM2+, Anabat Express and Anabat SD2 and time expansion recording and analysis.

HABITATS/BOTANICAL EXPERIENCE

- Qualified (BSc level) botanist experience in surveys of vascular plants and bryophytes.
- Experienced in the mapping of habitats and habitat assessment of sites of elements of proposed developments, including more than a dozen wind farm sites.
- Experience of initial habitat mapping of wind farm sites from aerial photographs, followed-up by ground-truthing on site. GIS mapping of habitats on wind farm sites.
- Production of ecological constraints maps, assessment of impacts and recommendation of mitigation measures.

OTHER EXPERIENCE

- Experience of surveys for Freshwater Pearl Mussel, Marsh Fritillary and Kerry Slug at wind farm sites in Ireland.
- Practical experience of aquatic macroinvertebrate survey for Q-value evaluation in water bodies at or near to proposed wind energy development sites.
- Mammal surveys at wind energy sites for Badger, Otter etc.
- White-clawed Crayfish surveys for instream works.

Management/Supervision

Self-motivated

Working with People Extensive experience in successful dealings with statutory ecological consultees including NPWS and Fisheries Boards, usually regarding **Communication Skills** sensitive ecological sites Licenses Held National Parks and Wildlife Licences (under Section 35 of the Wildlife Act, 1976 - as amended) Tape lure for Red Grouse C06/2009 Shanakeever, Co. Galway & Slievecallan, Co. Clare. C08/2009 Corraun, Co. Mayo. C06/2010 Various sites in Cos. Galway and Clare. C04/2012 Sites in Cos. Donegal and Leitrim. 003/2013 Three sites in Co. Mayo. 013/2013 Two sites in Co. Kerry and one site in Co. Galway. 008/2014 One site in Co. Donegal. 015/2015 One site in Co. Cavan. National Parks and Wildlife Licences (under Sections 22, 23 and 43 of the Wildlife Act, 1976 - as amended) Bats- Personal licence (all species, to capture by hand or with handnet C86/2005 Rol jurisdiction C10/2006 Rol jurisdiction C02/2007 Rol jurisdiction C65/2008 Rol jurisdiction C09/2009 Rol jurisdiction C88/2010 Rol jurisdiction C118/2011 Rol jurisdiction C144/2013 Rol jurisdiction C138/2015 Rol jurisdiction National Parks and Wildlife Licences (under Sections 22, 23 and 43 of the Wildlife Act, 1976 - as amended) Multiple licences for the trapping of White-clawed Crayfish and surveys of Freshwater Pearl Mussel. Electrofishing Authorisation (under Section 18 and the second schedule of the Fisheries Act, 1980) Western Regional Fisheris Board- River Clarin, Athenry, Co. Galway June-August 2005. Physical / Other Full Clean Drivers Licence

Safe Pass Certificate

Seán Meehan, Ecologist

BSc Agricultural Science, MSc Biological Recording

Address: 4 Foxborough Rise, Lucan, Co. Dublin

Mobile: 00 353 87 9207583

Email: meehanecology@gmail.com
Social media: linkedin.com/Seán Meehan

I am currently seeking work as an ecologist on a freelance subcontractor basis. I have recently obtained Associate CIEEM membership and have four years experience working in the ecological consultancy industry, working on a range of diverse projects including windfarms, quarries, housing developments and a proposed electricity interconnector as a surveyor and ECoW. As a field ecologist, I have carried out numerous bat, bird, botanical and mammal surveys across a variety of habitat types.

Professional Experience

April 1st 2015 – March 31st 2016

Ecologist

Blackstaff Ecology, 46, Ballynahatty Road, Belfast, BT8 8LE

- Carrying out general ecological works on a number of windfarm and housing development sites. Such works included habitat classification and assessment using Phase 1, Fossitt and NVC, bat surveys, smooth newt and common lizard surveys, mammal (badger, otter, pine marten and red squirrel) and avian surveys.
- I was appointed as an ECoW on a six turbine windfarm between November 2015 and March 2016. This particular site was challenging due to the fact that an area of the development footprint falls within a recently designated ASSI. This scenario required close cooperation with NIEA and the project clients to ensure no impacts on this designated area occurred whilst ensuring that construction proceeded without delays.
- Bird surveys including summer and winter vantage point surveys, breeding bird transects and dedicated hen harrier nest searches. Methodologies followed included Brown & Shepherd, Scottish Natural Heritage and NIEA guidelines.
- Bat surveys on a number of different developments such as windfarms and housing projects. I have also carried out tree and building roost potential surveys and post construction bat carcass searches at operating windfarms.
- Compiling reports and appendices. I am competent with using QGIS and MAVIS vegetation analysis software.

