

Status of birds, other biodiversity and habitats in Ireland as it relates to BirdWatch Ireland focus areas.

- Two thirds of Ireland's regularly occurring wild bird species are Red or Amber-Listed Birds of Conservation Concern in Ireland. Farmland birds in particular are continuing to show declines and no recovery from the catastrophic and steady crash in populations since the 70s and up to this day. Habitat loss/change and change in farming practices are leading causes of losses^{1 2}. Corncrake, Barn Owl, Yellowhammer, Twite, Whinchat as well as the suite of breeding waders like Curlew, Lapwing, Dunlin, Golden Plover, Redshank and Snipe are severely threatened. Other more common farmland birds like Common Kestrel and Stock Dove are showing declines now, with Skylark and Meadow Pipit also ones to watch. Information in the graphs below is taken from the 2007-2011 Bird Atlas³

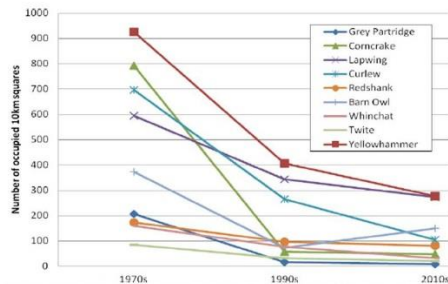


Figure 1: Range (number of occupied 10km squares) in 1970, 1990 and 2010 breeding bird atlases of Red-listed lowland farmland bird species in Ireland

Status and declines

Species	Conservation status	% Change	
		1970-2010	1990-2010
Curlew	IUCN /Irl Red	-78	-73
Dunlin	Annex 1, Irl Red	-69	-71
Golden Plover	Annex 1, Irl Red	-50	-42
Redshank	Irl Red, SPEC 2	-55	-47
Lapwing	Irl Red, SPEC 2	-53	-33
Snipe	Irl Amb, SPEC 3	-34	-8

- Birds on fragile mountain and hill habitats such as breeding Hen Harrier, Red Grouse, Golden Plover are also in a precarious position.
- One third of our 99 wild bee species are threatened with extinction. Reasons for decline include; Loss of habitat through conversion of low-intensity farmland and semi-natural land to intensive farmland, forestry and urban/ industrial use; Loss of flowering plants as a food source due to changing farming practices are reasons for decline; Poisoning from pesticide use⁴
- 40% of our wintering waterbirds have declined in 20 years with changes in land use threatening geese, swans and some wader species⁵
- 85% of EU protected habitats (the best of the best and internationally important) have 'bad' conservation status according to the latest report from the Irish government to the Commission⁶ and 70% of these are negatively impacted by agriculture⁷
- There has been a loss of 28% of the surveyed area of the EU protected and Annex 1 lowland hay meadow habitat since 2013 due to impacts of intensification of agriculture and application of slurry⁸.
- Water quality results show a decline in Ireland in the period 2013-2019 after a period of stabilisation with now only 53% of Ireland's surface water bodies having satisfactory **water**

¹ Colhoun K. & Cummins, S. 2013 Birds of Conservation Concern in Ireland 2014-19. Irish Birds 9:523-544

² Lewis, L. J., Coombes, D., Burke, B., O'Halloran, J., Walsh, A., Tierney, T. D. & Cummins, S. (2019) Countryside Bird Survey: Status and trends of common and widespread breeding birds 1998-2016. Irish Wildlife Manuals, No. 115. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

³ Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J. (2013) *Bird Atlas 2007-11: the breeding and wintering birds of Britain and Ireland*. BTO Books, Thetford.

⁴ FitzPatrick Ú., Murray T.E., Byrne A., Paxton R.J., Brown M.J.F. (2006) Regional Red List of Irish Bees, Publ. Rep. to National Parks and Wildlife Service (Ireland) and Environment and Heritage Service (N. Ireland).

⁵ Burke, B., Lewis, L. J., Fitzgerald, N., Frost, T., Austin, G. & Tierney, T. D. (2018) *Estimates of waterbird numbers wintering in Ireland, 2011/12 – 2015/16*. Irish Birds No. 41, 1-12.

⁶ NPWS (2019). The Status of EU Protected Habitats and Species in Ireland

⁷ NPWS (2019). The Status of EU Protected Habitats and Species in Ireland, pg 84.

⁸ Martin, O'Neill and Daly, (2018). Martin, J R, O'Neill, F H and Daly, O H (2018) The monitoring and assessment of three EU Habitats Directive Annex I grassland habitats. Irish Wildlife Manuals 102, National Parks and Wildlife Service, Ireland

quality. The number of pristine water bodies has fallen to 20 from 500 since the 1980's. Pollution from agriculture is a dominant factor along with wastewater discharges⁹.

