

National Parks & Wildlife Service



An Roinn Ealaíon, Oidhreacht,
Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta

Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs

The National Parks and Wildlife Service has been involved in the monitoring of hen harrier at the national scale for nearly twenty years. National breeding surveys have been undertaken on a five yearly basis since the turn of the last century. The latest national survey estimated the population in the republic of Ireland to be 108 – 157 breeding pairs (see Irish Wildlife Manual [No. 93](#)).

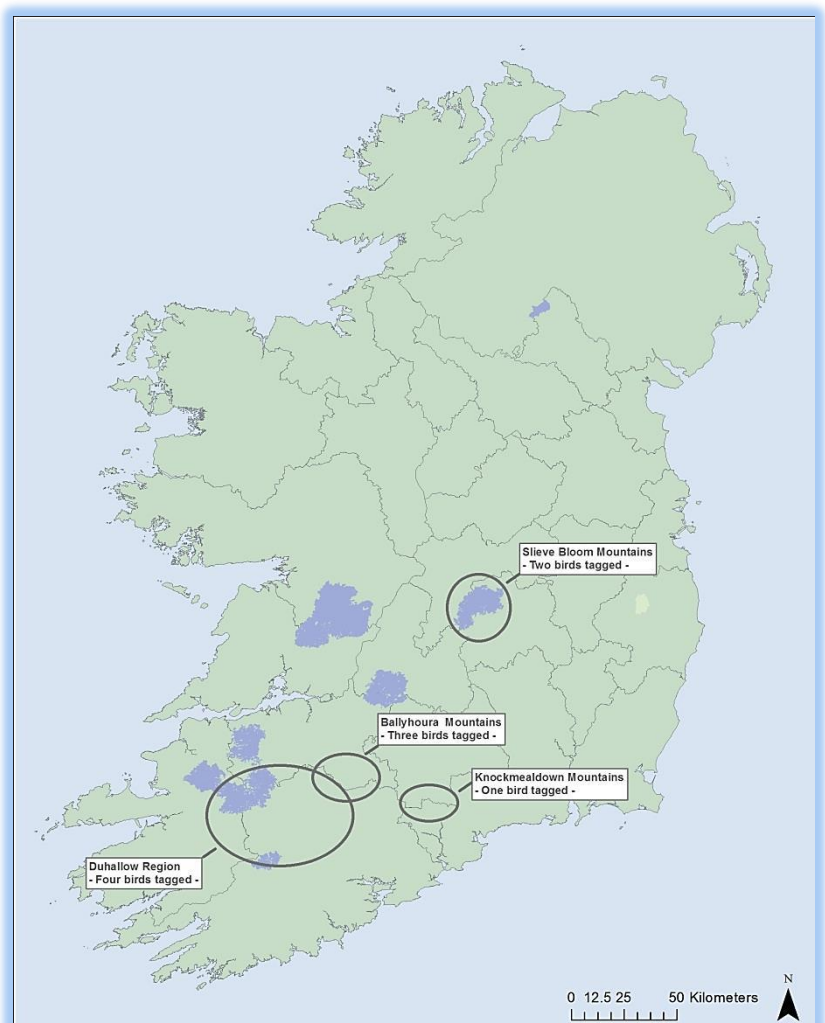


In 2007 six sites were designated as Special Protection Areas under the Birds Directive on account of their importance for holding hen harrier breeding populations. In tandem with the designation process a significant amount of scientific research was undertaken primarily focusing on their habitat use during the breeding season and several scientific papers have been published. Various research and monitoring initiatives have identified likely pressures acting on the population.

Over the last 15 years or so it has been estimated that the national population has declined by over 30%. Recent research raised the possibility that this species may be subject to an ecological trap due to its habitat preferences in Ireland. This coupled with concerns that the extent and rate of change to the hen harriers' habitat including: continued afforestation; an increase in the rate of wind farm development; and agricultural intensification among others were linked to the recently recorded declines led to the decision to develop a Hen Harrier Threat Response Plan (HHTRP).

One of the priority research areas identified through this process is to gain a better understanding of this species' ecology during the non-breeding period. Such research work is warranted in order to identify the relevant periods and places where positive intervention might be required and to provide an evidence base in order that fit purpose conservation actions could be targeted in an effective and efficient manner.

Central to this research work is to investigate overwinter survival rates and post breeding dispersal patterns at the population level. One way to achieve this is to follow the life stories of an adequate number of individual harriers for several years. In order to do this these birds need to be fitted with solar powered satellite tags. These tags are designed to transmit reasonably accurate locational data on a regular basis over several years. As of July 2016 tags have been successfully attached to six near fledged harrier chicks across the Slieve Blooms, Knowckmealdowns and the Ballyhours.



In late 2015 NPWS became aware of a similar project also at the planning stage that was preparing to focus their conservation efforts at the Duhallow Region. IRD Duhallow Raptor LIFE are working towards tracking a number of harriers that fledge from the Duhallow region and its hinterland over the coming years (see <http://duhallowlife.com/>). This has already resulted in four Duhallow chicks successfully fitted with satellite tags in July of 2016.



Prior to this season's fieldwork NPWS, RaptorLife IRD Duhallow and the Irish Raptor Study Group met and came to the determination that the two projects should co-operate with a view to optimising logistics, attaining cost savings and increasing the statistical power of the scientific analyses that will flow from the data combined from all of the tagged birds. Furthermore by agreeing a cooperative approach between the organisations the scene is now set to enable the public to follow the stories of some of these tagged birds over the coming years via the Hen Harrier Tracker weblog @ <http://HenHarrierTracker.blogspot.ie/>

Selected papers on hen harrier research in Ireland

- Fernández-Bellon, D., Irwin, S., Wilson, M.I & O'Halloran, J. 2015. Reproductive output of Hen Harriers *Circus cyaneus* in relation to wind turbine proximity. *Irish Birds* (10) 143 – 150.
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- Irwin, S., Wilson, M.W., Kelly, T.C., O'Mahony, B., Oliver, G., Troake, P., Ryan, B., Cullen, C., O'Donoghue, B. & O'Halloran, J. 2011. The breeding biology of Hen Harriers *Circus cyaneus* in Ireland over a five year period. *Irish Birds*, 9: 165-172.
- O'Donoghue, B., O'Donoghue, T., & King, F. 2011. The Hen Harrier in Ireland: Conservation Issues for the 21st Century. *Biology and Environment: Proceedings of the Royal Irish Academy*. 111B, No.2, pp. 83–93. Royal Irish Academy.
- Wilson, M.W., Irwin, S., Norriss, D.W., Newton, S.F., Collins, K., Kelly, T.C. & O'Halloran, J. 2009. The importance of pre-thicket conifer plantations for nesting Hen Harriers *Circus cyaneus* in Ireland. *Ibis*, 151:332-343.
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