January 1st 2013 – March 31st 2015

Self-employed Ecologist

- Appropriate Assessment, NIS and compilation of an EIS ecology chapter for a windfarm application in Co. Donegal.
- Appropriate Assessment, NIS and compilation of two EIS ecology chapters for two quarry extensions in Co. Donegal.
- Freelance work for a number of consultancies that included bat surveys (including roost assessment), Appropriate Assessments, botanical, habitat and mammal surveys.
- Provision of environmental and biodiversity workshops to various public groups on behalf of local authorities.

July 1st 2012 – December 31st 2012

General Ecologist

Aecom, 9th Floor, The Clarence West Building, 2 Clarence Street, Belfast BT2 7GP

- I was principally employed to carry out a Phase 1 habitat survey along the route of a planned interconnector (40km in length). In addition, I carried out bat surveys, including tree roost assessment, and smooth newt surveys along the proposed route.
- I also carried out an upland peatland vegetation assessment in the Mourne Mountains following severe wildfires to assess vegetation regeneration and long term damage to habitats.

September 1st 2008 – December 31st 2011

Environmental Education Officer

NPWS, Wicklow Mountains National Park.

- Delivering ecological education and information to school groups, third level students and the general public.
- Habitat management (woodland and blanket bog) within the national park.
- Assisting wildlife rangers with mammal surveys such as deer and badger.

Relevant interests and voluntary work

- I am a long term volunteer with the Irish Wildlife Trust and since September 2015 I am the serving vice-chairman. In 2008, I managed the Trust's national common lizard survey of Ireland and in 2013 I coordinated the Trust's smooth newt survey of Ireland.
- I am a member of the BSBI and I regularly participate in organised botanical recording meetings.

Donnacha Mc Geever

dmcgeever1@hotmail.com@gmail.com +353 83 876 4535

Lough Derg View Cottage, Derrycastle, Ballina, Co. Tipperary, Ireland

EDUCATION

Tralee Institute of Technology 2014-Present

Bachelor's in Wildlife Biology

St. Annes Community College Co. Clare 2008-2013

Leaving Cert points: 400

WORK EXPERIENCE

Lakeside Leisure Centre – Head Swim Coach and Lifeguard

2012-Current

- Taught beginners of all ages to swim, from toddlers to adults.
- Coached competitive swimmers of all levels. Coached swimmers who qualified for national champs and adults who completed Iron Man Triathlons.
- Managed and organised the busy pool classes schedule and assigned swimmers to classes based on personal judgement of their ability.

Sheep and Poultry Farm Worker

2012-Current

- Reared chickens, ducks, turkeys, rabbits, lambs, cats and dogs at a homestead.
- Woke at 7am daily to feed all animals. Collected eggs and cleaned houses.
- Constructed and repaired fences and henhouses.
- Regularly inspected health of animals. Administered medicine when advised by veterinarian.

WILDLIFE BIOLOGY PROJECTS

Quadrate and Line Transect Survey

- Used navigation and surveying skills to survey upland and woodland habitats across changing gradients.
- Searched many types of difficult terrain for all animals present.
- Identified and catalogued all species.
- Achieved an A grade, the highest in my class.

The Effect of Fluctuating Tides on Breeding Patterns of Migratory Birds

- Self-conceived and self-proposed research project.
- Objective of paper is to investigate whether abnormally close moon position will inhibit the mating/nesting process of sea birds due to sustained high tides.
- The project will involve utilizing all of the surveying and navigation skills learned in college.

KEY SKILLS

Mountain Rescue First Aid

- Certified to be the first responder in all-terrain all-weather medical emergencies.
- Trained to treat injuries and care for patients trapped in isolated locations in temperature extremes, where emergency services may not be readily available.

Mountain Skills Level 1 and 2

- Trained extensively in navigation for both day and night expeditions.
- Learned how to read maps and use compass, and be safe at all times.
- Trained to tackle steep inclines, pace correctly and learned timekeeping skills.
- Trained to minimally impact the natural environment.

Interpersonal

- Proficient in speaking Spanish and Irish.
- Excellent communication, presentation and personal interaction skills due to constant presentations and meetings with senior lecturers.
- Strong team skills developed through team sports and continuous project work. Natural leadership skills.

