

Pearl Mussel Project EIP



Designing a results-based locally-led agri-environment programme for Freshwater Pearl Mussel in Ireland's top-eight catchments



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'The European Agricultural Fund
for Rural Development: Europe
investing in rural areas'.



Pearl Mussel Project EIP

- Top 8 catchments in Ireland: c.35% of European Freshwater Pearl Mussel population
- Funding by DAFM under Article 35 of Rural Development Regulations
- European Innovation Partnership (EIP) with total budget of 10 million, one of the largest EIP projects in Europe, 5 year project
 - Locally adapted
 - Key stakeholders: farmers, ecologists and expert advisors, farm advisors



Rural Development in Ireland 1994-2013:

Lessons learned

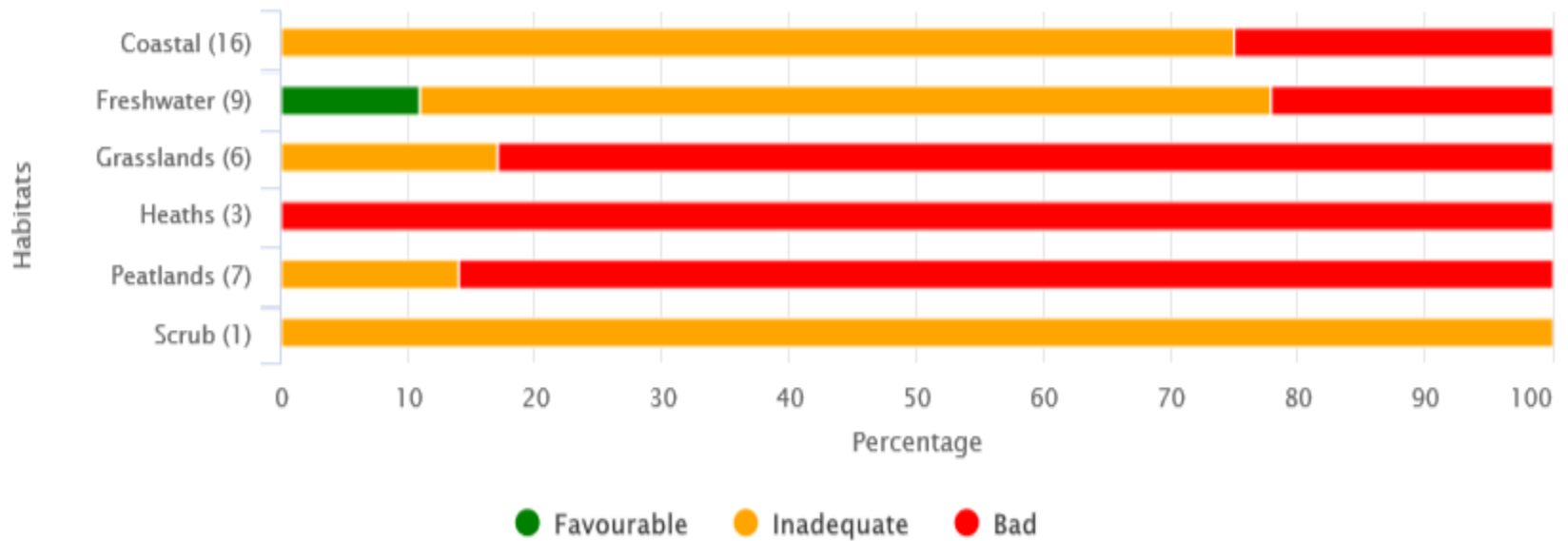
- Higher payments were available in Natura 2000
- Measures were prescription/rule-based agri-environment schemes
- Measures were general, not targeted at habitats/species (and not focused on results) (*one size fits all*)
- Advisory services not supported by specialists
- Monitoring and performance indicators were poorly designed
- There has been an understandable focus on administrative verifiability and control but....



...have they worked?

Conservation Status of Listed Habitats

Source: National Parks and Wildlife Service



Results-Based Approach

Payments are linked to the nature quality of your farm
Higher nature quality = Higher payment level



Each plot (field) is scored out of 10 using a scorecard that captures high and low quality habitat which reflect past and current management.

