Results Based Agri-Environment Payment Scheme

Grassland conference

27 November 2018

An introduction to Results Based Payment Schemes

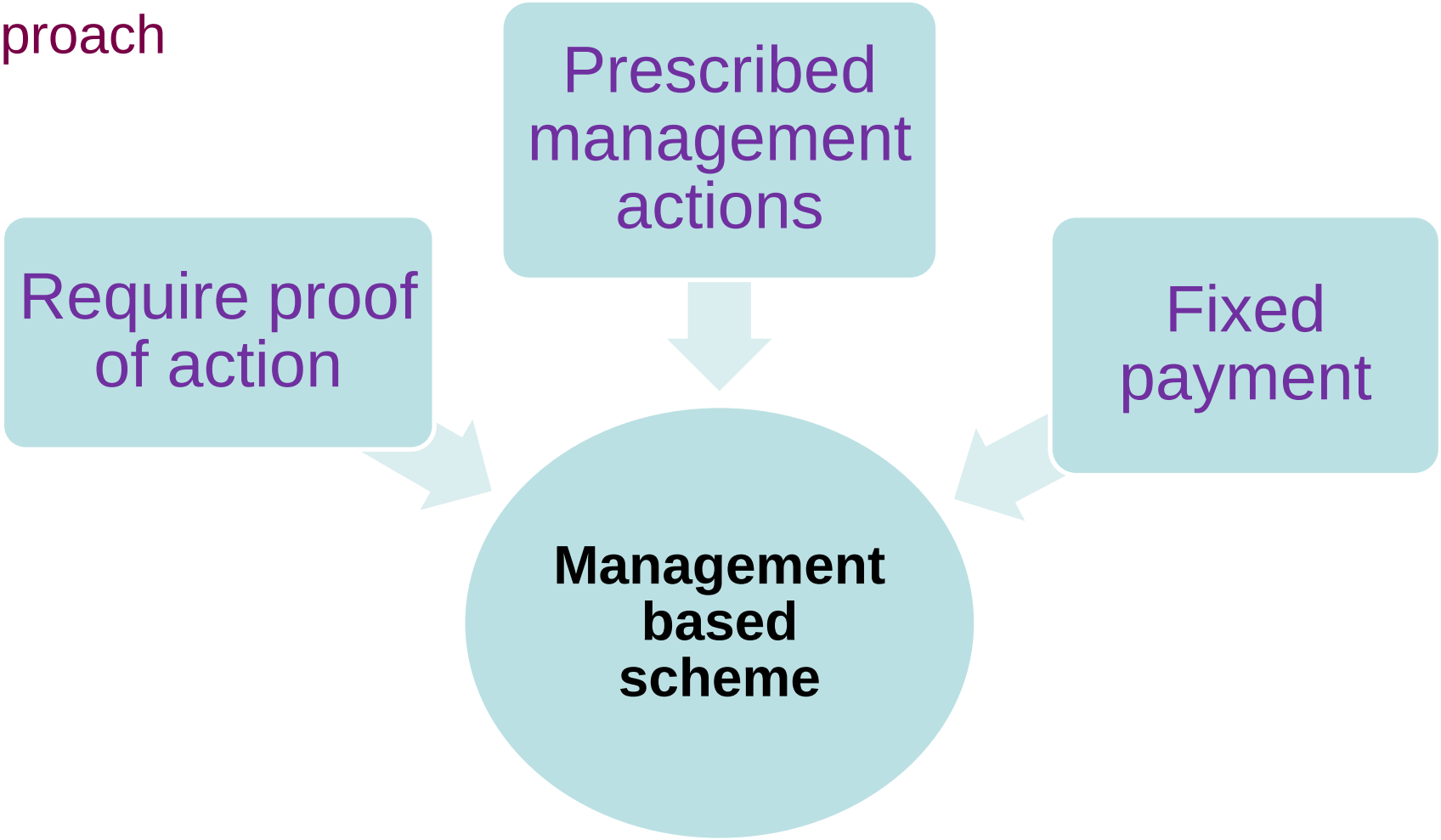
Annabelle LePage
Project Manager, Natural England

An Introduction

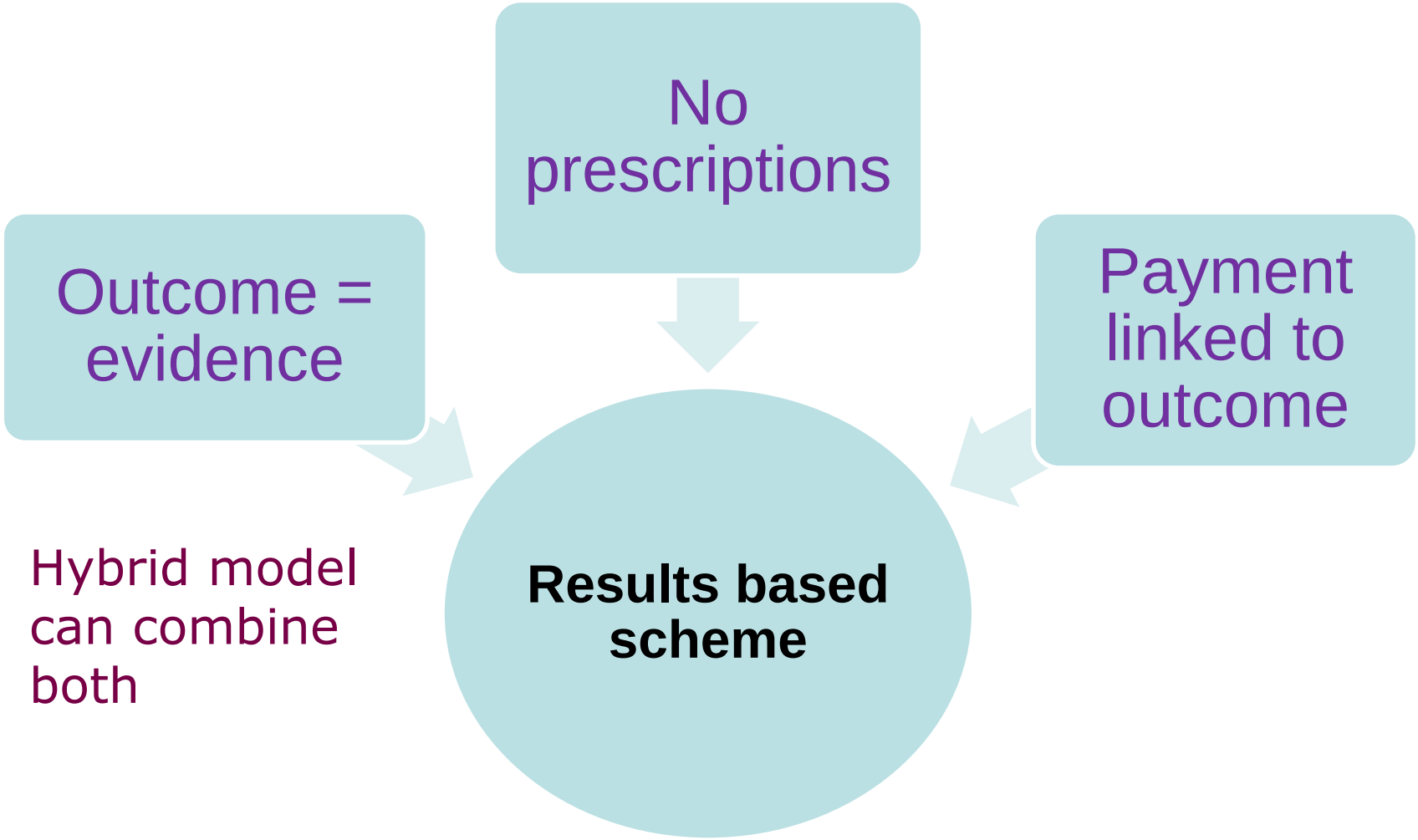
- What are Results Based Schemes
- RBAPS in Europe
- An overview of the English pilot

How is it different?

The conventional approach



Results Based

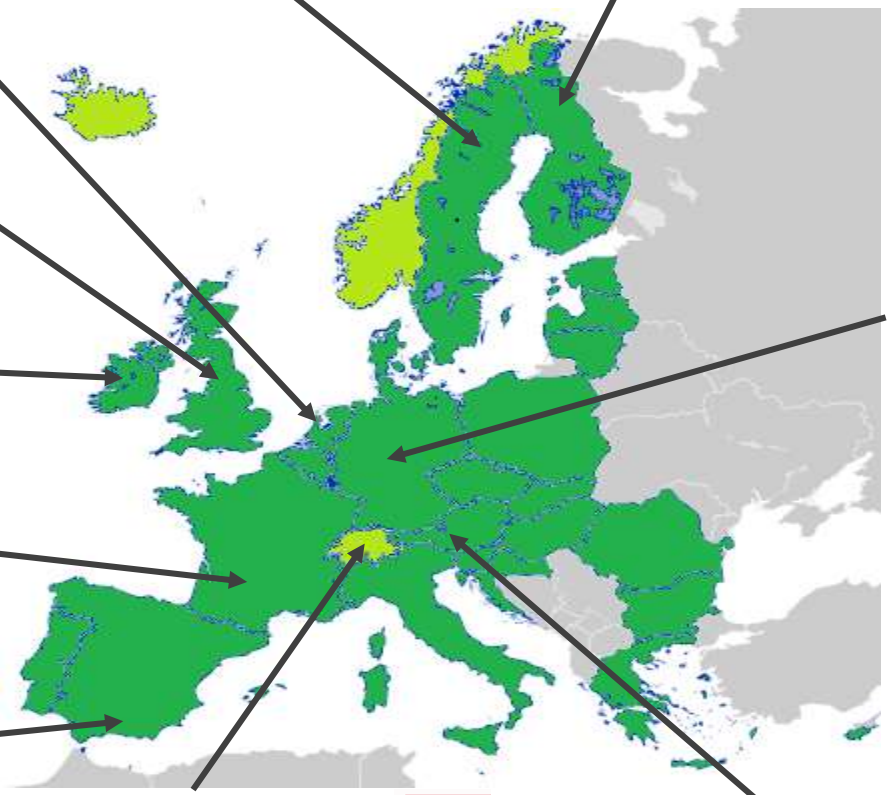


Hybrid model can combine both

Potential advantages of RBAPS

- ✓ Flexibility (“freedom to farm”) to meet the outcomes
- ✓ Provides motivation to succeed, gain recognition & reward
- ✓ Verification is by the results, not record keeping etc
- ✓ Can incentivise maintenance of good habitats & enhancement of others
- ✓ More cost-effective (?) as payment linked to quality

Over 30 years of history already. . . . .



Large carnivores - Lynx (*Lynx lynx*) and Wolverine (*Gulo gulo*)

Golden Eagle (*Aquila chrysaetos*)

Meadow birds
Species-rich grassland

Peak District farm conservation scheme

Burren farming for conservation programme

Flowering meadows
Pastoral management

RAPCA fire prevention scheme

Species rich grassland
Species rich orchards

Ergebnisorientierter Naturschutzplan
Nature Conservation plan

Species rich grassland
Bird schemes:
- Harrier nest protection in arable fields
- Grassland birds

Orchards

<u>Animal Genetic conservation</u>
Most Member States offer some form of support for animal genetic conservation operating on a results-based approach.

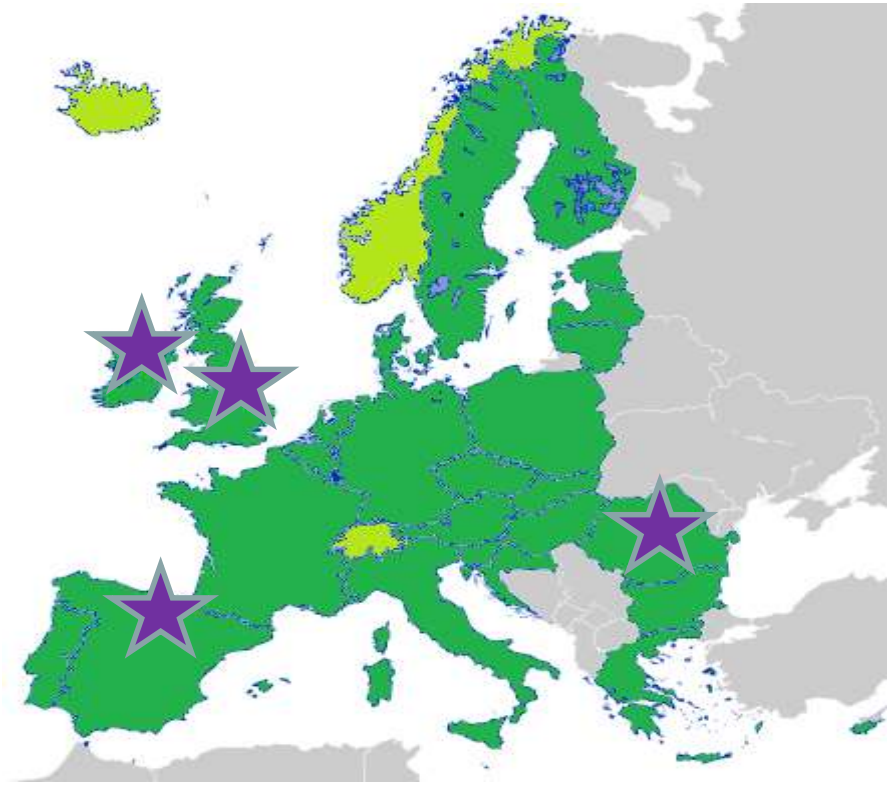
Examples can be seen in Italy, Germany, Ireland and Austria.

Institute for European Environmental Policy

EU projects 2014-2018

2014-15 New pilot projects commissioned by DG Environment to inform future CAP

- €2 million for 3- or 4-year pilots:
  - **Ireland/Spain**
  - **Romania**
  - **England**
- All concluding by end 2018



RBAPS England

- **Upland grassland – Wensleydale, North Yorkshire**
  - Habitat for breeding waders
  - Species rich hay meadow

- **Arable – Norfolk & Suffolk, Eastern England**
  - Winter bird food
  - Pollen & nectar mix

Co-delivered by Natural England & YDNPA

Builds on links with EFNCP and NUCLNP

RBAPS England - Aims

- ✓ assess the environmental performance of habitats under RBAPS agreements
- ✓ compare the RBAPS approach to control sites within the pilot boundary
- ✓ test accuracy of farmer self-assessment of results
- ✓ test cost effectiveness of RBAPS approach
- ✓ explore agreement holder and stakeholder attitudes to RBAPS

Project timeline

2016

- Developing result measures, thresholds, payment rates
- Recruitment of participants/baseline assessments

2017

- Delivery
- Monitoring and evaluation
- Control comparisons

2018

- Delivery
- Monitoring and evaluation
- Final report & dissemination

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Results Based Agri-Environment Payment Schemes

Vicky Robinson
Project Manager, Natural England

Arable pilot

	Total area under agreement (ha)	Number of plots	Number of agreements with this option
Winter Bird Food	25.04	18	15
Pollen and Nectar	16.94	11	11

Winter Bird Food

Objective: To provide an abundant and available supply of small seeds during the autumn and winter months for farmland birds.

An assessment is undertaken in early autumn.

Survey of representative quadrats within plot to count seed heads.

Only specific crops above threshold levels count.

Crops to be present at necessary threshold in five or more quadrats to count.

Winter Bird Food

Q1

	No. of Plants/Seed Heads Required per Quadrat	Quadrat 1	Quadrat 2	Quadrat 3		Tick if Present in 5 or more Quadrats
Crop						
Cereals	25 Seed Heads					
Red Millet	4 Seed Heads					
White Millet	4 Seed Heads					
Quinoa	2 Plants*					
Fodder Radish	1 Plant*					
Dwarf Sunflowers	1 Plant*					

Results Criteria: Number of Established Sown Species Producing Seed*	Grant payment rate where 50% or more of plot assessments reach the required plant or seed head threshold
5+	Tier 6 (£842)
4	Tier 5 (£674)
3	Tier 4 (£505)
2	Tier 3 (£337)
1	Tier 2 (£168)
0	Tier 1 (£0)

Pollen and Nectar

Objective: To provide an essential food source for beneficial pollinators between early and late summer.

An assessment is undertaken over the summer.

Survey of representative quadrats within plot to count flower heads and % cover

No list of specific species that count.

% cover added to assessment in Yr2

Species to be present in five or more quadrats to count.

Pollen and Nectar

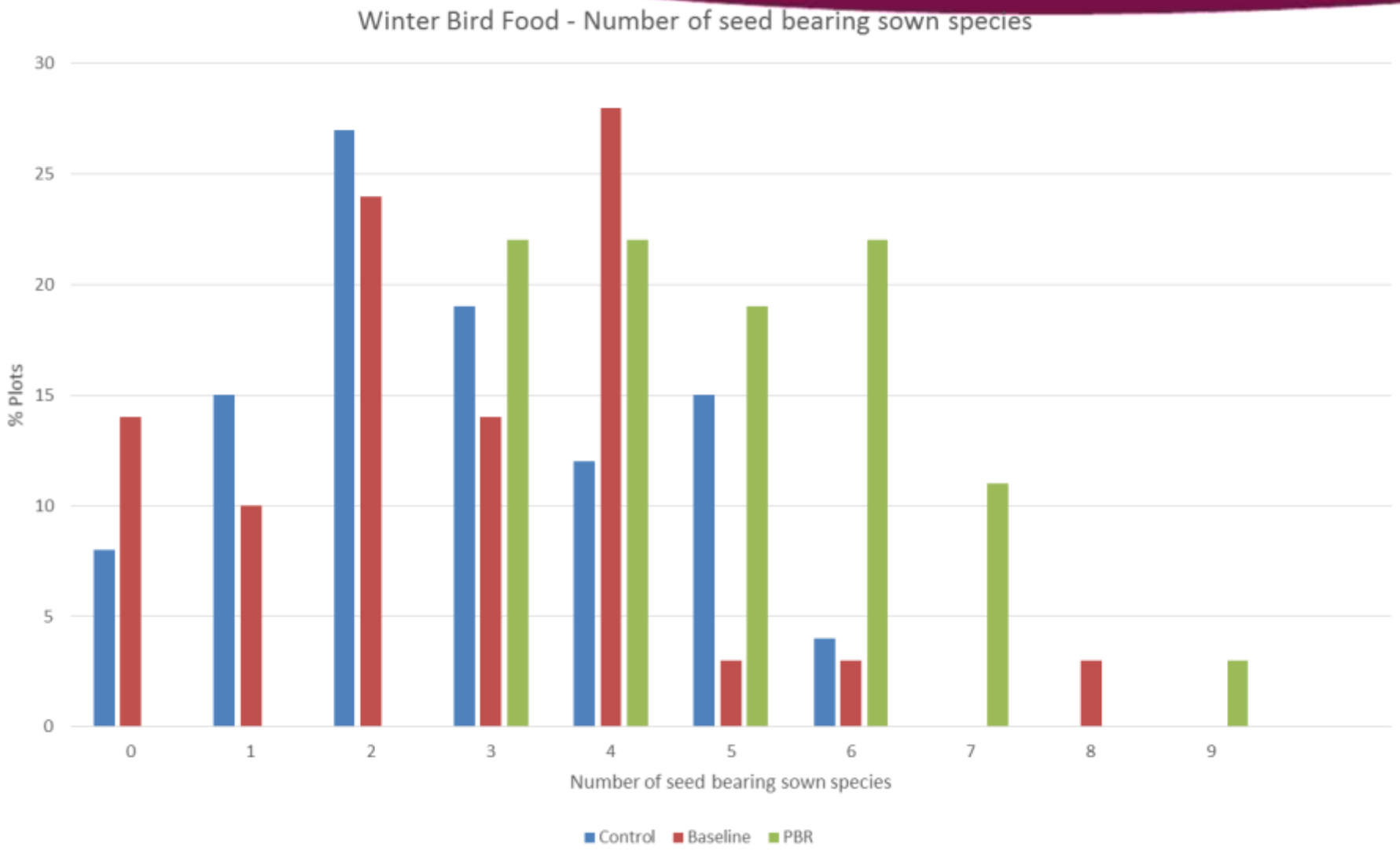
Sown flower species present	QUADRAT										Enter a TICK ✓ in this column for all sown flower species present in 5 or more quadrats
	1	2	3	4	5	6	7	8	9	10	
	Record all sown flower species present in each quadrat										

