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**Agricultural Strategy** 

Sustaining a vibrant Agriculture sector, enabled to deliver a

reliable and profitable food chain, while maintaining and

enhancing the Island's natural environment and capital

Farming and wildlife thriving side-by-side

Additional £1million/yr from Treasury











	The RED		Colley Jiarz
Teal	Black-tailed Godwit	Common Tern	Merlin
Pochard	Knot	Arctic Tern	Skylark
Eider	Curlew Sandpiper	Razorbill	Grasshopper Warbler
Long-tailed Duck	Woodcock	Black Guillemot	Ring Ouzel
Cuckoo	Snipe	Puffin	Redwing
Stock Dove	Redshank	Fulmar	Spotted Flycatcher
Water Rail	Kittiwake	Shag	Whinchat
Corn Crake	Black-headed Gull	Barn Owl	Tree Sparrow
Oystercatcher	Great Black-backed Gull	Long-eared Owl	Meadow Pipit
Lapwing	Herring Gull	Short-eared Owl	Twite
Curlew	Lesser Black-backed Gull	Kingfisher	Linnet
Bar-tailed Godwit	Little Tern	Kestrel	Yellowhammer



#### **AES Recap**







Manx Wildlife for the Future

www.mwt.im

Bea-Feie Vannin son y traa ry-hee

BIOSPHERE ISLE MAN







Agri-Environment Scheme Impact: First Year in Review



BIOSPHERE ISLE+MAN





**Agri-Environment Scheme** 

Timeline















13.80% Herd/Flock Health

7.20%

6.80%

6%

Creation of Legume Rich Swards

4.70% Beef KPIs 6.80%

9%

Manure Management

Hedge Management

6.70% Crop Nutrient Management

5.10%

Legumes Combined

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4.40%



Habitat Creation <u>A-Feie</u> Existing Habitat Management Habitat Restoration & Enhancement <u>Nature-friendly Farming</u> Protecting Watercourses Educational Visits









#### **Payments**

1 April 2021 - 31 March 2022



160 farms

£1,452,779.74



#### Progress so far (MWT)

331 farm visits MWT

166 individual farms

Covering 70,104 acres (69% of farmland, 49% of Island)









# Farmer Initiatives





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# Farmer Initiatives

BIOSPHERE

Gorse clearance on priority habitats Predator control - Lapwing Electric stock fencing - Curlew Water course restoration & troughs











## What are Herbal Leys

- Multi-species pastures
- Characterised by a combination of 15 to 40 species
- Include different grasses, legumes and herbs





#### Introduction

- What are Herbal Leys
- Advantages
- Disadvantages
- Choosing a mix
- Establishment
- Management
- Summary



#### Advantages

**Anthelmintic Properties** 

Trials have shown that lucerne, sainfoin, alsike clover and chicory all have elevated levels of tannin and other compounds which act as pesticides and so reduce ruminant worm burdens





## Other advantages

- Increased livestock productivity
- Nitrogen fixing species so reduced reliance on artificial fertilisers
- Improved soil structure with deeper rooting species
- Drought resistance
- Increased pasture biodiversity providing habitats for pollinating insects, birds and small mammals



#### Advantages

# Provide physical barriers to parasite survival and infection

Parasites are inhibited from translocating up taller species in a herbal mix and when they do, are more exposed to the elements

Field plot experiments using sheep faeces with nematode parasites resulted in 63% fewer parasitic larvae on the chicory and birdsfoot trefoil compared to the ryegrass





#### **Nutritional Status**

Some species such as chicory have relatively high levels of potassium, sodium, calcium, sulphur, magnesium and zinc

Legumes in herbal mixes can increase overall crude protein levels Increased dry matter



Chicory



## Choosing a Herbal Seed Mix

- Perennial ryegrass: the mainstay of most herbal leys
- Cocksfoot: deep rooting and longer growing season
- Timothy: will grow at lower temperatures and is palatable
- Festulolium: Fescue/perennial ryegrass hybrid so stress resistance but provide bulk
- Grasses 65% to 80%
- Legumes 10% to 30%
- Herbs