Creating a market

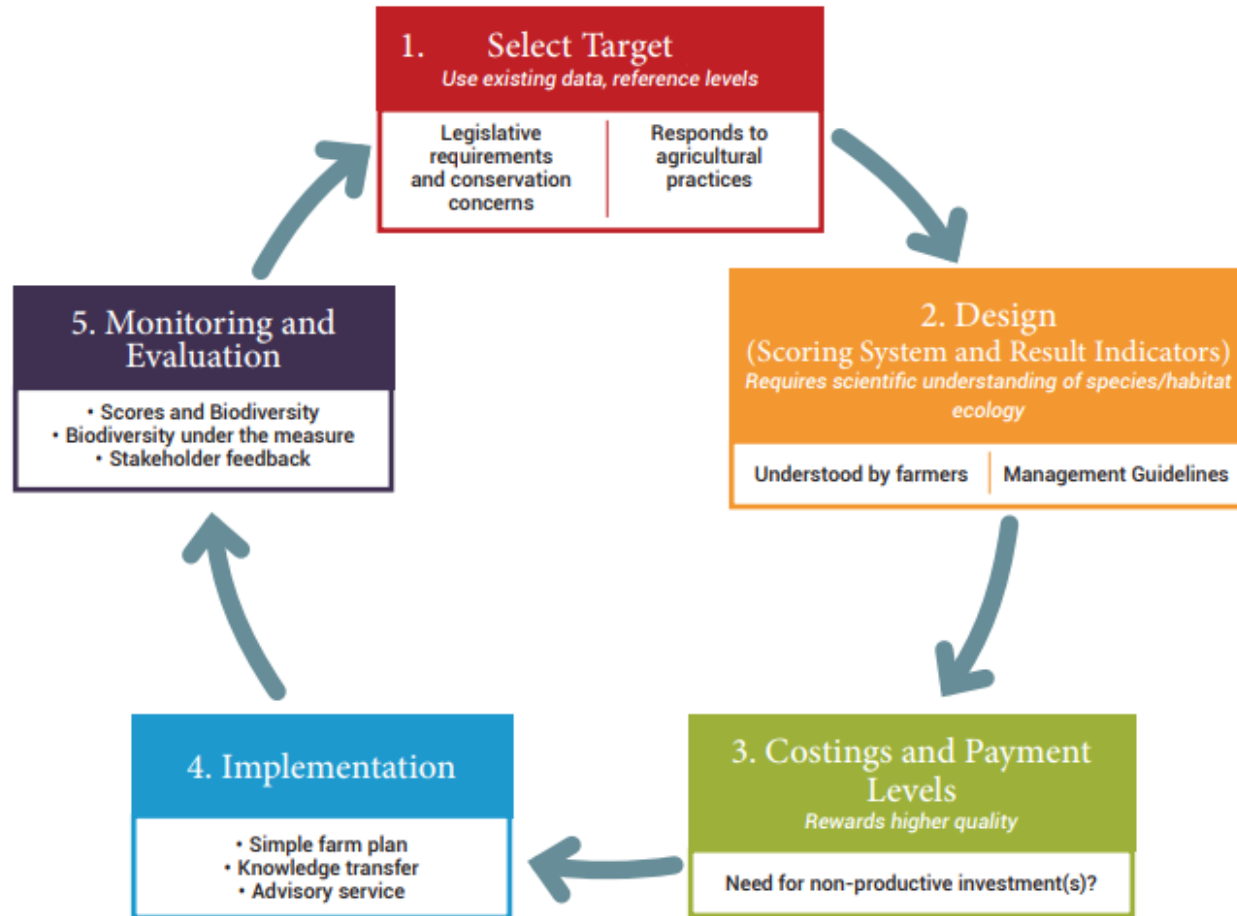
- Putting market value on the services that High Nature Value farmland provides



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How do we apply this approach?



Freshwater Pearl Mussel

Margaritifera margaritifera

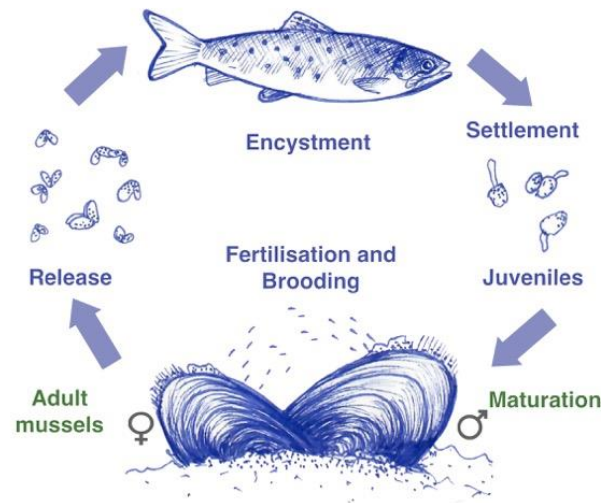
- Biology

- Complex life cycle
- Live to 120 years
- Indicator of exceptionally clean and healthy environment



- Pressures

- Flow
- Sediment
- Nutrients



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PMP design approach

- Challenge posed by aquatic target species
 - Results-based approach
 - Incentivise farmers to address problems and improve low scoring lands
 - Catchment scale & whole-farm
- What surrogates can we use to assess results
 - Grassland
 - Peatland
 - Scrub
 - Drainage and watercourses & Floodplain function
- Quality of each habitat assessed using scorecards



Results-based payment scale



Sample habitat quality

Peatland



Low quality
(Score 0-3)
€ 0



Moderate quality
(Score 4-6)
€ € €



High quality
(Score 8-10)
€ € € €

Floodplain Payment

- Rewards farmers for maintaining active floodplains on their lands along pearl mussel habitat