Other Skills

Certified Pool Lifeguard, Driver's License holder, Power Boat Driver's License holder.

CLUBS AND SOCIETIES

Tralee Institute of Technology Bird Watching Club – Creator and Chairperson

- Created the first-ever bird watching club in ITT and hold position of chairman.
- Achieved funding from the clubs and societies body of the college.
- Regularly organise field trips and the purchase of new equipment.
- Number of members consistently growing each week.

SPORTS AND HOBBIES

- Irish Age Group Swimming National Champion.
- Multiple triathlon category winner and regular open water swimmer.
- Regularly hike and camp in mountains and national parks in Ireland.
- Bird-watching and botany enthusiast.

VOLUNTEER WORK

Swim Ireland Time Keeper

- Regularly act as a timekeeper at Special Olympic swimming competitions in Limerick.
- Use electronic stopwatch to record the race times of competitors.

REFEREE

Mr. Kilian Kelly Lecturer (Wildlife Biology) Institute of Technology Tralee Co. Kerry

Email: kilian.kelly@staff.ittralee.ie



CURRICULUM VITAE

Sean Ronayne



Sean Ronayne is an Assistant Ornithologist with McCarthy Keville O'Sullivan Ltd. with over 10 years of experience in both national and international bird surveys. Sean holds a BSc (Hons) in Zoology, an MSc in Marine Biology and an MSc in Ecological Assessment (1st Class Hons). Prior to taking up his position with McCarthy Keville O'Sullivan in April 2017, Sean worked with Northern Ornithology, a company specialised in bird and bat surveys in the North-East of England. Prior to this, Sean worked with Serenity Boat Tours, a company which brought eco-tourists to view birds and marine mammals in the Farne Islands Nature Reserve, in Northumberland. Sean has taken part in numerous ornithological surveys of note, including I-Webs, the Bird Atlas, and both Hen Harrier Roost & Breeding Surveys. Sean has been an active birdwatcher for over 20 years and can readily identify all Irish species based on sight and through vocalisations. Two of his dissertations were of an Ornithological nature, and he has 5 publications in Irish Birds. Sean's key strengths and areas of expertise are in bird identification, bird surveys, report writing, statistics and GIS. Since joining MKO Sean has been involved as an assistant ornithologist, working at Derryad Bog, Co. Longford, at a proposed wind-farm site. Here Sean has conducted vantage point surveys, breeding walkover surveys, and woodcock surveys.

Current Role	Assistant Ornithologist
Qualifications	 2017 MSc. Ecological Assessment (Hons. 1.1) 2010 MSc. Marine Biology (Hons. 2.1) 2009 BSc. Zoology (Hons. 2.1)
Years of Experience	May'12 – Mar'15 Assistant Ecologist, Northern Ecology
Relevant Experience	Nov'11 - '12 Survey Volunteer, Irish Wetland Bird Survey Principal Duties: Responsible for an allocated site in regards to monitoring of activity Conducted winter bird surveys Liaised and assisted Dr. Tom Gittings (of UCC) throughout the project Collected additional relevant data for further investigation Jun'11 - Nov'11 Assistant Ecologist, Badger Vaccine Research Project Principal Duties: Assisted in trapping of wild badgers under B.R.O.C. licence for TB vaccine development purposes Set humane traps in relevant areas Supported lectures and researchers with data analysis and assessment Collected additional relevant data for further investigation Mar'11 - May'11 Survey Volunteer - Buzzard Soaring Survey, Irish Raptor Study Group Principal Duties: Counted soaring individuals and pairs during pre-breeding period Conducted weather evaluation to determine correct timings Identified suitable habitat for Buzzard Soaring Survey Survey Volunteer, Hen Harrier Winter Roost Survey, Ireland Survey Volunteer, Hen Harrier Breeding Survey, Ireland

