



Agri-Food Strategy 2030: Submission on Chapter 10 'A Climate Smart, Environmentally Sustainable Agri-Food Sector'

### **Agri-Food Strategy Timeframe and Fundamental Principles**

As there is so much in flux with the EU Multi-annual Financial Framework budget, yet to be agreed, CAP budget and uncertainty around the UK withdrawal agreement, we suggest a longer timeframe for the entire process. We are unduly rushing a fundamental area of policy development, which will have wide ranging long-term impacts for our natural environment and rural communities in particular, but for everyone in Irish society and the way in which our food is produced and consumed in the future.

A guiding principle in Food Wise 2025 is that it, "will seek to embed at all levels of the agri-food industry, with environmental protection and economic competitiveness considered equal and complementary: one will not be achieved at the expense of the other." This social contract between the public and agriculture has been broken as all the environmental indicators are showing further declines and reactive nitrogen usage (in fertiliser and feed) is driving increased greenhouse gas and ammonia emissions from agriculture. This must be urgently remedied.

The Environmental Pillar again recommends basing the next Agri-Food Strategy on restoring the building blocks of farming in Ireland. That includes restoring the confidence of farmers and giving them a fair price for the food they produce. It also means halting and reversing environmental impacts and restoring soils, bird and insect populations, native plants, habitats, water quality of rivers, lakes, estuaries and cutting greenhouse gas emissions. It means building a strategy respecting key areas of biodiversity, climate and water in every chapter rather than isolating environment into a chapter on its own. This would promote policy coherence and reduce a silo-ed approach.

### **Role of SEA/AA in Process**

A key objective of Food Wise 2025 articulated by two Ministers for Agriculture stated that in Food Wise 2025, "environmental protection and economic competitiveness are equal and complementary: one will not be achieved at the expense of the other".

The facts, increasing biodiversity, climate and pollution impacts from agriculture, demonstrate that the environment has not been equal or complementary to economic competitiveness, to the contrary, economic goals have been achieved (for some) at the expense of the environment in Ireland and by transferring increased costs and risks to many farmers. The social contract of Food Wise is broken. We need clean drinking water, thriving biodiversity and a healthy diverse food system. The pandemic has shown us how important biodiversity is in our lives for our wellbeing, but biodiversity is critical for the ecosystem services it provides for free (carbon sequestration of peatlands/hedgerows, pollination by wild bees, diverse resilient habitats).

The Food Wise 2025 SEA/AA was substandard and the ensuing strategy has led to disastrous consequences for the environment.

The goal of Habitats Directive is to restore to favourable conservation status. Habitats have to be restored. The Strategy must reflect the needs of habitats and species.

SEA must assess birds of Conservation Concern and status of habitats outside of Natura sites and include the Teagasc mapped areas of High Nature Value farmland.

The AA process must take account of case law from European Court of Justice and must have complete, precise and definitive findings that there will be no significant impacts to Natura sites or the conservation of protected species including Annex 1 bird species.

The AA must also assess impacts of Strategy on ex-situ habitats included in the Conservation Objectives of Special Protection Areas.

AA must assess impacts of Strategy as it relates to Article 4.4 of the Birds Directive (protection for birds in the wider countryside) and which is one of the rulings of C/418-04 against Ireland.

## **Introduction**

The member organisations of the Environmental Pillar ([www.environmentalpillar.ie](http://www.environmentalpillar.ie)) recognise the benefits of supporting sustainable agricultural production, and some of our members work with farmers and other stakeholders within the Irish agri-food sector. However, the agri-food sector cannot exist in isolation of national and international initiatives and obligations to tackle some of the most pressing and existential issues of our time: climate breakdown, loss of biodiversity, degradation of ecosystem services, and declining water quality. Furthermore, the continued emphasis on expansion and intensification within the Irish agri-food sector as a key to the success of the sector ignores the reality that we are living on a finite planet with finite resources, and a finite ecological carrying capacity. Numerous EU citizens, whose taxes fund the Common Agriculture Policy (CAP) that underpins Irish agriculture policy, have shown that they want to see food produced in a way that protects the environment. Policies must act to protect our ecological assets. These assets are at the core of our long-term health and well-being. The success of human society can no longer be based solely on financial metrics; sustainability must be considered differently, being linked to concerns for our environment, our communities and long-term human health and well-being.

The Natura Impact Statement for Food Wise 2025 stated that there would be no significant impacts on the Natura 2000 network, habitats and species. This has proven to be incorrect with continued deterioration of habitats. Since the 2015 publication date, all environmental indicators are showing that environmental quality in Ireland as it relates to agriculture is worsening and not improving. This includes water, biodiversity (breeding waders, farmland birds, pollinators including bees and butterflies and other wildlife, terrestrial and coastal habitats) and greenhouse gas and ammonia emissions. The NPWS states that 85% of EU protected habitats have bad or inadequate status with 70% of those impacted by agriculture.

The removal of the milk quotas and coupled with the support of certain grants and subsidies provided under the Rural Development Programme 2014-2020, as well as the lack of environmental objectives for 95% of direct payments to farmers under Pillar 1 of the RDP, ANC payments and bolstered by TAMs grants, has resulted in the intensification of agriculture and in particular the dairy sector. Not only have we witnessed failure to restore bird populations and habitats and to maintain water quality, these indicators are worsening. Save for the Burren Farming for Conservation Programme, the Hen Harrier EIP, Curlew EIP which are promising in their targeted results-based schemes, we are further from ecosystem and species restoration now than in 2014.

This submission outlines the scale of the pressures on biodiversity, emissions and water quality. It goes into some detail on the solutions in forestry, fisheries and agriculture and charts a path forward. When we look out to 2030 and ask where does Ireland want to be in terms of our bird populations, water quality and greenhouse gas emissions, the government must ask itself if it will accept extinction of species, undrinkable water and soaring emissions or if it will commit to redressing the problems created by Food Wise 2025? Agri-Food 2030 must chart a new path which recognises that farmers, our bird and bee populations, our water, climate will not continue to take the hit for unsustainable agriculture and large profits for some.

### **Agri-Food Strategy Public Consultation- farmer support for a change in direction**

The public consultation element of the agri-food strategy comprised an online survey. The results of this survey demonstrate that public concern of respondents for agriculture which supports and protects biodiversity and reduces climate impacts is greater than for agriculture as an area of economic growth. However, the chapters that we have seen so far have not reflected these concerns. Instead the standalone chapter on environment is meant to address these concerns whereas a fundamental transformation of how and what we farm in Ireland is needed to align all chapters of the strategy with environmental boundaries and the objective of the EU Biodiversity Strategy 2030 and the EU Farm to Fork strategy. In order to support farmers with better prices for their food, a 'less is more' approach needs to be considered-less produce with a higher premium that has high nature value.

The Environmental Pillar sought greater representation of the environmental sector on this committee, including experts in climate science, biodiversity and water to ensure that these concerns were reflected in the strategy document. This was denied. The industry-heavy committee is reflective of the Department's 'business as usual' approach (previously critiqued in Kenny et al. 2016) and not representative of the responses in the public consultation.

Almost 60% of responses were from primary producers (farmers/fishers) and 56% working in/representing the agriculture sector 47% of respondents either disagreed or strongly disagreed that 'Food Wise 2025 is delivering on its vision of thriving producers and agri-food business'. Only 18% either agreed or strongly agreed with this statement.

Environmental Sustainability and Human Capital were the highest ranked themes for the next Agri-Food Strategy with 110 out of 212 respondents ranked environment as the most important theme-with a significant margin between it and the next ranked theme (43 points for Human Capital).

Low profitability is the key area of focus needed for generational renewal and new entrants. This deserves significant attention. The current form of agriculture is very heavily reliant upon expensive inputs which can be very damaging to the environment (see <https://www.arc2020.eu/less-is-more-upland-farming-economics/>). Ramped up payments for ecosystem services which would handsomely reward farmers for the work they do in protecting and restoring ecosystems through the right grazing management systems would be a good area of focus on the new Strategy. The objective of the Farm to Fork Strategy to increase organic food production to 25% needs to be included in the Agri-Food Strategy 2030, and the intertwined need for Bord Bia to promote organic food to build consumer support must be a high-level action. Support for diversification where appropriate and additional crops on the right soils must receive attention. Increasing uptake of farming means better prices for the primary product that farmers produce. Less produce and garnering higher premia must be the way forward.

Environmental sustainability also ranked as the number one concern for processors as consumers are demanding this. However, this must be real sustainability, as defined in the Bruntland report: ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.

In relation to the importance of the contributions of farmers/fishers to society- protecting biodiversity, water and climate came second and third to ensuring safe, healthy food.

Tackling climate change, halting the losses of biodiversity and restoring it, and meeting water quality legal obligations are the top three priorities for the next 10-year strategy to address at primary production level.

### **New Developments: the EU Biodiversity Strategy and Farm to Fork Strategy**

In May 2020, the EU Biodiversity Strategy and Farm to Fork Strategy-for a fair, healthy and environmentally-friendly food system, were published. Led by the Directorate of Health the Farm to Fork Strategy sets a course for much more sustainable agriculture across the EU with human health a key driver. It states ‘It addresses comprehensively the challenges of sustainable food systems and recognises the inextricable links between healthy people, healthy societies and a healthy planet’. It goes on to say ‘There is an urgent need to reduce dependency on pesticides and antimicrobials, reduce excess fertilisation, increase organic farming, improve animal welfare, and reverse biodiversity loss’. The objective of the EU Biodiversity Strategy 2030 and Farm 2 Form Strategy will be integrated into Ireland’s next CAP Strategic Plan and this will be assessed by the European Commission. Since the Agri-Food Strategy 2030 will rely on implementation of the CAP to support its objectives, the Agri-Food Strategy is obliged to integrate the goals of these EU Strategies into its plans.

Important points from these strategies which must be the basis for which the Agri-Food 2030 Strategy is developed are:

#### *EU Biodiversity Strategy 2030*

- By 2030, 30% of EU land and EU sea areas is primarily managed for nature and Biodiversity with at least one third of protected areas – representing 10% of EU land and 10% of EU sea – should be strictly protected. Significant areas of other carbon-rich ecosystems, such as peatlands, grasslands, wetlands, mangroves and seagrass meadows should also be strictly protected, taking into account projected shifts in vegetation zones.
- Member States will have to ensure that at least 30% of species and habitats not currently in favourable status are in that category or show a strong positive trend. The Commission and the European Environmental Agency will provide guidance to Member States in 2020 on how to select and prioritise species and habitats.
- The Commission will aim to agree the criteria and guidance for additional designations with Member States by the end of 2021. Member States will then have until the end of 2023 to demonstrate significant progress in legally designating new protected areas and integrating ecological corridors. On this basis, the Commission will assess by 2024 whether the EU is on track to meet its 2030 targets or whether stronger actions, including EU legislation, are needed.

- The Commission will put forward a proposal for legally binding EU nature restoration targets in 2021 to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.
- The EU's legal framework on water is ambitious but implementation is lagging behind and enforcement must be stepped up."
- ...at least 25,000 km of rivers will be restored into free-flowing rivers by 2030 through the removal of primarily obsolete barriers and the restoration of floodplains and wetlands. Technical guidance and support to the Member States to identify sites and help mobilise funding will be provided by the Commission in 2021.
- The Commission will take action to reduce by 50% the overall use of – and risk from – chemical pesticides by 2030 and reduce by 50% the use of more hazardous pesticides by 2030.
- Full implementation of the EU Pollinators initiative. By the end of 2020, the Commission will review the initiative and propose additional measures if necessary.
- The Commission will ensure that the CAP Strategic plans are assessed against robust climate and environmental criteria, and that Member States set explicit national values for the relevant targets set in this strategy, as well as in the Farm to Fork Strategy. These plans should lead to sustainable practices such as precision agriculture, organic farming, agro-ecology, agro-forestry, low-intensive permanent grassland, and stricter animal welfare standards.
- There is an urgent need to bring back at least 10% of agricultural area under high-diversity landscape features.
- At least 25% of the EU's agricultural land must be organically farmed by 2030. In addition to CAP measures, the Commission will put forward an Action Plan on organic farming, helping Member States stimulate both supply and demand of organic products. It will also ensure consumer's trust through promotion campaigns and green public procurement
- The Commission will update the EU Soil Thematic Strategy in 2021. The Zero Pollution Action Plan for Air, Water and Soil that the Commission will adopt in 2021 will also look at these issues. A mission in the area of soil health and food under Horizon Europe will aim to develop solutions for restoring soil health and functions.
- It also promotes the shift to advanced biofuels based on residues and non-reusable and non-recyclable waste. This approach should continue for all forms of bioenergy. The use of whole trees and food and feed crops for energy production – whether produced in the EU or imported – should be minimised."
- The Commission is assessing the EU and global biomass supply and demand and related sustainability. As part of its increased ambition to protect and restore forest ecosystems, the Commission will publish the results of this work on the use of forest biomass for energy production by the end of 2020.
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- "There must be zero-tolerance for illegal practices."
- "The application of an ecosystem-based management approach under EU legislation will reduce the adverse impacts of fishing, extraction and other human activities, especially on sensitive species and seabed habitats."