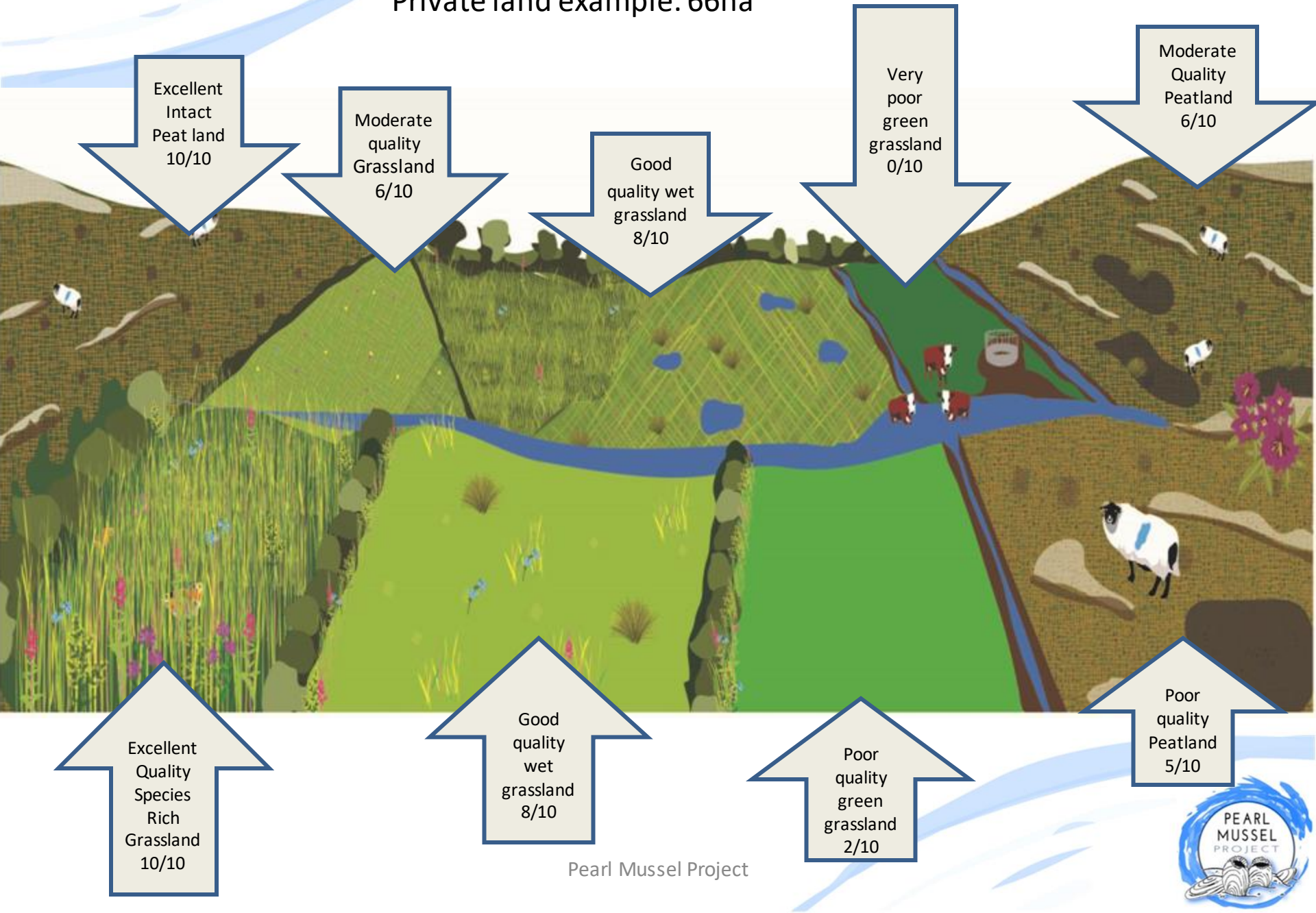
Whole-farm assessment

- Connectivity with water courses
- Farmyard and nutrient management
- Farm score adjusted based on result of assessment



Result based payment (before watercourse assessment)	€1000
Whole-farm assessment	Final payment
Excellent (x 1.2)	€1200
Good (x 1)	€1000
Inadequate (x 0.6)	€600
Poor (x 0.3)	€300

Private land example: 66ha



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Potential Supporting Actions

- Examples of some options:
 - Water troughs
 - Drain management
 - Farm access (bridging, etc.)
 - Conversion to lighter breeds
 - Fencing
 - Many measures will be 'bespoke'
 - Consider environmental benefit
 - Farmer led solutions
 - Locally adapted and site specific



Payments

Results Payments

Habitat Quality Payment

+

Floodplain Payment

X

Whole-farm score



Supporting
Actions
Payments



What services are being provided?

- Biodiversity
- Carbon sequestration
- Protection of soil
- Clean water
- Flood management
- Aesthetic value
- Recreation + well-being



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www.PearlMusselProject.ie



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Results-based Agri-environment
Payment Scheme pilot project

www.rbaps.eu