Result Criteria: Number of sown flowering species present	Results Criteria: Percentage cover of flowering sown species * and Grant payment rate					
	0-49	50-59	60-69	70-79	80-89	90-100
5+	Tier 1 (£0)	Tier 6 (£423)	Tier 7 (£494)	Tier 8 (£564)	Tier 9 (£635)	Tier 10 (£705)
4	Tier 1 (£0)	Tier 5 (£353)	Tier 6 (£423)	Tier 7 (£494)	Tier 8 (£564)	Tier 9 (£635)
3	Tier 1 (£0)	Tier 4 (£282)	Tier 5 (£353)	Tier 6 (£423)	Tier 7 (£494)	Tier 8 (£564)
2	Tier 1 (£0)	Tier 3 (£212)	Tier 4 (£282)	Tier 5 (£353)	Tier 6 (£423)	Tier 7 (£494)
1	Tier 1 (£0)	Tier 2 (£141)	Tier 3 (£212)	Tier 4 (£282)	Tier 5 (£353)	Tier 6 (£423)
0	Tier 1 (£0)	Tier 1 (£0)	Tier 1 (£0)	Tier 1 (£0)	Tier 1 (£0)	Tier 1 (£0)

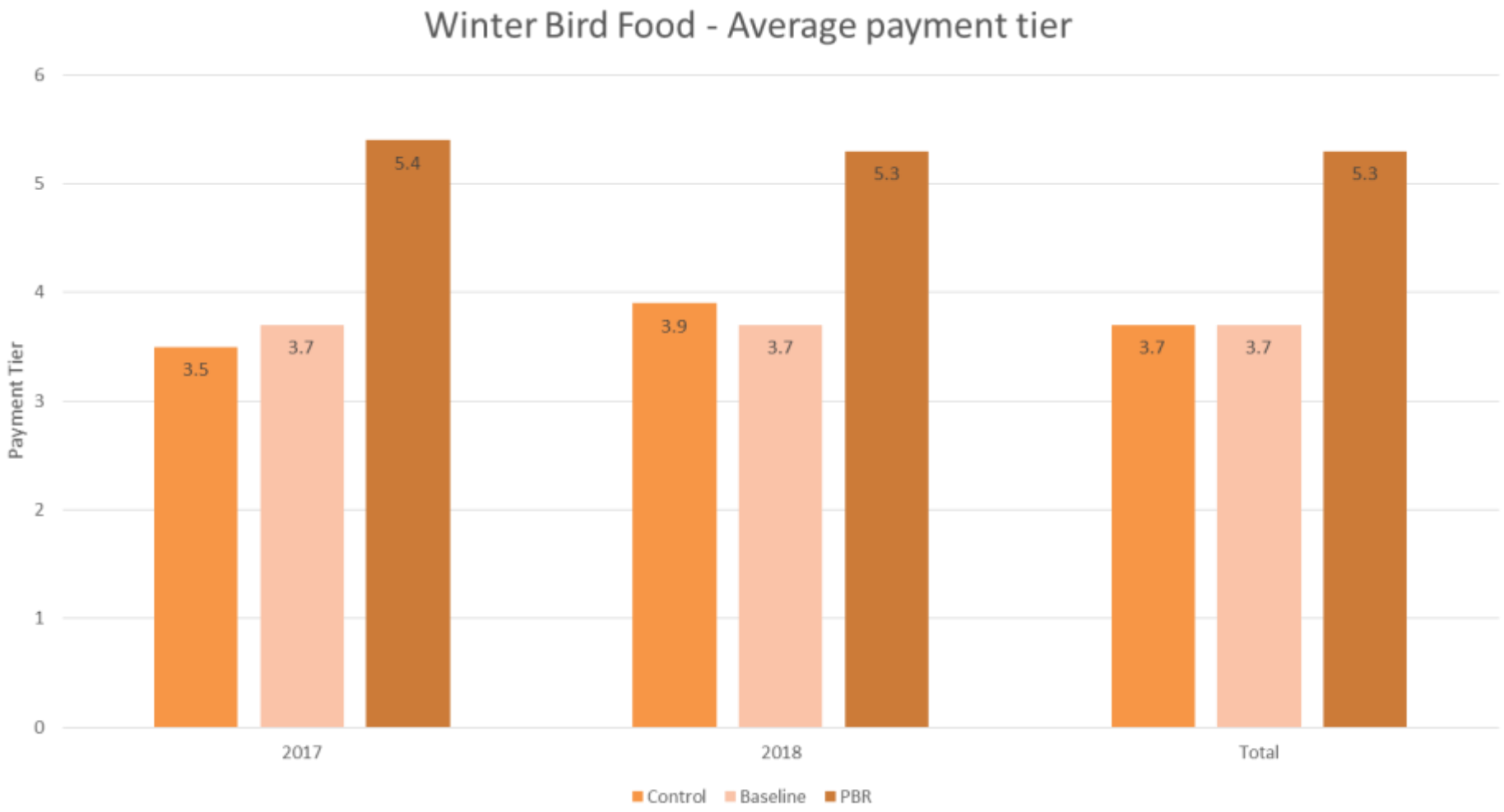
Arable assessments

Results

WBF - Plot Environmental Performance – Number of Crops



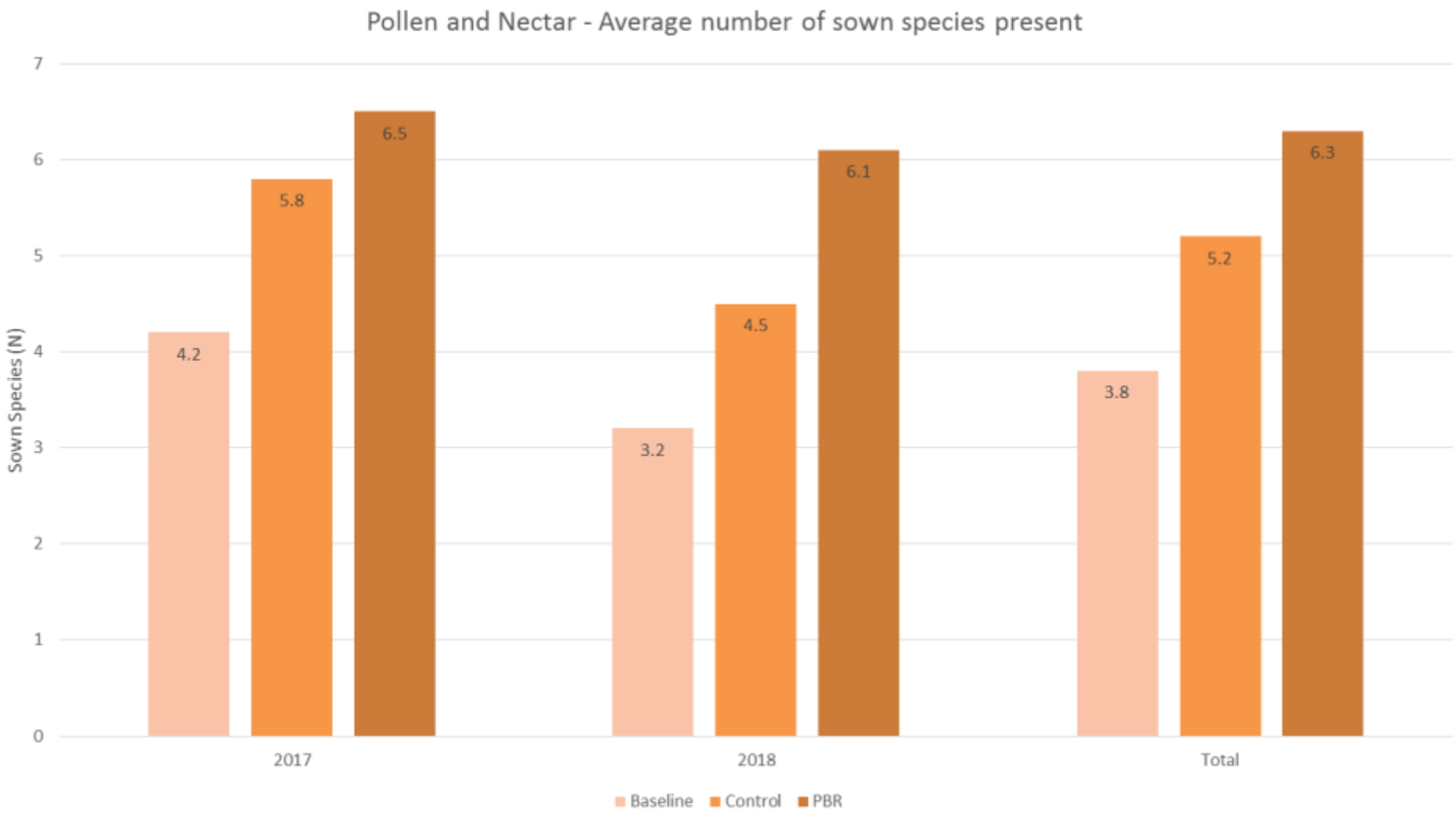
WBF – Average Payment Tier



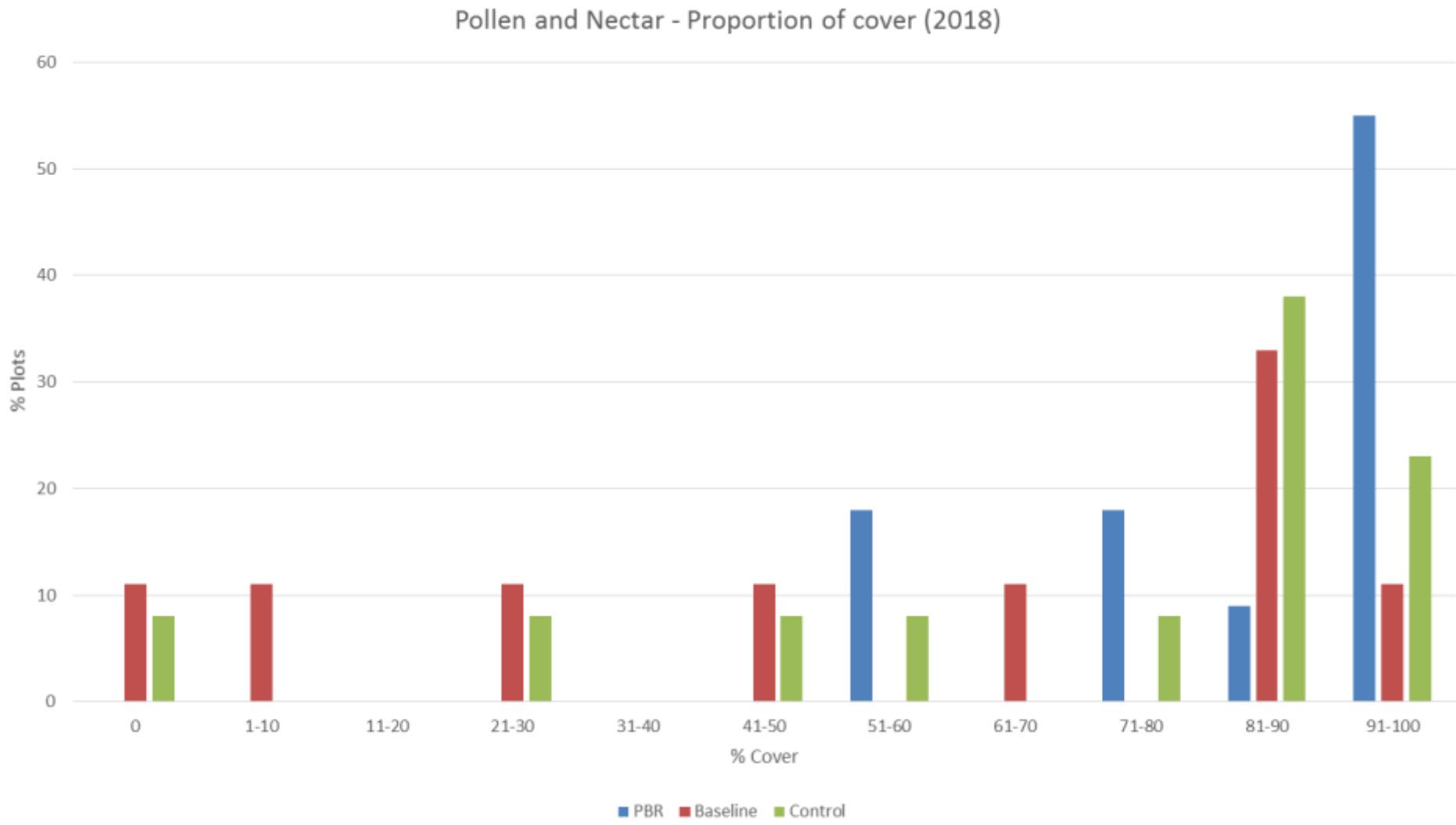
Practicalities

Results

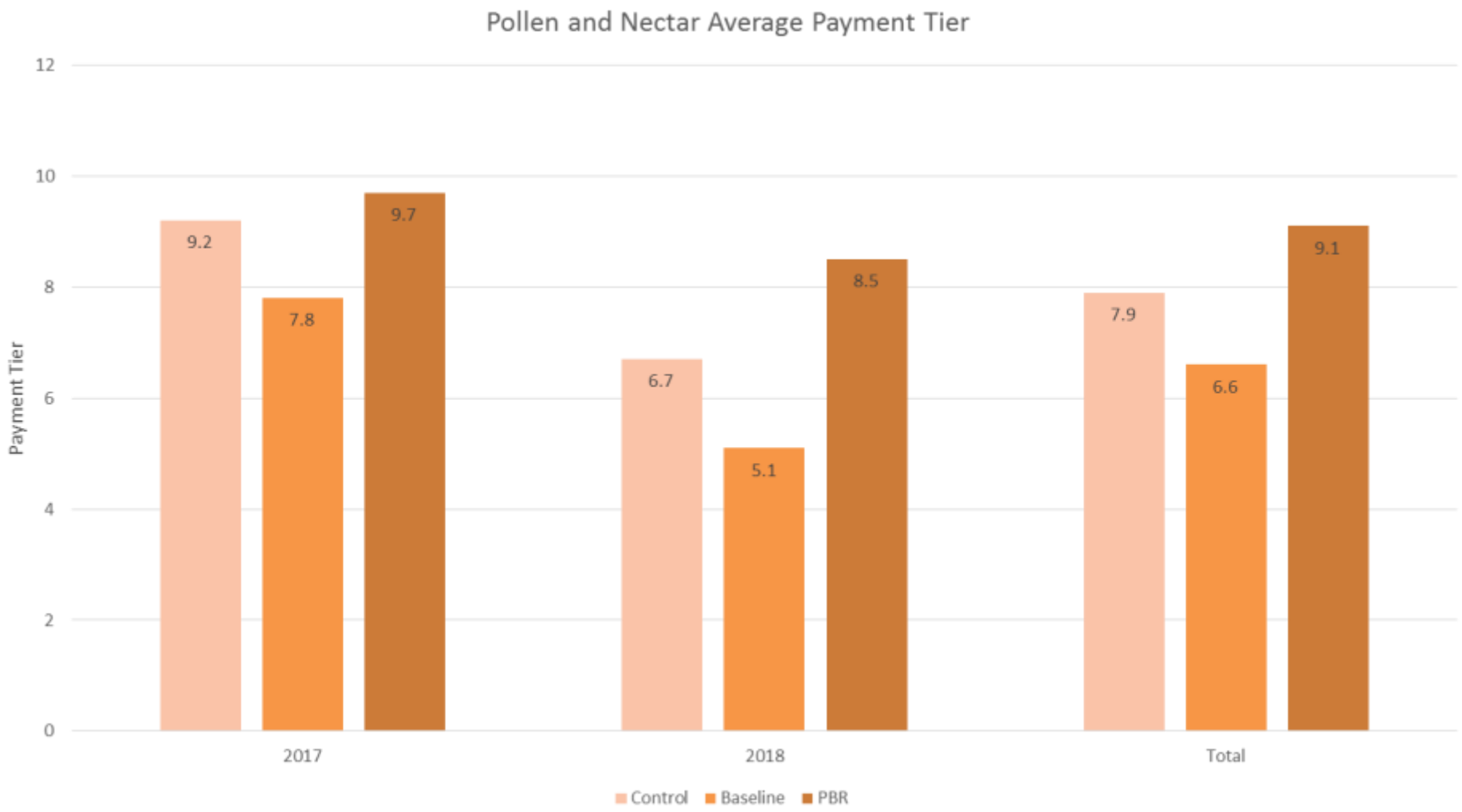
PN – Average Number of Sown Species



PN – Percentage Cover



PN – Average Payment Tier

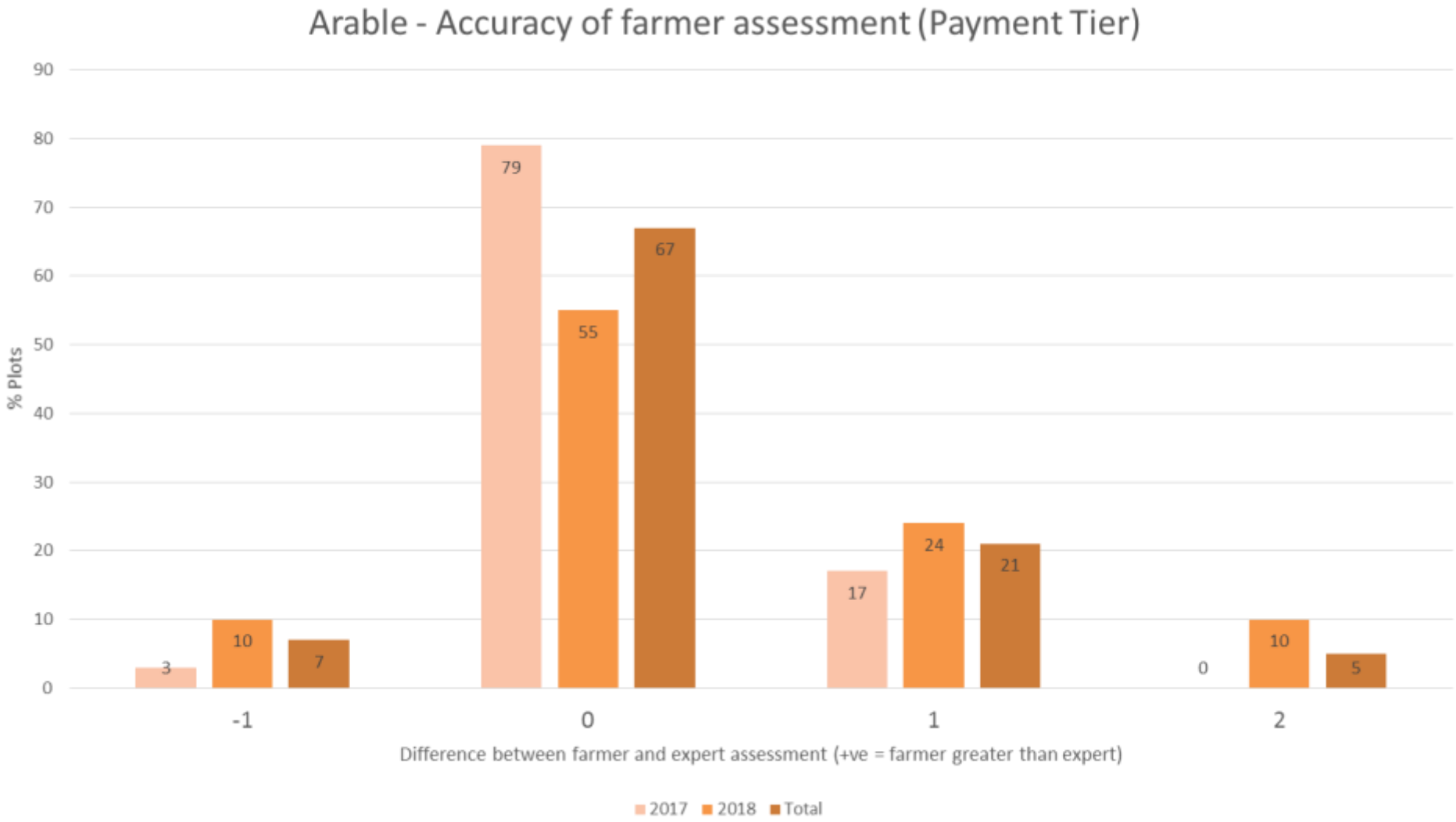


What the farmers have told us told us:

ADVANTAGES	DISADVANTAGES
• Flexibility and freedom • Reward for effort • Ability to use local knowledge • Incentive to produce better results • Improved knowledge • Increased biodiversity • It delivers • Measurable results • Better use of public money • Fair • Happy Birds!	• Crop failure and risk of no payment • Time consuming to complete assessments • Intensive farming of the plot vs wildlife benefits • More time consuming for the administrators due to increase in checking and time to set up an agreement. • Scalability • Getting stung by bees when doing the pollen and nectar assessment!