	2010 Report Writer, 2010 Guide, Guided Nature Reserve 2009 - 2010 Volunteer Orn Florida, USA 2007 - 2008 Assistant Surve IWDG 2006 - Present Volunteer, Irish Scheme IWDG	er, Irish Bird Atlas Survey, Birdwatch Ireland The Moths of Cuskinny Nature Reserve Nature Walk, Cobh Camera Club & Cuskinny ithologist, American Christmas Bird Counts, eyor, Irish Whale & Dolphin Group Ferry Survey, in Whale & Dolphin Group Cetaceans Stranding h Whale & Dolphin Group Casual Sightings
		013. Sexing prey including Pygmy Shrew Sorex o alba pellets. Irish Birds 9: 635-636
	Ronayne, S.T. 2011. Breeding Lit the Atlantic Pond, Cork City. Irish	tle Egrets Egretta garzetta in an urban habitat, Birds 9: 325-326.
	Ronayne, S.T. 2011. Diet of the Li Irish Birds 9: 328-329.	ttle Egret Egretta garzetta in southern Ireland.
		& Carden, R.F. 2011. Another Record of toni in a Barn Owl Tyto alba pellet following
	Ronayne, S.T., 2010, Sleeman, D. death on prey. Irish Birds 9: 128	P. Long-eared Owl Asio Otus nestling choked to
Practical Skills and Aptitudes	 Bird identification Bird survey techniques Statistics Report Writing Proficient in the use of Micro 	soft Office, "R", Minitab, SPSS, ArcGIS
Interpersonal & Communication Skills	 Possesses strong interpersor following grades: PS4015 Data Analysis for Bio PS4016 Computing for Biolog ZY3014 Science Skills and Co 	ists (69%)
Licenses Held	Provisional Driving Licence	
Physical / Other	 Sean is a keen amateur bird p several magazines, and on te 	photographer and has had photographs featured in levision.

JOHN CURTIN



John is an experienced ecologist with a high skillset over several disciplines. Primarily a field worker with experience in botanical & habitat identification, ornithological surveys & monitoring and mammal surveys. He has also completed season long bat surveys for several large scale wind farm projects. In addition, he has prepared numerous stage 1 and 2 Natura Impact Statements and has also submitted remedial Environmental Impact Statements

Proposed Role
Qualifications

Ornithologist/Ecologist

B.Sc., Environmental Science [1st class honors] NUIG

2004 – 2009

Dissertation: Investigations into the wetland plant communities of the Burren National Park

Years of Experience

6 Years

Relevant Experience

Bat Surveys

Over 60 nights (excluding voluntary work) of bat surveys since 2012 including wind farms, industrial developments, hotels, period homes and one off houses. Includes; roost identification, dawn and dusk transects and erection of static detectors. Also experienced in call analysis and report writing. Successfully applied for derogation license.

Habitat Surveys

Numerous surveys since 2010 for projects ranging from screening assessments, windfarm sites, road schemes, industrial developments and community biodiversity. Habitats surveyed include peatland, grasslands, intertidal, woodland. Identification of Annex I habitats

Botanical Identification

Surveys completed for presence of: *Vicia orobus* (Apple Data Centre site, Athenry 2014) & *Eriophorum gracile* (R336 Barna road widening scheme 2012). Teaching AEOS officers vegetative grass identification and character species

Ornithological Surveys

Monthly baseline transect and VP surveys; Clonfert, Co. Galway & Moycullen, Co. Galway. Monthly monitoring & collision corpse searches; Letterpeak, Lettergunnet wind farms, Co. Galway, Completed 7 Grouse tape lure surveys with license during 2015

Natura Impact Statements

Over 40 Stage 1 and 2 Natura Impact Statements since 2010 alongside 2 Environmental Impact Statements and co-authoring an additional 3 for quarries.

Practical Skills and Aptitudes	Bat survey - Roost identification, dusk & dawn surveys for windfarms, EIA's and AA's
	Habitat survey - Annex I habitats, Fossitt (Irl), NVC (UK)
	Report writing - Appropriate Assessment Screening, Bat report, Biodiversity report
	Mapping - Mapinfo, GPS
	Other - Plant identification, mammal tracks, Marsh Fritillary (Euphydryas aurinia)
Management/Supervision	• Experience as group leader of five ecologist on 3 month Ascophyllum biomass survey. Assistant secretary of Moyglass group water scheme, currently overseeing €100000 upgrade works.
Working with People & Communication Skills	• Liaising with other ecologists as well as National bodies such as Co. Councils and NPWS. Reassuring landowners and public when out on fieldwork. Working in conjunction with engineers and planners.
Licenses Held	Tape lure
Physical / Other	Mountain leader training, Rescue and emergency care, kayaking coach



CURRICULUM VITAE

Patrick Manley



Patrick Manley is an Ornithologist at McCarthy Keville O'Sullivan. He attended University College Dublin where he completed a BSc (Hons) in Geology. Prior to joining the company Patrick worked as part of the conservation team in BirdWatch Ireland, on projects such as the Dublin bay birds project, Kilcoole Little Tern conservation project and the results based agri-environmental scheme for breeding waders. He has extensive experience surveying birds through other projects such as the Irish wetlands bird survey, the Inishmurray all-island breeding birds survey, the national Hen Harrier survey and the countryside bird survey.