- The Commission will also propose a new action plan to conserve fisheries resources and protect marine ecosystems by 2021. Where necessary, measures will be introduced to limit the use of fishing gear most harmful to biodiversity, including on the seabed.
- The by-catch of species threatened with extinction must also be eliminated or reduced to a level that allows full recovery. This should also be the case for those in bad conservation status or not in good environmental status. Furthermore, the by-catch of other species must be eliminated or, where this is not possible, minimised so as not to threaten their conservation status. To support this, data collection on by-catch for all sensitive species needs to be stepped up.
- Fisheries-management measures must be established in all marine protected areas according to clearly defined conservation objectives and on the basis of the best available scientific advice.
- As part of the Commission's Zero Pollution Ambition for a toxic-free environment, a new EU Chemicals Strategy for Sustainability will be put forward along with a Zero Pollution Action Plan for Air, Water and Soil. The Commission will also promote the goal of zero pollution from nitrogen and phosphorus flows from fertilisers through reducing nutrient losses by at least 50%, while ensuring that there is no deterioration in soil fertility. This will result in the reduction of use of fertilisers by at least 20%."
- The Commission will put in place a new European biodiversity governance framework. This will help map obligations and commitments and set out a roadmap to guide their implementation."
- "As part of this new framework, the Commission will put in place a monitoring and review mechanism. This will include a clear set of agreed indicators and will enable regular progress assessment and set out corrective action if necessary. (...) It will support administrative capacity building, transparency, stakeholder dialogue, and participatory governance at different levels."
- As regards the Birds and Habitats Directives, enforcement will focus on completing the Natura 2000 network, the effective management of all sites, species-protection provisions, and species and habitats that show declining trends. The Commission will also ensure that environment-related legislation with an impact on biodiversity is better implemented, enforced and – where necessary – reviewed and revised.
- "The Commission will support civil society's role as a compliance watchdog and will engage with Member States to improve access to justice in national courts in environmental matters for individuals and NGOs. It will also broaden standing for NGOs by proposing a revision of the Aarhus Regulation.
- New initiative in 2021 on sustainable corporate governance = "legislative proposal, will address human rights and environmental duty of care and due diligence across economic value chains in a proportionate way according to different sizes of enterprises."
- "The Commission will help to build a European Business for Biodiversity movement, taking inspiration from recent initiatives and making this movement an integral part of the European Climate Pact.
- The Commission will ensure full implementation and enforcement of the biodiversity provisions in all trade agreements including through the EU Chief Trade Enforcement Officer.
- "The Commission will also present in 2021 a legislative proposal and other measures to avoid or minimise the placing of products associated with deforestation or forest degradation on the EU market, and to promote forest-friendly imports and value chains.

## **Farm to Fork Strategy:**

- Legislative proposal for a framework for a sustainable food system before the end of 2023
- Focus in the document is on defining sustainable food systems and labelling, also says it will ‘mainstream sustainability in all food-related policies.’
- Moving to a more plant-based diet with less red and processed meat and with more fruits and vegetables will reduce not only risks of life-threatening diseases, but also the environmental impact of the food system.”
- EC will examine EU rules to reduce the dependency on critical feed materials (e.g. soya grown on deforested land).
- Review of the EU promotion programme for agricultural products, with a view to enhancing its contribution to sustainable production and consumption, and in line with the evolving diets. In relation to meat, that review should focus on how the EU can use its promotion programme to support the most sustainable, carbon-efficient methods of livestock production.
- EC will strictly assess any proposal for coupled support in Strategic Plans from the perspective of the need for overall sustainability.
- “The Commission is committed to halving per capita food waste at retail and consumer levels by 2030 (SDG Target 12.3).”

## **Setting the Scene- Current status of different species groups and habitats as they relate to the Agri-Food Strategy.**

All of the indicators in relation to biodiversity as it relates to terrestrial and marine biodiversity make for a dismal reading. Ireland is liquidating its biodiversity by its agriculture and fisheries policies.

The following information demonstrates the current status of much of Ireland’s most threatened biodiversity that relate to agriculture, fisheries and forestry.

- 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.<sup>1</sup>
- 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.<sup>2</sup>
- Other more common farmland birds like Common Kestrel and Stock Dove are showing declines now, with Skylark and Meadow Pipit also ones to watch.
- Birds on fragile mountain and hill heath habitats such as breeding Hen Harrier, Red Grouse, Golden Plover are also red listed demonstrating declines in these habitats.
- 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 use.<sup>3</sup>

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

<sup>2</sup> 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.

<sup>3</sup> 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).

- 40% of our wintering waterbirds have declined in 20 years with changes in land use threatening geese, swans and some wader species.<sup>4</sup>
- 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 Commission<sup>5</sup> and 70% of these are negatively impacted by agriculture.<sup>6</sup>
- 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 slurry.<sup>7</sup>
- 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 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 discharges.
- 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 Gadwall.<sup>8</sup>
- 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 incidence predicted to increase over the next 12 years; this has been linked to the threat from fertiliser and pollution on selected fish species.’<sup>9</sup>
- 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 emissions.<sup>10</sup>
- Drained peatlands (raised bog, upland blanket bog and other peat soils) and related activities account for emissions of c.11 million tonnes of CO<sub>2</sub> per year<sup>11</sup> - equating to total emissions from the energy sector in 2018 (11.7 million tonnes CO<sub>2</sub> per year).<sup>12</sup>
- Forestry is a significant pressure and threat to Red and Amber listed birds of Conservation Concern.<sup>13</sup>

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<sup>4</sup> 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; 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.

<sup>5</sup> NPWS (2019). *The Status of EU Protected Habitats and Species in Ireland*

<sup>6</sup> NPWS (2019). *The Status of EU Protected Habitats and Species in Ireland*, pg 84.

<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup> 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>

<sup>10</sup> Ireland's Provisional Greenhouse Gas Emissions 1990-2018

[https://www.epa.ie/pubs/reports/air/airemissions/ghgprojections2018/Report\\_GHG%201990-2018%20Provisional%20Inventory%20October%202019.pdf](https://www.epa.ie/pubs/reports/air/airemissions/ghgprojections2018/Report_GHG%201990-2018%20Provisional%20Inventory%20October%202019.pdf)

Ireland's Greenhouse Gas Emissions Projections 2018-2040

[https://www.epa.ie/pubs/reports/air/airemissions/ghgprojections2018-2040/Greenhouse\\_Gas\\_Projections.pdf](https://www.epa.ie/pubs/reports/air/airemissions/ghgprojections2018-2040/Greenhouse_Gas_Projections.pdf)

<sup>11</sup> 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.

<sup>12</sup> 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.

<sup>13</sup> Corkery et al 2019 Changes in forest cover result in a shift in bird community, composition *Journal of Zoology* doi:10.1111/jzo.12757

- In relation to Ireland’s 24 breeding seabird species (threat level is medium or high):<sup>14</sup>
  - 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 trouble<sup>15</sup> and the foremost risk in Irish waters is over-exploitation as part of commercial fisheries.

## **Ireland’s Natural Heritage: Our Biodiversity**

### *Environmental Background paper information on biodiversity*

- In the background chapter on environment, the focus on biodiversity appears to be solely on the Natura 2000 sites and protected habitats. This will need to be corrected in the subsequent iterations to address wider countryside biodiversity and the impacts to it.
- The chapter states that current baseline biodiversity is provided for within the conditionality of the basic payment. However, this is obviously not the case when all the environmental indicators are failing. This signifies that the conditionality (cross compliance) has failed to be properly implemented and that policies are undermining the goals of the conditionality.
- In relation to the following statement, “The trends in biodiversity nationally are not positive despite Agri-environmental schemes in place since 1994. The current AES - GLAS has approximately 50,000 participants and has made advances on past AES with more targeted actions and measures. There is a significant biodiversity focus with both priority entry and actions targeted at habitats and species of conservation concern.” The RDP 2014-2020 failed to provide targeted ecological advisory services to support farmers in the measures they were required to undertake. This was flagged in advance and requested by BirdWatch Ireland. We are not confident that there will be any biodiversity boost from general GLAS schemes. The EIPs supported by DAFM however are very promising and show the benefit of targeted results-based schemes supported by strong ecological advisory services.
- In relation to hedgerows, work done by Neil Foulkes of the Hedgelaying Association of Ireland has found that approximately 300 km of hedgerows have been sanctioned for removal by the DAFM under EIA regulations but without adequate environmental assessment. Older hedgerows are irreplaceable and appropriate management is required. This issue has been raised with DAFM but has not been resolved. The thresholds for EIA must be eliminated.
- In the table at the end called ‘**ANNEX I – SUMMARY OF ENVIRONMENTAL TARGETS IN THE AGRI-FOOD SECTOR**’ the targets for biodiversity are poor. They must be aligned with requirements under the EU Law and the new EU biodiversity strategy 2030 as it relates to restoring nature. In addition, national laws and plans must also be included.

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<sup>14</sup> 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

<sup>15</sup> 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.

- Habitats Directive (maintain and restore favourable conservation status, avoid deterioration of sites),
  - Article 6.1 For special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex I present on the sites.
  - Article 6.2 Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.
- Birds Directive:
  - Article 2: Member States shall take the requisite measures to maintain the population of the species referred to in Article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level.
  - Article 3: Member States shall take the requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Article 1.
  - Article 4.2: Member States shall take similar measures for regularly occurring migratory species not listed in Annex I, bearing in mind their need for protection in the geographical sea and land area where this Directive applies, as regards their breeding, moulting and wintering areas and staging posts along their migration routes. To this end, Member States shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance.
  - Article 4.4: Member States shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats.
- The Targets table states that Ireland is going to partially achieve targets for biodiversity but there is absolutely no evidence to substantiate this. We suggest that unless there is a complete turnabout in agriculture policy and significant ramping up of targeted results-based measures in CAP to halt the loss of biodiversity, it will not happen.

**The following information and subsequent proposals to transform agriculture in Ireland in this submission must be inform the direction of the Agri-Food Strategy 2030.**

Ireland's biodiversity that relates to farmland and marine ecosystems are experiencing very severe pressures and threats. This is evidenced by declining populations of many farmland birds and the loss in extent and quality of many semi-natural habitats in the mosaic of Ireland's farmed landscapes. Our marine ecosystems are also in serious trouble with declining fish stocks, warming waters and estuarine habitats having bad or inadequate status.

Not only has the intensification of agriculture resulted in impacts to habitats, water and greenhouse gas emissions but the forestry programme's focus on predominantly Sitka spruce plantation without adequate ecological assessment on the siting of plantations has put further pressure on protected species and habitats within Natura sites, but also has impacted wider countryside biodiversity. The third impact of course is that rising greenhouse gas emissions globally is also a significant threat to biodiversity here. Unsustainable policies are a zero-sum game for our biodiversity and where the solutions (forestry planting for dairy emissions) can make matters significantly worse.

Ireland's natural heritage is under severe pressure. Many threatened habitats are in danger of being lost, and many species are threatened with extinction. Climate change will affect not just species and habitats, but also impact on people's lives and livelihoods. Nature also has a role in helping mitigate climate impacts and helping communities adapt to a changing climate through carbon sequestration, flood water retention and coastal protection amongst others. Ireland must address these and other issues to ensure future economic, social and environmental sustainability. It must seek to reduce climate impacts, mitigate for existing actions and adapt to changes as required. Ireland must halt the loss and destruction of important habitats in the Irish landscape, whether in designated areas or in the wider countryside. Biodiversity declines must not just be halted, but reversed. Populations of threatened species need to be not only stabilised, but also restored to parts of their former range. Government Policy, backed up by sufficient resources, must prioritise safeguarding all aspects of Ireland's natural heritage and wider environment for future generations.

Existing legislation must be acted upon and, where possible, enhanced or exceeded. For biodiversity, the long-overdue fulfilment of the EU Natura Directives as it relates to agriculture, fisheries and forestry is an essential first step. The full suite of all suitable sites must be designated so they can be fully and properly protected. Within these sites, comprehensive management plans, with targets and objectives and, crucially, the means to achieve them, must be clearly set out. Outside of these sites in the wider countryside, actions are required to protect priority, threatened species and habitats. A properly reformed and re-visualised Common Agricultural Policy (CAP) has a crucial role to play in this ambition. However, to achieve these goals, a reformed CAP must sit within a coherent set of EU policies and be backed up by appropriate national legislation.

Declining bird populations indicate declining health of the natural environment. Birds are indicators of the health of the countryside. Like the "canary in the coalmine", birds can provide early warning systems for the degradation or loss of ecosystems, and the services such ecosystems provide. Birds satisfy many of the criteria of effective indicators, are often used as an early-warning system to detect emergence of environmental problems, and have been widely used to inform decision making and land use management policy including within agricultural ecosystems.<sup>16</sup> The decline in farmland bird populations is telling us that we need to do more to maintain a healthy balance of nature across Irish farmland.

To protect our natural heritage, actions and measures must be underpinned by the best information available. In some cases, we must improve our understanding of threats in order to properly deal with them through new research.

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<sup>16</sup> Gregory, R. D., A. van Strien, P. Vorisek, A. W. Gmelig Meyling, D. G. Noble, R. P. B. Foppen and D. W. Gibbons. 2005. Developing indicators for European birds. *Philos. T. R. Soc. B* 360: 269-288.

Information on how to deliver on objectives and priorities must be available to everyone involved in delivery at all levels (from the Government Ministers to individual citizens), seeking out experts on certain issues where required, and ensuring dissemination is accessible to all.

An integrated monitoring and evaluation programme is essential to ensure that policies and actions are delivering on objectives. Monitoring needs to be at many levels, and must use indicators that reflect the actual impacts of the actions on objectives and priorities. Evaluation must ensure that strengths are highlighted to show the value of the work being done. It must also ensure that any gaps are addressed to ensure a comprehensive delivery.

### **Farmland birds**

Humans depend upon biodiversity for health, wealth and survival. Biodiversity provides the basis for agricultural productivity, providing ecosystem services such as pollination, maintenance of soil fertility and control of crop pests. As well as agriculture benefitting from biodiversity, many species benefit, and are even dependent upon, farming to create and manage the habitats they require. Many semi-natural habitats and the associated flora and fauna depend on sustainable management, in relationships that have evolved over thousands of years. We would have far fewer Yellowhammers if we had no cereal crops, and probably no Corncrakes without late-cut hay meadows. However, changes in recent decades have occurred too rapidly for many habitats and species to adapt, hence the catastrophic losses in biodiversity we are witnessing today.