- The majority in 2018 have managed their RBAPS plots differently to their existing ES plots with a range of different activities being carried out. In 2017 all bar one managed their plots differently.
- Training was highlighted as very important or important with plant identification followed by management techniques being the key areas.

Farmer Accuracy of Assessments



Positives

- Plots are having a close eye kept on them to ensure timely management decisions
- Additional operations are being undertaken to deliver the highest tier possible with resulting environmental benefits
- Environmental performance is higher for the PBR plots
- The training and guidance has been really successful
- The farmers have enjoyed getting together to share their views and experiences
- For the delivery organisation: Shift from paperwork to fieldwork

Farm Events

Challenges

- The dry spring made 2018 a challenging year
- Scoring sensitive for the winter bird food and pollen and nectar.
- Plant protection product availability for winter bird food could limit ability to produce reliable range of crop types.
- WBF results criteria drive more intensive management than feels ‘right’ for an environmental option
- Upscaling

Conclusions

- Environmental performance is higher with a PBR approach based on the Pilot's results criteria
- Incentive and flexibility of management is hugely valued, but if scaled up consideration of practicalities needed
- Accuracy of farmer assessments is variable with further work needed on the assessment methodology.
- PN needs a longer period of time to test management decisions when the species start to decline.
- WBF needs further work to test different mixes.

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Results Based Agri-Environment Payment Schemes



Wensleydale


Project Aim

To test the effectiveness of results-based payments for maintaining upland grassland condition

(outside existing agri-environment agreements, but based on equivalent agri-environment scheme options with management based payments).

Exploration

- **Where?**

  Choice of grassland project location

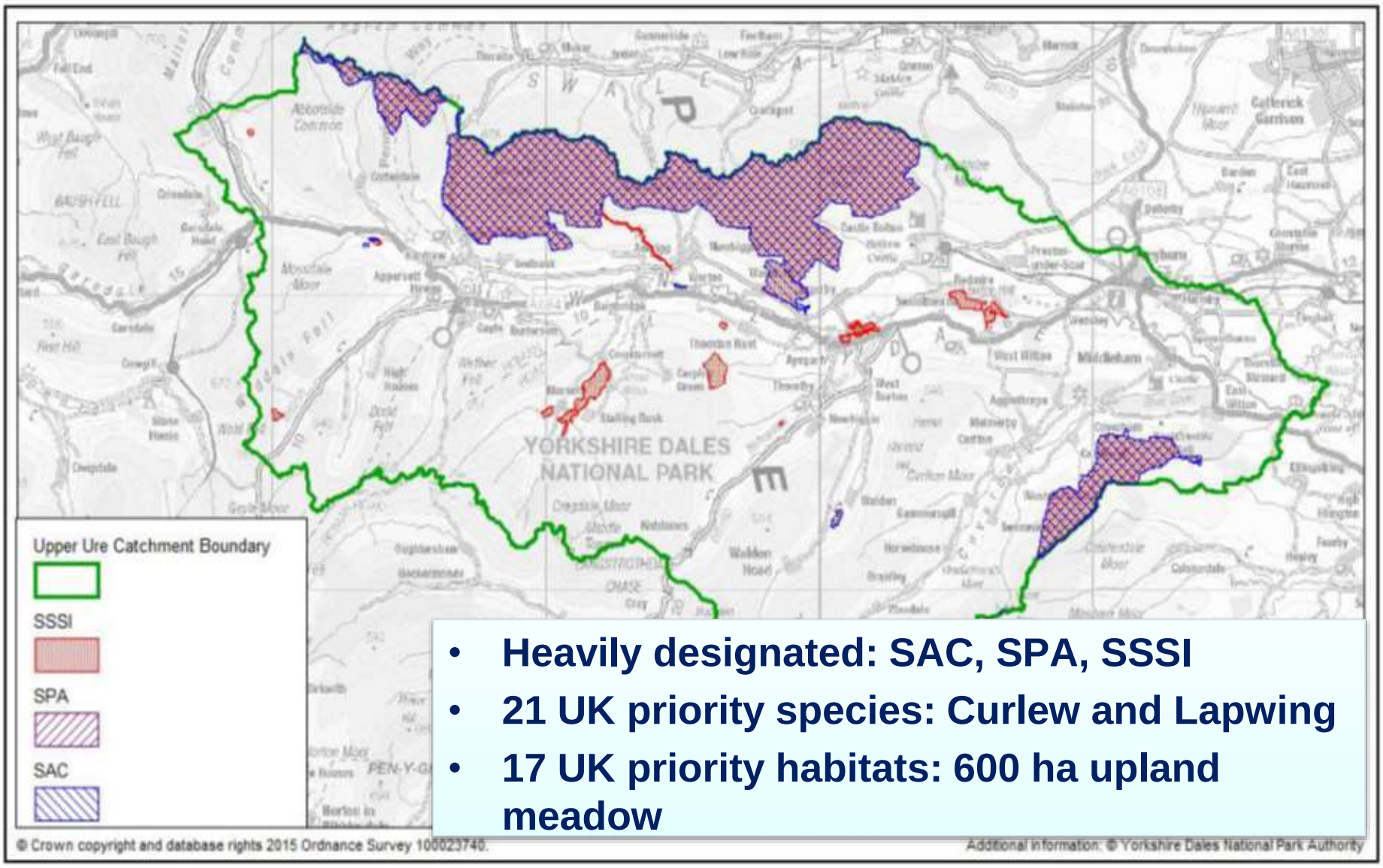
- **Why?**

  Assessment of baseline levels: habitats/species

- **What?**

  Setting biodiversity goals, candidate options and results

Why Wensleydale ?



- **Heavily designated: SAC, SPA, SSSI**
- **21 UK priority species: Curlew and Lapwing**
- **17 UK priority habitats: 600 ha upland meadow**

Birds of Conservation Concern 2015 data

BOCC species	IUCN status	European status	UK status	% decline over past 25 years*	Dependent on upland habitats for breeding	Selected as RBAPs target
Eurasian curlew Numenius arquata	Near threatened	SPEC 1	Red	46	Y	Y
Northern lapwing Vanellus vanellus	Near threatened	SPEC 1	Red	57	Y	Y
Common redshank Tringa totanus	Least concern	SPEC 2	Amber	44	Y	Y
Common snipe Gallinago gallinago	Least concern	SPEC 3	Amber	31	Y	Y

Upland Hay Meadows

- Upland or northern hay meadows (NVC community MG3, Anthoxanthum odoratum – Geranium sylvaticum grassland)
- an Annex 1 habitat under the EU Habitats and Species Directive
- one of the rarest grassland habitats in the UK

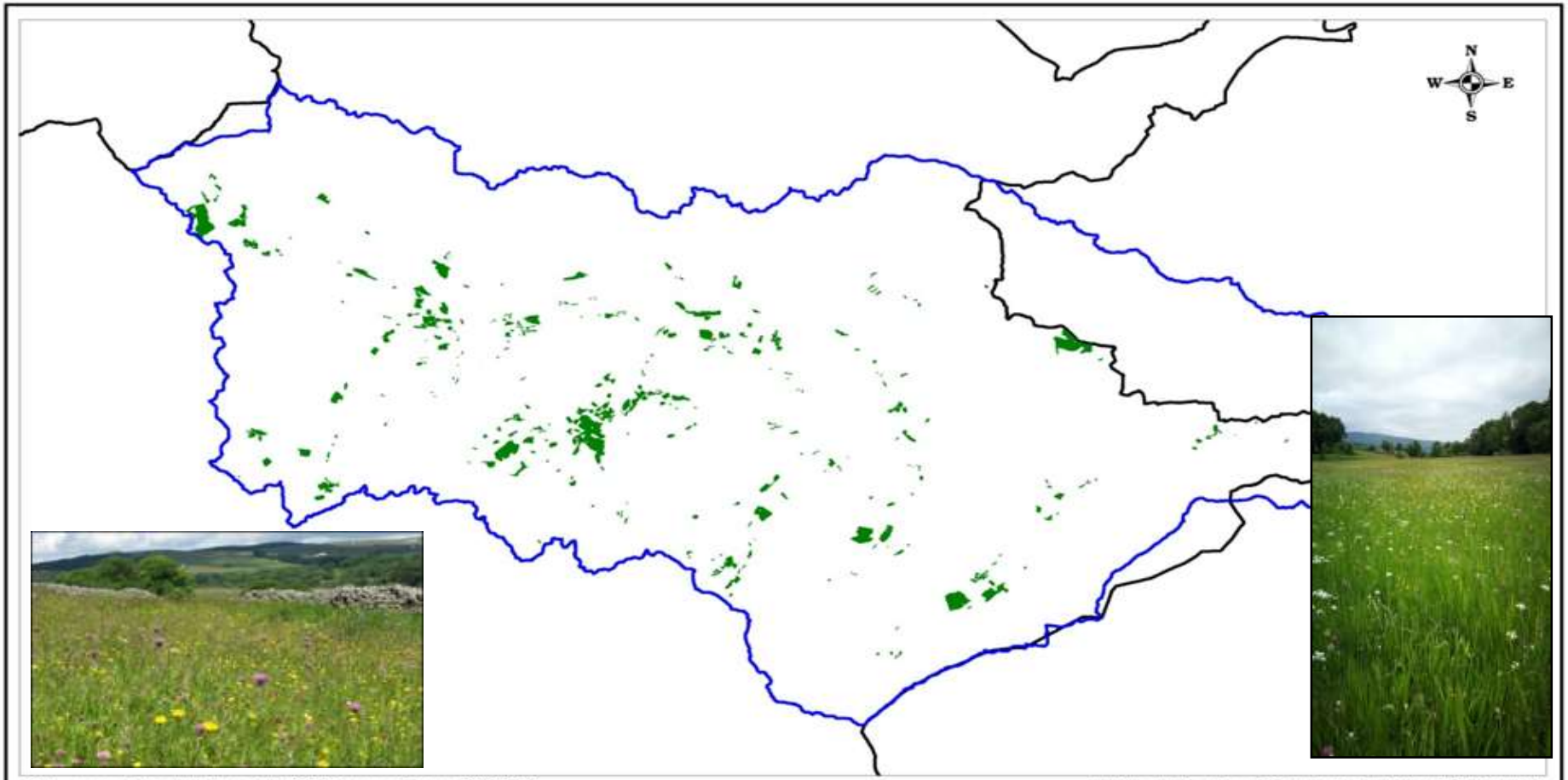
Distribution of meadows: Wensleydale

Distribution of Hay Meadows

Green = Hay Meadows (G06 & G09) including mosaics (Source: YDNPA Habitat Map and NE PHI Vers.1)

Scale 1:176563

Compiled by Fran Graham on 24 March 2015



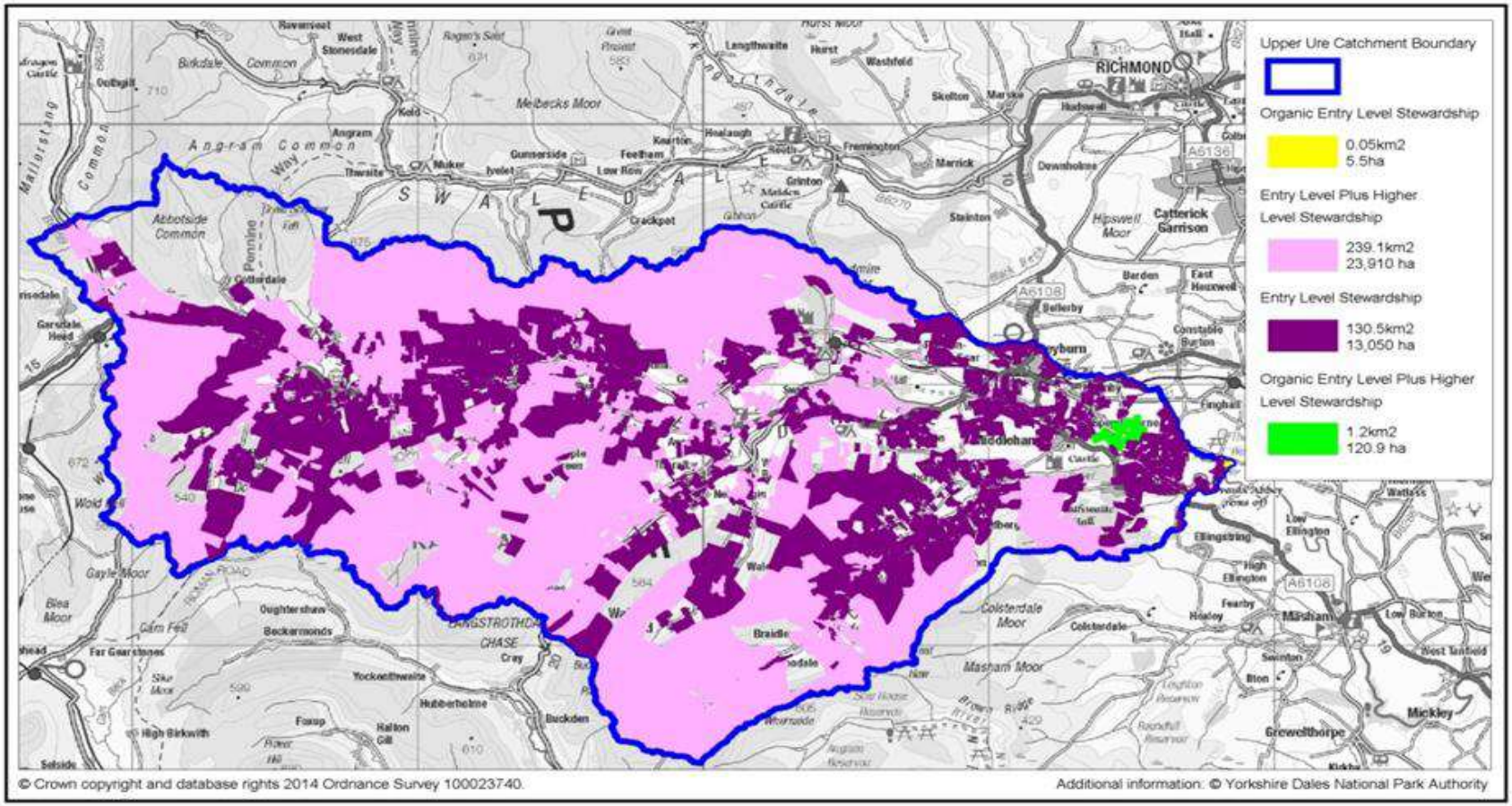
Agri environment coverage

Agri-environment scheme coverage in the Upper Ure Catchment

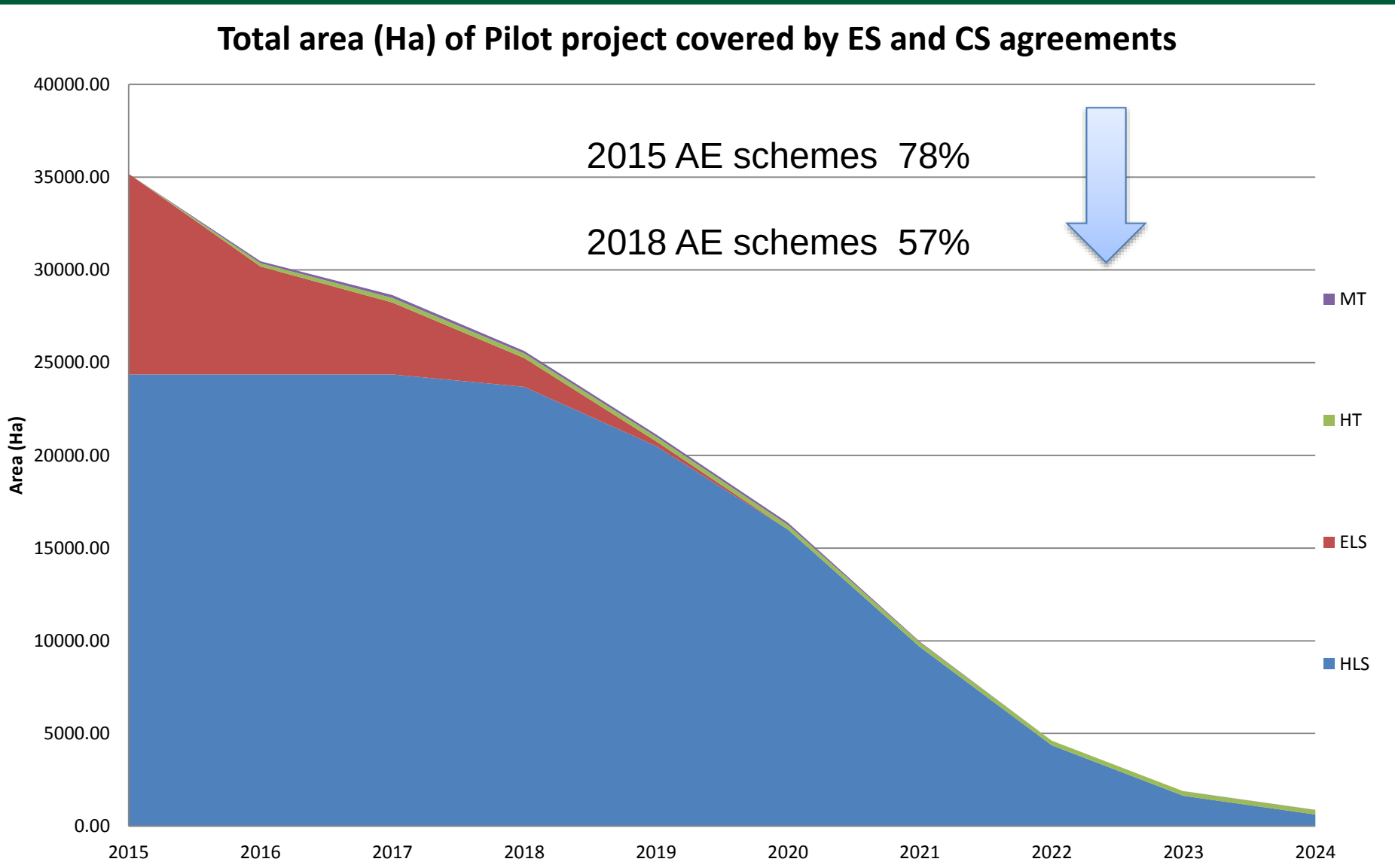
(Data from http://www.geostore.com/environment-agency/WebStore?xml=environment-agency/xml/ogcDataDownload.xml)

Scale 1:186119

Compiled by on 3 October 2014



Agri environment expiry in Wensleydale



Project objectives

The objectives were agreed as a result of farmer and stakeholder engagement meetings within the Northern Upland Chain Local Nature Partnership. The objectives had to be meaningful for the farmer and describe the desired outcome.

To test the effectiveness of results-based payments for maintaining upland grassland condition:

Hay meadows (GS7 Restoration of species rich grasslands)

'to *maintain or enhance the diversity of plant species within hay meadows through sustainable agricultural management'*.

Breeding waders (UP2 Management of rough grazing for birds)

'to provide suitable and sufficient feeding, nesting and chick rearing habitat for the four key breeding waders in the uplands (curlew, lapwing, snipe and redshank)'

Design and implementation

- Development of results criteria and assessment methodology
- Calculation of payment rates
- Selection of applicants
- Control and verification
- Dispute resolution
- Guidance and training

Stakeholder engagement

- The Northern Upland Chain (NUC) Higher Nature Value Farming (HNVF) working group was the main vehicle for farmer involvement
- Engaging farmers from the start of the design process ensured their skills and understanding of land management were utilised within the formation of the indicators.

Developing results criteria and methodology

Indicators and assessment method must be representative of the habitat, simple, repeatable and objective.

