**Vacancy:** Researcher at postdoctoral level
**Role:** Research on wildlife-wind energy interactions

*Review of applications will begin immediately.*

**Description**

Wind energy is the fastest growing renewable energy source globally. Despite the sector's rapid growth and contribution to climate action strategies, there are increasing concerns regarding the environmental impact of wind energy, and especially effects on wildlife (Katzner et al. 2019). In Ireland, research on wildlife and wind energy interactions has been limited (see for example Percival 2003, Fernández-Bellon et al. 2015, McGuinness et al. 2015, Wilson et al. 2015, 2017, Fernández-Bellon et al. 2019) and environmental guidance for wind farm developments is largely based on research carried out elsewhere. MKO Research was established to address this gap in knowledge by conducting applied research on wildlife and wind energy interactions, with our current research focused on the interactions between hen harriers and wind farms. Wind energy development within the hen harrier range (Wilson et al. 2017) and the species' sensitivity to wind farms (McGuinness et al. 2015) makes them especially relevant in this context. MKO Research is recruiting a researcher at postdoctoral level to contribute to this project.

The successful candidate will be involved in desk- and field-based research aimed at understanding hen harrier interactions with wind energy developments. Using extensive datasets they will investigate (i) hen harrier flight behaviours in relation to turbines (avoidance patterns, habitat use in relation to turbine presence, etc.) and (ii) temporal patterns in territory occupancy in relation to changes in habitat and wind farm development. This position will require data management; spatial and statistical data analysis; preparation of manuscripts for publication in peer-reviewed journals; conference attendance and presentation of results. The project will also involve data collection in the field and the researcher will be expected to be involved in planning and assisting with fieldwork. Beyond the main body of work described above, the successful candidate will be encouraged to develop their own research ideas in the wider field of wildlife-wind energy interactions, and to contribute to the development of new research ideas and future funding applications. The position has an initial duration of 12 months, with funding available for contract extensions upon review of performance and progress.

MKO Research is a new research initiative established in 2019 that lies at the interphase between industry and academia. The research group is based in the private sector and hosted by MKO Ireland, a large (60+ employee) specialist environmental and planning consultancy, and has links to academia through active collaborations with several universities (National University of Ireland Galway, University College Cork, University College Dublin). MKO Research is established as an RPO (Research Performing Organisation) within MKO, meaning it is a non-profit and independent section of MKO Ireland. All research is open access and peer-reviewed publication driven, as the aim is to conduct research that will advance wildlife-wind energy knowledge and that can be incorporated into environmental policy. The research group prioritises the wellbeing and healthy life-work balance of all its members and adheres to guidelines to achieve this.

References

Fernández-Bellon, D., S. Irwin, M. Wilson, and J. O'Halloran. 2015. Reproductive output of Hen Harriers *Circus cyaneus* in relation to wind turbine proximity. Irish Birds 10:143–150.

Fernández-Bellon, D., M. W. Wilson, S. Irwin, and J. O'Halloran. 2019. Effects of development of wind energy and associated changes in land use on bird densities in upland areas. Conservation Biology 33:413–422.

Katzner, T. E., D. M. Nelson, J. E. Diffendorfer, A. E. Duerr, C. J. Campbell, D. Leslie, H. B. V. Zanden, J. L. Yee, M. Sur, M. M. P. Huso, M. A. Braham, M. L. Morrison, S. R. Loss, S. A. Poessel, T. J. Conkling, and T. A. Miller. 2019. Wind energy: An ecological challenge. Science 366:1206–1207.

McGuinness, S., C. Muldoon, N. Tierney, S. Cummins, A. Murray, S. Egan, and O. Crowe. 2015. Bird sensitivity mapping for wind energy developments and associated infrastructure in the Republic of Ireland. BirdWatch Ireland guidance document, Kilcoole, Ireland.
Percival, S. M. 2003. Birds and wind farms in Ireland: a review of potential issues and impact assessment. Report, Durham, UK.
Wilson, M., D. Fernández-Bellon, S. Irwin, and J. O'Halloran. 2015. The interactions between Hen Harriers and wind turbines. UCC final project report, Cork, Ireland.
Wilson, M. W., D. Fernández-Bellon, S. Irwin, and J. O'Halloran. 2017. Hen Harrier *Circus cyaneus* population trends in relation to wind farms. Bird Study 64:20–29.

**Requirements**

Minimum:

- A PhD in a relevant field (ecology/conservation).
- Strong analytical skills.
- Proven expertise in GIS/spatial ecology and relevant software.
- Experience working with large datasets and conducting statistical analysis with R.
- Excellent organizational capability and ability to meet deadlines.
- Excellent written and verbal communication skills in English and proven ability of writing manuscripts for publication in peer-reviewed journals.
- Ability to work independently (e.g. take the lead on research papers and see them through to publication).
- Eligibility to work in Ireland.
- Full driving licence.

Desirable:

- Post-doc experience.
- Knowledge of upland ecology/ornithology/wind energy.
- Project management experience.
- Experience securing funding.
- Experience using occupancy models.
- Experience in ornithological field work.

**Position details**

- Location: MKO, Galway.
- Reporting to: Darío Fernández-Bellon.
- Salary: commensurate to experience, range €30,000-40,000 per annum (prior to income tax and social deductions).
- Duration: 12 months, full-time (with extensions possible).
- Start date: To be agreed depending on personal and international COVID-19 circumstances; ideally May 2020 or as soon as possible thereafter.

**Application**

- Email a cover letter and CV as a single pdf file (filename: 'your surname') to info@mkoireland.ie with the subject 'HH postdoc + your surname'.
- Cover letter (one page max.) should describe how you meet the above criteria (preferably in bullet point form).
- CV should include academic record, publication/s, names and contact details of two referees.
- Review of applications will begin immediately until the position is filled.
- Informal enquiries by email to Darío Fernández-Bellon dfbellon@mkoireland.ie.