- Eutrophication of freshwater bodies is considered to pose a high-level pressure and medium-level threat to four waterbird species namely, Goldeneye, Pochard, Scaup and Tufted Duck; and a medium-level pressure and threat to Coot and Gadwall¹⁰.
- The NPWS Article 17 report to the European Commission on the status of protected species (2019) including water-dependent species states 'The Agriculture category represents the highest percentage of High-importance pressures (Figure 9) relative to other categories, with the incidence predicted to increase over the next 12 years; this has been linked to the threat from fertiliser and pollution on selected fish species¹¹.
- Greenhouse gas emissions nationally have increased and those from agriculture have not only increased, they are projected to increase further out to 2030 to 38% of total emissions¹²
¹³.
- Drained peatlands (raised bog, upland blanket bog and other peat soils) and related activities account for emissions of c.11 million tonnes of CO₂ per year¹⁴ - equating to total emissions from the energy sector in 2018 (11.7 million tonnes CO₂ per year)¹⁵
- Forestry is a significant pressure and threat to Red and Amber listed birds of Conservation Concern¹⁶.
- In relation to Ireland's 24 breeding seabird species (threat level is medium or high)¹⁷:
 - 22 are threatened by wind, wave and tidal energies if not planned correctly
 - 21 are threatened by fisheries bycatch
 - 18 are threatened by climate change
 - 13 are threatened by marine plastics
 - 11 are threatened by recreational activities
- Six species of sharks, skates and rays in Irish waters are Critically Endangered, a further five species are Endangered, 6 species are Vulnerable and 19 are near threatened according to IUCN Red List criteria. In essence 62% of Ireland's rich cartilaginous fish species are in trouble¹⁸ and the foremost risk in Irish waters is over-exploitation as part of commercial fisheries.
- 45% of fishing limits agreed for 2020 in the North East Atlantic are in excess of scientific advice and eight Irish stocks are critically overfished where scientists have advised that no fish should be taken.

⁹ O'Boyle, S., Trodd, W., Bradley, C., Tierney, D., Wilkes, R., Ní Longphuirt, S., Smith, J., Stephens, A., Barry, J., Maher, P., McGinn, R., Mockler, E., Deakin, J., Craig, M., Gurrin, M., (2019) Water Quality in Ireland 2013–2018, EPA Wexford.

¹⁰ Lewis, L. J., Burke, B., Fitzgerald, N., Tierney, T. D. & Kelly, S. (2019) Irish Wetland Bird Survey: Waterbird Status and Distribution 2009/10-2015/16. *Irish Wildlife Manuals*, No. 106. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

¹¹ NPWS (2019). The Status of EU Protected Habitats and Species in Ireland, pg 90

<https://www.npws.ie/publications/search?title=article+17&keyword=&author=&series=All&year=&x=31&y=8>

¹² Ireland's Provisional Greenhouse Gas Emissions 1990-2018

https://www.epa.ie/pubs/reports/air/airemissions/ghgprovements2018/Report_GHG%201990-2018%20Provisional%20Inventory%20October%202019.pdf

¹³ Ireland's Greenhouse Gas Emissions Projections 2018-2040

https://www.epa.ie/pubs/reports/air/airemissions/ghgprojections2018-2040/Greenhouse_Gas_Projections.pdf

¹⁴ Wilson, D., C. Müller, and F. Renou-Wilson, Carbon emissions and removals from Irish peatlands: current trends and future mitigation measures. *Irish Geography*, 2013. 46(1-2): p. 1-23.

¹⁵ Duffy, P., et al., National Inventory Report 2018. Greenhouse gas emissions 1990-2016 reported to the United Nations Framework Convention on Climate Change. 2018. p. 581.

¹⁶ Corkery et al 2019 Changes in forest cover result in a shift in bird community, composition *Journal of Zoology* doi:10.1111/jzo.12757

¹⁷ Cummins, S., Lauder, C., Lauder, A. & Tierney, T. D. (2019) The Status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018. *Irish Wildlife Manuals*, No. 114. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland and national Article 12 of the Birds Directive reporting to the European Commission

¹⁸ Clarke, M., Farrell, E.D., Roche, W., Murray, T.E., Foster, S. and Marnell, F. (2016) Ireland Red List No. 11: Cartilaginous fish [sharks, skates, rays and chimaeras]. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. Dublin, Ireland.