Habitats and species should be:

- ✓ easy to identify
- ✓ easy to survey
- ✓ present for a significant period (not transitory/short-lived)
- ✓ within farmer's control
- ✓ sensitive to management change

Positive and negative indicators give farmers a clear message on the type of management necessary to improve the score and payment

Upland hay meadows

Objective: To undertake sustainable agricultural management to produce good quality herb rich hay

A single self assessment in June/July undertaken by the farmer, looking specifically at 2 key habitat features needed to meet the objective:

1. Range of positive and negative plant species
2. Impact of damaging activities

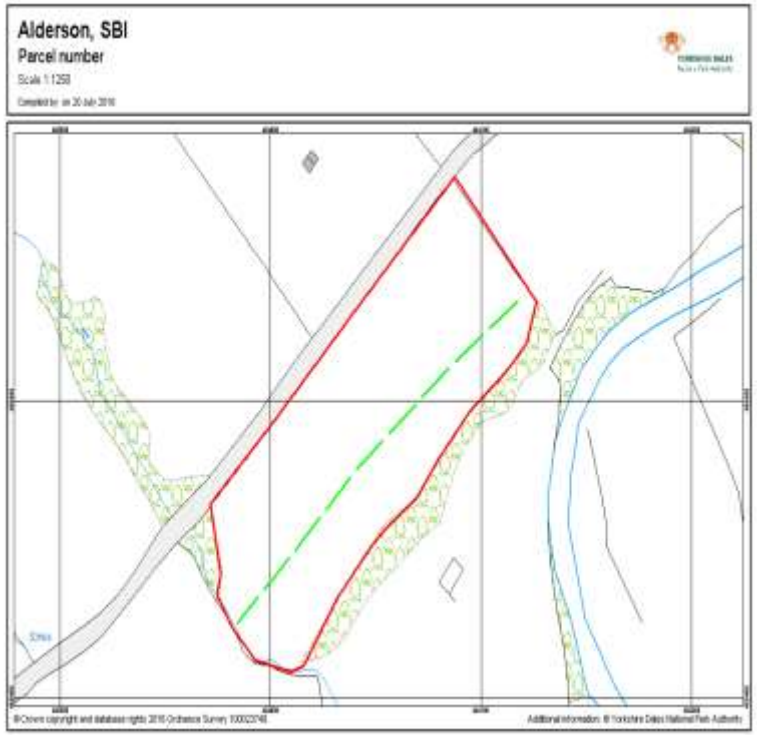
Assessment of range of species undertaken by following a set line through the meadow, with the farmer stopping 10 times to ID plant species

Meadow assessments

Meadow survey sheet	Parcel: SE 04800747													
Date of survey:	Jul-16													
Survey undertaken by:	Helen Alderson and JLC													
STOPS	Species Score	1	2	3	4	5	6	7	8	9	10	Present in field but not on stop	Total Presence	Total species score *
2. Positive plant species (V)														
Betony	3												0	0
Birds foot trefoil	3											1	1	3
Bugle	3											1	1	3
Burnet saxifrage	3												0	0
Common bistort	3												0	0
Common black knapweed	3											1	1	3
Cowslip	3												0	0
Eyebrights	2	1	1	1	1	1	1	1	1	1	1		10	20
Fairy flax	3												0	0
Globe flower	4												0	0
Greater burnet	4												0	0
Harebell	3											1	1	3
Hawkbits	2	1	1	1	1	1	1	1	1	0	1		9	18
Ladies mantle sp	4												0	0
Marsh marigold	2												0	0
Meadowsweet	2												0	0
Melancholy thistle	4												0	0
Orchids	4												0	0
Ox eye daisy	3												0	0
Pignut	2	1	1	1	1	1	1	1	1	0	1		9	18
Ragged robin	3												0	0
Red clover	2	1	1	1	1	1	1	1	1	1	1		10	20
Ribwort plantain	2	1	1	1	1	1	1	1	1	1	1		10	20
Salad burnet	3												0	0
Scabious (sp)	3												0	0
Sedges - short & tall	2												0	0
Sneezewort	3												0	0
Vetches	2											1	1	2
Water avens	3												0	0
Water mint	3												0	0
Wood cranesbill	4												0	0
Yellow / hay rattle	2	1	1		1	1	1	1		1	1		8	16
Quaking grass	4												0	0
Sweet vernal grass	2	1	1	1	1	1	1	1	1	1	1		10	20
Negative plant species														
Common dock	-2												0	0
Cow Parsley	-1												0	0
Creeping thistle	-2												0	0
Nettle	-2												0	0
Ragwort	-2												0	0
Rush	-1												0	0
Soft brome	-1												0	0
Spear thistle	-2												0	0
Meadow score														146
2. % cover of field area affected by damaging activities														
greater than 20%	-20													
10 - 20%	-10													
5 - 10%	-5													
under 5%	0													
TOTAL MEADOW SCORE														146

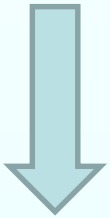
Survey sheet

Meadow map showing transect line



Payment bands for meadows

- Score of 146 = £260/ha



Score / Total points	1 40 -79 points	2 80-119 points	3 120-159 points	4 160-199 points	5 200+ points
£/ha	112	186	260	334	371

Upland grassland for breeding waders

Objective: To provide suitable feeding, nesting and chick rearing habitat for breeding waders

A single self assessment in March/June undertaken by the farmer, looking specifically at 5 key habitat features needed to meet the objective:

1. Vegetation height
2. Rush cover
3. Scale of wet features
4. Quality of wet features
5. Damaging operations

Breeding wader Assessment

Vegetation height

Mixed sward height where between 25 - 75% of the field is short and the rest varied, tussocks frequently seen and well distributed	10
Over 75% long. Short swards confined to very small parts of fields (e.g. gateways, sup feed sites only) Tussocks indistinguishable from other tall vegetation	5
Over 75% short with little to no variation in height. Tussocks rare or absent	5
No difference in height – either all short, or all long with no variation	1

Rush cover

10 – 30% cover, well scattered with local areas of dense rush	10
>30% rush cover, large areas of dense rush and tall vegetation	5
Absent or sparse <5%	1

Scale of wet features

Field is damp across the majority of the area with a number of wet areas scattered across the field	10
Damp areas are contained to approximately 10% of the field, e.g. springs, remainder of field is dry	5
Damp areas are rarely seen	1

Quality of wet features

Wet features contain a mix of shallow pools and wet vegetation, gently sloping edges, 50% of the edge is mud with less than 25% rush or tall vegetation	10
A number of wet features on the site but not meeting all criteria above	5
Steep sided, no muddy edge, dense rush cover, inaccessible to birds	1

Points = Pounds

Total score 30 points = £139/ha

Tier	1	2	3	4	5
Total points	<9 points	10-19 points	20 – 29 points	30 – 39 points	40 points
Grant £/ha	35	69	104	139	174

Farmers are also asked to record bird presence but this has no effect on the score as it is outside farmers control

Payment rate calculations

Costings were undertaken by NE and are based on management regimes required to produce the desired outcomes.

Hay Meadows	Wader habitat
Hay making costs	Livestock IOWC
Barley replacement	Cattle grazing charges
Reduction in early season grazing	Sward management
Loss due to early livestock exclusion	Weed control on 5% area
Reduction in aftermath grazing	Rush control (20%)
FYM application	Scrub control (10%)
Soil analysis, sampling and liming	Surveys
Surveying	Attendance at meetings
Attendance at meetings	Establishment & maintenance of scrapes
Weed control on 10% area	Impediment of drainage

Additional costs

It was recognised that farmers would have to undertake additional tasks not undertaken with conventional schemes. Farmers would have to attend training events and learn new skills of surveying and species identification.

Survey training
Meadows
approx 1.5 hr per ha @ £25/ha.

Waders
approx 30 mins/ha @ £13/ha

- **Training attendance at meetings £25/hr**
- **Travel costs £0.45/mile**
- **Attitudinal surveys £25/hr**

Setting payment bands

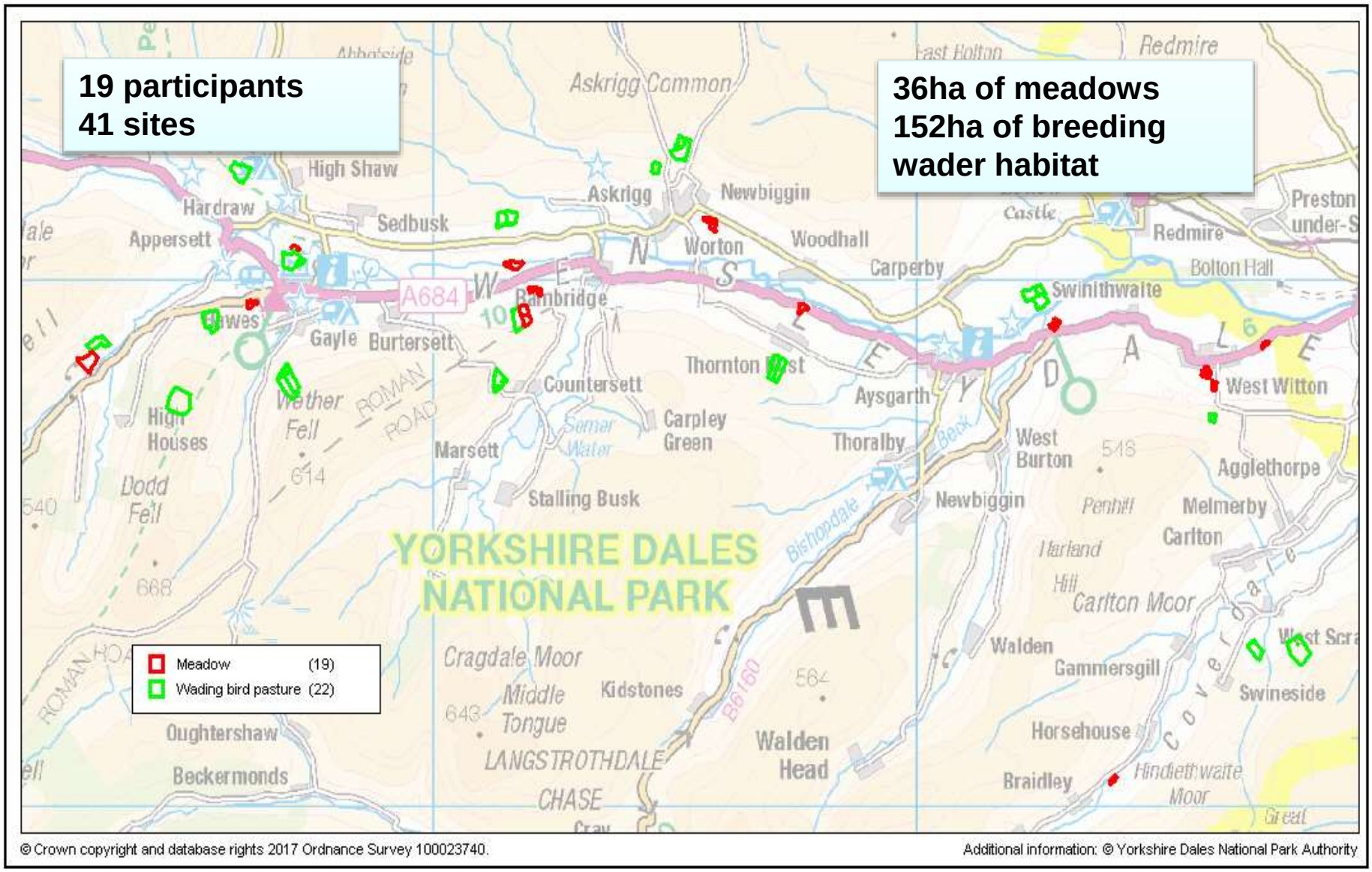
Other European results based schemes indicate a number of payment bands set according to habitat condition, is a positive method of encouraging farmers to manage the habitat to improve their payment.

- **It fairly rewards farmers based on the condition of the habitat at the time of assessment.**
- **Provides incentive to improve habitat condition.**
- **Can instigate healthy competition.**
- **Managing the environment is seen as important as managing livestock, as payment is based on the quality of the output – the habitat is the product.**
- **A graduated payment rate matrix was designed on the basis of meeting specific outcomes associated with habitat management.**

Selection of applicants 2016

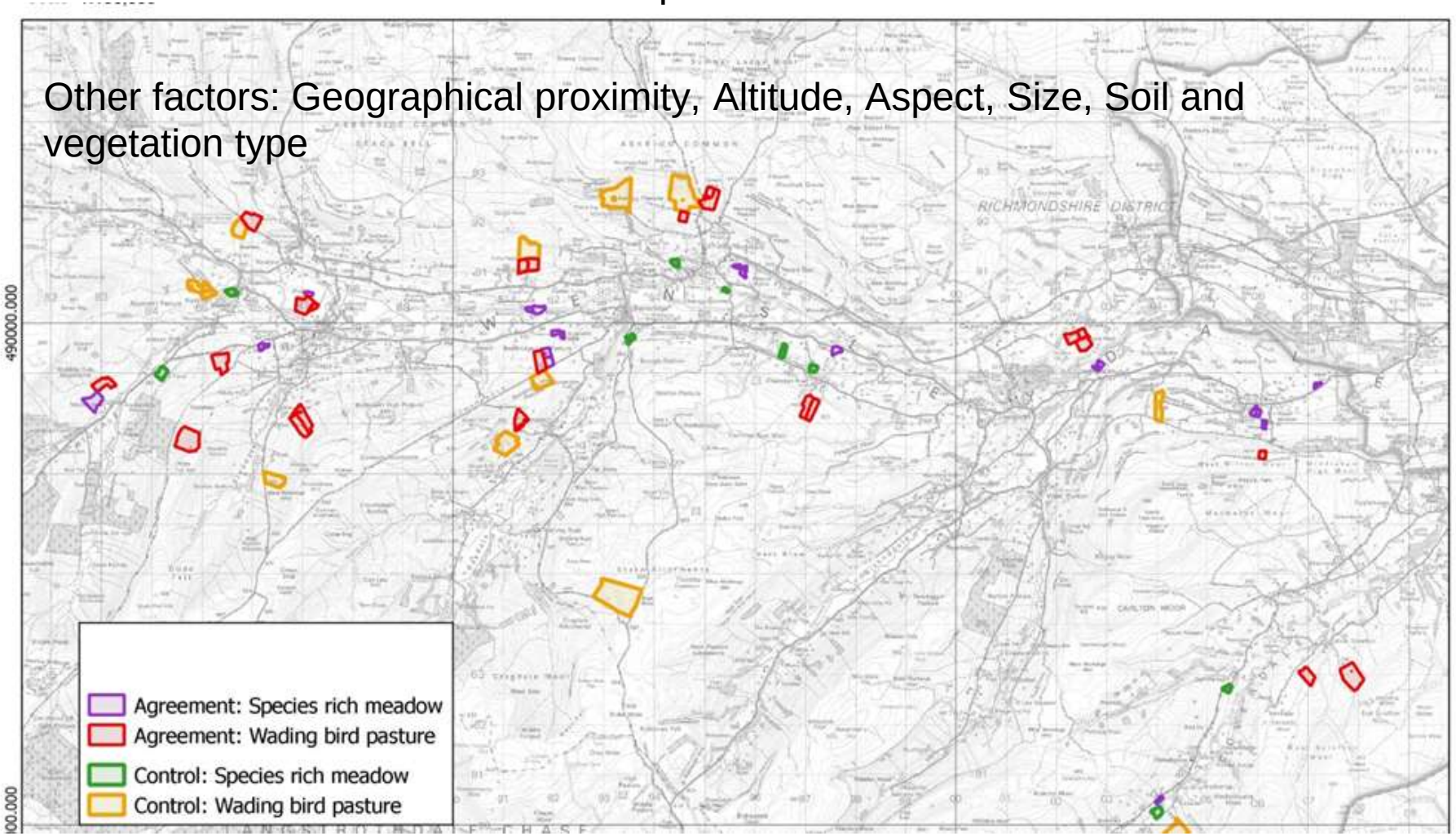
- The pilot was open to all eligible applicants within the project area.
- Promoted through direct mailings (300), stakeholder workshops and press adverts
- 35 farmers applied
- 19 farmers eligible
- Agreements signed
- Baseline survey - Adviser

Project Site locations



Control and verification

Control sites were selected from comparable sites in Wensleydale managed under ES/CS options GS7 or HL7/UP2



Dispute resolution

- Predictably there were instances when the farmer and adviser results and scores differed. If either the farmer or adviser score took the payment into a different band the adviser contacted the farmer to discuss the survey results and compare the outcomes together. A discussion took place about how each party reached their score including their survey technique and identification skills.

- A negotiated decision was made on the final score which was agreed by both parties. Within this project this has proved a successful diplomatic method for settling score discrepancies for participating farmers.

