



State of biodiversity in Ireland

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The word “biodiversity” comes from the junction of bio and diversity. The origin of bio is the Greek word βίος, which means life. Diversity comes from the Latin *divertere* (di-‘apart’, -vertere ‘to turn’).¹ It is defined by the Cambridge Dictionary as “the number and types of plants and animals that exist in a particular area or in the world generally, or the problem of protecting them”. Other living beings that are not part of the plant or animal kingdoms should be added to this definition.

In May 2019, Dáil Éireann declared Climate and Biodiversity Emergency, making Ireland the second country in the world to do so. During the same year, ten other countries (mostly European) also declared the Emergency. 2019 was the end of **the warmest decade on record**. Looking at Biodiversity, the WWF recently prepared a statistic that shows a world general decline of a 69% on non-human populations around the globe in the past fifty years.

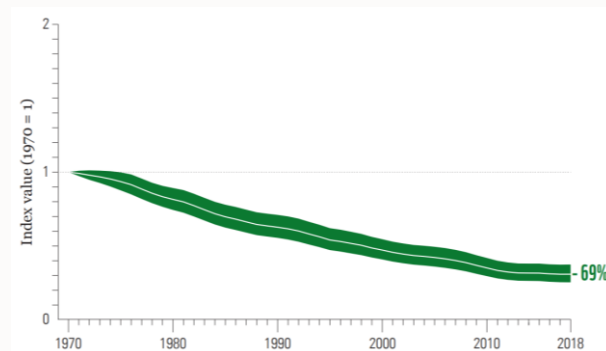


Figure 1. The global being Planet Index (1970 to 2018)

Irish Biodiversity is not an exception to this worrying trend, as we will explain in the following section.

Endangered species or habitats and their threats in Ireland

The loss of biodiversity means that there is a general decrease in population of a wide range of species within a region. When a population of a particular species starts to decline, it is included in lists that tell us about how bad their numbers are. Globally, the most important list is **The IUCN Red List of Threatened Species**, created by the International Union for Conservation of Nature (IUCN). This list has different categories regarding the risk of extinction of a particular species (**IUCN Red List Categories and Criteria**):

¹ Klein, D. (2003) *A comprehensive etymological dictionary of the english language*. Elsevier Ed.

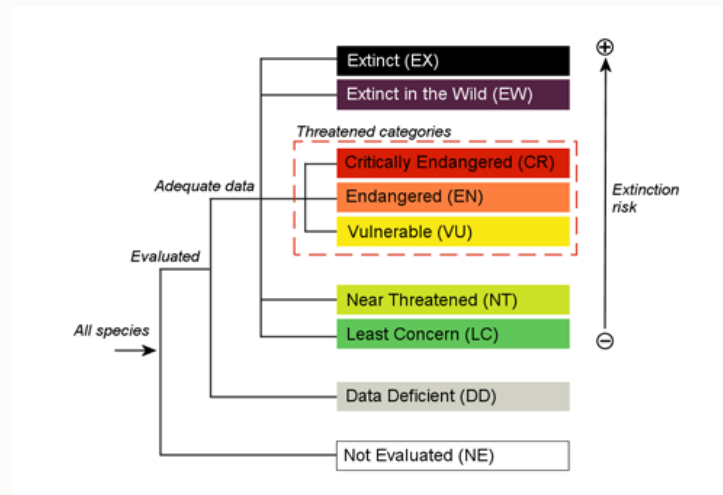


Figure 2. Structure of the categories of the IUCN Red List

Within Europe, even though there is the **European Red List** made in collaboration with the IUCN, the status of the species is addressed by the Member States and is regulated by the Art. 17 of the Habitats Directive (**Policy Context** is explained in the following section). In this list, the categories are named “Conservation Status”, and they address both species and habitats with different parameters:

Species	Habitats
Range	Range
Population	Area
Suitable habitat	Structure & Functions
Future prospects	Future prospects