#### Management

- Herbal leys can be maintained by grazing, cutting or a combination of both
- Lightly graze in first year after sowing
- Start grazing when ley is 0.5 metres to 1 metre high
- Graze until vegetation height is halved
- Do not overgraze
- Rest leys between cutting and grazing for at least 5 weeks
- Do not apply nitrogen fertilisers
- With good management the herbal ley will last at least 4 years

## Disadvantages

- High legume content herbal leys can cause bloat
- Establishment success can be disappointing on certain soil types
- Species diversity will decline over time
- Can be more challenging to manage compared to perennial ryegrass/white clover ley
- Phosphate and potash will need to be closely monitored



## Establishment

- Sow from March to September
- Soil pH of more than 6.0, Phosphate and Potash indices of 2
- Mix seed in hopper before sowing
- Broadcast seed or shallow drill no more than 1cm
- Sow into a well- consolidated, firm, fine weed-free seedbed after an application of FYM
- Roll once or twice after sowing to achieve maximum seed to soil contact







**Delivering a Unique or Desirable Habitat** 

www.mwt.im

1,046 fields 5,338ac





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#### Summary

Manx Wildlife for the Future

- What are Herbal Leys
- Advantages
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Process Deadlines Management conditions Handbook updates Cross Compliance

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#### Manz Wildlit Treish Vannin

Manx Wildlife Trust Treisht Bea-Feie Vanaity

Application Forms Primary Initiative Form Application Assistance Part Claims Payment Codes Physical Signatures Streamlining Automatic Approval Farm Assurance Herbal Leys Pest & Diseases Priority Habitats Online Field Map Manx Lime Drop-in days Newsletter





#### What are Winter Cover Crops

- Non-cash crops grown primarily for the purpose of protecting or improving soils between periods of regular crop production
- Sown as soon as possible after harvest of the previous crop and destroyed by different methods in late winter







Drop-in Session Thursday 16<sup>th</sup> February at DEFA

#### Winter Cover Crops



**Caroline Perry** 



## Advantages

- Provide a 'green manure' which returns organic material to the soil increasing soil biological activity and overall soil health
- Can reduce pest and diseases by breaking lifecycles
- Help with weed management in future crops
- Provide winter habitat and food for birds, small mammals and insects



## Choosing a mix - What to consider

- Aims what are you looking to get out of the cover crop?
- Economics ensure expensive species will give economic benefits?
- Growth is any one species likely to out compete the others?
- Will any species not survive cold weather?



## Advantages

- Can help reduce soil erosion and improve water quality during the winter months
- Provide cover over the winter which helps reduce nutrient loss through run-off and leaching



#### Disadvantages

- Sowing takes place during busy periods
- Potential for poor establishment
- Additional costs planting and destroying costs



#### Choosing a mix - Species

Grasses & cereal

Good early ground cover and vigorous root growth

• Legumes

Benefit to following crops as they fix nitrogen

• Brassicas

Grow rapidly in the autumn, reduce nitrogen leaching, provide ground cover, improve soil structure and can reduce soil erosion

• Other crops

Phacelia (green manure),





## Establishment

• Seed rates

Seed rates for each species in a mix should be reduced proportionally

• Sowing dates

As soon as possible after harvest

Sowing

Drill or broadcast into stubble, roll to conserve moisture and enhance seed/soil contact

If broadcasting, rake trash to distribute straw and generate tilth



#### Choosing a mix - What to consider

#### Management

How will crop be sown and destroyed (some mixes may become very bulky and therefore difficult to incorporate into soil)?



#### • Rotations

- Could the regrowth of any of the cover crop species becoming volunteers in the next crop?
- Will any species harbour diseases or increase soil borne diseases?
- Could the cover crop provide over wintering sites for crop pests?

## Choosing a mix

#### NO HARD AND FAST RULES

• Decide what are the 'must-haves'

Brassicas e.g. stubble turnips, if grazing is part of the crop destruction process

Brown mustard or fodder radish to act as a biofumigant for potato cyst nematodes

Are there any 'must not haves'

Consider the next crop e.g. brassicas - club root

Consider other advantages

Which species can help provide benefits over and above winter stubble

• The mix

Ensure species will complement each other and survive until February

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#### Management

- Should not require nutrients
- Cover Crop destruction
  - Spray off with glyphosate and direct drill next crop straight in
  - Graze
  - Mechanically destroy
  - For biofumigant cover crops, flail and incorporate at least two weeks prior to sowing next crop