Identify problem

Discuss

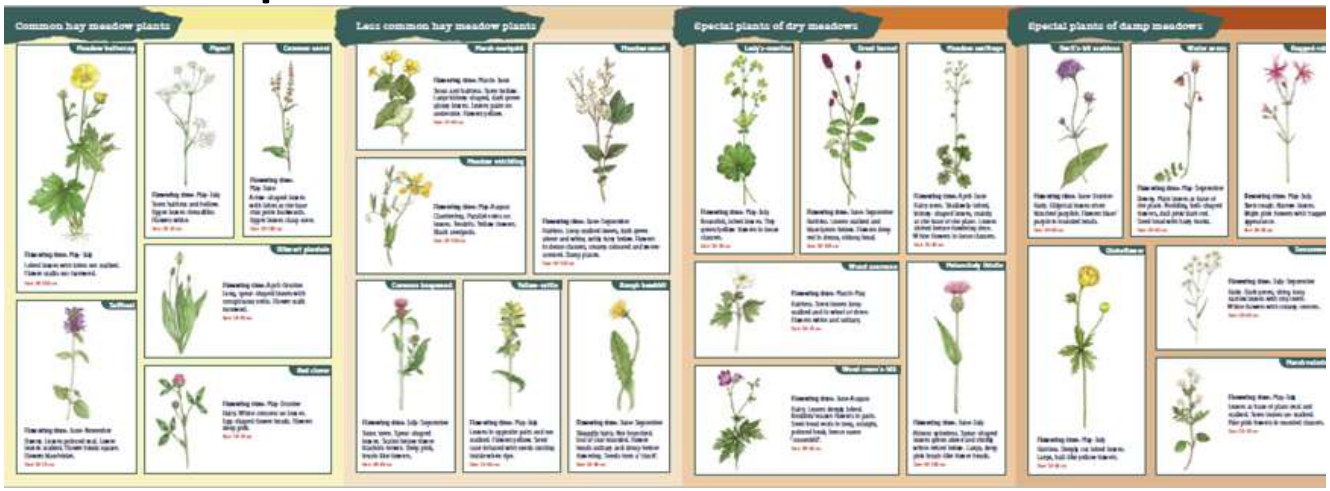
Negotiate

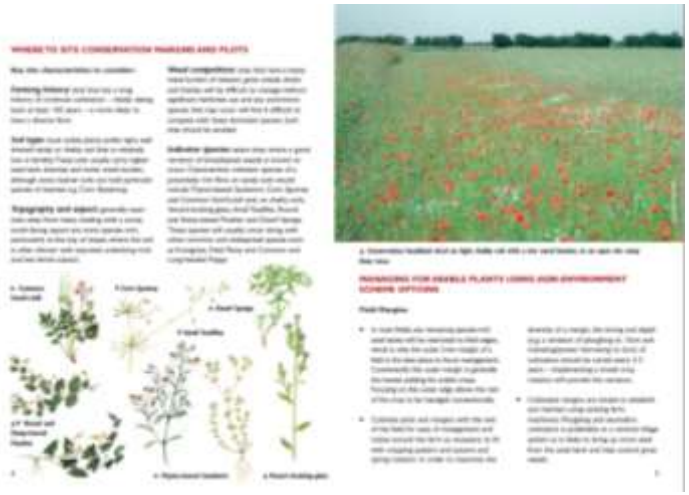
Agree

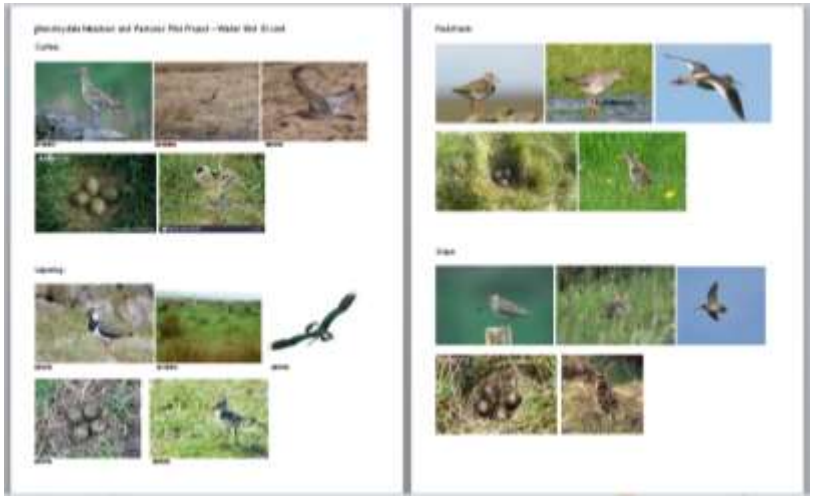
Guidance and training

Advice literature

Guidance production







Thank You

Results Based Agri-Environment Payment Scheme

Grassland conference

27 November 2018

NATURAL ENGLAND

Results and Attitudes

YORKSHIRE DALES National Park Authority

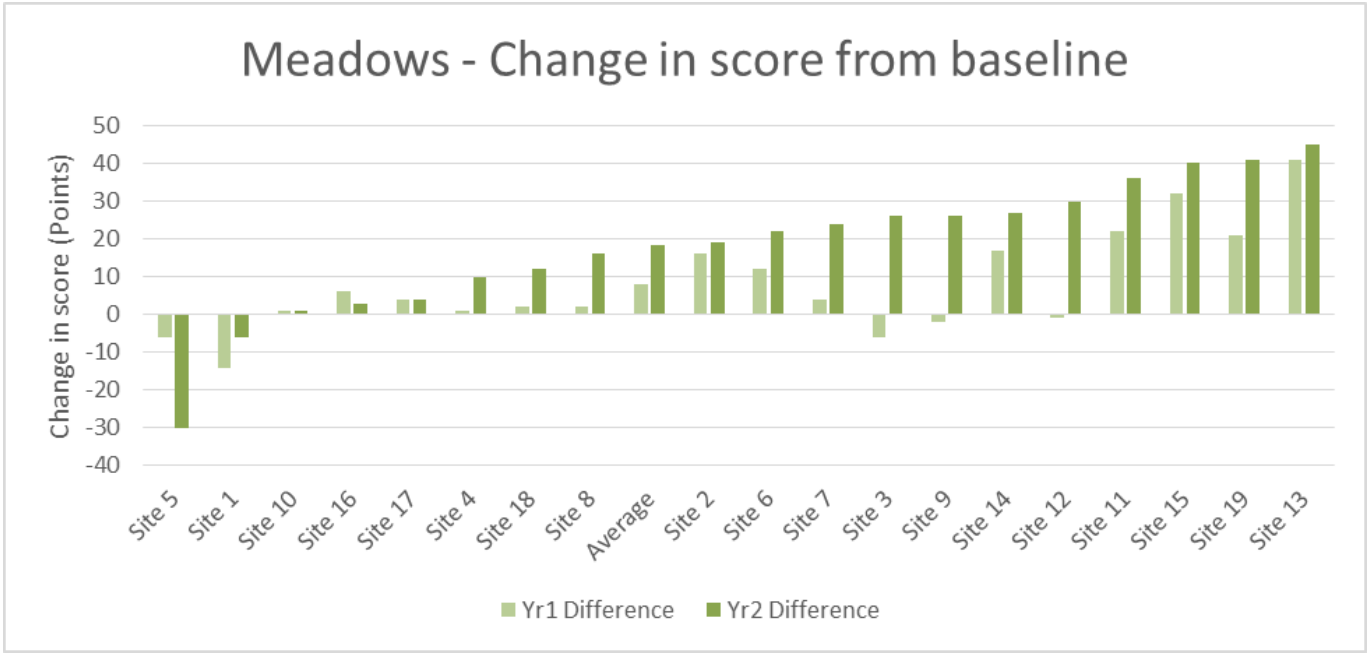
- Overview of meadow and wading bird habitat results, comparison to control sites and review of farmer accuracy
- Review of participant farmers attitudes towards RBAPs
- What have we learnt from this process

Upland hay meadows
Performance of PBR meadows from baseline to year 2

	Baseline	Year 1	Year 2	Average points difference to baseline	Average Payment tier change
Average points score	84	92	102	+22	+0.6
Number of positive plant species seen	19	22	19		
Number of negative species seen	3	4	5		

By the end of year 2:

- 12 of the 19 meadows had an increase in payment tier
- 6 meadows remained on the same payment tier
- One meadow dropped down a payment tier
- an average 21% increase in score



Upland hay meadows
Species changes

NATURAL ENGLAND

YORKSHIRE DALES National Park Authority

Species with a year on year increase in frequency (% of all stops)

Species	2016	2017	2018
Common black knapweed	2.63	2.63	4.21
Eyebrights	16.84	19.47	20.53
Greater burnet	4.21	5.26	5.79
Hawkbits	23.16	31.05	31.58
Pignut	43.16	50.00	80.00
Red clover	76.32	91.58	94.74
Sweet vernal grass	88.42	96.32	97.37
Salad burnet	0.00	1.05	1.58
Creeping thistle	0.00	0.53	1.05

Compared to baseline, there has been an 8% increase in species frequency of the meadows

Top 10 frequently occurring species (% of all stops)

	Base	**Year 1**	**Year 2**
Sweet vernal grass	88.42	93.32	97.37
Red clover	76.32	91.58	94.73
Ribwort plantain	67.37	77.89	74.74
Yellow / hay rattle	55.26	68.95	64.74
Pignut	43.16	50.00	80.00
Hawkbits	23.16	31.05	31.58
Eyebrights	16.84	19.47	20.53
Vetches	7.89	6.84	8.95
Soft brome	5.26	16.84	2.63
Wood cranesbill	4.74	1.58	4.21
Greater burnet	4.21	5.26	5.79

Upland hay meadows
Change in farm management

NATURAL ENGLAND

YORKSHIRE DALES National Park Authority

Lime spre

late by

On average, a PBR farmer undertook 4 new management actions

Small baled hay by 4 farmers

Seed introduction by 9 farmers

Weed control by 4 farmers

Late hay cut by 2 farmers

Sensitive machinery use on wet soils – 1 farmer

Upland hay meadows
Accuracy of farmer surveys

	Year 1	Year 2
Average score – farmer	92	106
Average score – adviser	92	102
Average points difference	+/- 18	+/- 10
% of fields where there was an agreement on the payment band	69%	74%

Farmers scores:	Year 1	Year 2
% higher than adviser	38%	53%
Lower than adviser	54%	31%
Same as adviser	8%	16%

Upland hay meadows
Accuracy of farmer surveys

NATURAL ENGLAND

YORKSHIRE DALES National Park Authority

Year 1 assessments

Species	Adviser frequency %	Farmer frequency %
Sweet vernal grass	96.32	73.16
Red clover	91.58	78.95
Ribwort plantain	77.89	67.37
Yellow / hay rattle	68.95	56.32
Pignut	50.00	52.11
Hawkbits	31.05	24.74
Eyebrights	19.47	15.79
Soft brome	16.84	10.53

Year 2 assessments

Species	Adviser frequency %	Farmer frequency %
Sweet vernal grass	92.28	81.84
Red clover	85.79	84.21
Ribwort plantain	71.58	72.11
Yellow / hay rattle	61.23	62.89
Pignut	57.19	62.63
Hawkbits	27.37	26.32
Eyebrights	18.77	19.74
Soft brome	8.25	5.26

Upland hay meadows
Comparison to control sites

Year 1 – Year 2 results - meadows	RBAPS	Control
Increase in score	79%	40%
Decrease in score	10.5%	60%
Same score	10.5%	0%
Increase in payment band	37%	0%
Decrease in payment band	5%	10%
Maintained same payment band	58%	90%

PBR sites have performed more strongly than control sites

More control sites had a drop in score than PBR sites

Very little change in the control sites

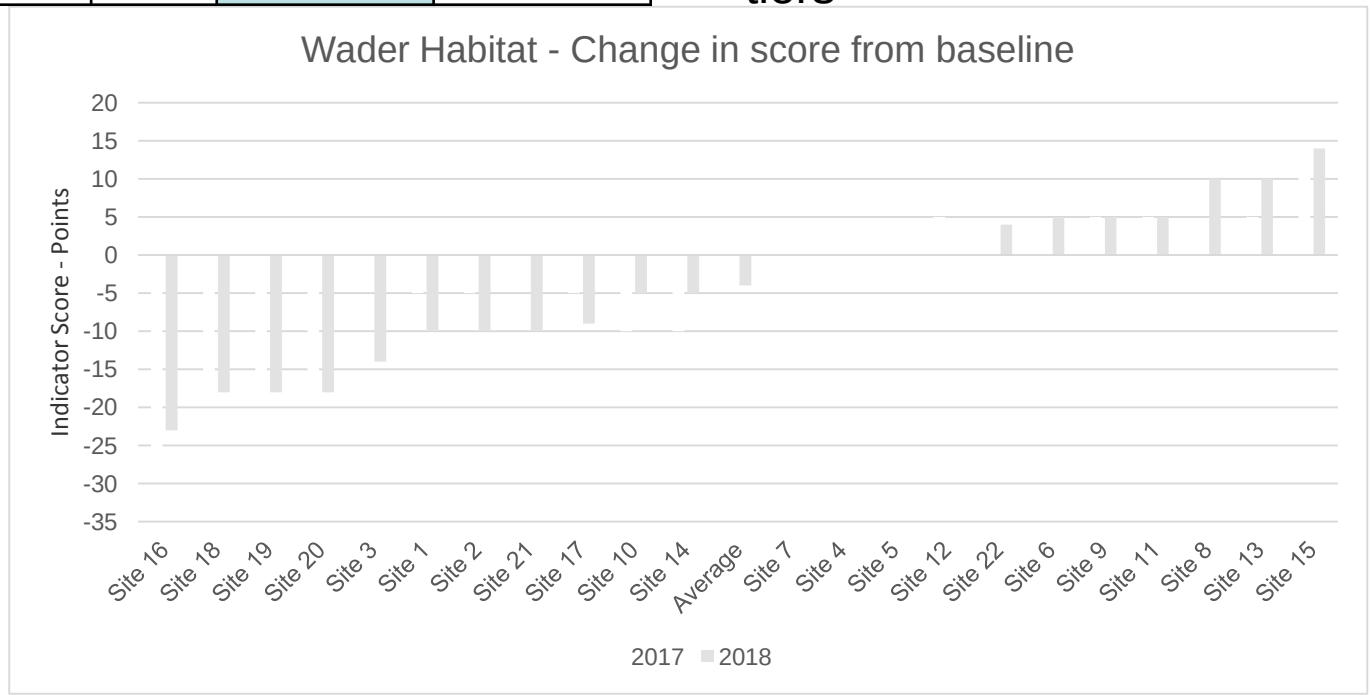
	Average score (points)	
	Participants	Control
2017	92	134
2018	102	124
% Change	+11%	-7%

Breeding wader habitat
Performance from baseline to year 2

	Baseline	Year 1	Year 2	Average points difference to baseline	Average Payment tier change
Average points score	31	27.5	27.5	+/- 8.8	
Average payment tier	4.1	3.3	3.5		-0.55

By the end of year 2:

- 3 of the 20 wader sites had an increase in payment tier
- 7 sites remained on the same payment tier
- 6 sites dropped down one payment tier
- 4 sites dropped down two payment tiers



Breeding wader habitat
Analysis of the scores – a tale of two halves

The positives:

- Improvement in grassland management
- Reduction in rush cover
- No damaging operations recorded

The negatives:

- The two dry springs took their toll on the wet feature measures

Assessment criteria	% of fields at Baseline	% of fields at Year 1	% of fields at Year 2
Vegetation height score 10	79	74	94
Cover of rush score 10	37	47	50
Extent of wet features across field score 10	79	53	39
Quality of wet features score 10	37	26	33
Damaging operations score < 5% cover	100	100	100

Breeding wader habitat
Key habitat changes

3 farmers b

6 farmers created shallow pools

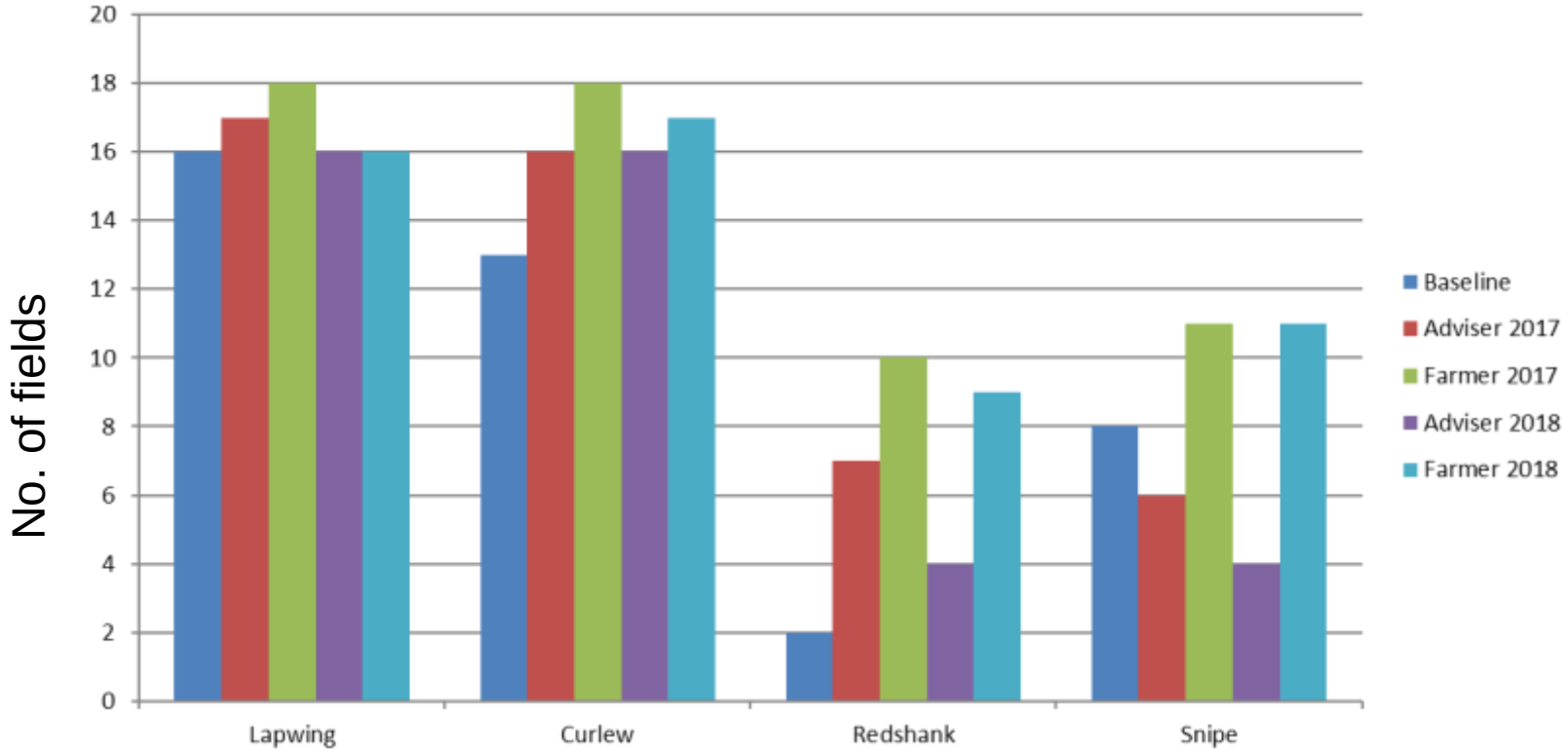
On average, a PBR farmer undertook 4 different management actions to improve the PBR score

5 farmers undertook selective mowing of vegetation

7 farmers used different stocking levels and type of livestock

Breeding wader habitat
Presence of breeding waders

Presence of breeding waders across the PBR fields



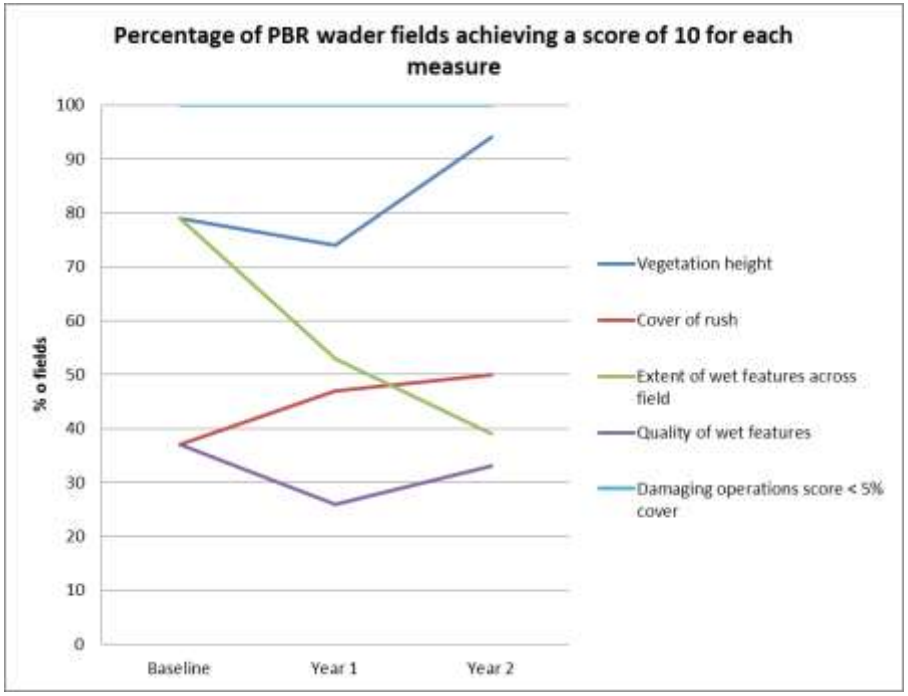
Breeding wader habitat
Accuracy of farmer assessments

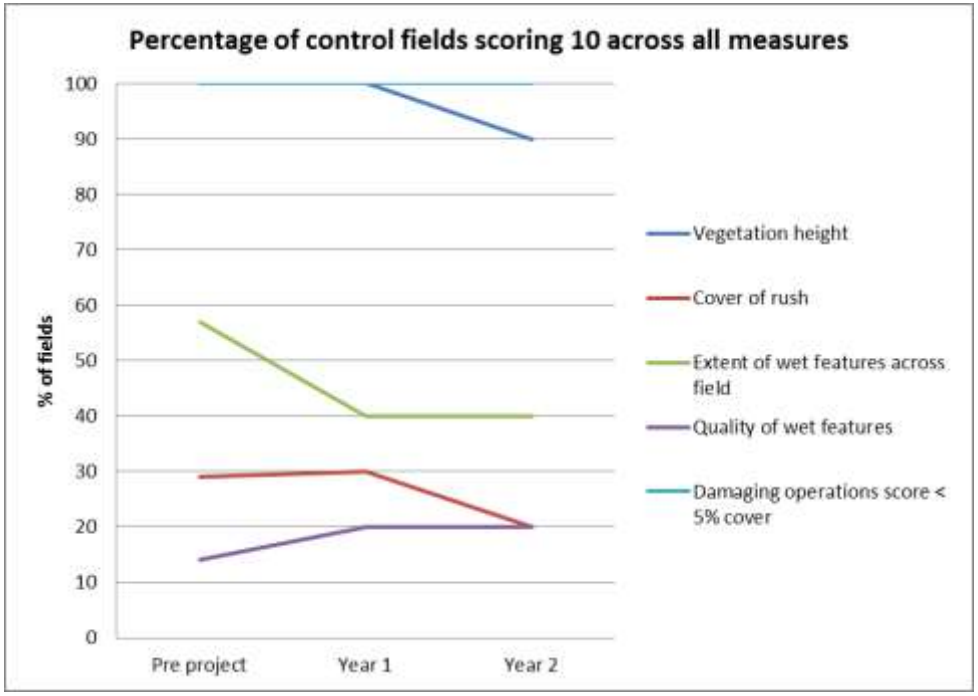
	Year 1	Year 2
Average score – farmer	33	32
Average score – adviser	27.5	27.5
Average points difference	+/- 7.25	+/-6.65
% of fields where there was an agreement on the payment band	30%	35%

- More negotiation required
- Impact of dry spring main issue
- Different survey times on 4 sites
- Payment bands more sensitive to a difference in score
- Assessment methodology needs further work

Farmers scores:	Year 1	Year 2
% higher than adviser	60%	60%
Lower than adviser	15%	15%
Same as adviser	25%	25%

Breeding wader habitat
Comparison to control sites





Year 1 – Year 2 results - waders	RBAPS	Control
Increase in score	44%	22%
Decrease in score	33%	44%
Same score	33%	33%
Increase in payment band	22%	11%
Decrease in payment band	22%	22%
Maintained same payment band	55%	67%

Farmer attitudes towards PBR

Attitudinal survey at the start in 2016 and repeated in Autumn 2018

ADVANTAGES	DISADVANTAGES
Management flexibility / no prescriptions Financial reward (for) Environmental improvement Farmers focused on environmental results Less bureaucracy Learning about nature Simple scheme Easier to administer	Weather conditions/ factors outside the farmers control could affect score Time burden of administrator to train and deliver scheme Currently only two options available Conflict of opinion / scores between farmer and adviser Costly to deliver No capital works for walls or barns

Farmer attitudes towards PBR

- **Training and advice was a very important part of the project.**
- **At the start of the project farmers were ‘quite confident’ about the management required and their ability to undertake the scoring. This increased modestly during their agreement.**
- **All were actively working towards improving the habitat from the baseline score by up to 1 or 2 payment bands by the end of year 2.**
- **By the end of their agreements, 93% of respondents had actively worked towards improving their score siting their motivation as a split between their passion for the environment and the prospect of an increase in payment.**

Farmer attitudes towards PBR

- **ID skills have developed further – for meadows from 10 species to 16 species! Bird ID skills have improved too.**

- **Half of the farmers have discussed / shared their learning and experience with other participating farmers on how to improve their habitat scores.**

- **Rate of change did not diminish their determination to achieve the results.**

- **Overall they were proud and pleased about the results they had produced.**

- **The most important thing they will take away from this experience is the increase in knowledge of the habitats and species and the importance of them within the UK environment.**

The weaknesses and more to learn…..

