

European Union

European Regional Development Fund Investing in your future



Special EU Programmes Body Foras Um Chláir Speisialta An AE Boord O Owre Ocht UE Projecks

Freshwater Pearl Mussel Erne & Melvin CSG Oct 2012

IR IVa Reference Number: 003705

Picture courtesy of E Moorkens



Comhairle Chontae Dhún na nGall

Donegal County Council

www.donegal.ie



Northern Ireland Environment Agency



An Agency within the Department of the

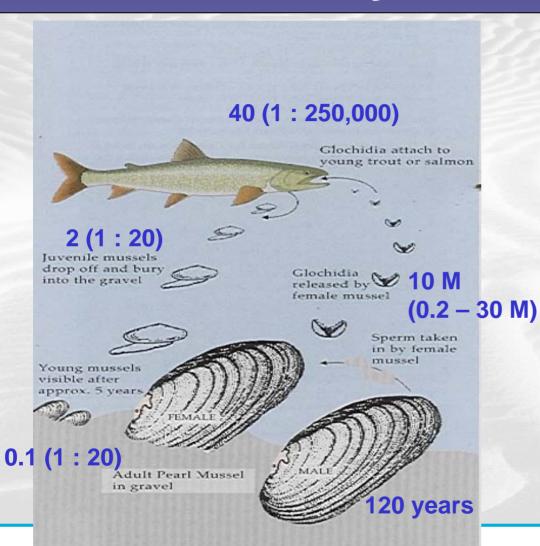
Environment

ww.doeni.gov.uk



Life Cycle





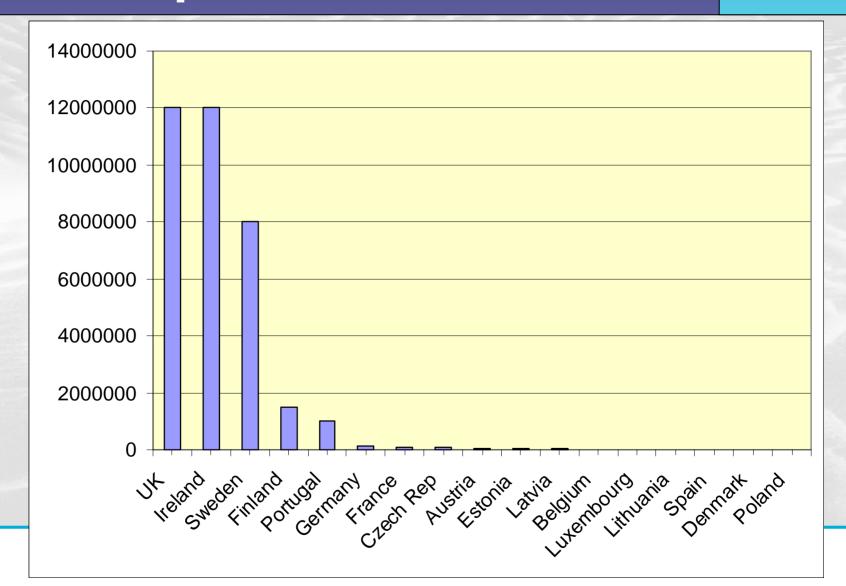


Global Distribution

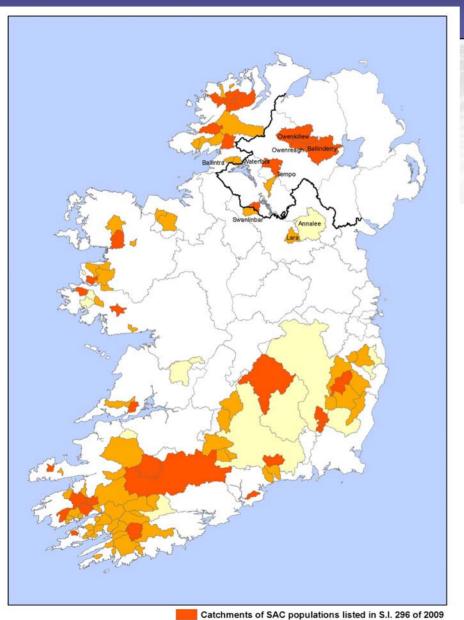


European Abundance





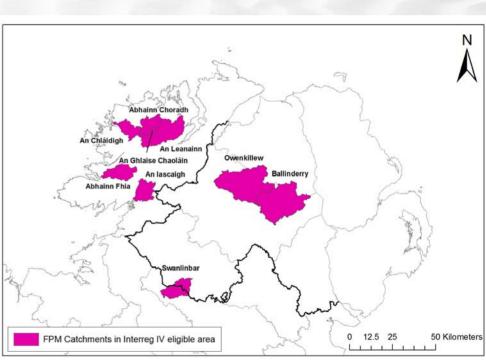