Ireland's biodiversity is facing very severe threats, as evidenced by declining populations of many bird species and the loss in extent and quality of many semi-natural habitats. In Ireland, many previously common birds have suffered major population and range declines since the 1970's<sup>17</sup>. Declining bird populations indicate declining health of the natural environment. They reflect losses in habitat extent and quality and often equate to losses in ecosystem services which are a valuable asset to Ireland. The decline in farmland bird populations is telling us that we need a sea change to maintain a healthy balance of nature across Irish farmland.

Like the "canary in the coalmine", birds can provide early warning systems for the degradation or loss of ecosystems, and the services such ecosystems provide. Birds satisfy many of the criteria of effective indicators, are often used as an early-warning system to detect emergence of environmental problems<sup>18</sup>. Bird indicators have been widely used to inform decision making and land use management policy including within agricultural ecosystems.<sup>19</sup>

### **Addressing Farmland Bird Declines**

It is well-documented that many modern, intensive farming practices leave little space for birds or biodiversity.<sup>20</sup> Many birds that use farmland habitats that were previously common have suffered major population declines since the 1970's.

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<sup>17</sup> Colhoun K. & Cummins, S. 2013 Birds of Conservation Concern in Ireland 2014-19. *Irish Birds* 9:523-544.

<sup>18</sup> 2010 Biodiversity Indicators Partnership 2010

<sup>19</sup> Gregory, R. D., A. van Strien, P. Vorisek, A. W. Gmelig Meyling, D. G. Noble, R. P. B. Foppen and D. W. Gibbons. 2005. Developing indicators for European birds. *Philos. T. R. Soc. B* 360: 269-288.

<sup>20</sup> Newton, I. 2004. The recent declines of farmland bird populations in Britain: an appraisal of causal factors and conservation actions. *Ibis* 146: 579-600.

As a group, farmland birds have experienced some of the largest population declines and range contractions of any bird species in Ireland. Corn Bunting (a tillage-specialist) has become extinct as a breeding bird in Ireland, with the last confirmed breeding in the 1990s.<sup>21</sup>

The Countryside Bird Survey (CBS) monitors farmland bird populations (as well as the populations of other bird species occurring in the wider countryside). However, it was established in 1998 and as such was arguably too late to pick up many of the more dramatic or long-term declines that have taken place in farmland species, many of which occurred prior to this period, and especially from the 1970s onwards. These earlier declines have been illustrated by bird atlases. They have also been shown in other western European countries that have had ongoing monitoring schemes in operation since the 1970s, such as Britain and France, where similar changes in agriculture have taken place. **The Farmland Bird Index cannot be used in isolation as an indicator of the performance of Irish agriculture. It is misleading as it does not adequately reflect ongoing declines in breeding waders in particular.** This must be rectified.

Figure 1 shows the breeding season range (as expressed by the number of occupied 10km squares in Ireland where breeding was either confirmed or considered probable) from the three breeding bird atlases undertaken in Ireland (around 1970, 1990 and 2010) for the nine lowland farmland bird species that are Red-listed in the Birds of Conservation Concern in Ireland (BoCCI)<sup>22</sup>. For all nine species, the number of occupied 10km squares has at least halved since 1970.

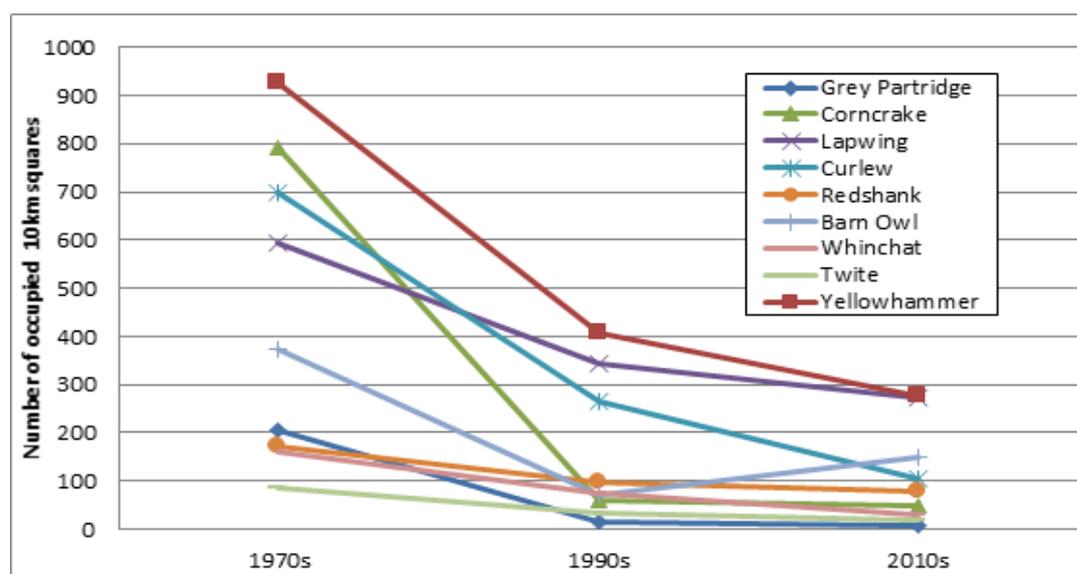


Figure 1: Range (number of occupied 10km squares) in 1970, 1990 and 2010 breeding bird atlases of Red-listed lowland farmland bird species in Ireland.

<sup>21</sup> Lynas, P., Newton, S.F. & Robinson, J.A. (2007) The status of birds in Ireland: an analysis of conservation concern 2008 – 2013. *Irish Birds* 8: 149-166.

<sup>22</sup> Colhoun K. & Cummins, S. 2013 Birds of Conservation Concern in Ireland 2014-19. *Irish Birds* 9:523-544.

## 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

Figure 2: This data shows declines in breeding waders which are experiencing further declines to this day.

There has been extensive research in the UK in particular which has related farmland bird declines to changes in agricultural practices since the 1970s.

Specific causes for change included a variety of practices, including increased use of pesticides and fertilisers, increased mechanisation and loss of hedgerow extent and quality. These changes in agriculture also took place in Ireland over the same period.

Since 1990, only one Red-listed species (Barn Owl) has shown a range increase in the bird atlas data. This is most likely due to greater recording from an intensive project underway since 2006. This work has been focused on locating Barn Owl nesting sites throughout the country, providing Barn Owl nesting boxes in key areas, and studying aspects of the species ecology, particularly the appearance and spread of two introduced prey species.

For other species, the rate of decline between 1990 and 2010 has reduced compared to that between 1970 and 1990. In some cases, these slower rates of decline may be linked to a reduction in the level of agricultural intensification in the last twenty years compared to the twenty-year period before that, when larger areas of farmland would have been agriculturally improved (cleared, drained, re-seeded, etc.). **However, recent declines of previously common farmland birds, i.e. Kestrel and Stock Dove, show that recent intensification in the last 5 years may now be further impacting farmland bird populations<sup>23</sup>.**

In other cases, the reduced rate of decline may be linked to direct conservation action, such as the Corncrake Grant Scheme which was introduced in Ireland in the early 1990s. **However, for some species (such as Curlew, Whinchat or Twite) the rate of decline is such that further extinctions of these breeding species are likely without targeted and sustained intervention, and re-imagining how landscapes will support these species in the long term.**

<sup>23</sup> 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.

## Halting further Breeding Wader Declines

Recent data from the 2007-2011 Bird Atlas confirms that, as a group, breeding waders in Ireland are experiencing significant declines in populations size and range (see Figure 1 for trends for Lapwing, Curlew and Redshank). Many breeding wader species, including Curlew, Lapwing, Redshank and Snipe are largely dependent upon grassland habitats. The decline in many of these species has been linked to various effects of grassland intensification, including drainage, increased use of fertilisers, re-seeding and increased stocking rates<sup>24</sup>. Agri-environment measures that are being trialled in Ireland (and elsewhere) have shown that population declines can be halted, provided that sympathetic grassland management techniques are used.

Many breeding waders are dependent upon farming, such as extensive grazing of upland commonages or machair grassland, to create and maintain habitats that offer all their ecological requirements (e.g. appropriate vegetation for nests, chick-feeding areas, etc.) during the breeding season. Dunlin and Golden Plover are listed on Annex 1 of the Birds Directive; Curlew has recently been added to the IUCN Red List of globally threatened species; Lapwing, Redshank, Curlew and Golden Plover are now on the Red List of Birds of Conservation Concern in Ireland, due to significant population and/or range contractions over the last 50 years, with Snipe and Dunlin on the Amber List because of similar, though less severe, declines.

Although there has been no national survey of breeding waders in the Republic of Ireland, trends have been calculated from the best available data (see Figure 2). As can be seen, these national estimates indicate very serious declines of Curlew, Lapwing and Redshank in particular.

We estimate that there may have been around 5,000 pairs of Curlew in Ireland in the late 1980s. The population has subsequently undergone a decline of 97% in 40 years. The number of breeding pairs remaining in the Republic of Ireland is so low that the species is now facing national extinction.

These declines are confirmed by recent atlas data, which records a 54% loss of occupied 10km squares for Lapwing, 53% reduction for Redshank, 85% decline in occupied 10km squares for Curlew and 34% range contraction for Snipe. The changes are largely attributed to land use changes, in particular those associated with agricultural improvement, including:

- The widespread loss of wetlands; more than 600,000 acres of agricultural land were drained between 1947 and 1997.
- The more intensive management of grasslands; for example, fertiliser use increased by 400% in the second half of the last century.
- Direct loss of marginal upland habitat through, *inter alia*, afforestation. For example, there was a 60% increase in the area of forestry between 1980 and 2000.

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<sup>24</sup> Lauder, C. & Donaghy, A. 2008. *Breeding waders in Ireland 2008: A Review and Recommendation for Future Action*. Unpublished BirdWatch Ireland report to the National Parks and Wildlife Service.

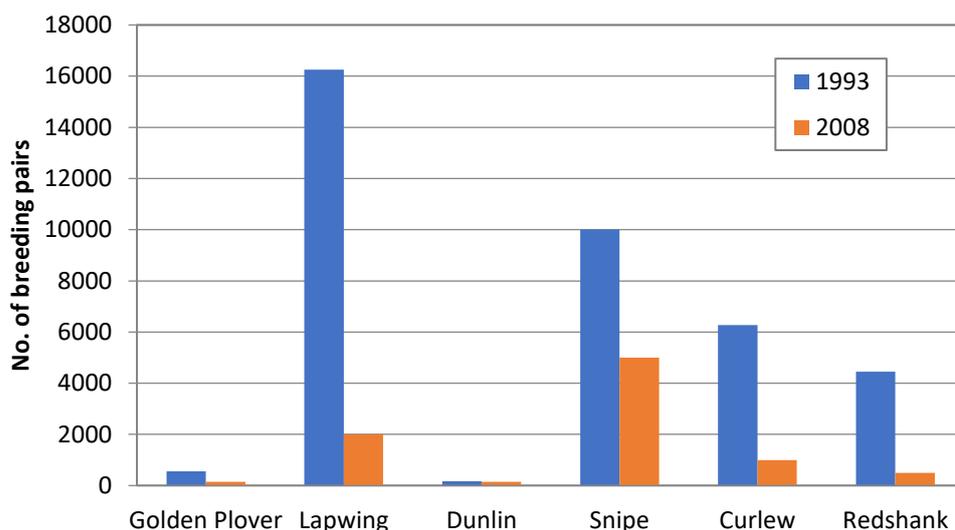


Figure 2: Number of breeding pairs of six key wader species in Ireland between 1993 and 2008 (data from Lauder & Donaghy, 2009)

Unfortunately, the lack of targeted measures for biodiversity and the incentivisation for further uptake of dairy enterprises and the high premia for afforestation are putting further pressure on breeding waders and other species. The current supports systems are not providing sufficient incentivisation for HNV farming or for saving breeding waders and other species.

#### Addressing the loss of farmland pollinators

Pollination, which plays a vital role in the reproductive cycle of flowering crops and wild plants, brings substantial economic benefits to agriculture, tourism and exports, as well as human health and wellbeing. Pollinators are important to farmers who grow pollinator-dependent crops and to those of us who want to grow our own fruits and vegetables. Even if we don't currently grow these crops, we should aim to retain the ability to do so for future generations. We know that 78% of our wildflowers also benefit from being pollinated by insects - without bees we will lose the colourful and distinct natural beauty of our landscape which makes it a pleasant place to live, an attractive destination for tourists, and a selling point for our agricultural produce abroad.

Unfortunately, our pollinators are in decline, and the problem is serious. One third of our 99 bee species are threatened with extinction from the island of Ireland.

If we want them to be here to pollinate crops and wild plants for future generations, we need to manage the landscape in a more pollinator friendly way and create a network of diverse and flower-rich habitats. The All-Ireland Pollinator Plan 2015-2020<sup>25</sup> is supported by over 68 governmental and non-governmental organisations who have pledged to deliver 81 actions to achieve this goal and make Ireland, North and South, more pollinator friendly.

Appropriate land management practices are essential to conserve pollinators in Ireland. Traditional farming was very pollinator friendly because it was naturally flower-rich. There were hay meadows, annual flowers in cereal crops, more wildflowers along lanes and in field corners due to less spraying, more flowers in hedgerows due to less mechanisation and we grew more of our own fruits and vegetables. In the past 50 years, changes in farming have reduced the number of flowers and, therefore, we now have fewer bees.

<sup>25</sup> <http://www.biodiversityireland.ie/wordpress/wp-content/uploads/All-Ireland%20Pollinator%20Plan%202015-2020.pdf>

A reformed CAP must not only make space for habitats that pollinators can use but ensure that there is large scale restoration of semi-natural grassland habitats. Tinkering around the edges in urban areas and encouraging no mowing will not replace the loss of thousands of hectares of semi-natural grassland.