- **Limited baseline data for the control sites**
- **Subjective scoring methodology – difficult to move away from?**
- **Difficult to get the methodology right first time - needed a lapwing centred methodology for 4 of the fields**
- **Using a single straight line transect**
- **Weather dependant features – not entirely under farmers control**
- **Missed opportunity to include other features in scoring eg historic environment, landscape features**
- **Resource heavy in the first 2 years but would this lessen if given a longer project?**
- **Only 2 years to measure any change**

The strengths (result!)

SUCCESSFUL

FAIRNESS

FLEXIBILITY

SIMPLE APPROACH

LESS PAPERWORK

RESULTS ACHIEVED

GUIDANCE IS KEY

ENGAGED FARMERS

RECOGNITION

SKILLED FARMERS

MINDSET CHANGE

CONFIDENCE

HABITATS MORE VALUED

INVOLVEMENT

KNOWLEDGE BUILDING

TRUST

And finally…..

We have found this interesting and has given a new generation of farming an interest in the environment which they didn't have before. Have got our children involved in helping too.

The ability as a group of farmers - we have demonstrated that we can deliver more and better results without the need of prescriptions.

It's been rewarding but in some ways frustrating experience!

The key is low admin burden and expert help plus reasonable payments. The scheme is a good model

Can farm without bureaucracy and prescriptions whilst still getting some financial reward if delivering outcomes

Thanks to everybody who has helped me with the scheme. I do think it can work and farmers with high value land should be encouraged to take part.

Results Based Agri-Environment Payment Scheme

Grassland conference

27 November 2018

Payments For Outcomes project (NT, Yorkshire Dales)

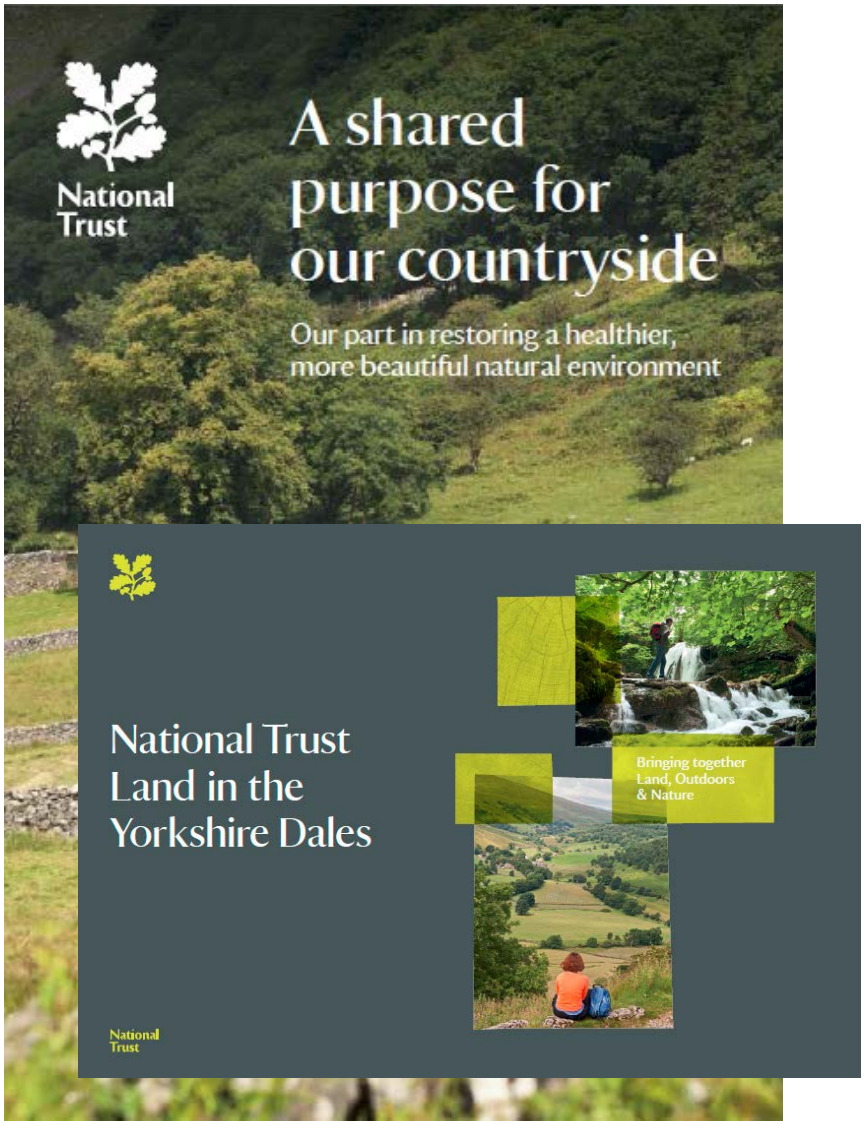
Working towards a Whole Farm Approach

RBAPS Uplands Conference, November 2018

Introduction

1. NT Payments for Outcomes (PFO) and RBAPS
2. Results-based measures for **Multiple Habitats** (2017)
3. Working alongside CS – e.g. **Soil Health** (2018-2022)
4. Whole Farm Approach – **Pollinator Health** (2018-2020)
5. Summary

1. Payments for Outcomes



<u>PFO is:</u>

- Inspired by
- Builds on
- Complimentary to

RBAPS

<u>RBAPS provides:</u>

- Advisory support to PFO

1. PFO: Current Project Team

Sue Cornwell

Clare Frater

Fran Graham

Chloe Lumsdon

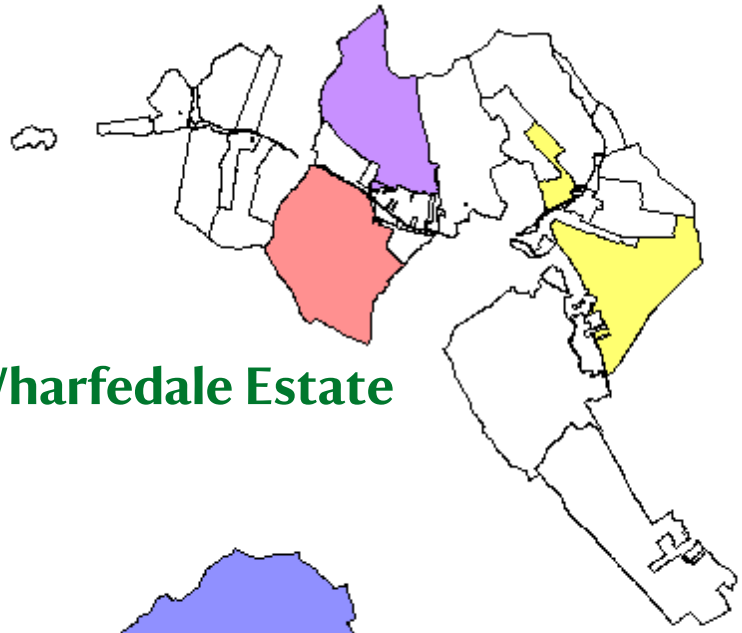
Helen Keep

2. Multiple Habitats: Scope

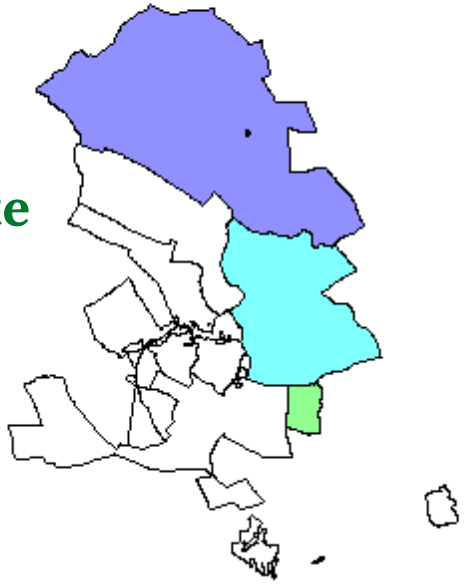
Habitats measures tested	Land parcels	Quadrats* (Fixed)
Blanket Bog	6	30
Upland Calcareous Grassland	8	40
Limestone Flushes	5	25
Limestone Pavement	2	n/a
Ancient Semi-Natural Woodland	2	10
New Native Woodland	8	38
Acid Grassland/ Upland Heathland	4	20
Total	**35**	**163**

* Quadrat size varied by habitat, as standard methodologies

2. Multiple Habitats: Scale



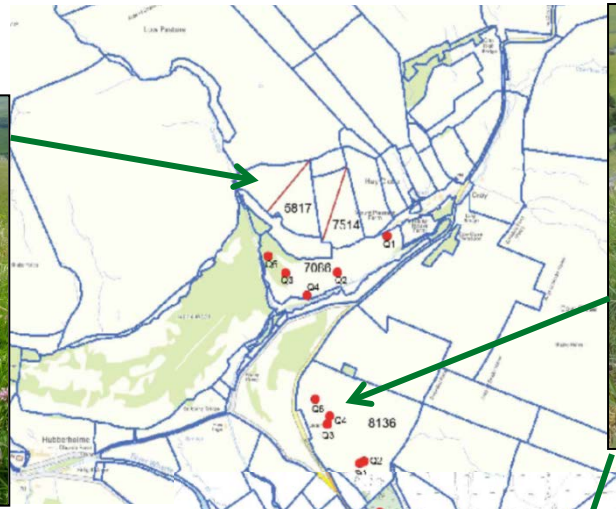
Upper Wharfedale Estate



Malham Tarn Estate

2017	
Farms	6
Total Area (Ha)	2004
Land Parcels	35
Habitats	7
Quadrats	163

2. Multiple Habitats: Heber Farm



2017	
Methods Tested	6
Land Parcels	11
Quadrats	38
Transects	2

2. Multiple Habitats: Monitoring

1. Farmer assessments

2. Verification

Non-SSSI G04 Lowland calcareous grassland (BAP habitat), G08 Upland calcareous grassland (BAP habitat) – Field FORM

Unit Name & Number_____ Parcel number_____ File Number_____
Land Manager Name_____ Date of visit_____ Surveyor_____

GRASSES (✓ or X)	1	2	3	4	5	6	7	8	9	10	Freq*
Bent, common											
Blue moorgrass											
Brome, upright											
Cock's foot											
Crested Dog's-tail											
Crested Hair-grass											
Fescue, red											
Fescue, sheep's											
Oatgrass, hairy											
Oatgrass, meadow											
Oatgrass, yellow											
Quaking-grass											
Sweet vernal grass											
Tor-grass											
INDICATOR SPECIES (✓ or X)											
G04, G08 calcareous grassland											
Bird's-foot-trefoil											
Burnet, salad											
Dropwort											
Eyebrights											
Fairy flax											
Gentians											
Harebell											
Hawkbit, rough											
Hawkweed, mouse-ear											
Rock-rose, common											
Rock-rose, hoary											
Scabious, Devil's bit											
Scabious, small											
Squinancywort											
Thistle, carline											
Thyme, wild											
Vetch, horseshoe											
G04 lowland calc only											
Basil, wild											
Bedstraw, lady's											
Bellflower, clustered											
Betony											
Cowslip											
Crane's-bill, Bloody											
Hawkbit, Lesser											
Knapweed, greater											
Marjoram											

	1	2	3	4	5	6	7	8	9	10	Freq*
G04 lowland calc only (cont.)											
Milkwort,											
Orchids (list species below											
Ox-eye daisy											
Plantain, hoary											
Purple milk-vetch											
Restharrow											
Saw-wort											
Scabious, field											
Sandwort, thyme-leaved											
St. John's-wort, beautiful											
Thistle, stemless											
Vetch, kidney											
Violet, hairy											
Yellowwort											
G08 only upland calc only											
Bistort, alpine											
Butterwort, common											
Clubmoss, lesser											
Grass of Parnassus											
Mountain everlasting											
Saxifrage, mossy											
Saxifrage, yellow											
Willowgrass, hoary											
Small sedges (spring, flea glaucous, carnation) – list species below											
OTHER NOTABLE SPECIES											

*R = 1-2 stops, O = 3-4 stops, F = 5 or more stops out of 10

3. Traditional scheme condition assessments (FEP/BEHTA)

4. Compare, calibrate, improve

2. Multiple Habitats: Results

High potential

4 Habitat Methods

Blanket Bog

Calcareous grassland

Alkaline flushes

Limestone Pavement

Low potential

Partially restored habitats e.g. Acid grassland/ Upland Heath

Generic habitats e.g. ASNW

2. Multiple Habitats: Results

Our farmers are very committed

- 98% assessments completed

Attitudinal survey

- On-site training/ advice is essential
- Methods were user-friendly (9/10)
- Habitat skills increased by 20%
- Species ID skills increased by 28%
- Interest in environmental management was 85%

We also delivered:

- 10 demonstration events

3. Soil Health: Scope

- **Working alongside Countryside Stewardship**
- In-bye land outside national schemes
- Meadows and Pastures
- Area payments 5 Yrs

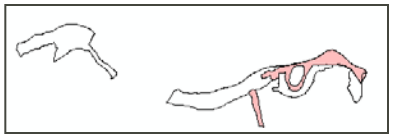
		Year				
Activities		**2018**	**2019**	**2020**	**2021**	**2022**
Assessments	Visual					
	Structural					
	Chemical					
Interventions	Management					
	Capital works					
Advice						

- Advice & Training
- Interventions (Management/ Capital works)

Better Soil Health = Higher scores = Higher payments

3. Soil Health: Scale

Swaledale



Wensleydale

Upper Wharfedale Estate

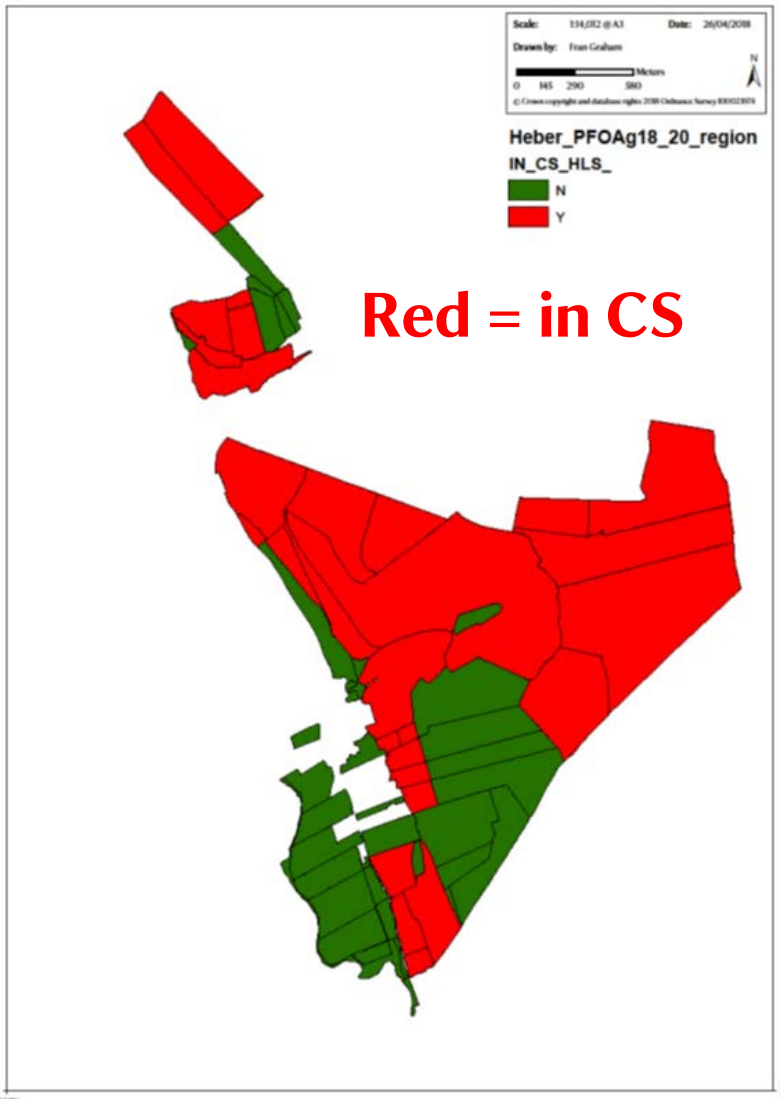
Participation	
Farms	3
Field Parcels	32
Area (Ha)	80

Total Score	Condition	Payment Rate (£/Ha/Yr*)
<25	Poor	15
25 - 45	Moderate	35
46 - 65	Good	45
66 - 80	Excellent	55

*This option is being used in-combination with the Pollinator Health option

3. Soil Health: Heber Farm

Complimentary to existing schemes



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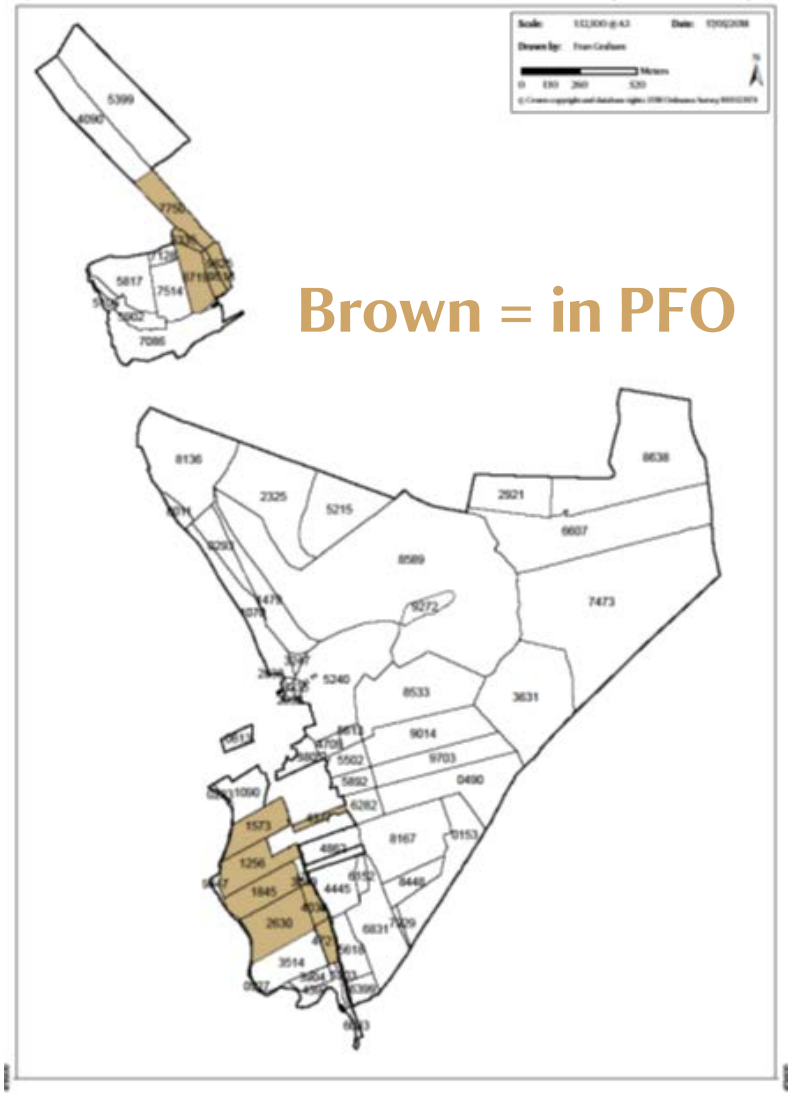


