## FARMING WITH NATURE ON A COMMERCIALIRISH DAIRY FARM

## Gerard MacMahon

 Irish Dairy Farmer Tuesday 29th August
## ABOUT THE FARM

- Location: County Cork, South of Ireland.
- Farm purchased in 1959 by Father
- Gerard began farming in 1987.
- Activities: 72 Dairy Cows Spring Calving.
- 20 Males finished as beef at 20 months.
- Surplus heifers sold as replacement for other farms.
- Grass based system
- Farm in Nitrates Derogation:
- Stocking Rate +2.5LU/HA


# MAP OF THE FARM 

## 45 Hectares in total

- 27 Owned
- 18 Leased



# 20\% SPACE FOR NATURE 

## Shrubland,

 Hedgerows, Ditches, Trees, River, Ponds.
## RIVERSIDE WALK

- Short Nature Walk with running stream
\& canopy of trees
- Abundance of native plants \& trees:
- Oak, Hazel, Sally, Willow, Whitethorn, ferns, moss, etc.
- Habitats for local wild life:
- Blue Jay, Black Birds, Small Birds, etc.
- Peaceful space created in the last 5-6 years.


## BIRDS ON THE FARM



YELLOWHAMMER


SONG THRUSH


BLUE TIT


BLACKBIRD


GOLDFINCH


ROBIN


SWALLOW


STONECHAT

## BIRDS ON THE FARM



KESTREL


BARN OWL


SPARROWHAWK


BLUE JAY


BUZZARD


GREAT TIT


LONG TAILED TIT


COAL TIT

## HEDGEROWS

- Approx. 12,000m of Diverse Hedgerows.
- 200m were newly planted 20 years ago.
- Provide food, shelter and movement corridors for native wildlife.
- Wildlife: Birds, Bats, Hedgehogs, Field Mice,


The Hedgerows are teeming with Pollinators \& Butterflies this time of year. Shrews, Badgers, etc.

- Ecosystem services:
- Shelter for livestock, pollination, flood prevention, water quality protection.
- Hedgerows maintained manually.


## LOCAL WILDLIFE



HEDGEHOG


BADGER


PYGMY
SHREW


RED FOX


WOOD MOUSE


RED SQUIRREL


BROWN RAT


PHEASANT

## BIRD FEED COVER

## - 0.4 HA Native

Wildflower Bird Feed Area set Annually.

- €500 of farmer's own spending - outside schemes.
- Mixture of Wildflowers \& Plants.
- Alive with insects, butterflies, bees and birds.



## BIRD FEED COVER: PLANTS



PIONEER SUNFLOWER


TRITICALE


RAMPART RAPE


TORO FODDER RADISH


WHITE MUSTARD


PHACELIA


REDSHANK


RED AND WHITE MILLET

## DAIRY HERD

## - 72 Dairy Cows

- Predominantly Grassfed Diet.
- Winter feed grown on farm.
- Milked twice a day
- 4.5\% BF, 3.8\% Protein
- All Dairy Female are Genotyped
- 450,000 litres of milk produced a year.
- 6,000 litres per cow a year.
- Herd EBI (Economic Breeding Index) top 1\% in Ireland
- 4 Bulls selected for breeding with AI companies


## LOW EMISSION SLURRY SPREADING



Dairy Farms under derogation in Ireland must use LESS: Low Emission Slurry Spreading. LESS uses slurry application techniques such as trailing hose or trailing shoe to reduce the amount of harmful Nitrous Oxide and Ammonia displaced into the atmosphere.

## PROTECTED UREA

- Nitrogen Urea Fertiliser that has been coated with a urease inhibitor to reduce ammonia loss and reduces the harmful greenhouse gas "nitrous oxide", without affecting performance.
- Recommended by Teagasc (Ireland's Agricultural State Agency) as the least harmful chemical fertiliser.



## OLD APPLE ORCHARD

Almost 100 years old.

- Apples harvested late
August/September for family and friends.
- Mixture of native Irish Apple varieties.



## TRADITIONAL FARM LIFE

- Cats for rodent control.
- Handcrafted

Stone Wall
features.

- Vegetable

Garden for family
and friends.


## BENEFITS OF FARMING ALONGSIDE NATURE

- Hedgerows and Ditches are vital habitats for wildlife.
- You can farm with profit while
 protecting and enhancing the wildlife \& biodiversity.
- Nature adds interest to the farm, it is a pleasant place to work.
- Increase of positive insects, pollinators, birds.
- Nature is ever-changing

- Flowers, fruit, hazelnuts.


## CHALLENGES

- Cost - huge challenge this year.
- Price Volatility.
- Manual Labour:
- Electric fences must be cleared of hedgerow obstruction manually.
- Strict Regulations.
- Nitrates regulations.
- Not always sensible!
- Factory Beef Grading is a problem.



## LESSONS LEARNED

- Habitats must be retained and enhanced, rather than manually creating new habitats.
- Grazing Livestock important for flora \& can enhance biodiversity.
- Land abandonment is negative for biodiversity.



## THANK YOU FOR LISTENING