### **Tackling the Loss of HNV farmland and Semi-natural grassland Habitats**

Within the EU it is recognised that the loss of semi-natural habitats associated due to agricultural intensification is a major driver of biodiversity loss. Over 50% of Europe's most highly valued biotopes occur on low-intensity farmland. Of Europe's most threatened habitats and species, 57 types of habitat and 257 species depend on or are associated with farming. Worryingly over 75% of these habitats and at least 70% of the species are in unfavourable conservation status.

The need to protect farming systems in Europe of greatest biodiversity value is recognised as being necessary if the EU is going to halt biodiversity loss under the 2020 biodiversity agreement. These farming systems have been defined by the EU Commission as High Nature Value (HNV):

*“High Nature Value farmland comprises those areas in Europe where agriculture is a major (usually the dominant) land use and where that agriculture supports or is associated with either a high species and habitat diversity, or the presence of species of European, and/or national, and/or regional conservation concern, or both.”* Indeed *“the highest grade of HNV farmland is that which supports the presence of species of European conservation concern.”*

Semi-natural grassland habitats, which are often extensively grazed, are rich in flora and fauna and are hugely valuable to agriculture and wider society. These threatened habitats are one example of threatened HNV habitats in Ireland. Extensively grazed grasslands have many species of seed producing grasses which support a variety of invertebrates and birds. Some semi-natural grassland habitats are protected by the Habitats Directive because they have declined so much in extent across the EU and will be lost unless measures are taken to protect them and ensure that they are managed appropriately. Annex I habitats under the Habitats Directive which are reliant on farming practices include Calaminarian grassland, Molinia meadows, Hydrophilous tall herb, Lowland hay meadows and the priority habitats Orchid-rich calcareous grassland and Species-rich Nardus upland grassland. However, many semi-natural grasslands are not protected by legislation, and are therefore considered vulnerable due to poor conservation status.<sup>26</sup> Ireland is even losing those that are protected as evidence by the 2019 Annex 1 grassland resurvey.<sup>27</sup>

Extensive grazing has maintained these HNV farmed habitats for thousands of years and such HNV farming needs to be maintained and supported if they are to continue to deliver the range of public benefits which they are valued for.

In Ireland, the overall quality of each of the Annex I grassland habitats surveyed in response to Article 17 requirements of the Habitats Directive was ‘Unfavourable – Bad’, emphasising their vulnerability in Ireland and the urgency with which they need to be studied, monitored and offered suitable management support measures.

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<sup>26</sup> O’Neill et al; Irish Semi-natural Grasslands Survey, Annual Report No. 4, November 2013. National Parks and Wildlife Service [https://www.npws.ie/sites/default/files/publications/pdf/ISGS13\\_Western\\_Report.pdf](https://www.npws.ie/sites/default/files/publications/pdf/ISGS13_Western_Report.pdf)

<sup>27</sup> 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.

In most cases, the implementation of appropriate management would improve the condition of the habitat, and assessment scores of Favourable would be attainable in the medium term.<sup>28</sup> The “main threat recorded for Annex I grassland habitats surveyed in 2009 was encroachment/undergrazing, highlighting the urgency with which the problem of land abandonment needs to be tackled.”<sup>29</sup>

Agri-environment measures that are being trialled in Ireland (and elsewhere) have shown that wildlife population declines can be halted, provided that sympathetic grassland management techniques are used.

### CAP economics and environment in Ireland

Data published by the DAFM in the CAP beneficiaries database<sup>30</sup> was investigated by BirdWatch Ireland and reveals an allocation of just over €1.6 Billion to the Irish agri-food sector for all measures under CAP (Pillar 1 and Pillar 2) in 2016. Within this allocation, nearly €365 million (22.7% of the total CAP budget) was drawn upon from Pillar 2 for measures ‘Improving Environment and Countryside’. However, the allocation of these funds across Ireland is very different (see Figure 4 and Figure 5) and is not going to those farmers who need it most to support biodiversity and water.

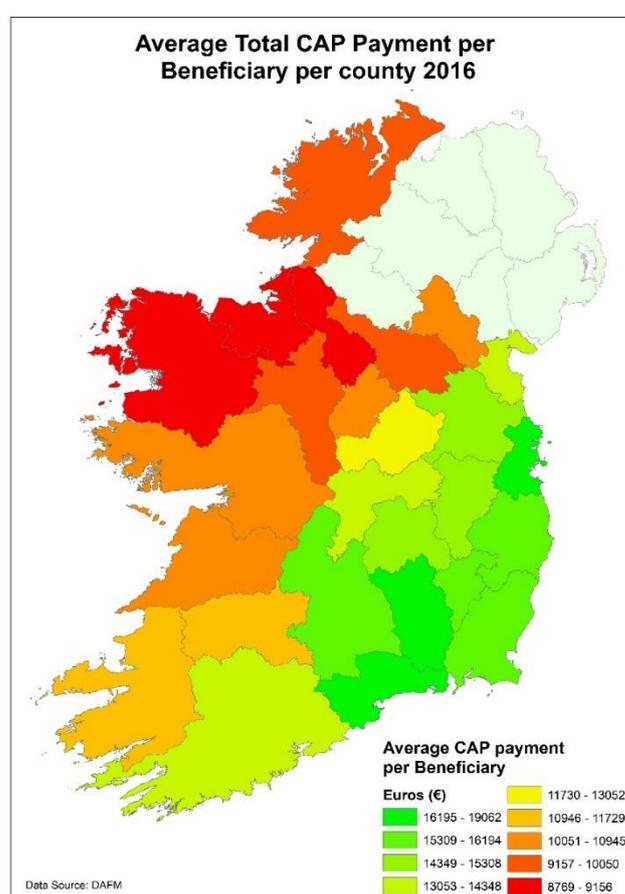
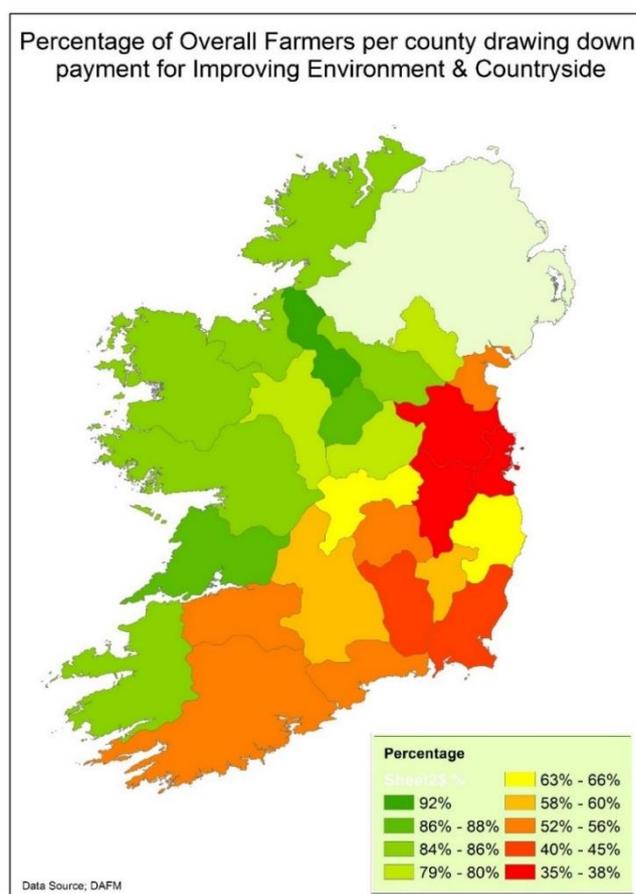


Figure 4: Number of farmers (as percentage) drawing down payments from CAP in 2016 for Improving Environment and Countryside as a percentage of overall farmer numbers (farmer numbers derived from the CSO farm census 2010)

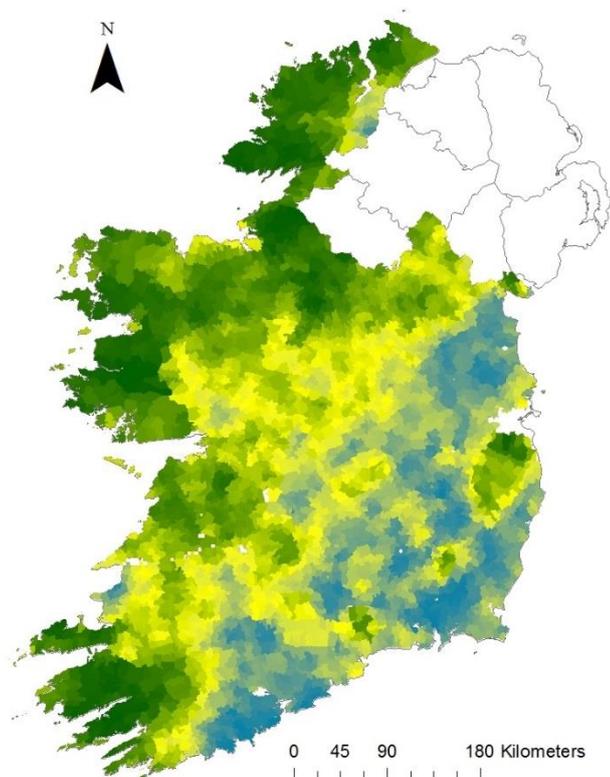
Figure 5: Displays the average total CAP payment received by individual beneficiaries in each county of Ireland for 2016.

<sup>29</sup> O'Neill et al., 2009, from the Irish Semi-natural Grasslands Survey Annual report, NATIONAL PARKS AND WILDLIFE SERVICE ([https://www.npws.ie/sites/default/files/publications/pdf/ONeill\\_et\\_al\\_2009\\_ISGS.pdf](https://www.npws.ie/sites/default/files/publications/pdf/ONeill_et_al_2009_ISGS.pdf))

<sup>30</sup> Data derived from CAP beneficiaries database (<https://www.agriculture.gov.ie/agri-foodindustry/euinternationalpolicy/commonagriculturalpolicy/cap/capbeneficiariesdatabase/>); accessed Jan-18

Figure 4 shows the proportion of farmers drawing down Pillar 2 payments for measures associated with “Improving the Environment and Countryside” in 2016 on a county-by-county basis. The number of farmers in each county is based upon CSO statistics from 2010 (the most recent census data available). The Pillar 2 measures include agri-environment schemes and the Areas of Natural Constraint (ANC) schemes. By contrast, Figure 5 shows the average payment per county to CAP beneficiaries (under Pillar 1 and/or Pillar 2) in 2016. The differences between the two figures are striking, with a clear north-west: south-east divide. The scale of this divide is also substantial, with farmers in Cos Kilkenny and Waterford receiving almost twice the average CAP payment compared to farmers in Mayo, Sligo and Leitrim, yet perhaps only half the proportion of farmers in these areas undertake environmental management measures in comparison to the north-west.

What is even more stark, and when considering the value for money of overall CAP funding, is to compare these economic maps with indicators for the delivery of public goods. For example, Figure 6 shows the likelihood of HNV farming in Ireland. This map uses five variables (Corine landcover data split into three classes; farmed semi-natural land, semi-natural land and non-semi-natural land; average stocking density; hedgerow density; river and stream density and soils diversity) that are available at a national scale to map HNV farmland likelihood at an Electoral Division scale.<sup>31</sup>



*Figure 6: Map showing likelihood of HNV farming in Ireland; green indicates high likelihood; yellow indicates intermediate likelihood and blue indicates low likelihood of having HNV farmland. (Map sourced from IDEAL-HNV (<http://www.high-nature-value-farmland.ie/hnv-distribution/>)).*

<sup>31</sup> This map was downloaded from the IDEAL-HNV project <http://www.high-nature-value-farmland.ie/hnv-distribution/> (accessed March 2018); please see this website for further information on HNV farming, and the uses and limitations of this map.

It is clear that HNV farming occurs where average CAP payments are lowest (e.g. the north-west) and the proportion of farmers drawing down payments to improve the environment and countryside (such as agri-environment or ANC payments) is highest. To meet CAP and EU objectives, funding should be directed towards areas delivering non-market, public goods (such as a healthy environment). It is clear from Figures 5 and 6 that the current CAP model instead directs money to areas where environmental outputs are low.

### Water-dependent Habitats and Species

Diffuse agricultural pollution is known to be one of the greatest pressures on water quality and freshwater biodiversity in Ireland. According to the NPWS only five (11%) of Ireland's water-dependent habitats are deemed to be at Favourable Conservation Status, while only eleven (50%) water dependent species are at Favourable Conservation Status. The loss of high ecological status is a critical conservation issue for Ireland's internationally important populations of Freshwater Pearl Mussel (*Margaritifera margaritifera*) the endemic subspecies the Nore Freshwater Pearl Mussel (*Margaritifera durrovensis*) and the Atlantic Salmon (*Salmo salar*). The Freshwater Pearl Mussel and the Nore Freshwater Pearl Mussel are listed under Annex II and V of the Habitats Directive while salmon are an Annex II species. According to the NPWS both species have bad conservation status with an overall declining trend in conservation status. These species require high water status and agricultural intensification and its associated water quality impacts of eutrophication and sedimentation are having a negative impact on their conservation status. Diffuse pollution to surface waters due to agricultural activities are considered as one of the greatest threats to these species.

The decline in high status sites and the continued decline in water quality generally will be discussed more in the section on Water quality. High-status sites are protected under the Water Framework Directive and many are also protected under the Habitats and Birds Directives due to the presence of important water-dependent habitats and species. Where these designations overlap Ireland is legally required to prevent a deterioration in water quality under both the WFD and Habitats and Birds Directives. The CAP has an important role to play in meeting Ireland's obligations under the WFD. This will involve promoting measures which address diffuse agricultural pollution right across the country and also supporting farming systems which are associated with the protection of High Status Waterbodies and freshwater SACs and SPAs.

The following information highlights our significant concerns in relation to water-dependent birds:

- 40% of our wintering waterbirds have declined in 20 years with changes in land use threatening geese, swans and some wader species.<sup>32</sup>
- 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 Gadwall.<sup>33</sup>
- 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,**

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<sup>32</sup> 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; 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.