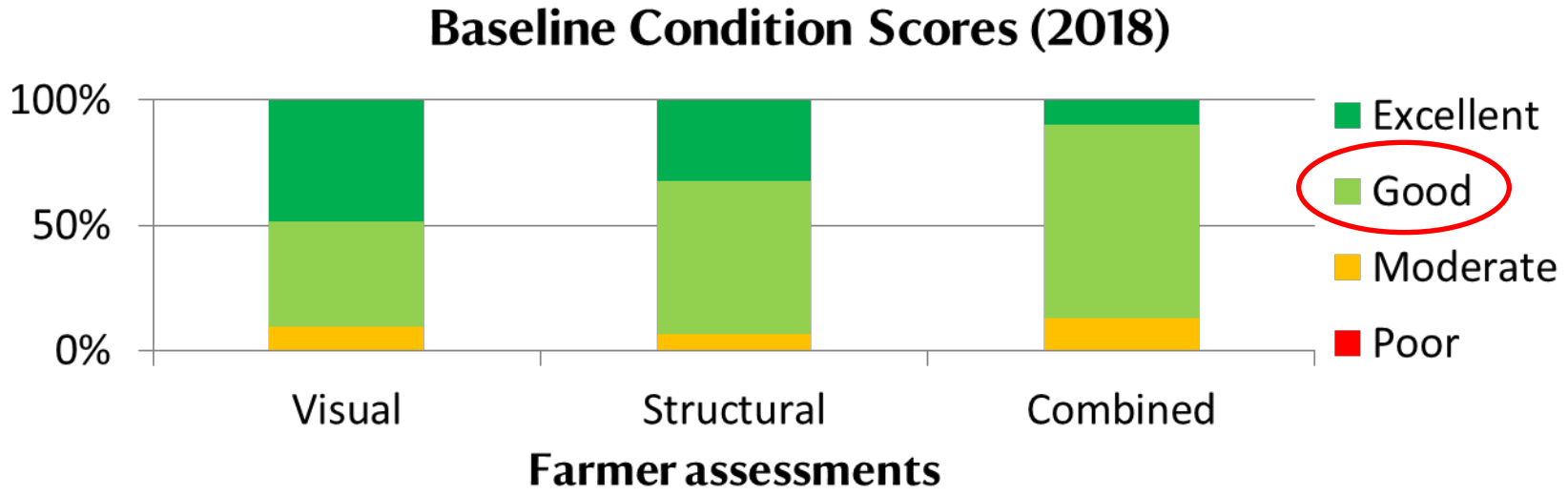
3. Soil Health: Monitoring

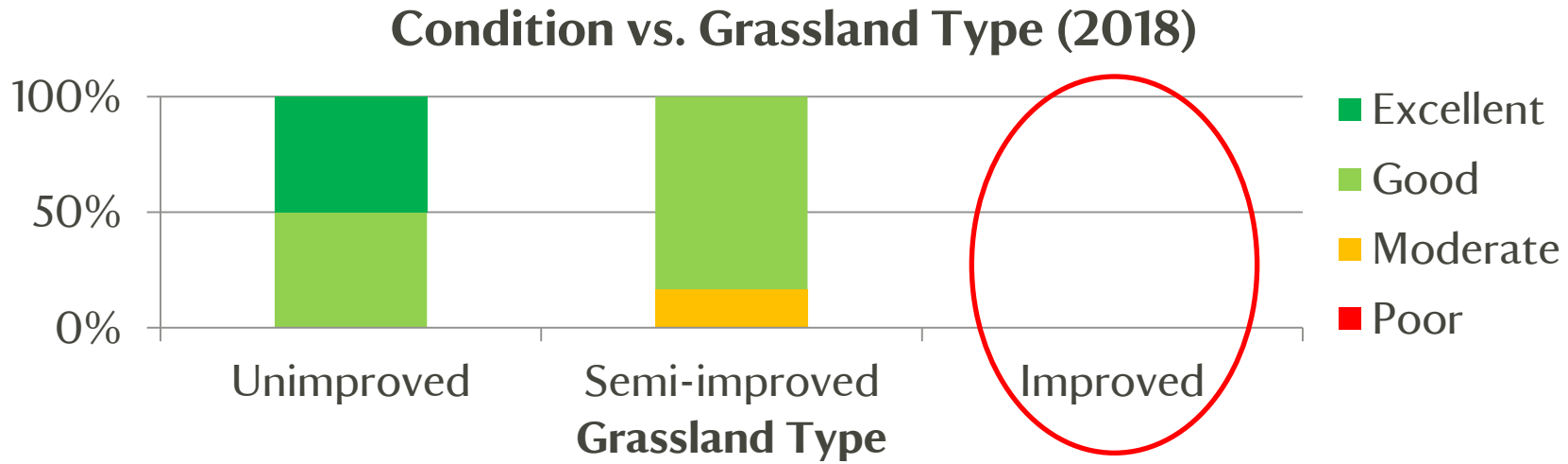
Verification of farmers assessments	
Visual	75%
Structural	40%

Control Sites	
Meadows	6
Pastures	4
Total	**10** (32%)

Soil compaction survey	
Method	Penetrometer
Sampling resolution	25m Grid
Repeats/ location	3
Depths	2 (15cm & 50cm)

3. Soil Health: Initial Results





3. Soil Health: What's next?

		Year				
Activities		**2018**	**2019**	**2020**	**2021**	**2022**
Assessments	Visual					
	Structural					
	Chemical					
Interventions	Management					
	Capital works					
Advice						

Better Soil Health = Higher scores = Higher payments

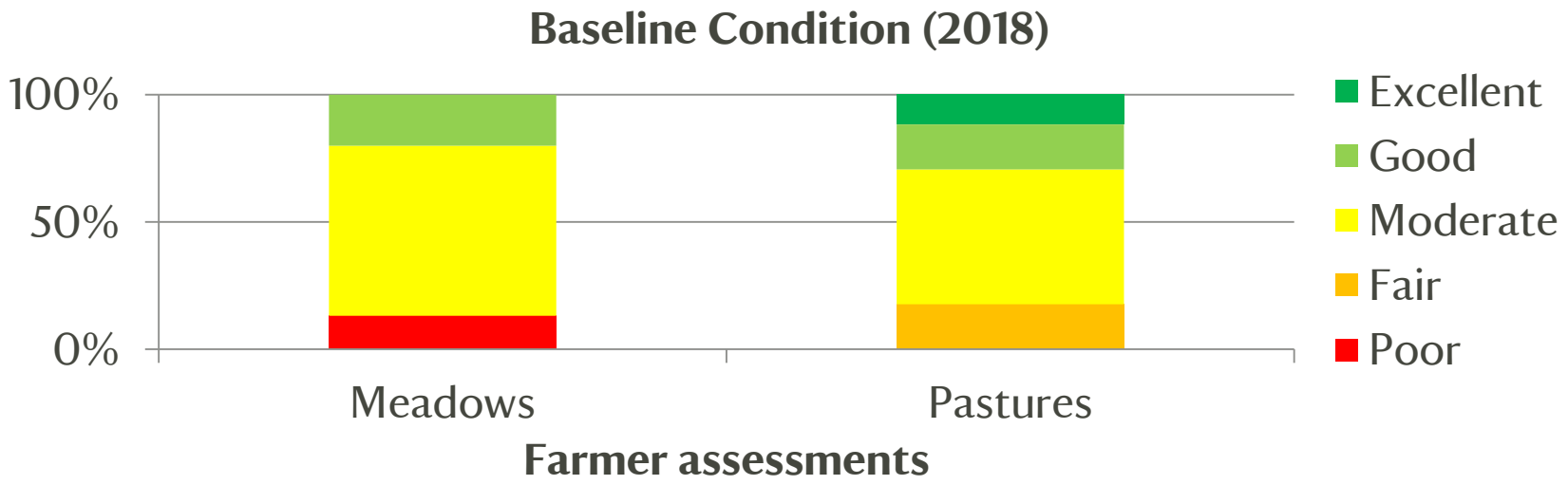
4. Pollinator Health: Scope

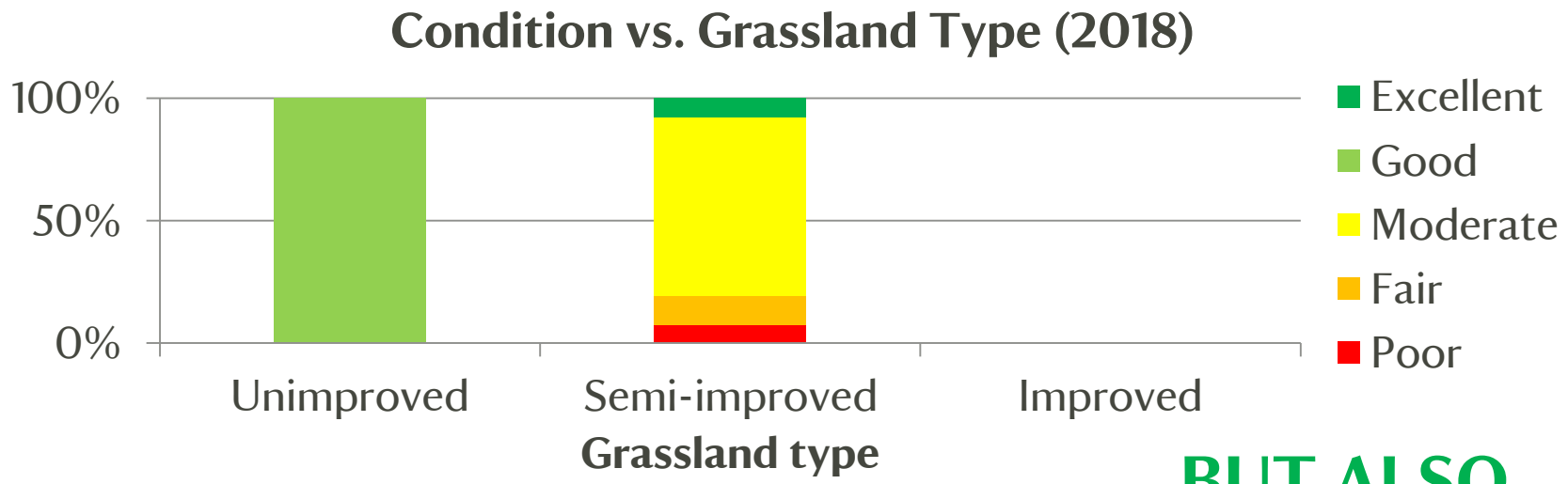
- In-bye land outside national schemes
- Meadows and Pastures
- Area payments 2018-2020

		Year		
Activities		**2018**	**2019**	**2020**
Assessments	Meadows			
	Pastures			
Interventions	Management			
	Capital works			
Advice				

Better Pollinator Health = Higher scores = Higher payments

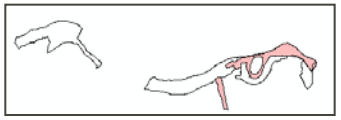
4. Pollinator Health: Results

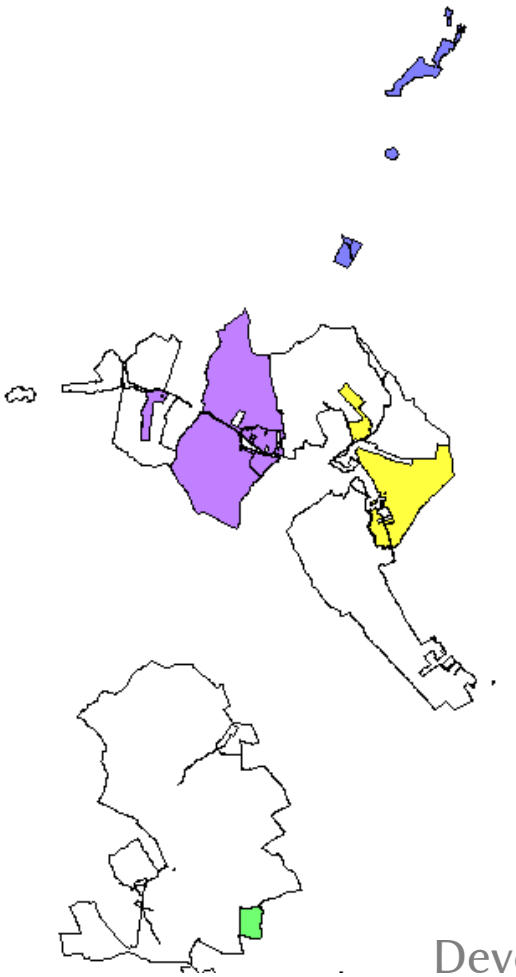




BUT ALSO….

4. Pollinator Health:
Whole Farm Approach





Participation	
Farms	5
Area (Ha)	1552

Pollinator groups
Hoverflies
Bumblebees (LT)
Bumblebees (ST)
Butterflies & Moths
Generalists

Score and Map:

Habitat
Nesting
Overwintering
Flowering

Connectivity Analysis

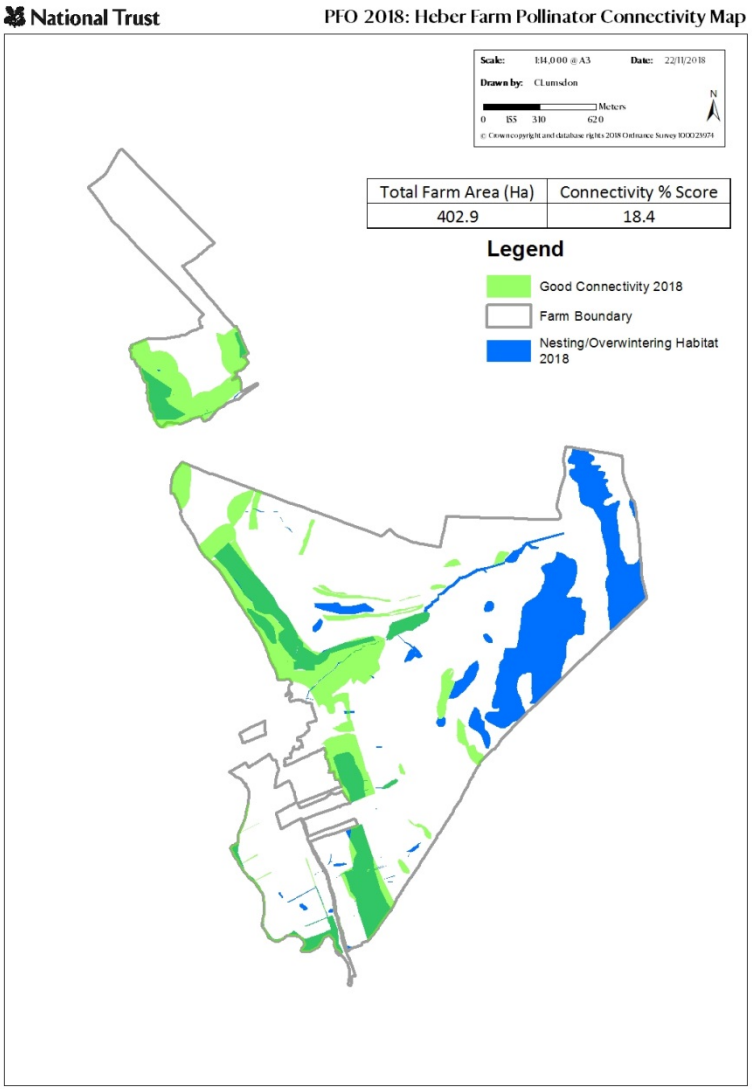
Interventions

Bonus Payment

Developed with technical advice from BugLife

4. Pollinator Health - Results

Connectivity = 18%



Good:

- Area of habitat (nesting)
- Structural diversity (flowers)
- Different pollinators (flowers)

Gaps:

- Tall herbs
- Proximity of lifecycle needs
- Frequency (flowers)

Target interventions

Better Connectivity = Higher scores = Higher payments

5. Summary

1. RBAPS and NT Payments for Outcomes (PFO)
2. Results-based measures for **Multiple Habitats** (2017)
3. Working alongside CS – e.g. **Soil Health** (2018-2022)
4. Whole Farm Approach – **Pollinator Health** (2018-2020)

Thank you for listening!

Results Based Agri-Environment Payment Scheme

Grassland conference

27 November 2018

European Forum on Nature Conservation and Pastoralism

Fitting RBAPS into mainstream agricultural policy – the Irish experience

Gwyn Jones gwyn@efncp.org

Outline of talk

- Introductory remarks
- Describe where we are and how we got there
- Discussion of pros and cons of some of the approaches to fostering innovative approaches
- Some reflections on the RBAPS project
- Final thoughts

What do we mean by a more results-based policy?

