



The Skydancer

Hen Harriers in Ireland



BirdWatchIreland

The Hen Harrier *Circus cyaneus* is one of our most spectacular and rarest birds of prey, with Ireland being home to the most westerly population in the world. The national survey of Hen Harriers in 2015 estimated the population to be 108 to 157 breeding pairs.

Hen Harriers are Amber-listed in the *Birds of Conservation Concern in Ireland*, due to historical declines and continued vulnerability as a result of habitat loss and persecution. They are also listed in Annex I of the EU Birds Directive, which is a legislative framework designed to protect birds, and includes measures such as the designation of Special Protection Areas (SPAs). Six Hen Harrier SPAs were designated in 2007, which combined make up 2.3% of the country's surface area.

Where they live

Hen Harriers have a widespread but sporadic distribution which is restricted during the breeding season to upland and hilly areas that have sufficient nesting and foraging habitat so that they can reproduce. In winter they spread out to low-lying and coastal areas.

Typically an open-country species, Hen

Harriers traditionally nested on the ground in heather-dominated moorland in Ireland; however, due to land use and landscape changes, including widespread planting of non-native coniferous forests, their nesting preference has largely switched to ground nesting in pre-thicket forest plantation and early growth second rotation forest; they will also nest in dense vegetation including scrub.



Female Hen Harrier
(Photo: S.Connolly)

Skydancer

Hen Harriers are renowned for their spectacular aerial acrobatics. The 'sky dance' is an impressive courtship display in which the male shows off extraordinary agility to a potential female partner. It is one of the most magical natural spectacles in the Irish countryside where the male rises to dizzying heights before suddenly plummeting towards the ground in a series of impressive twists, tumbles and turns while calling to the female, before pulling up just before impact with ground.

Food pass



The 'food pass' is a mid-air transfer of food from the male to the female which also shows the graceful maneuverability of these birds. The male arrives to the nesting area with prey while calling to the female. She flies up to meet the male and summersaults upside-down to collect the prey from him in mid-air.

Key conservation issues

- The Hen Harrier population has suffered long term population declines. In 2015 the national population was estimated at 108 to 157 breeding pairs, which represents a decrease of 8.7% since the 2010 survey. A comparison of Hen Harrier numbers in survey areas covered across all four national surveys since 1998–2000 indicates a population decline of one third (33.5%). Between 2005 and 2015 Hen Harrier numbers have declined by 27% within the SPA network (where they should be thriving).
- Loss of suitable habitat in upland areas through agricultural intensification, including afforestation, is one of the main concerns for the future of the Hen Harrier population. Over 50% of Ireland's Hen Harrier SPA network consists of commercial forest, compared to 11% nationally. Afforestation and forest maturation is one of the primary threats to the Hen Harrier.
- Sustainable farming practices in key areas for Hen Harriers are essential for their conservation. Adequate support for farmers for these practices would not only benefit Hen Harriers and other upland birds, but would also protect habitats and the wider ecosystem.



Male Hen Harrier
(Photo: A.Hay)



Quick facts

- Males and females are strikingly different in their appearance, so much so that for centuries it was thought that they were separate species.
- Despite their size, they are relatively light birds, an adaption to their hunting style but also facilitating their acrobatic flight and impressive aerial displays.
- Hen Harriers can appear owl-like due to their dish-shaped face. As with owls, this is an adaptation that helps them to detect and pinpoint prey by sound.

- In Ireland the Hen Harrier's diet is comprised mostly of small birds such as Meadow Pipits and Skylarks, and also includes small mammals such as Bank Voles and mice.

- Although scarce, Hen Harriers are found widely dispersed in coastal and low-lying areas

during the winter. However, they have a restricted range during the breeding season as they need suitable upland habitats for nesting and foraging. The south-west supports the highest concentrations, with over 60% of the population in Munster. The SPA network holds over 40% of the breeding population.

Factors which impact Hen Harriers in Ireland

The main pressures and threats which impact Hen Harriers in Ireland include afforestation on open ground, forest and plantation management and the modification of cultivation practices. In addition to the loss of nesting and foraging habitat through afforestation, other issues of conservation concern facing the Hen Harrier include agricultural intensification, degradation of upland habitats, increased predation, disturbance and habitat loss from illegal burning, developments in upland areas and illegal persecution, and there are also concerns over juvenile survival and recruitment into the breeding population.

Female Hen Harrier at the nest
(Photo: M.Richards)



Within the SPA network, afforestation and forest maturation is one of the main threats to Hen Harrier conservation. Although Hen Harriers will use the early growth stages of plantation forests for nesting and foraging, once the forest matures and the canopy closes (9-12 years after planting), use by Hen Harriers declines and this habitat becomes largely unsuitable. The SPA network is currently comprised of over 50% commercial forest plantation, compared to an overall national total of 11% forest cover. **Even in the absence of further land use change, forest maturation within these SPAs over the next decade will result in a substantial decrease in areas of suitable habitat available for the Hen Harrier.**

Hen Harriers are largely dependent on the type of traditional farming in upland areas that has existed for generations. Acknowledging the value of maintaining sustainable farming in these areas through adequate support mechanisms would deliver not only for Hen Harriers but other high priority species, sensitive upland habitats and the wider ecosystem, in addition to benefitting landowners and local communities.

BirdWatch Ireland is working to influence the best outcome for Hen Harrier conservation through a number of measures, including inputting to the Hen Harrier Threat Response Plan which is being prepared by the National Parks and Wildlife Service. The purpose of this plan is to identify the main threats to Hen Harriers and the best solutions to protect and enhance their populations and, if successful, it has the potential to deliver an effective framework for Hen Harrier conservation.

Further information

Colhoun, K., & Cummins, S. (2013). Birds of Conservation Concern in Ireland 2014 - 2019. *Irish Birds*, 9 (4), 523-544.

Irwin, S., Wilson, M., O'Donoghue, B., O'Mahony, B., Kelly, T., & O'Halloran, J. (2012). *Optimum scenarios for Hen Harrier conservation in Ireland*. Department of Agriculture, Food & the Marine.

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.

Ruddock, M., Mee, A., Lusby, J., Nagle, A., O'Neill, S. & O'Toole, L. (2016). The 2015 National Survey of Breeding Hen Harrier in Ireland. *Irish Wildlife Manuals*, No. 93. National Parks and Wildlife Service, Department of the Arts, Heritage and the Gaeltacht, Ireland.

Wilson, M., Irwin, S., Norriss, D. W., Newton, S. F., & Collins, K. (2009). The importance of pre-thicket conifer plantations for nesting Hen Harriers *Circus cyaneus* in Ireland. *Ibis*, 151(2), 332-343.

Wilson, M., O'Donoghue, B., O'Mahony, B., Cullen, C., O'Donoghue, T., Oliver, G. (2012). Mismatches between breeding success and habitat preferences in Hen Harriers *Circus cyaneus* breeding in forested landscapes. *Ibis*, 154, 578-589.

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