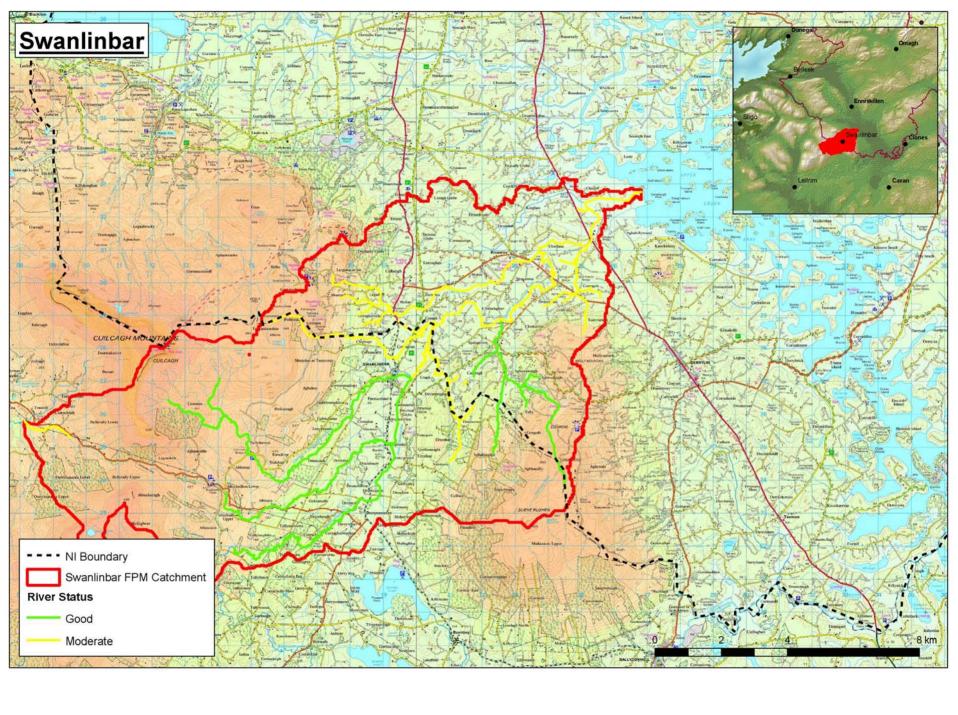


Catchments of other extant populations
Catchments with pre-1970 live records

0 15 30

Kilometers





What are the causes of the decline?





Illegal Pearl Fishing









Gold Brooch with Eske Pearl presented to Queen Victoria on her visit to Ireland in 1849

LEGAL PRODUCTION

Cultured Freshwater Pearls – China produces 1,500 tonnes per annum

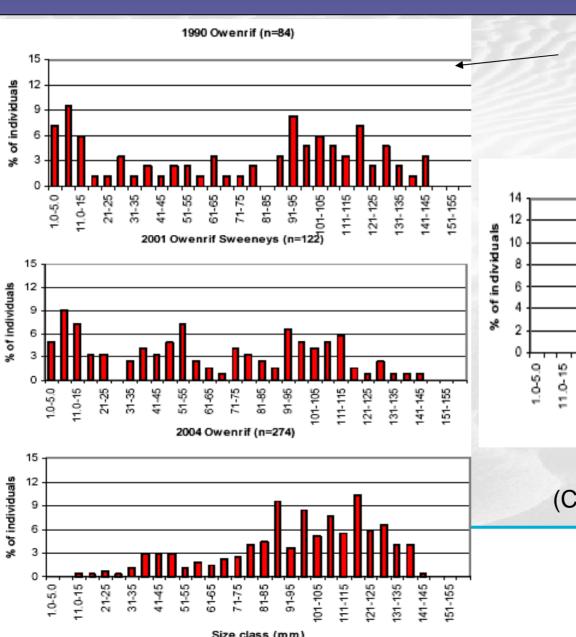
A Thing of the Past!





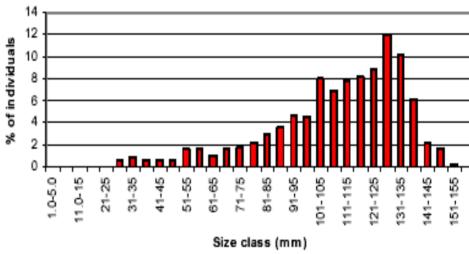
Where have all the young ones gone?





This is what shell length profiles should look like

2006 Owenrif (n=512)



(Courtesy: Áine O'Connor, NPWS)

Climate Change?