Current Role	Ornithologist
	BSc Geology, University College Dublin (2013).
Qualifications	
Years of Experience	2 years post graduate experience in wildlife conservation and monitoring.
Relevant Experience	 Relevant Work Experience: Field ornithologist as part of the Little Tern Conservation Project with BirdWatch Ireland for two breeding seasons (2015 & 2016). Patrick gained experience in monitoring and protecting a vulnerable species and in the collection, collation and analyses of large data sets. He was also responsible for liaising with the public, the writing of weekly reports and full technical reports at the end of each breeding season. Agri-Environmental Liaison Officer for the Results Based Agri-Environmental Payment Scheme with BirdWatch Ireland. Patrick gained experience in liaising with land owners, coordinating and finalizing terms with participants of the scheme. He also gained skills in the ecological applications for GIS, in training landowners in land management for breeding birds and in carrying out breeding bird surveys. Conservation Team Intern with the Dublin Bay Birds Project for BirdWatch Ireland. Patrick gained experience in compiling, proofing and analysing large datasets, as well as waterbird monitoring during various tidal and weather conditions and writing technical reports Field Assistant with the Dublin Bay Birds Project with BirdWatch Ireland. Patrick gained experience doing waterbird surveys, radio tracking surveys and the tracking of colour ringed waders. He also gained experience in collating, proofing and validating large datasets. He was also responsible for fitting colour rings to waders during multiple catching sessions. Volunteer Bird Surveyor on various projects including the Irish wetlands bird survey, the Inishmurray all-island breeding bird survey, the national Hen Harrier survey and the countryside bird survey. Relevant Surveys for MKO: Lissinagroagh Windfarm, County Leitrim (Client: Coillte) Carried out Vantage point surveys, winter walkovers, hen harrier roost surveys and red grouse surveys

	Glanard Windfarm, County Dancard (Client, Coillte)
	 Glenard Windfarm, County Donegal (Client: Coillte) Carried out Vantage point surveys for this site. Cahermurphy Windfarm, County Clare (Client: Mid Clare Renewable Energy Ltd.) Derrryadd Windfarm, County Longford (Client: Bord na Mona) Carried out Vantage point surveys, waterfowl surveys and breeding raptor surveys for this site. Timahoe Solar, County Laois (Client: Bord na Mona) Carried out breeding walkover surveys for this site. Coole Windfarm, County Westmeath (Site located on raised bogs) Carried out Vantage point surveys, breeding walkovers, breeding raptor surveys, breeding woodcock surveys and waterfowl distribution surveys for this site. Clonbern Windfarm, County Galway Carried out Vantage point surveys, and waterfowl surveys for this site. Ardderroo Windfarm, County Galway (Client: Enerco) Carried out Vantage point surveys, hen harrier/white-tailed eagle roost surveys and waterfowl surveys for this site. Boolynaghleragh Windfarm, County Clare (Client: Enerco) Carried out pre-commencement hen harrier surveys for this site.
Practical Skills and Aptitudes	 Proficient in GIS and MapInfo software. Proficient in MS Office. Experience surveying birds using line transects, vantage point counts, flush counts, mist netting, radio tracking and GSM trackers.
Management/ Supervision	 Experience managing field sites and coordinating large teams of volunteers for the Little Tern Conservation Projects 2015 and 2016. Experience coordinating and supervising volunteers during the all-island seabird survey on Inishmurray. Experience coordinating and liaising with volunteers/surveyors with BirdWatch Ireland and Irish Midlands Ringing Group on various projects.
Interpersonal & Communication Skills	 Experience coordinating workloads and delegating tasks as a member of both large and small teams of volunteers on a number of different projects with BirdWatch Ireland and the Irish Midlands Ringing Group, often in challenging fieldwork environments. Experience as lead author or co-author on technical project reports. Managed public relations and public outreach for the Little Tern Conservation Project in 2015 and 2016 (including an appearance on RTE series "EcoEye" in January 2016). Experience giving bird ringing demonstrations to various groups including BirdWatch Ireland branch members, Dublin Field Naturalist club and during heritage week.
Licenses Held	 Full clean driving licence SafePass
Physical / Other	 Qualified bird ringer with British Trust for Ornithology and committee member of the Irish Midlands Ringing Group.