<sup>33</sup> 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.

**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 species.<sup>34</sup>**

### **Restoration management of grazed peatland habitats**

Healthy peatlands are valuable to society for the range of services they provide, including water regulation and purification, carbon storage and sequestration and biodiversity. Restoration and conservation management of peatland habitats is widely lauded as a prime example of a nature-based solution to climate change mitigation and adaptation.

Peatland habitats in Ireland are in extremely poor condition in Ireland, with all of the annexed peatland habitats (wet heath, dry heath, blanket bog and raised bog) found to have 'bad' conservation status.<sup>35</sup> While there are a range of threats to peatland habitats, many designated and undesignated peatland habitats are managed by extensive grazing on upland peaty soils. Upland sites with thin peaty soils are sensitive to overgrazing. Once eroded, appropriate grazing levels alone is insufficient to restore the habitats ecological functioning. Eroded peatlands release carbon, impact water quality downstream, result in loss of wildlife and ecosystems services, damage fisheries and increase costs of treatment for drinking water.

Taking even the climate change mitigation ecosystem services associated with peatlands highlights the importance of managing this national asset sustainably. Covering a mere 3% of the world's terrestrial surface, peatlands contain an estimated 550 Gigatonnes (Gt) of carbon. This is equal to 30% of all soil carbon, as much carbon as all terrestrial biomass, and two times the carbon sink of all forests in the world. In Ireland peat soils cover 20.6% of the national land area and contain more than 75% of the national soil organic carbon. It was revealed that near-intact peatlands may actively sequester c. 57,402 t C/year over the whole country. However, damaged peatlands are a persistent source of carbon dioxide (CO<sub>2</sub>) and, at the national level, Irish peatlands are a large net source of carbon.

This is a very real cost to society, in terms of both the loss of valuable ecosystem services as well as actual damage to habitats and fisheries interests. However, peatland restoration, as with afforestation, is not a substitute for cutting the direct greenhouse gas emissions from agriculture.

### **Compliance with Environmental Law**

Although some protection of birds (and other habitats) is afforded within protected areas (Special Areas of Conservation and Special Protection Areas for birds) through the Birds and Habitats Directives, Ireland has struggled to deliver the conservation requirements for most species within protected sites due to lack of implementation of this legislation, failure to link agri-environment schemes adequately with conservation objectives of Natura sites and failure to properly pay for the very special ecosystem services farmers in these areas deliver to the public (carbon sequestration and storage, supporting wild bird populations and many more).

In addition to threats to species and habitats within EU-designated sites (SACs and SPAs), there are a number of requirements in the Birds Directive, the Habitats Directive, and the EIA and SEA Directives to protect species and habitats outside of designated and protected areas.

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<sup>34</sup> 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>

<sup>35</sup> Conservation Status in Ireland of Habitats and Species listed in the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC. NPWS, 2008.

In ECJ Ruling C418-04, the Court found that despite a requirement for Member States to “make a serious attempt at protecting those habitats which lie outside the SPAs” Ireland had not “transposed that provision fully and correctly by taking suitable steps to avoid pollution or deterioration of the habitats lying outside the SPAs. It is thus clear, in the present case, that Ireland must endeavour to take suitable steps to avoid pollution or disturbances of the habitats.”<sup>36</sup> This case is still open.

In pursuing the range of targets associated with government policies, such as the increase of agricultural production, flood control, housing or other development, there will be a general requirement for a change, intensification or industrialisation of land use. Although in some areas on certain land types this may be achieved without any significant negative impacts on the natural environment or on protected species and habitats, there may be other cases where this could result in damage reducing potential for a range of species and habitats to meet the Favourable Conservation Status required by law. It is necessary to develop and implement a range of effective regulatory measures which ensure, beyond reasonable doubt, that such impacts will not occur, before such actions are implemented.

The Habitats Directive, also applicable to Birds Directive, outlines a hierarchy of avoidance of adverse impacts, followed by mitigation of those impacts. Mitigation measures are measures which avoid or reduce the impact of the (proposed) activity or activities to the point where the plans or proposals no longer have a risk of an adverse effect. This procedure is laid out in Article 6 of the Habitats Directive and there is a body of guidance and case law which clarifies the requirements.

It is also important to note that European Court of Justice case law against Ireland in the nature and environment field illustrates Ireland’s legacy of failures to adequately implement Environmental Law including the Nitrates Directive, the Birds Directive, the Habitats Directive and the EIA Directive and Regulations. This situation reflects how Ireland still does not benefit from a cohesive body of legislative instruments, policy and procedures to protect the environment from accelerating degradation and points to the need for assessment of the impacts and measures to mitigate potential impacts at the source of policy developments rather than any approach which might rely on existing Irish law and policy to ensure compliance.

Despite these well-recognised failures on Ireland’s part in implementing nature protection requirements, it is clear that significant short-comings still exist. Within the new Programme for Government<sup>37</sup> there is neither mention of biodiversity conservation nor protection of nature, beyond the very limited measures already agreed and in operation through EU-funded schemes.

In addition, the shockingly poor funding of the National Parks and Wildlife Service and the lack of political will has meant delays in fully designating Natura sites, failure to complete Conservation Objectives, and put in place management measures for Natura sites. This has resulted in Ireland being referred to the European Court of Justice in June 2020. These failures mean that there is inadequate coherence between agriculture policy and protecting important farmed habitats in Natura sites.

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<sup>36</sup> JUDGMENT OF THE COURT (Second Chamber) 13 December 2007; Paragraphs 179-181 of C418-04

<sup>37</sup> [http://www.merrionstreet.ie/MerrionStreet/en/ImageLibrary/Programme\\_for\\_Partnership\\_Government.pdf](http://www.merrionstreet.ie/MerrionStreet/en/ImageLibrary/Programme_for_Partnership_Government.pdf)

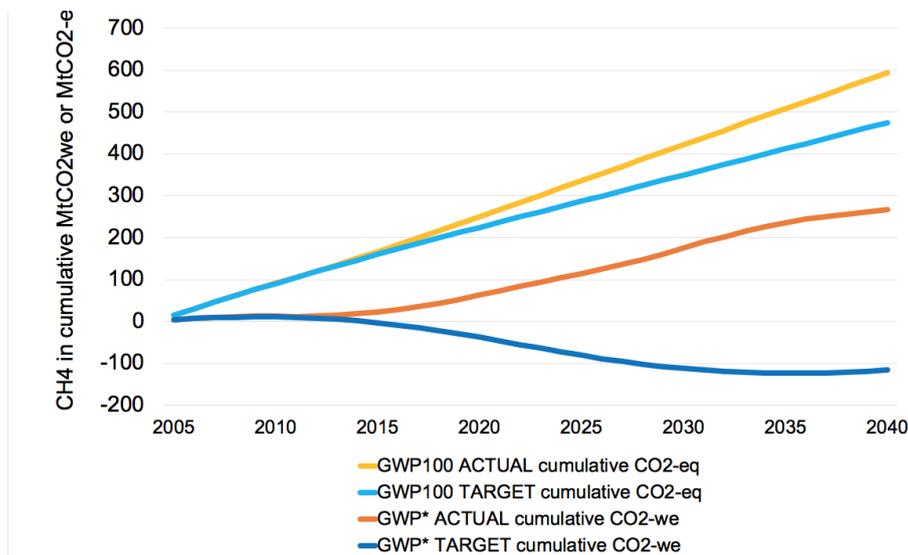
## Climate and Air

### Climate

- Agricultural strategy since 2010 has brought about an ill-advised reversal in climate action policy in Ireland completely undoing prior mitigation achieved in agriculture. This is true whichever GHG metric is used.
- Agricultural policy and climate polluting emissions are remarkably correlated. Changes in beef and cattle numbers and fertiliser inputs are the key drivers. Three distinct trends are evident from 1990 to 2020:
  - 1990–1997: Irish agricultural emissions rose as EU CAP subsidies enabled greater beef cattle and pig numbers, and maintained high sheep numbers. These increases outpaced reduced dairy emissions due to the milk quota.
  - 1998–2011: Nitrogen inputs, cattle numbers and total emissions decreased due to efficiencies within the EU milk quota and extensification. These policies resulted in reducing nitrogen inputs and falling beef and dairy cattle numbers as Teagasc research confirmed at the time<sup>38</sup>.
  - 2012–2020: Due to intentional policy change to promote agricultural intensification and expansion from 2010 onward, nitrous oxide and methane emissions have increased rapidly. Contrary to EU climate and pollution reduction policy, Ireland's Food Harvest 2020 and Food Wise 2025 agri-strategies developed by the agri-food industry and approved by the government halted and reversed earlier mitigation.
- Nitrogen use increased by about 38% from 2011 to 2018 boosting production but also boosting nitrogen pollution (N<sub>2</sub>O, NH<sub>3</sub> and nitrates), and methane emissions increased due to increased grass and feed fed to more cattle..
- Ireland's per capita emissions of methane and nitrous oxide are each three times the EU average, and over 92% of each gas are from agriculture.
- Methane and ammonia emissions are strongly correlated with fertiliser use and cattle numbers because more feed intake results in rising per head annual methane emissions and nitrogen excretion for dairy cattle, which have trended steadily upward from 1990 to now.
- Current international GHG accounting uses the GWP100 metric but recent livestock industry advocacy has pushed for a change to use of the GWP\* metric developed by Oxford Martin group climate scientists rather than GWP100. However, these proponents have failed to present a GWP\* analysis of Irish agricultural methane.

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<sup>38</sup> Humphreys 2008 <http://onlinelibrary.wiley.com/doi/abs/10.1111/j.1471-0307.2008.00372.x>



As the chart above shows, using GWP100 indicates only a difference of 120 MtCO<sub>2</sub>-eq between the actual pathway due to intensification after 2011 and what might have been had mitigation continued to 2020. Using GWP\* shows that mitigation continued to 2020 would have been equivalent to removing 115 MtCO<sub>2</sub> from the atmosphere, whereas increasing Irish agricultural methane emissions since 2011 has been equivalent to adding 265 MtCO<sub>2</sub> to the atmosphere compared to 2005. Therefore, using GWP\* reveals the true extent of intentional policy reversal in agriculture due to strategy since 2011 as being equivalent to adding an additional 380 MtCO<sub>2</sub> to the atmosphere, greatly increasing the resultant warming due to agriculture compared to what it might have been with continued mitigation. This is equivalent to more than 10 years of Irish fossil fuel emissions at the 2018 rate. Therefore, changing the GHG equivalence metric for agricultural methane from GWP100 to GWP\* more starkly reveals the severity of climate action failure that has been driven by the agri-strategies adopted since 2010.

- Agricultural methane reduction in the near-term is critical to Paris-aligned climate action. Cutting agri methane quickly to 2030 would avoid high risk, high cost dependence on afforestation and bioenergy with carbon capture and storage (BECCS), which would have far more severe impacts on land use and on rural society.
- Biogas and anaerobic digestion on farms can only be on a limited basis at farm-only scale. Otherwise, methane leakage and planned increased fertiliser use related to large numbers of AD plants is likely to cancel out any climate benefit. Carbon sequestration (increasing land carbon stocks through afforestation and soil carbon increase) is of extremely limited usefulness to climate policy compared to protecting existing land carbon stocks by blocking drainage on all organic soil pasture, ending all peat extraction and limiting timber harvest. Land carbon is of far lower economic or climate policy value than ensuring that fossil carbon remains unextracted.
  - Carbon sequestration is: highly uncertain so difficult and costly to verify; highly vulnerable to re-release through reseeded, ploughing, fire etc;
  - Moreover, Ireland has very large land use CO<sub>2</sub> emissions due to grassland organic soils and peat extraction being far greater than forestry and wood product removals, therefore any sequestration is merely refilling previously lost land carbon.
  - **Scientifically it makes no sense for CO<sub>2</sub> removals via carbon sequestration to be used as offsets for continued or increasing non-CO<sub>2</sub> methane emissions.**

- It is estimated that at the national level, emissions from Irish peatlands and related activities (e.g. combustion, horticulture) are around 11.01 Mt CO<sub>2</sub> yr<sup>-1</sup> to the atmosphere. In comparison annual C sequestration rates provided by the Department of agriculture are equivalent to 1.56 to 2.39 Mt CO<sub>2</sub> yr<sup>-1</sup> for the first commitment period 2008-2012. Without even considering ongoing emission from carbon rich soils, it is clear that the land use sector in Ireland is a net source of emissions and there is no budget available to offset further agricultural emissions. There is no credible approach to LULUCF In Ireland or the EU unless peat and soil carbon sink issues are addressed. The management and protection of carbon stocks in existing highly organic soils such as those found in the uplands, peatlands, grasslands and native forests would be complementary to the Biodiversity Strategy and Ireland's obligations under the Birds and Habitats Directives and commitments under the National Peatland Strategy.
- Pointing to "jam tomorrow" measures such as highly uncertain carbon sequestration or methane reduction (e.g. seaweed feed additives) is no substitute for methane reduction action now by reducing total nitrogen inputs and cattle and sheep numbers.
- Total nitrogen fertiliser imports in fertiliser and feed should be reduced to 2011 levels by 2025 resulting in greatly reduced intensive cattle numbers and reduced GHGs and nitrogen pollution.
- A national nitrogen budget within a declining cap on total feed and fertiliser reactive nitrogen usage is required as part of a national food policy to ensure nitrogen is used for food crops rather than wastefully used on grass and feed production.
- **Continuing the current strategy direction is aligned with further climate action failure. Therefore, for the benefit of farmers and society the current strategy direction needs take a U-turn toward farm extensification and diversification within rapidly reducing nitrogen fertiliser limits. This cannot happen soon enough to cut emissions of nitrous oxide and methane as quickly as possible.**
- Cutting fertiliser use in line with Farm to Fork will require the acknowledgement of the inherently very low nitrogen and GHG efficiency of milk and beef relative to the much higher food efficiency of food (not feed) crops and forestry.
- Therefore, Farm to Fork will require diversification in Ireland toward tillage, horticultural, supporting farmers to halt the losses and restore wild bird populations, pollinators, semi-natural habitats and native woodland with far more extensive, low input livestock. This trajectory is essential to reduce climate and horticultural impacts. It will protect rural society and health, enable biodiversity recovery and provide a real basis for sustainability, and play a fair part in limiting rather than increasing climate impacts in Ireland and globally.