The Monarch
Climate Change
project found that
Ireland is well
within climate
space survival
parameters over
the next 80 years

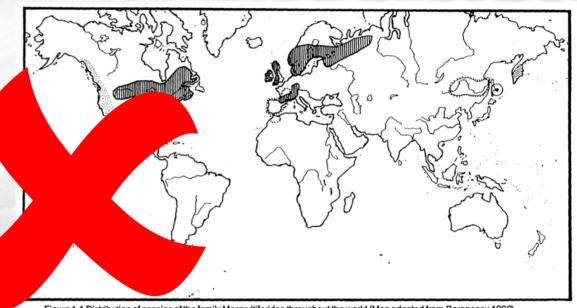
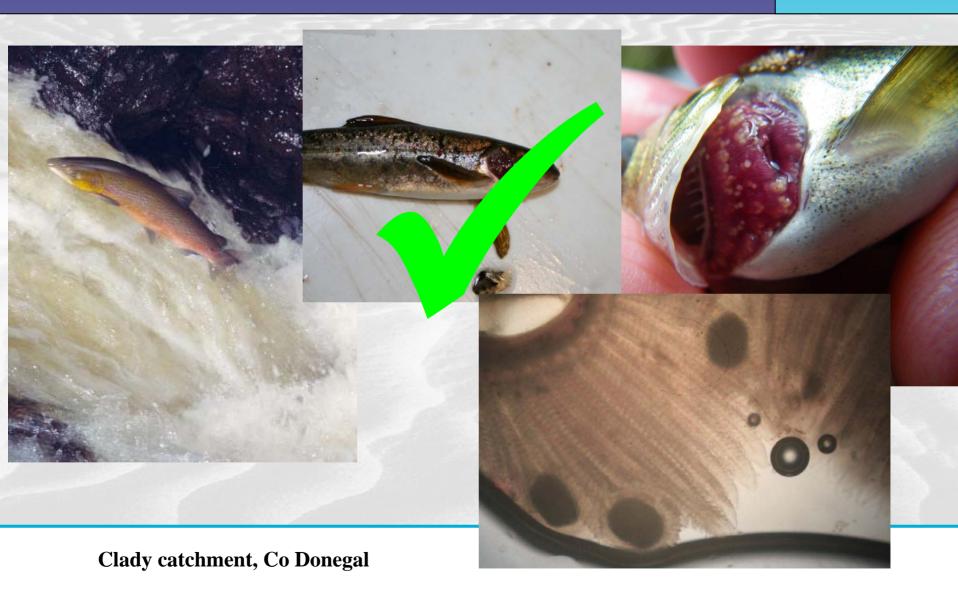


Figure 1.1 Distribution of species of the family Margaritiferidae throughout the world (Map adapted from Baranescu,1990).

1. Margaritifera margaritifera; 2. M. auricularia; 3. M. dahurica; 4. M. middendorffi; 5. M. sachalinensis; 6. M. hembeli; 7. M. falcata.

Are the Mussels Reproducing?





(Spring 2009)

Silt damage





Some Sources

- Agriculture
 - Over Grazing
 - Tillage
 - Drainage
 - Livestock Poaching
- Forestry
 - Felling
 - Afforestation
 - •Roads
 - Drainage
- •UWWT
- House Construction
- Quarrying
- Peat Harvesting

Excessive Fine Silt Impacts on Mussels and Fish



























Nutrient Enrichment





Some Sources

- Agriculture
 - Fertilisers
 - Slurry
 - Livestock Access
- Forestry
 - Fertilisation
 - •Felling / Brash
- •UWWT
- Septic Tanks



