

# Farming, Our Environment and You

*Ireland has few, if any, pristine habitats. Our environment has been shaped by humans over many centuries. As a result, many of our habitats and the species they contain are dependant upon our agricultural system. The quality of Ireland's natural heritage is high when compared to other countries that contain more intensive, capitalised and arable farming systems. However, in recent decades, the Europe wide trend of intensification and specialisation has led to its deterioration.*

How has this trend of intensification and specialisation affected our environment? What are the factors driving it, and more importantly is there anything we, as consumers, can do?

## Why this matters

Our natural heritage has suffered by farmers becoming locked on the technological treadmill. Unsustainable land management practices, habitat loss and fragmentation, declining species, soil erosion and pollution have occurred.

*Some Examples:*

## Farmland Birds

Over the 20 year period (1968/72 –1988/91) many farmland bird species have declined in lowland areas.

- **Corncrake:** Between, 1988 – 1993 numbers declined by 81%. This has been attributed, almost entirely, to agricultural intensification and the change from hay to silage production
- **The Grey Partridge:** The last remaining population numbered 24 in 2000. Like the Corncrake it was once widespread throughout the country. Decline has specifically been attributed to the loss of rough grass margins around arable land. While indirectly, the effects of increasing pesticide usage on invertebrate numbers, has been blamed. The decline in mixed farming and the resulting habitat fragmentation has also had a part to play.
- **Barn owls** have suffered a major decline. This has been attributed to the reduction in rough overgrown areas and hedgerows, which has led to a decline in their prey species.

## Decline Lowland Farmland

### Moderate 5 – 25%

Skylark  
Linnet  
Goldfinch  
Reed bunting  
Tree sparrow  
House martin

### Substantial 25-50%

Yellowhammer  
Stock dove  
Long-eared owl

## **Major 50-75%**

Barn owl

## **Severe Over 75%**

Corncrake

Grey partridge

Corn bunting

(Source: [www.birdwatchireland.ie](http://www.birdwatchireland.ie))

## **Water Quality**

Eutrophication, caused by phosphorous loading and resulting in excess algae growth, loss of species i.e. trout and salmon, and increasing cost of water treatment, is the number one threat to Irish water quality. It is the agricultural industry's most crucial impact on our aquatic environment. Today, the industry is responsible for 45% of all eutrophic rivers

The main source of agricultural eutrophication is phosphorous leaching from organic and inorganic fertiliser where these are spread surplus to requirement. It is estimated that Irish farmers have applied approximately \_ million tonne in excess of requirements over the last 10 years.

Although over-fertilisation is still common, we are currently witnessing a reversal in this trend. According to a 2002 Teagasc survey, phosphorous application decreased by 22% between 1995 and 2000. This trend is expected to continue for a number of reasons:

- Increasing cost of fertiliser.
- Advisory agencies are increasingly recommending individual farm nutrient tests rather than general application rates.
- Introduction of the EU Water Framework Directive, and county by-laws relating to farm pollution.
- Introduction of the Code of Good Agricultural Practice by the Department of Agriculture.
- Currently one of the largest state funded environmental research programmes is underway, aimed at providing solutions to eutrophication problems caused by agriculture.

However, reducing the phosphorous build up in soils can take decades and will continue to impact on Ireland's water quality.

## **Soil Erosion**

The C.A.P. resulted in an increase in sheep numbers by 5.2 million between 1980 and 1992. In upland areas, especially in the West, this resulted in:

- Severe overgrazing exposing underlying substrate
- Up to a five fold increase in upland peat loss in some areas.
- River widening and channel braiding, causing channel instability and eliminating salmon and trout spawning

While subsequent policies have reduced sheep numbers by 1.7 million, the population is still twice that of 1980.

(Source: *Ireland's Environment, 2004 Report*, [www.epa.ie](http://www.epa.ie))

## **Habitat Loss**

- An 8% loss of wetlands between 1990 – 2000 due to agricultural intensification and forestry.
- An estimated 16% loss of hedgerows due to intensification.

## **Farming Today**

- 73% of Ireland's land is under agriculture
- 30,000 individual farmers
- Average family farm income of €15,054
- Approximately 39% of all farms have a farming income of less than €6,500.
- Direct payment/subsidies make up 90% of family farm income.
- Average age of farmer is 53yrs
- Average farm size is 39.1 ha
- Almost 50% of farms are under 20h

(Source: Teagasc National Farm Survey, 2003, [www.teagasc.ie](http://www.teagasc.ie))

In common with EU trends, farm numbers in Ireland have declined by an average of 2,210 per year, over the last decade. This decline has been greatest in the smaller farm. As a result, over the past decade, the average farm size has increased from 27ha to 39.1ha.

(Source: Teagasc National Farm Survey 2003, [www.teagasc.ie](http://www.teagasc.ie))

## **Nature of the Industry**

### *Farmers are Price Takers*

In a market economy producers have a certain amount of control over the price they receive for their goods. As long as enough people wish to buy it, they can maintain or drive up the price by holding back on supply. This method of pricing is often applied to knowledge and skills as effectively as hard goods, e.g. Trade Unions use this premise if they threaten to take strike action. There are a number of reasons why farmers are unable to use this method of pricing.

