

## DID YOU KNOW?

- The main land cover type in Ireland is agricultural land, which accounts for two-thirds of the national landmass.
- Ireland's soils are generally considered to be in good condition, with the exception of peat areas, which are particularly vulnerable due to external pressures.
- Natural peatland acts as a long-term carbon store; however, if damaged this storage function is reversed and carbon is released to the environment.

## IRELAND'S MAIN LAND COVER TYPE IS AGRICULTURAL



The soil of Ireland is an immensely valuable national resource, which formed and evolved slowly over long periods of time. Soil is a biologically active, complex mixture of weathered minerals, organic matter, organisms, air and water that provides foundation for life in terrestrial ecosystems.

The Irish landscape is the direct result of hundreds of years of human interventions and land use change. Many of these changes were derived by historical processes and events, such as the forest clearances prior to the 1700's, the Famine and the depopulation of rural Ireland from the 1850's through much of the last century. More recently the population growth of the late 20th and early 21st century led to an increase in the extent of built-up areas. However, **the overall area of artificial surfaces remains low in comparison with other EU countries, and agriculture is still the predominant land use in Ireland.**

1600

1700

1800

1900

2000



## THE CURRENT SITUATION

A diverse range of sources contribute to the collation and analysis of land cover and land use data in Ireland. However, there is no clear mandated authority with overall responsibility for the task. A study by the EPA in 2010 found that there is a pertinent need for a national high-resolution (1-5 hectares scale) land cover dataset specially designed to characterise Irish Land Use and Land Cover adequately.

## LAND COVER IN IRELAND

**66%**

**AGRICULTURE**

Predominantly permanent grassland pasture



This is **greater** than European average of **42%**

**11%**  
**FORESTRY**



This is **lower** than European average of

**35%**

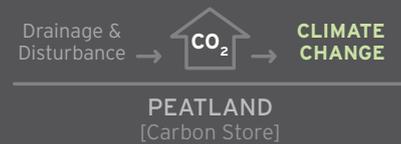
**20%** **PEATLANDS/  
WETLANDS**



Between 2007 and 2013 there has been a **decline** in the area, and status of Ireland's peatlands

## PEATLAND

Natural peatland acts as a long-term carbon store; however, if damaged (through harvesting or drainage for example), this storage function is reversed and carbon is released. **Release of terrestrial carbon from soil and biomass is a major source of carbon dioxide (CO<sub>2</sub>), the main contributor to climate change.**



## FORESTS

Much of the forest in Ireland is young, with nearly 40% of total forest planted since 1990.

The range of benefits from Ireland's forest cover is diverse. **These benefits extend beyond basic timber production to employment, biodiversity, wildlife conservation, carbon sequestration, recreation and tourism.**

The management of forests however can be challenging from an environmental perspective. The potential for adverse impacts on vegetation, soils and landscape during afforestation and harvesting is large. These processes can also impact on water quality through acidification, sedimentation and nutrient mobilisation.



**EU AVERAGE  
FOREST COVER**



**IRELAND'S AVERAGE  
FOREST COVER**



## SOIL

**A healthy soil provides us with clean air, food and water.** It supports plant growth and animal life while providing foundations for human settlements. The immense biodiversity of our soils is also the foundation of many ecosystems.

The lack of heavy industry in Ireland and the large percentage of land under permanent pasture has protected our soils from significant amounts of contamination or damage. The notable exception to this is the decline in the status of our peatlands.

Sustainable food production and the management and protection of soil are strongly linked. They depend on one another.

Water pollution caused by the loss of nutrients and the loss of pesticides to waters from agricultural land are major concerns that need to be addressed collectively by all environmental and agricultural stakeholders.

There is relatively little legislation relating directly to soil and soil protection. The Environmental Impact Assessment Regulations for On-Farm Development supports soil protection in Ireland through the requirements for environmental impact assessments for soil operations such as soil drainage.

Since 2000, significant investment by the EPA Research Programme has increased the scientific knowledge required to underpin the protection and sustainable use of soil. The National Soils Database provides a valuable baseline knowledge on soils across Ireland and a national soils map is available at:

<http://gis.teagasc.ie/soils/map.php>

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