## Ammonia

The EPA have indicated that the targets in Food Wise 2025 are exacerbating ammonia emissions, with clear links to increasing dairy cow numbers and fertiliser use, and in 2015 Teagasc outlined that significant policy measures would be necessary to implement uptake of ammonia abatement measures, and many could only be implemented at huge cost, and this may constrain agricultural growth.

This conflict between policy ambition and environmental commitments was clearly outlined by Teagasc<sup>39</sup> in 2018, when they outlined that there is a:

‘continuing dilemma between policy driven and industry motivated ambitions to increase agricultural activity levels and commitments to reduce emissions. The resolution of this dilemma is perhaps the most important challenge currently facing the Irish agri-food sector’

Low-emission slurry spreading (LESS) is presented as the solution to reducing ammonia emissions, but it is only one of a multitude of measures which would be necessary to achieve compliance with the National Emissions Ceiling Directive (NECD) ammonia thresholds. DAFM have produced a Code of Good Agricultural Practice for reducing ammonia, which is a range of voluntary measures which farmers can implement, with no clear funding stream to support action. According to previous MACC modelling by Teagasc every single possible abatement measure would need to be implemented to even come close to reducing ammonia emissions sufficiently, and even then it is likely to be impossible. We understand that updated MACC models due this year will indicate that it is technically possible to reduce ammonia in line with our legal commitments, but the practical and financial feasibility of achieving this remains extremely doubtful.

- The priority needs to be laying out a credible roadmap to get Ireland to NECD compliance, including mandatory enforced measures, a clear funding stream, with an immediate ban on splash plate slurry spreading.
- The Ag-Climate plan will not deliver ammonia emissions as suggested in the draft chapter, as it relies on the Code of Good Agricultural Practice, the weaknesses of which are outlined above. The Code of Good Practice is a box ticking exercise, not a credible tool.
- Nor will the Nitrates Directive, with water quality a clear indication of its current failure to prevent nitrate loss to water, and by proxy to air.
- Ireland has been in breach of the National Emission Ceilings Directive for the last 3 years, and the European Commission have assessed Ireland as being at high risk of non-compliance with our ammonia reduction commitments beyond 2030<sup>40</sup>
- Agricultural ammonia poses a significant health threat, responsible for 1/3 of global deaths caused by air pollution, and causes serious health problems globally, including Ireland.
- It is also ecologically damaging for bogs, heaths and other sensitive European protected sites.
- Failing to address ammonia emissions is a significant public health issue, an environmental problem, and a legal failing.

## Water Quality

The impact of agriculture on water quality and status needs to be more clearly articulated in this chapter, so as to fully reflect the findings of the EPA catchment characterisation and Local Authority Waters Programme (LAWPro) catchment assessment. While the current text indicates that agriculture is the most prevalent pressure, and that excess nitrogen “can be linked to our intensive systems of agricultural production,” the significance of agriculture as the main source of water pollution (from nutrients, sediment and pesticides) and the link between agricultural intensification

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<sup>39</sup> Lanigan et al (2018) An Analysis of Abatement Potential of Greenhouse Gas Emissions in Irish Agriculture 2021-2030. Teagasc.

<sup>40</sup> European Commission. Reduction of national emissions of atmospheric pollutants – Review of the EU Air policy - Environment - European Commission [Internet]. 2020 [cited 2020 Jul 3]. Available from: <https://ec.europa.eu/environment/air/reduction/index.htm>

under Food Harvest 2020 and Food Wise 2025 and declining water quality needs to be made more clearly. Furthermore, in the context of the commitment in the Programme for Government to ‘ensure that the State complies with the EU Water Framework Directive’, it must be clearly stated that agriculture is the primary cause of Ireland’s ongoing failure to meet the Water Framework Directive requirements.

We are currently into the second of three river basin management planning cycles before the final WFD deadline of 2027 but, rather than making progress towards meeting our obligations, water quality is actually in decline:

- More than half our rivers, lakes and estuaries (47%; 49.5%; and 62% respectively) are not in a healthy state i.e. they are failing WFD mandatory standards of ‘good ecological status’
- River water quality has declined by 5.5% since the last EPA assessment period<sup>41</sup>
- Also, as stated in draft Chapter 10, numbers of high-status waterbodies have fallen by a third since 2009 (now numbering 20, down from over 500 in the early 1990s).

Given the significant investment in water management through the EPA Catchment Unit and LAWPRO, this decline is especially disappointing and begs the question, why? The most significant change in national policy since the last water quality report is in agriculture. The national herd has increased by 0.74m head since 2010, driven by growth in dairy cow numbers, with a 33% increase in dairy cows since 2010 and synthetic nitrogen imports are also up 38% since 2011.

The EPA have expressed explicit concern about the link between increased agricultural intensification and increased water pollution (from nitrates), especially in the South and South-East of the country. According to the latest EPA Water Quality Report<sup>42</sup>, “Since 2013 nitrogen emissions to water have increased as both cattle numbers and fertiliser use have increased” and “the increase in nutrient concentrations, which coincide with areas impacted by agricultural activities, are a particular concern.”

This link between declining water quality and agricultural intensification, needs to be stated as a clear and urgent issue, which must be addressed as a priority in the Agri-Food Strategy.

This issue also highlights the importance of Agri-Food 2030 being brought fully in line with the EU Green New Deal, in this case in relation to nutrient inputs. This must include, as a binding target, a national reduction in the use of fertilisers by at least 20% by 2030 and a reduction of nutrient losses by 50%.

While the draft chapter identifies sediment as an issue, this needs to be elaborated, including identification of what activities are causing it and the policy drivers behind these. Sediment loss is caused by overland flow, but also by degradation, drainage and physical alterations to waterbodies and riparian wetlands.

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<sup>41</sup> The decline is between the EPA water status assessment period 2010-2015 reported in EPA (2016) ‘Water Quality in Ireland 2010-2015’ (available here: <https://www.epa.ie/pubs/reports/water/waterqua/waterqualityinireland2010-2015.html>)

and the 2013-2018 assessment period reported in EPA (2019) ‘Water Quality in Ireland 2013–2018’ (available here <https://www.epa.ie/pubs/reports/water/waterqua/waterqualityinireland2013-2018.html>)

<sup>42</sup> EPA (2019) ‘Water Quality in Ireland 2013–2018’. Wexford <https://www.epa.ie/pubs/reports/water/waterqua/waterqualityinireland2013-2018.html>

Catchment assessments by the Local Authority Waters Programme (LAWPro) have found that widespread unregulated wetland and riparian drainage and other modifications to river systems (under the WFD, classified as ‘hydro-morphological alterations’) carried out on agricultural land are a significant issue. They also report that such drainage is linked in some areas to farmers increasing productive land as they move into more intensive dairying.

In addition, physical alterations to waterbodies carried out by agricultural landowners are also a pressure in their own right and should be identified as such in Chapter 10. These include altering the ecology of the river bed and riparian zone and thus impacting aquatic ecology, in addition to altering the flow and hydrological regime of the river, which impacts the ecological status of the waterbody.

Agri-Food 2030 must also identify the threat posed by agricultural pesticides on water ecology and also on drinking water quality, e.g. exceedances of MCPA permitted levels have been identified in 27 Irish Water drinking supplies according to the EPA Drinking Water report, published this month<sup>43</sup>. In this regard also, Agri-Food 2030 must be brought in line with the EU Green New Deal and include reduction in the overall use and risk of chemical pesticides by 50% by 2030.

The text currently references the importance of ‘the right measure in the right place’. However, it then goes on to explain that the GAPP regulations are the main measure to protect water from agricultural sources, outlining the provisions of these regulations to achieve this and also recent changes to the regulations. However, there is a contradiction here which needs to be addressed in the final text:

- The inadequacies in the GAPP regulations in addressing water pollution from agriculture should be clearly identified, including the fact that they do not provide for implementing the ‘right measure in the right place’ because they take only an overarching national approach and do not include interception measures tailored to on-farm physical and hydrological conditions, and they permit the spreading of slurry on fields with Soil P 4, even though this poses a risk to receiving waters.

ASSAP is cited as one of the initiatives taken “to try to address agriculture’s contribution to declining water quality” and that “it is hoped...that positive results will be seen ..”. It is accurate to use such circumspect language. It should furthermore be clarified that there is no evidence yet of water quality benefits from ASSAP, nor even any comprehensive information on how many measures have been implemented. The need for an evidence-based assessment of the efficacy of ASSAP in achieving WFD standards in impacted waterbodies should be identified.

Finally, while the ‘right measure in the right place’ approach is appropriate in particular for phosphorus where the pathway is the most critical factor, it is the source that is the most significant factor when it comes to nitrogen. In both cases, but particularly for nitrogen, it must be ensured that at the national level, the volume of manure being produced by the national herd does not exceed that which can be safely land-spread or otherwise managed in a way that does not cause water pollution or environmental damage. When taking into account the ‘assimilative capacity’ of the area of land available for land-spreading, excluding the proportion which is unsuitable due to nutrient loss susceptibility, the evidence does not yet exist that the volume of manure produced nationally under Food Wise 2025 is environmentally sustainable from a water quality / WFD perspective. This needs to be determined in order to inform Agri-Food 2030.

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<sup>43</sup> EPA (2020) ‘Drinking Water Quality in Public Supplies 2019’ Wexford. Available here: [https://www.epa.ie/pubs/reports/water/drinking/DW%20Quality%20in%20Public%20Supplies%202019\\_web.pdf](https://www.epa.ie/pubs/reports/water/drinking/DW%20Quality%20in%20Public%20Supplies%202019_web.pdf)

In particular, as committed to in the Programme for Government, an urgent assessment of impacts of the Nitrates derogation on water quality is needed before Agri-Food 2030 can be finalised.

As part of this, the following questions must be answered:

1. What impact, if any, has the application of derogations had on water quality in the catchments of derogation farms to date?<sup>44</sup>
2. Where are the derogation farms and how is this broken down by county and catchment?
3. What impact will the further expansion in derogation farming have on the state of Ireland's waters generally, and on the status of water-bodies in catchments of derogation farms?
4. Does the granting of the derogation have an impact on the meeting of Nitrates Directive and Water Framework Directive (WFD) obligations?
5. How is nutrient loss from derogation farms prevented when no consideration of physical and hydrological conditions, nor transport interception measures, are included in derogation stipulations?

On-farm best practice techniques are subsidiary to this fundamental issue. The effectiveness of on-farm efficiencies and technical solutions will be limited if taking place within a flawed system where there may well be a fundamental mis-match between the volume of organic nutrients in the form of slurry and the ability of the national agricultural land-bank to absorb it.

### **Marine ecosystems and fisheries**

It is positive that the Background paper on Environmental Sustainability acknowledges a number of challenges relating to environmental protection in the marine environment. The Marine Protected Areas are not mentioned. However, these could be included as an opportunity, as if any activity in those sites is restricted or eliminated, it can support ecosystem restoration.

- The Background paper states that “The Landing Obligation was also fully implemented in 2019. The objective of the Landing Obligation is to eliminate the wasteful and unsustainable practice of discarding fish which will, over time, lead to an improvement in the state of the stocks.” We do not agree with this statement. There is ongoing failure of the State to end overfishing and to implement the landing obligation properly. These, in addition to having a penalty points system in place are far bigger constraints on our fisheries than the Conservation Objectives for Natura 2000 sites.
- This document hasn't identified the opportunity to greatly increase the value of our fisheries by restoring fish stocks and managing them sustainably.
- The whole outlook is focused on the profitability of the pelagic sector and the producers, with very little consideration given to the inshore sector. The ban on large trawlers in the inshore area has created an opportunity for better management moving forward. Why isn't this identified as a priority to create jobs where they are most needed?
- The Strategy seems driven to shoehorn more Pacific Oysters into sensitive bays around the coast; more focus should be put into recovering stocks like Celtic Sea Herring, which have collapsed.

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<sup>44</sup> We note that the Commission Implementing Decision requires the generation of such data, including in map form (European Commission (2018) COMMISSION IMPLEMENTING DECISION (EU) 2018/209 of 8 February 2018 granting a derogation requested by Ireland pursuant to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources Brussels.

- According to research carried out in 2016 on the benefits of pathways to MSY for EU Northeast Atlantic fisheries, the study found achieving MSY for fish stocks in the Northeast Atlantic fisheries could generate about €4.64 billion in operating profit annually. From an Irish perspective, the economic benefits relative to 2012-14, of rebuilding EU fish stocks to MSY could provide Ireland with an additional 200,000 tonnes of fish landings annually. This would generate an additional €270 million in earnings, potentially supporting 2,200 new jobs.
- The Irish Government and the EU have failed to meet the Common Fisheries Policies 2020 legal deadline to end overfishing. At last year's December Council 46% (51 out of 110) of Total Allowable Catches (TACs) agreed were in excess of scientific advice. According to BirdWatch Ireland's own analysis of TACs for which Ireland has a relative stability share 51% (23 out of 45) exceeded the best available scientific advice for 2020. This increases to 57% (8 out of 14) when only the TACs which Ireland has a share of <33.33% are taken into consideration. This increases again to 62% (8 out of 13) when the only the TACs which Ireland has a share of <40% are taken into consideration. This suggests that TACs for which Ireland has a greater influence on TAC setting are managed less sustainably than the average across the NE Atlantic, providing further evidence of the negative role the Irish government has played in driving overfishing at EU negotiations.
- Since the reform of the CFP, progress has been made in the management of some commercially important stocks of relevance to Ireland, however the speed and scale of progress has been insufficient. Less commercially important stocks such as data limited precautionary approach (PA) and bycatch species continue to be overfished, as do several commercially important Herring and Cod stocks. The Irish government should follow the relevant ICES headline advice for MSY and PA stocks when setting TACs.
- Ireland has a relative stability share in a high proportion of the least sustainably managed stocks in the North East Atlantic. For example there are eight stocks which Ireland has a relative stability share that have zero TAC advice for 2020 (Herring 5b, 6b & 6aN; Herring 7bc, 6aS; Herring 7h-k; Cod 6a, 5b; Cod 7b-c, e-k, 8, 9 & 10 & 34.1.1; Whiting 7a; Blue Ling 2 & 4; Plaice 7hjk).
- According to the North Western Waters (NWWAC) Choke Identification Tool 2019 there are ten stocks which are classified as high risk chokes and Ireland has a relative stability share in all of them. These overfished stocks constrain fishing and threaten to close entire fisheries due to their poor management (Haddock 7b-k; Cod 7e-k; Sole 7hjk; Plaice 7hjk; Cod, Haddock and Whiting 6a; Cod 6b; Cod 7a and Whiting 7a).