- Each farmer controls such a small percentage of the market share that no individual, or group, can affect price in this manner
- There is a significant time-lag between starting to produce an agricultural product and selling it. A Farmer has to try to predict market demand anything from months in advance – with crops, to years in advance – with livestock.
- It is impossible to hold back on supply in any effective manner. Food crops are perishable. Livestock, subject to strict regulations over age at sale, and practicalities such as lack of space and cost of feed.

Often a farmer must take whatever price is on offer at the time of sale.

Farmers suffer from the Farm Income Problem

- As a country develops the percentage of people's income spent on agricultural produce decreases.

A person earning the average industrial wage needs to work for less time today, than they did in 1973, in order to earn enough to purchase food.

- Unlike other goods, agricultural produce does not track inflation. If the price of agricultural produce had tracked inflation food items would cost considerably more today.

Cattle – Had the value of cattle tracked inflation since 1973 farmers would receive a sale price of over 162% more. In 2002 a farmer would have received €1,589 per animal, instead of €607.

(Source: [www.agriaware.ie](http://www.agriaware.ie))

Over time a farmer's income decreases while his/her cost of production increases. This is called the *farm income problem*.

### **Farmers are extremely Policy Led**

Unable to affect price, farmers are largely governed by the agricultural policy and advisory services in operation. In the past, farmers farmed mixed systems. One reason for this was because mixed systems helped them deal with the risks associated with trying to predict future demand. The Common Agricultural Policy, by providing a guaranteed price and market, discourages this traditional style of farming. Meanwhile, farmers were advised to counteract the farm income problem by specialising and intensifying. Input costs could be reduced by specialising in just one or two enterprises, while "economies of scale" could be gained by intensifying. Producing in bulk is less costly, so, as the scale and size of the enterprise expanded the cost of production dropped. Specialisation and intensification has led to an increased dependence upon agricultural inputs, such as inorganic fertiliser and agrochemicals, which can have a detrimental effect on the environment.

### **Farmers are trapped on the Technological Treadmill**

Using intensification, specialisation and economies of scale to fight the farm income problem has become a self-perpetuating cycle. Once on, this technological treadmill is nearly impossible to get off – without going out of business.

### **Additional Problems**

- Traditionally, agricultural agencies have encouraged farmers to remain optimistic about these problems. Encouraging them to – tighten their belts and ride out the storm.
- Technical advice and training has often lagged behind present-day realities.
- Farm diversification schemes are often costly to implement.
- The agri-environmental scheme, REPS, often requires high capital expenditure in order to meet with its requirements. While in many cases, the payments have traditionally been less than mainstream supports.

### **Without agriculture**

Trees are Ireland's climax species. If agricultural land is not managed, over time it will revert to scrub-land and eventually woodland. Protecting Ireland's natural heritage is a case of correct management, never abandonment. The farmers' role of stewardship over the land is essential to maintain wildlife habitats, environmental quality and biodiversity.

### **Become involved**

Ireland is becoming more socially conscience in the way it prices goods. The costs of environmentally damaging goods are being passed on to the polluter. For example,

the plastic bag levy, and the cost of waste disposal. This is a step in the right direction.

In addition to food production farmers produce a product that the whole nation benefits from – our landscape and our wildlife. They receive no payment for this. Indeed, farming in an environmentally friendly manner can mean that the farmer's income will fall.

Become involved in the debate surrounding the future of the industry. Value the environmental product produced by farmers. Better payments under agri-environmental and farm diversification schemes and penalties for environmental damaging operations will mean a better environment for all.

### **Spread the knowledge**

Many people do not understand the processes operating within the agricultural industry. Without this knowledge we cannot hope to effectively protect Ireland's natural environment.

### **Farmers Markets in your area**

For information on farmers markets operating in your area log onto the Bord Bia Web Site at:

[http://www.bordbia.ie/consumer/buying\\_food/farmers\\_markets/](http://www.bordbia.ie/consumer/buying_food/farmers_markets/)

### **Further Information**

Below is a list of useful sites

#### **Teagasc,**

[www.teagasc.ie](http://www.teagasc.ie)

#### **Department of Agriculture & Food**

[www.irlgov.ie/daff](http://www.irlgov.ie/daff)

#### **Agri – Aware**

[www.agriaware.ie](http://www.agriaware.ie)

#### **Central Statistics Office**

[www.cso.ie](http://www.cso.ie)

#### **Board Bia**

[www.bordbia.ie](http://www.bordbia.ie)

#### **Department of Environment & Local Government**

[www.environ.ie](http://www.environ.ie)

#### **National Parks & Wildlife Service**

[www.opw.ie](http://www.opw.ie)

#### **The Environmental Protection Agency**

[www.epa.ie](http://www.epa.ie)

#### **Text by Kathryn Finney**

*May 2005*

*Issued by:*

**ENFO – The Environmental Information Service,  
17 St Andrew Street,  
Dublin 2, Ireland.**

**Tel:** (01) 8883910

**Locall:** 1890 200191

**Fax:** (01) 888 3946

**e-mail:** [info@enfo.ie](mailto:info@enfo.ie)

**web:** [www.enfo.ie](http://www.enfo.ie)

Write to or visit our Centre at the above address or you may check out the **ENFO** information stands at your Local Authority Office / County Library

**ENFO** is a service of the Department of the Environment, Heritage and Local Government.