Excessive Aquatic Plant and Algal Growth



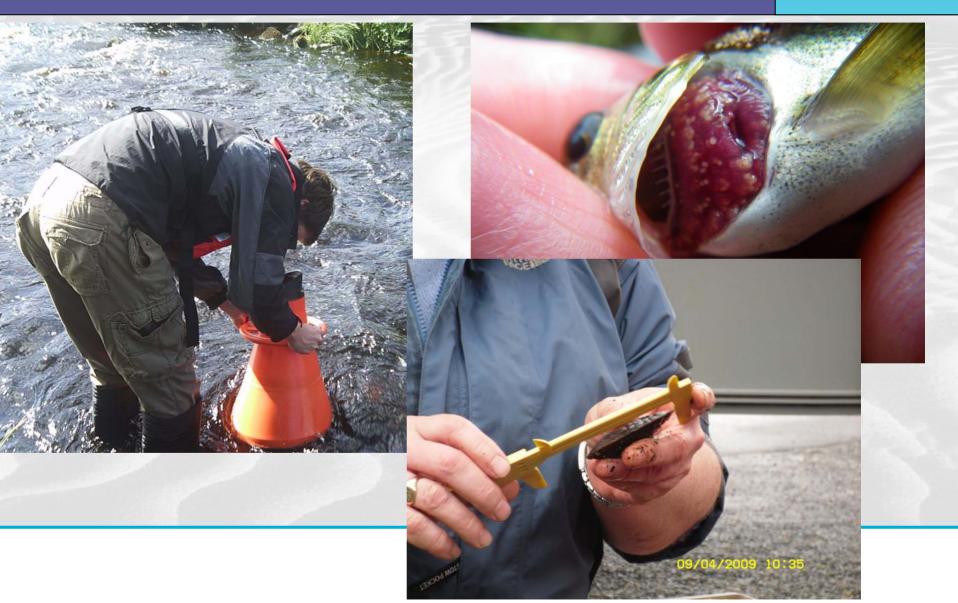
FPM Project Basics



- European Union INTERREG IVA Environment strand, Priority 2.2.
- Partners: Donegal CC, NIEA
- Funding €2.3M
- Project duration:
 October 2010 to March 2014
- Overall Aim: To support the practical implementation of measures that will restore the FPM to favourable conservation status at designated sites

So what are we doing about it?







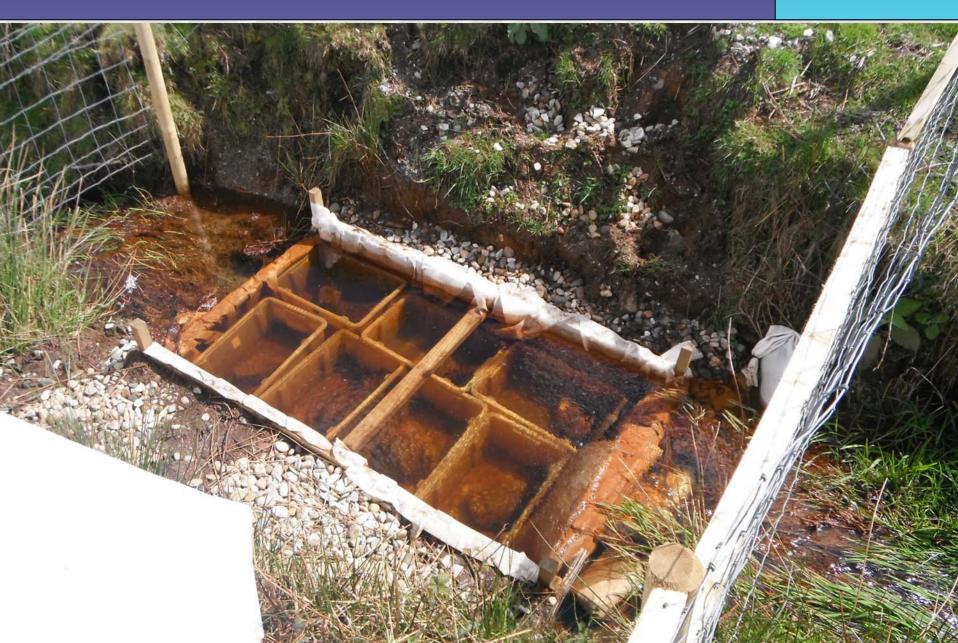








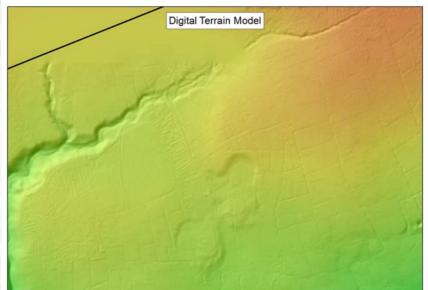




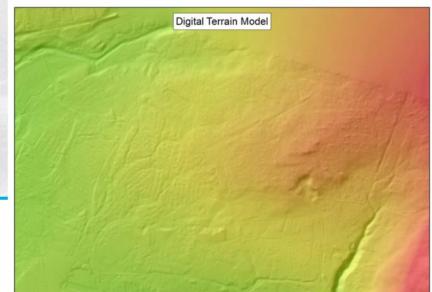




















http://freshwaterpearlmussel.com/

PHONE P PROJECT INFORMATION P FPM P GALLERY PINEWS PLINKS PLOGIN

Freshwater Pearl Mussel a Flagship Species

We take great pride in our beautiful unspoilt countryside with its pristine rivers and lakes. The image of a green and universited land brings many tourists and helps to sell our produce abroad. It is our heritage and we should guard it jealously. Crystal clear rivers with unspoilt animal and plant communities are part of that heritage, and one animal in particular (the freshwater pear mussel) tells us that the rivers in which it lives are of the very highest quality.

"the island of Ireland supports a major proportion of the Freshwater Pearl Mussel populations remaining in Europe"

Freshwater Pearl Mussel Project

Donegal County Council, in partnership with Northern Ireland Environment Agency, has been awarded funding under the European Union's European Regional Development Fund for a project almed at helping to secure the conservation of the Freshwater Pearl Mussel.

The project is grant aided under the European Union's INTERREG IVA Programme, as part of the Environment strand, under Priority 2.2.