The ongoing failure of the Irish Government to ensure adequate monitoring and control of commercial fisheries in Ireland EEZ needs to be urgently addressed. We would urge the relevant authorities to support the Commission in the implementation of REM on vessels, including CCTV. Greater effort must also be made to improve data collection for PA stocks.

### **Forestry and afforestation**

Under the Irish Forestry Programme 2014-2020, a target has been set to increase Ireland's forest cover area from 10.7% to 18% by 2046. This, it is projected, will require over 46,000 ha of land to be afforested by an estimated 25,000 landowners. Between 1990-2015 Ireland has had the highest rate of afforestation in the EU (4.6%).

Given the challenge of land mobility and the demand for agriculturally productive land the expansion of forestry in Ireland is being targeted within areas with marginal farmland. These areas often coinciding with peat soils and located in the Ireland uplands and western counties which due to a range of physical and socio-economic factors have avoided the scale of agricultural intensification which has occurred in other parts of the country.

These areas are often dominated by extensive grazing and tradition forms of land management. Extensive forms of grazing in particular are positively correlated with HNV farming.

The afforestation of these areas is leading to the irreversible loss of HNV farmland and the exacerbation of many of the negative socio-economic issues such as emigration and ageing demographics which have historically plagued these communities. Farming is the backbone around which many of these marginal communities have evolved and their loss due to Government policies and capital investment is a serious threat to the social cohesion of communities right across the West of Ireland. The CAP investment must do more to support HNV farmers who provide a vast wealth of public goods and services but receive a fraction of financial support (see above BirdWatch Ireland investigation into CAP beneficiaries).

This drive to afforest vast areas of farmland across the country in combination with the ongoing intensification of agricultural land will result in one of the most dramatic changes in land-use on the island in centuries. Invariably the scale of the social and environmental changes will have far reaching consequences for biodiversity. Looking forward, whether forestry in Ireland will have a net positive or negative influence on biodiversity will ultimately depend on a range of factors, such as where afforestation takes place, the model of forestry used and the environmental safeguards that are implemented. According to the National Parks and Wildlife Service (NPWS) in their reports to the European Commission on the status of EU protected habitats and species including birds, forestry and afforestation a significant threat and pressure on habitats and species protected under the Habitats Directive and the Birds Directive. According to the Environmental Protection Agency forestry is the greatest pressure nationally on our last remaining lakes and rivers of high ecological value. More information can be found in BirdWatch Ireland's Greening Irish Forestry report.<sup>45</sup>

The indications are that unless there's a shift in government policy then the predominance of non-native plantations and the use of clear-felling within Irish forestry will continue. That is to say that plantations of non-native conifers will be planted on marginal farmland and clear-felled. The expansion of forestry will therefore exacerbate the accepted negative biodiversity and water quality impacts associated with this model of forestry on a regional and catchment scale. One of the most pressing concerns for the Environmental Pillar is that afforestation is and will continue to be strategically targeted on marginal agricultural land, particularly in areas where low intensity land uses such as hill farming have persisted for generations. This marginal farmland contains some of the important remaining areas for biodiversity in the country, including high-status waters bodies, protected semi-natural habitats, important sites for ground nesting birds including red-listed species and High Nature Value farmland (HNVf).

Commercial forestry in its current form is not compatible with these sites. In order to ensure that Irish forestry is sustainable moving forward we must ensure that the right trees are planted in the right places and are managed appropriately. There is a need for a root and branch reform of the current forestry model. We need to reconsider where afforestation takes place, the model of forestry used and the environmental safeguards that are implemented. As a priority the government must take urgent steps to ensure full compliance with Irish and EU law and not implement the specific recommendations of the MacKinnon Report that would undermine environmental oversight and public participation. The State must not create, or worsen the situation for biodiversity in Ireland, by trying to tackle a climate change. Emissions cuts in agriculture are a must in the first instance.

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<sup>45</sup> <https://birdwatchireland.ie/publications/birdwatch-ireland-2019-greening-irish-forestry-report/>

## **Aquaculture**

While the draft chapter outlines that the six high-level principles (Responsible Planning; Ecosystem Protection; Science-based Approach; Compliance; Openness, Transparency & Accountability; Industry Best Practice) will provide a broad direction to guide the ongoing development of sustainable aquaculture, we would observe that many of these principles are not currently implemented, and relying on these to provide for sustainable development of aquaculture is ill-advised.

### **Compliance: Appropriate Assessment and EIA**

- Environmental NGOS have previously highlighted failures in the Appropriate Assessment (AA) procedure in a multitude of submissions on aquaculture referrals. The main issue is that the DAFM are utilising a 15% disturbance threshold, which they attribute to advice from the NPWS. There is no apparent legal basis for allowing for a threshold of disturbance in a Natura site, and despite this being highlighted numerous times, the DAFM continues to licence applications based on this rationale. In accordance with Article 6(3) of the Habitats Directive, a licence must be refused unless an adverse effect on the integrity of the site can be ruled out beyond reasonable scientific doubt.
- In Case C258/11 Sweetman, the loss of approximately 1% of the protected habitat was considered to be an adverse effect on the integrity of the site. As a result of the assumption in almost all of the AAs for aquaculture licences whereby a disturbance of up to 15% of the site is permissible, there is a lack of sufficient evidence to satisfy the test on absence of adverse effect. This is a major flaw in the aquaculture licensing process, and one that, in our opinion, is in contravention of the Habitats Directive.
- We have seen multiple examples where the AA has highlighted a lack of necessary data, generally speaking it is data on birds, but the aquaculture licences are granted regardless. We would consider this lack of compliance with the Habitats Directive to be a very serious legal issue, and one that undermines the sustainability of the whole aquaculture sector.
- In addition to that, in regard to Environmental Impact Assessment (EIA) there is a general lack of EIA screening for shellfish aquaculture based on the rationale that it is extensive, as opposed to intensive. We believe that under Article 2 of the EIA Directive, and Annex II Class 1 which refers to intensive fish farming, this distinction is not valid, and these licences should indeed be screened for EIA, particularly in light of their cumulative impact.

### **Public participation/transparency/openness**

There are failings in the public participatory requirement of the aquaculture licensing process, as outlined below:

- We have received reports from several of our members in regard to the advertisement of aquaculture licence applications occurring in the local newspaper with the lowest circulation, resulting in many communities being unaware of these applications. Should the licence or licences then be granted, the costs involved in taking an appeal to ALAB would quickly become prohibitive if it is necessary to appeal 20-30 licences in a single bay, which, in our experience, can frequently be the case.
- This is in contravention of the requirements of the Aarhus Convention. Articles 9(3) and (4) of the Aarhus Convention entitle individuals or organisations to access to both judicial and administrative review procedures on a basis that is fair and equitable and not prohibitively expensive. Case C203/15 Lesoochranarske and the cases that follow on from it, including in an Irish context Case C-476/16 NEPPC, all emphasise that Aarhus is a fundamental part of European law and that national procedural rules must be interpreted in accordance with it.

- It is our opinion that the current system is not sufficiently allowing for effective public participation. We would highlight that, given that 600 licensing decisions have been fast tracked through the system in the last two years, it is a full time job for anyone to review the licence applications, and assess the ramifications of licensing decisions on foot of those.
- While this fast tracking was seen to be of benefit to aquaculture operators who have applied for new licences, it was very much to the detriment of public participation, by means of overloading the system making it very challenging for both statutory consultees and the public to review the applications and decisions and as such to participate in a meaningful way.

#### **Suggested priorities for sustainable aquaculture:**

- For effective public participation, there should be a thorough review of the current practices and requirements for public consultation, and appeal procedures.
- The establishment of an ecological carrying capacity should be implemented. This assessment cannot be based on the MSFD GES assessment, as it does not provide the necessary information to determine ecological impact.
- There should be an explicit requirement for compliance with the relevant EU Directives, with a review of the current legal compliance within the system, in particular with the Habitats and EIA Directives. The current method of undertaking appropriate assessment of bays and not individual aquaculture operations is not in line with the Habitats Directives as it is incapable of providing ‘precise and definitive findings’ of assessment of impacts and which the European Court of Justice jurisprudence requires.

#### **The Bioeconomy**

EU Bioeconomy policy has created an exaggerated expectation at the potential of bioenergy and biobased material like corn starch or cellulose to replace fossil fuel energy and petroleum-based materials. This is reflected in the Irish Bioeconomy strategy adopted in 2018 (link to Environmental Pillar member An Taisce’s submission on this strategy).<sup>46</sup>

#### **Transitioning to Sustainable Food production -Content for a new Agri-Food 2030 policy**

*“We’ll never grow our way into food security: the more food we produce, the more we’ll waste and over-consume, degrade the environment and issues of equity and access will remain. To solve these problems, we need to recognise local and planetary boundaries and grow food sustainably within them...”*

2014 Tim Benton, *Global Food Security Champion*

Ireland’s new agri-food policy must facilitate the transition of Ireland’s food and farming system to environmental, social and economic sustainability across all sectors, in particular by:

- ensuring sustainable production, processing, trade and consumption of food and other products **without harm to the environment** in Ireland and elsewhere, in line with the Sustainable Development Goals
- providing adequate financial support for biodiversity on farms
- creating conditions for healthy, transparent and informed consumption of food
- minimising food waste and progressing the circular economy

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<sup>46</sup> <https://assets.gov.ie/2523/301018150640-783418f89ed44a12a8a744077ea88083.pdf>

## Less meat and dairy consumption

Consumption has been identified as one of the most important drivers of pressure on biodiversity. In particular, what, and how much we eat or consume directly affects what, and how much is produced. In Europe and globally, food production is driving biodiversity loss, environmental pollution and depletion of essential natural resources. The future food production in Ireland must take account of changing trends in diets and moves to more vegetable/plant-based diets as well as reducing the amount of meat and dairy consumption.

Debates about how to feed the world, or how to ensure ‘food security’, are often dominated by the assumption that food production must be increased in order to address current global hunger and malnutrition and to feed future generations. Such assumptions are used to justify further intensification and expansion of the unsustainable ‘high input, high output’ model, and, in Europe at least, the exporting of meat and dairy to meet growing global demand.

The EU Farm to Fork Strategy states, “While about 20% of the food produced is wasted, obesity is also rising. Over half of the adult population are now overweight, contributing to a high prevalence of diet-related diseases (including various types of cancer) and related healthcare costs. Overall, European diets are not in line with national dietary recommendations, and the ‘food environment’ does not ensure that the healthy option is always the easiest one. If European diets were in line with dietary recommendations, the environmental footprint of food systems would be significantly reduced.”

Globally, enough calories to feed the world’s population are already produced,<sup>47</sup> but what is produced is not shared equitably. In 2017, nearly 821 million people were classed as undernourished, while 672 million adults were classed as obese (as were 38.3 million children).<sup>48</sup> The picture has been further complicated by the coexistence of undernutrition with obesity which is commonly referred to as the “double burden” of malnutrition.<sup>49</sup> Simply producing more will not solve the political and economic issues that are already preventing us from feeding, and nourishing, the world today.

The influential 2018 report by the RISE foundation<sup>50</sup> finds that the vast majority of EU countries would need to reduce their stocking densities—in many cases to less than 30% of their current level—to stay within safe operating space in terms of climate change, nitrogen and public health. The report classified sustainable stocking density limits for achieving biodiversity benefits as between 0.5 and 1 livestock units per hectare.

The industrial food chain (production, processing, distribution etc) is responsible for negative human health outcomes, excessive food waste, and poor standards of animal welfare. Citizens and the state can no longer justify supporting this model financially and politically. Ultimately the solution to these issues lies in a change to the farming model as well as educating consumers to create the market demand for sustainable food. Our current consumption patterns are simply not viable and farmers and consumers must work together to instigate the change that is needed. This should underpin all facets of the new CAP arrangements. Any other short-term measures looking to address food waste or anti-microbial resistance will inevitably fail to justify the taxpayers money invested in its implementation.

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<sup>47</sup> <http://www.fao.org/docrep/x0262e/x0262e05.htm>; <http://www.fao.org/docrep/005/AC911E/ac911e05.htm>

<sup>48</sup> [http://www.fao.org/fileadmin/templates/faoitally/documents/pdf/pdf\\_Food\\_Security\\_Cocept\\_Note.pdf](http://www.fao.org/fileadmin/templates/faoitally/documents/pdf/pdf_Food_Security_Cocept_Note.pdf)

<sup>49</sup> <http://www.fao.org/3/I9553EN/i9553en.pdf>

<sup>50</sup> [http://www.risefoundation.eu/images/files/2018/2018\\_RISE\\_LIVESTOCK\\_FULL.pdf](http://www.risefoundation.eu/images/files/2018/2018_RISE_LIVESTOCK_FULL.pdf)

In relation to health, it is worth emphasising the risks from anti-microbial resistance, and the industrial pork and beef production systems which use substantial amounts of antibiotics as a matter of course that are contributing to this problem.