Figure 3. Art. 17 of the Habitats Directive reporting parameters

With these parameters, four different conservation status unfold, each of them related to one colour in a traffic light-like approach (green, amber, red and grey). The specific numbers that make a species or a habitat fall within a particular category are updated every six years. Throughout this period, Member States must prepare a report on their actions under the Habitats Directive. The last guideline was for the **2013-2018 period**. The four Conservation Status are (they are the same for the birds under Birds Directive):

Favourable (FV) (green)	Unfavourable – Inadequate (U1) (amber)	Unfavourable – Bad (U2) (red)	Unknown (XX) (Amber)
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Figure 4. Art. 17 of the Habitats Directive Conservation Status

The aim of the Conservation Status is to care for species and habitats that, even if they are not included in The Red List, are being lost on a regional or European level. Such is the case of the Common Sandpiper (*Actitis hypoleucos*), which is considered a **Least Concern** by The Red List, but is included in the **Amber List** and is protected in Ireland (this Amber List is made with a criteria that mixes European Directives, IUCN categories and other considerations). Even more, it is a specie of special interest in Ballinaglera.

In 2019, Ireland presented the **report for the 2013-2018 period**. It included 59 habitats and 60 species (does not include birds, since they are included into the report for the Birds Directive). The overall status is that 85% of the habitats are in Unfavourable status (39% Bad, 46% Inadequate), and only 2% of them have improved in comparison to the 2007-2013 period. The five main threats to the habitats are (in order of importance): (i) Agriculture (includes land conversion, grazing, abandonment, burning, enrichment,



drainage and associated pollution); (ii) Alien and problematic species; (iii) Development, construction and use of residential, commercial, industrial and recreational infrastructure and areas; (iv) Extraction of resources, and (v) Forestry.

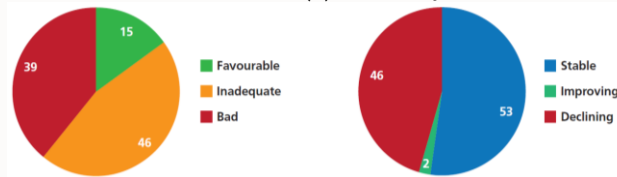


Figure 5. Conservation Status of Ireland's Habitats under the Habitats Directive

Looking at the species, 57% were in favourable status, 30% unfavourable (15% Bad, 15% Inadequate) and 13% Unknown, and there was an improvement in 17% of the species. The five main threats were: (i) Extraction of resources; (ii) Extraction and cultivation of biological living resources; (iii) Agriculture; (iv) Transport systems, and (v) No pressures or pressures unknown.

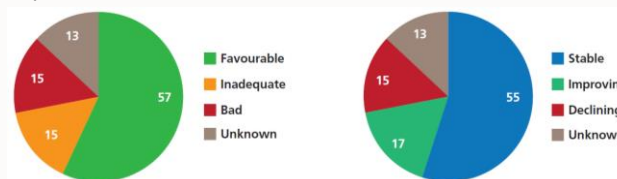


Figure 6. Conservation Status of Ireland's Species under the Habitats Directive

The statistics show that Ireland must work thoroughly on the conservation of habitats. Programs like the recent **Agri-Climate Rural Environment Scheme (ACRES)** try to enhance family farming that help addressing the biodiversity decline. Time will demonstrate its effectiveness. Problems like invasive species, coniferous planting on peatlands or farming runoffs being directly dumped into rivers need to be somehow addressed. Only a forceful approach can turn the unfavourables into favourables.

As the species statistics show, real efforts turn into real outcomes. Since 1991, Irish seas are considered Whale and Dolphin Sanctuary. As the report shows, the outcome of this is a stable-favourable population for most whales, dolphins and porpoises. On the other hand, species linked to habitats in a bad conservation status cannot thrive. Such is the case of the iconic Curlew, bogs dweller. As the **Curlew Conservation Program Annual Report 2022** concludes: "while conservation efforts [...] have been striving to help the Curlew, the factors that brought a 98% decline in 30 years have been and continue to be very much present, and active on a larger and more intensive scale". Healthy habitats mean healthy biodiversity, and the statistics show that Ireland habitats need improvement.

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