In order to meet requirements to support biodiversity, good water quality and address climate breakdown, Irish livestock agriculture needs significant reform. The current commodity driven food system based on high volume-low prices is serving no one. It is contributing to food waste, unhealthy diets and significant environmental damage.

### **Focus on supporting extensive grazing systems which support high nature value habitats and on organic food production in the next Agri-Food Strategy**

There urgently needs to be a focus away from “conventional” chemical and high-input agriculture towards regenerative, agroecological approaches which integrate farms into functional ecosystems and increase biodiversity, landscape and human health, and legitimise the subsidies paid to farm production in the eyes of the public. The current predominant research focus of Teagasc on increasing production levels from existing farming practices, and grass-based systems in particular, needs to be examined to determine overall value for money, particularly in light of current agricultural systems failing to meet existing needs to reduce greenhouse gas emissions, protect water, air and soils, enhance food security and conserve biodiversity. **Maximising production at all costs (and irrespective of environmental damage) is no longer appropriate given the huge gap that exists between current agricultural production systems and the sustainability of the environment on which it depends.** This is particularly the case with greenhouse gas emissions, where reducing total emissions is the only option to meet climate targets. Ultimately, a revised agriculture research programme is urgently needed in Ireland where the requirements for a vision for agriculture in 2030 can be delivered. **Maintaining the status quo of production and output-based research cannot continue as this not only fails to address urgent environmental needs but is making the problem worse.**

The reduction in overall volumes of livestock production should go hand in hand with a shift to extensive grazing. Grazing at low stocking densities has a role to play in maintaining many High Nature Value (HNV) systems. Grazing is important for healthy grasslands that create favourable habitat for many species (e.g. species such as the starling, Hen Harrier, and Red Grouse which rely on open areas, others such as curlew and lapwing require tussocky swards). A tailored approach is needed to provide a diversity of habitats for different species. In some areas this may mean reducing stocking density, but in others it may require an increase in livestock numbers to address under-grazing. The shift to organic food production is supported by EU targets. Diversification of farm activity is also critical.

Going forward, food production in Ireland must have quality rather than quantity as an objective in order to balance social, economic and environmental needs. Increasing quality and aiming for added value markets (such as organic, locally-branded or artisan production) as opposed to higher volume would reduce stocking pressure on farms and allow for the development of mixed farms, rotational grazing, increased agroforestry and other wildlife friendly measures. Specifically, much work needs to be done in Ireland to explore and promote non-livestock farming systems, particularly to establish which plant crops that are best suited to the Irish environment (e.g. fruit, vegetables, etc.). Furthermore, farming in Ireland should be limited to the carrying capacity of the Irish ecosystem instead of supplementing fertility with artificial fertilisers and feeds with imported GM Soya and other feeds. Not only are these often themselves the product of highly unsustainable farming practices and deforestation overseas, but such an approach would reduce sectoral risks from, for example, the current fodder crisis.

## Risk Management

The current focus on farming in Ireland seeks to increase production levels and specialise production methods. Both these carry substantial risk. In the case of specialisation, farmers may be limited to a single market and the volatility intrinsic to individual, specialised markets (e.g. dairy) whereas traditionally they may have been selling into multiple markets (e.g. beef and dairy). Putting all the eggs in one basket in terms of commodity production, and with price volatility evident on agricultural commodity markets as seen in recent years, support for diversification of farming should be encouraged rather than advised against.

Additionally, a focus on quality rather than quantity in production and marketing in Ireland, as well as bringing production more in line with the carrying capacity of Irish ecosystems would mean less risk and instability. Farmers would not be forced to constantly increase production and enter into increasing debt and risk to increase land holdings, acquire stock or feed for them. Risk management should mean avoiding dependence on imported feeds, such as has been seen in the recent fodder crises (and avoidance of such risk would also have positive environmental outcomes), avoiding increased farm debt, ensuring prices paid to producers cover the costs of production, and diversification of the farm economy.

With many small farmers in Ireland, it is essential to focus on supporting the farm family rather than solely the agricultural business, which gives preferential treatment to the larger factory farming, which also deliver fewer public goods and place increased pressure on the environment. A failure to focus on the wider rural economies, as can be seen throughout Ireland, places pressure on these areas to support, keep or attract young people.

Finally, the supports already available to farmers through Direct Payments provide a safety net to income, and essentially operate as a risk management tool; diverting CAP funds to other risk management measures will put undue pressure on an already over-stretched CAP (and EU) budget.

### Encouraging young farmers into farming

There is an imminent crisis in farm succession in Ireland, with an ageing farming population and an exodus of young people from rural areas. In order to reverse this trend, there is a need to open up access to land for landless young people in Ireland who wish to engage in farming. The alternative will see a huge drop in the number of small-medium sized farms which make up the main structure of rural economies and social life.

To support young farmers, who will be essential to the re-imagining of the CAP and the future of farming in Ireland, there must be a concerted effort to invest in training and education opportunities. These investments in education and training must focus on ensuring that farming in Ireland is sustainable, **and young farmers must be supported to transition into sustainable agriculture and one in line with redefining agriculture in Ireland to be in line with good water quality, significantly reduced greenhouse gas emissions and where farmland birds and other biodiversity is restored.** However, the first part of this process must be to listen to young farmers to see what they want, what they need, and how this can be realised to maximise benefits.

In addition to supporting young farmers deliver sustainable agriculture, there also needs to be investment in the fabric of rural Ireland to ensure that young farmers want to stay and work in these areas. This includes suitable infrastructure such as broadband, but also social supports (such as rural transport). Additionally, there needs to be promotion of farming as a career to make it attractive to new, younger entrants. The link with food production, and particularly quality, artisan or environmentally or socially-sustainable production systems may be useful mechanisms to do this.

Similarly to supporting young farmers, action needs to be taken to support women in the agri-food sector in Ireland. This includes supporting women entering farming as well as developing and supporting opportunities within the CAP for artisan food processing and related markets, that would support wider diversification on individual farms to encourage greater resilience within farming families.

### **Research and innovation**

There urgently needs to be a focus away from “conventional” chemical and high-input agriculture towards regenerative, agroecological approaches which integrate farms into functional ecosystems and increase biodiversity, landscape and human health, and legitimise the subsidies paid to farm production in the eyes of the public. The current research focus on increasing production levels from existing farming practices, and grass-based systems in particular, needs to be examined to determine overall value for money, particularly in light of current agricultural systems failing to meet existing needs to reduce greenhouse gas emissions, protect water, air and soils, enhance food security and conserve biodiversity. Maximising production at all costs (and irrespective of environmental damage) is no longer appropriate given the huge gap that exists between current agricultural production systems and the sustainability of the environment on which it depends. This is particularly the case with greenhouse gas emissions, where reducing total emissions is the only option to meet climate targets. Ultimately, a revised agriculture research programme is urgently needed in Ireland where the requirements for a vision for agriculture in 2030 can be delivered. Maintaining the status quo of production and output-based research cannot continue as this not only fails to address urgent environmental needs, but is making the problem worse.

Advisory organisations should play a positive role in farm education and in diversification. Support needs to be given to specialist advisors across the range of topics facing the agri-food sector, including environment, but also (for example) advisory services to encourage the formation of new producer’s organisations which reflect the changing interests of Irish farmers. The need for an agriculture qualification to give advice to farmers may not be appropriate in all cases (e.g. in the delivery of environmental advice, business planning, etc.) and the need for an agricultural qualification alone for agri-environment planning clearly needs to be revised. To support a diversified advisory service, the role of specialist NGOs must be acknowledged, and their advice sought and supported to help farmers, and the farming sector as a whole, deliver on its aims and objectives.

Finally, simplification in the draw-down and delivery of EU research funding is urgently required, particularly where this can be targeted to smaller-scale research projects seeking to specifically tackle issues around the sustainability of farming in the EU.

### **Suggestions on farm investments**

Investments on farms will be crucial in delivering a re-imagined agriculture sector. Investments can be thought of in two ways: those that seek to improve efficiency or profitability (including diversification into alternative farming practices, alternative land-use management, including non-farming activities) and those that seek to deliver non-market public goods.

For the latter, support is needed for farmers to undertake such actions, and this should continue to be delivered through schemes such as agri-environment (GLAS) or non-productive investment schemes (TAMS), **where only non-market public goods are created or supported**. In addition to the existing types of actions already available in agri-environment schemes, consideration should be given to flood management and alleviation works, such as the creation of wetlands to reduce down-stream flood events.

For investments that will deliver financial benefits to the recipient, consideration should be given to part-funding such works, with the beneficiary required to offer some level of co-financing. These need to be considered on a case-by-case basis to determine what an appropriate level of co-financing would be to support the beneficiary in taking in new (and potentially risky) ventures, but the need for co-financing should reduce risks to the spending of public money. In support of such investment activities, the provision of targeted financial instruments, such as low-interest or long-term loans may be appropriate, particularly if these loans can be used to invest in new technologies that deliver environmental as well as economic benefits.

It is important that those seeking to invest in such a way can be supported as much as possible to ensure they can take on the responsibility of such innovation with reduced financial stress. Examples of these could include investing in renewable energy systems on farms, or development of new, sustainable cropping systems, anaerobic digestion, and pollution control.

### **Strengthening the socio-economic fabric of rural life**

Education, particularly at primary and also secondary level, is essential to support the fabric of rural areas by creating a local identity to make communities proud of their area, and young people want to stay and work in these areas.

The CAP can support rural areas by helping to rebuild broken and disjointed local food production systems, stimulating the rural economy and local employment. Creating a market for local produce, though labelling or local promotion (including farmer's markets, but also labelling initiatives to support locally-sourced food), may be a very useful way of sustaining local jobs. Such an approach would deliver far more benefits nationally than the focus on export-driven production, which only seeks to improve profit margins for a small number of large companies.

In a similar vein, CAP should encourage renewable energy production on farms where it is ecologically appropriate, mainly wind, solar and hydro power. These systems should be locally installed and maintained, again creating and maintaining long-term, sustainable jobs in local areas.

Finally, CAP must continue to support farm diversification, through activities such as rural tourism, particularly off the main tourist routes, through walking, cycling and other initiatives. Supports for on farm accommodation and other measures should be introduced to stimulate this.

### **Position of Farmers in the Supply Chain**

Farmers have consistently been told that there is nothing they can do about price, all they can do is increase production, which is categorically untrue. Meat and dairy processing in Ireland exert an inordinate dominance in the food chain. This urgently need to be tackled politically in order to reveal the extent of their influence in the Irish food system, and their imprudent control over policy.

The CAP should introduce mechanisms for farmers to establish marketing boards independent of the large processors, provide funding for new small and medium scale processing units.

Farmers should be encouraged to market their produce both in local and regional markets directly and through cooperatives, thus bypassing the monopoly of agribusiness interests which dominates Irish farming. Supporting local markets not only has benefits for farmers through improving farm gate prices, but also has added benefits of supporting local communities, and the reduction in “food miles” (and associated transport costs and emissions) has environmental benefits as well. Furthermore, identifying food needs at local levels also allows farmers to diversify into gaps in the market, increasing resilience of farming locally along with reduction in risk to farm incomes.

### **Sustainable Development Goals (SDGs) and Agri-Food Strategy 2030**

We must also remember Ireland’s commitment to the Sustainable Development Goals (SDGs), which Ireland adopted in 2015, as intrinsic to this strategy. The SDGs provide a framework for environmental, societal and economic sustainability, underpinned by equality. As such, this strategy must take into account the rights and well-being of all individuals who work within the agri-food sector in Ireland, including migrant and seasonal workers across the fisheries, meat processing and horticultural sectors.

The need to ensure the health, safety and well-being of workers has been highlighted during the Covid-19 pandemic.

Specific recommendations to ensure that the Agri-food 2030 Strategy is fully sustainable and in line with our commitments under the SDGs include:

- Safeguards to protect and uphold the rights and standards workers across the horticultural and agri-food industry.
- All grants and financial support must include a clause to protect workers’ rights while setting targets and steps for this industry to reduce greenhouse emissions
- Carry out a regime of workplace inspections on both health and safety and workers’ rights including unannounced inspections across all aspects of the industry.

**NOTE:**

Detail on impacts of Agriculture on EU protected habitats (As stated by Minister Madigan to a Parliamentary Question on 6th of June 2019 <https://www.oireachtas.ie/en/debates/question/2019-09-06/2032/>)

The most frequent pressures recorded in habitats relate to the agriculture category. Over 70% of habitats were impacted by pressures relating to agricultural practices, and the pressure was ranked as High importance in more than 50% of habitats. The most prevalent sub-category of agricultural pressures was “Intensive grazing or overgrazing by livestock”, which was recorded in 55% of habitats in which agricultural impacts were noted (39% of habitats overall), the next most frequent agricultural pressure being “Extensive grazing or undergrazing”, which was noted at 21% of habitats impacted by agriculture (15% of habitats overall). Inappropriate grazing (either too much or too little) was recorded in 62% of all habitats where agricultural impacts were reported, and in 44% of habitats overall. “Abandonment of grassland management (e.g. cessation of grazing or mowing)” and “Agricultural activities generating diffuse pollution to surface or ground waters” were the next most frequent agricultural impacts, each affecting 19% of habitats where agricultural impacts were noted, or 14% of habitats overall. All eight of the habitats affected by diffuse pollution were either lake or groundwater-dependent habitats. Analysis of the proportion of habitat exceeding Nitrogen deposition thresholds arising from “Agricultural activities generating air pollution” has highlighted Blanket bog, Alpine heath and Wet heath, Juniper and Limestone pavement as particularly vulnerable to this type of pollution. The impacts of “Agricultural activities generating marine pollution” are reported at High importance in three of the marine habitats.