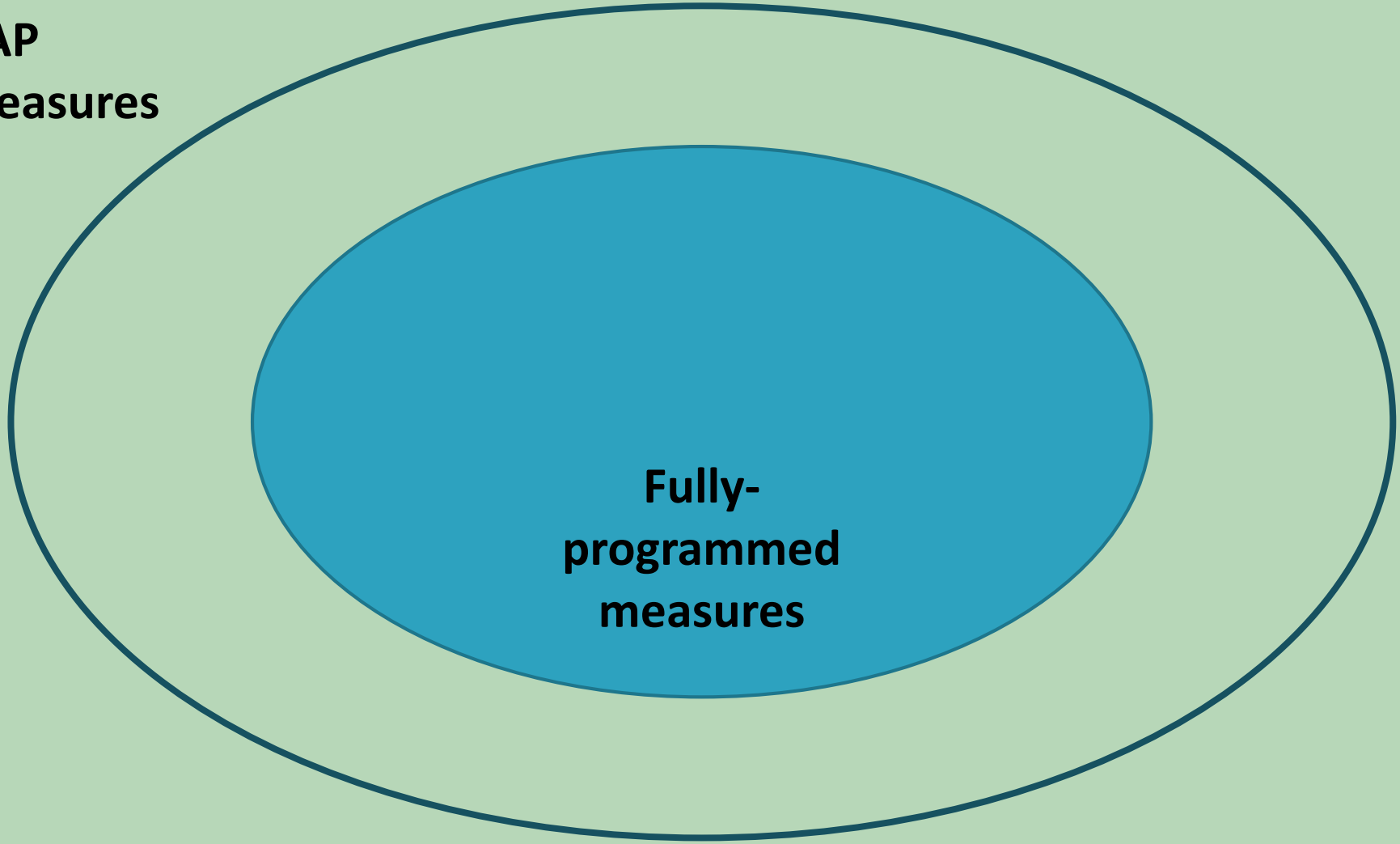
1) Results-based programming

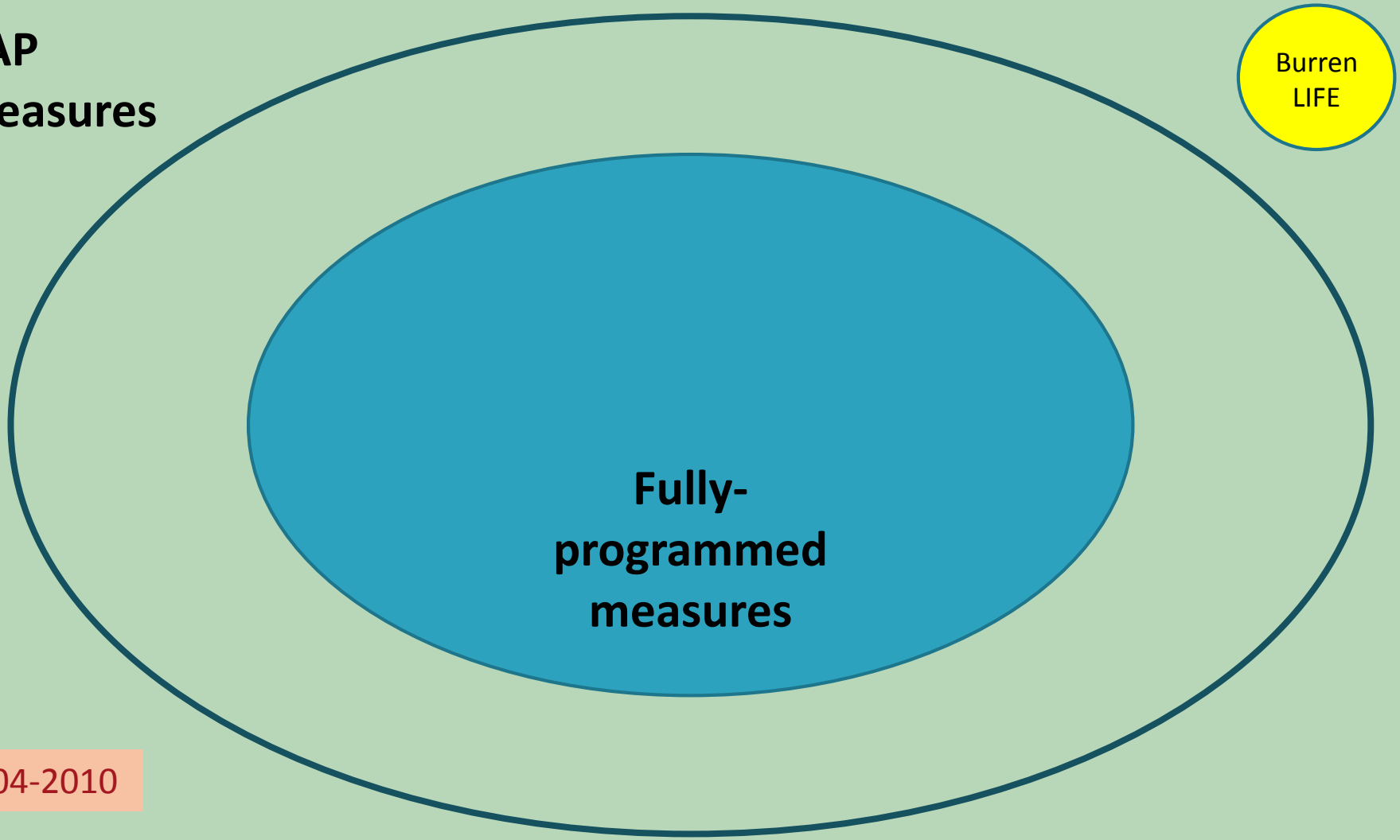
- Meaningful indicators relating closely to the policy objectives
- Dynamic monitoring and evaluation with efficient and rapid feedback into policy
- Easy adaptation mechanisms – amendment, wholesale revision etc.
- This is essential
- Irish record is actually poor (like that of most MS)

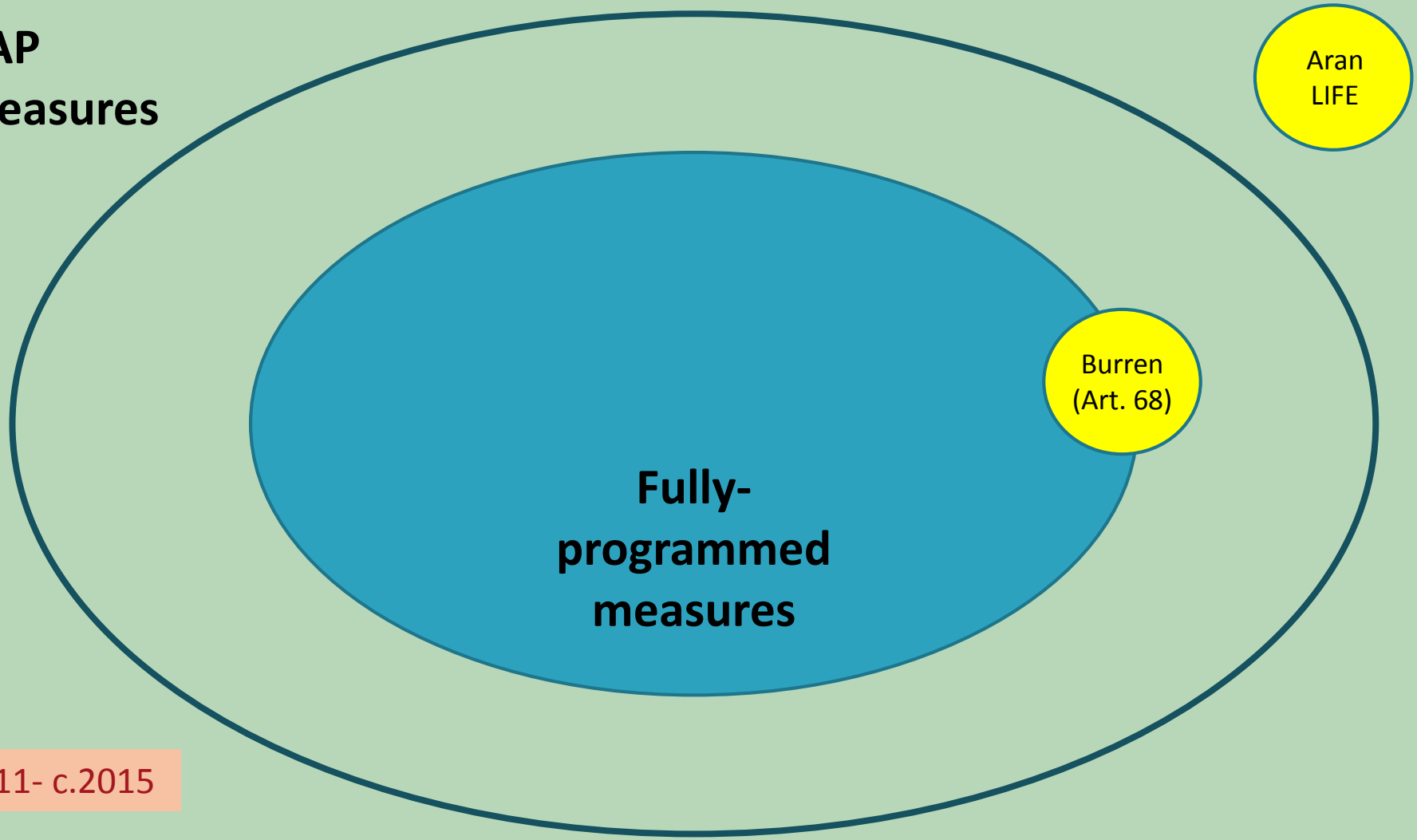
What do we mean by a more results-based policy?

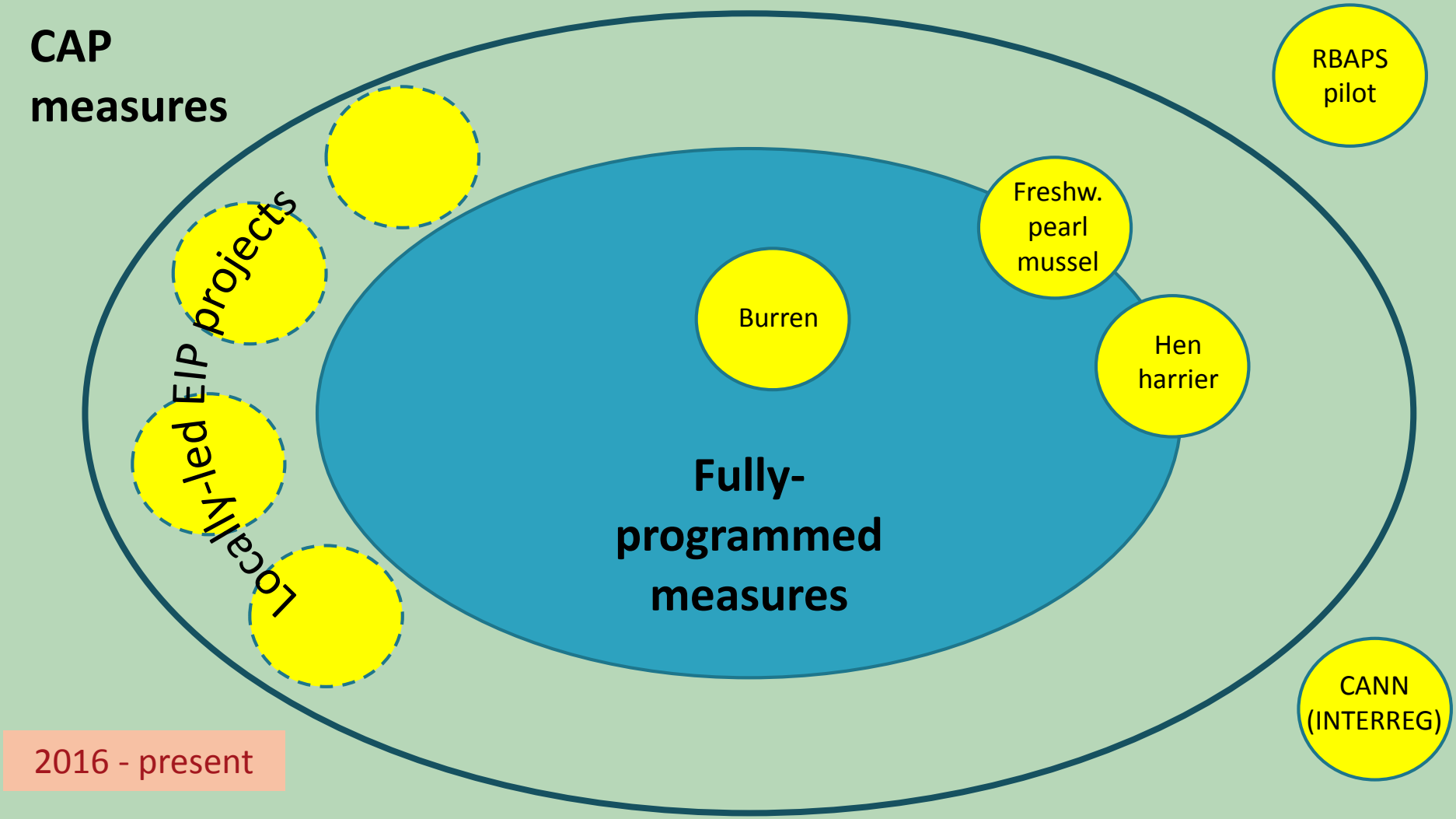
2) Results-based measures at the farm level

- Meaningful indicators relating closely to the policy objectives
- Focus on ends, not means; outcomes not prescriptions
- Payments tend to reward good performance
- Rest of talk will focus mainly on this aspect


CAP
measures
Fully-
programmed
measures


CAP measures
Burren LIFE
Fully-programmed measures
2004-2010


CAP measures
Aran LIFE
Burren (Art. 68)
Fully-programmed measures
2011- c.2015


CAP measures
RBAPS pilot
Freshw. pearl mussel
Burren
Hen harrier
Fully-programmed measures
Locally-led EIP projects
CANN (INTERREG)
2016 - present

Where we are now

- Burren mainstreamed as standard agri-environment scheme
- Hen harrier and freshwater pearl mussel projects commissioned by Govt. under the EIP measures
- Range of other EIP projects emerged through open competitive calls, some of which are using RBAPS approach. One of projects is follow-up to AranLIFE
- RBAPS pilot not as yet mainstreamed, but being discussed in Govt.
- Other local projects outwith CAP framework could later be mainstreamed in CAP in some way (e.g. CANN Interreg)

Questions we can think about

- How to stimulate and/or support innovation (perhaps especially at grassroots)
- How to ensure innovation covers all the bases (and how to fill the gaps)
- How to provide a mechanism for mainstreaming into core suite of measures
- How to generalise/extend the lessons learned/approach
- Keeping it as simple as possible, but no simpler (a question for a results-based policy-making approach)

How did we get to where we are?

- For most of the time since 2004, it did not happen through coherent Govt. action
- Key individuals, few reliable organisations, serendipity, right funding at right time
- Nothing succeeds like success – shift from being politically difficult to change to being politically difficult not to respond
- Latterly, innovation in Dept. in form of using EIP measure, supported by key individuals in Commission

Use of Agri European Innovation Partnership mechanism in an unusual way

- How can things be tested using agri-environment measure within a programming-based implementation?
- EIP starts from the assumption that developing the project is part of the project
- 2 focussed calls for tender; open calls within broad topics
- 2 stage process – at own risk 1st stage; funded 2nd stage for full proposal development
- Arms-length process, substantial degree of project-level autonomy

Irish EIP-AGRI Operational Groups

1 Inishowen Upland Farmers Project

2 Cúlra Créafóige - Cultivation Renewal Programme

3 The Conservation of Breeding Curlew in Ireland

4 Farming Rathcroghan Project

5 Maximising Organic Production Systems (MOPS)

6 North Connemara Locally Led Agri-environmental Scheme

7 Caomhnú Arann

8 Hen Harrier Project

9 Biomass to Biochar for Farm Bioeconomy (BBFB)

10 Mulkear EIP

11 Allow Project - Duhallow Farming for Blue Dot Catchments

12 Biorefinery Glas

23 Small Biogas Demonstration Programme

22 DANÚ Farming Group

21 Sustainable Uplands Agri-environment Scheme (SUAS)

20 Enable Conservation Tillage (ECT)

19 Blackstairs Farming Futures

18 The Duncannon Blue Flag Farming and Communities Scheme

17 Protecting Farmland Pollinators

16 Biodiversity Regeneration in a Dairying Environment (BRIDE)

15 Ovi Data

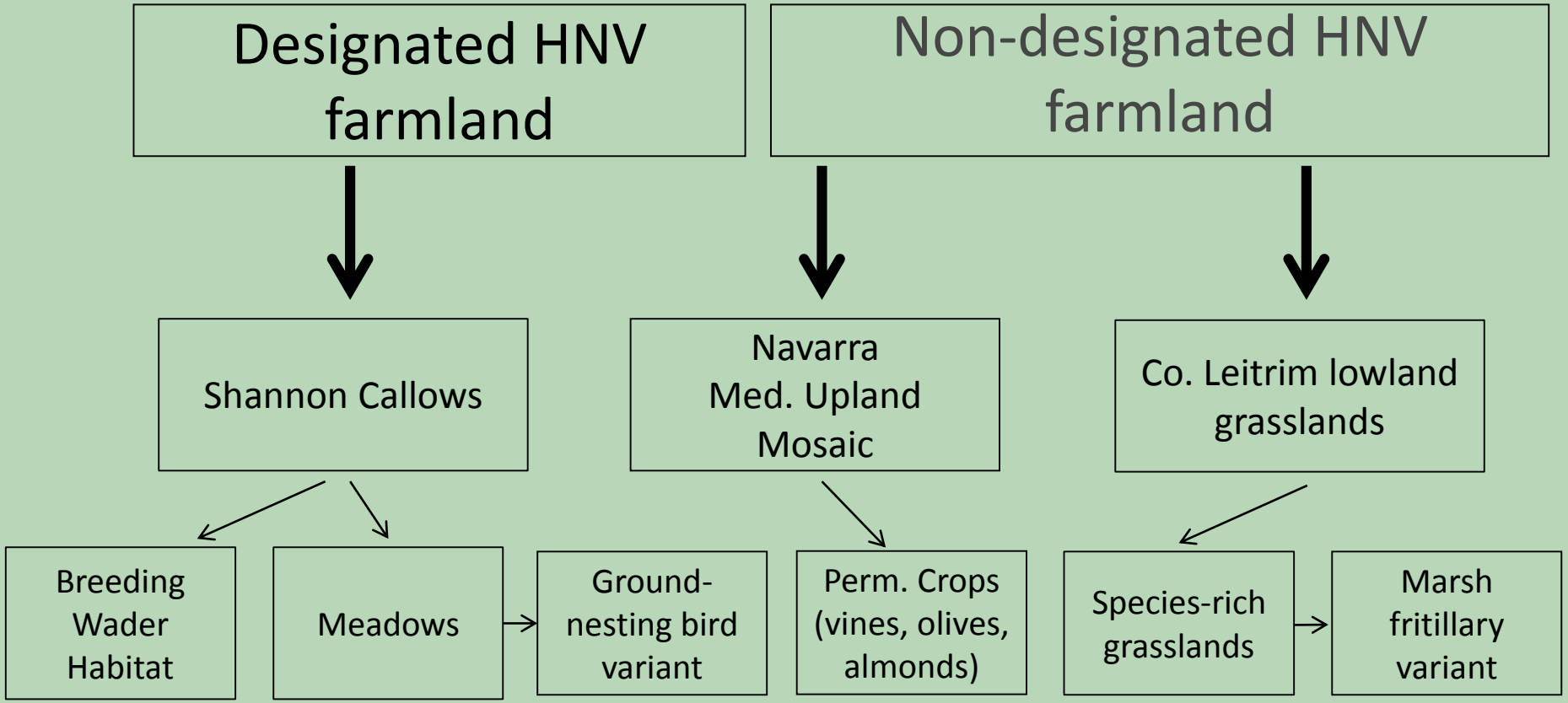
14 Pearl Mussel Project

13 A Sustainable Agricultural Plan for the MacGillycuddy Reeks

* The location points for each EIP-AGRI Operational Group relates to the group's Lead Partner, however the Operational Groups, in most cases are far reaching regionally and nationally. A specific indication of 'Geographical Location' for each group can be found in the EIP-AGRI Project Storyboard Database on the National Rural Network website, and also on the EIP-AGRI Service Point website.

Some potential weaknesses of Irish attempt to use EIP as main vehicle

- Difficult to make best use of an undirected, come-all-ye, approach without a wider integrating framework which includes reflection on key issues and which is closely tied to a mainstreaming pathway – does that exist?
- For reasons not entirely clear (and not necessarily good ones), decided that EIP can't make area payments – how can measures which are forbidden from reflecting the AECS approach efficiently inform development of AECS measures?
- Weakness of applicants vs. weakness of applications (can they be really locally-led?); arm's length vs. neglect (what role for aftercare?)
- Rejection
- Need to be innovative.



Ireland/Spain RBAPS project

Lessons from the RBAPS project


Stand on the shoulders of any available giants!
STANDING
ON THE
SHOULDERS
OF GIANTS

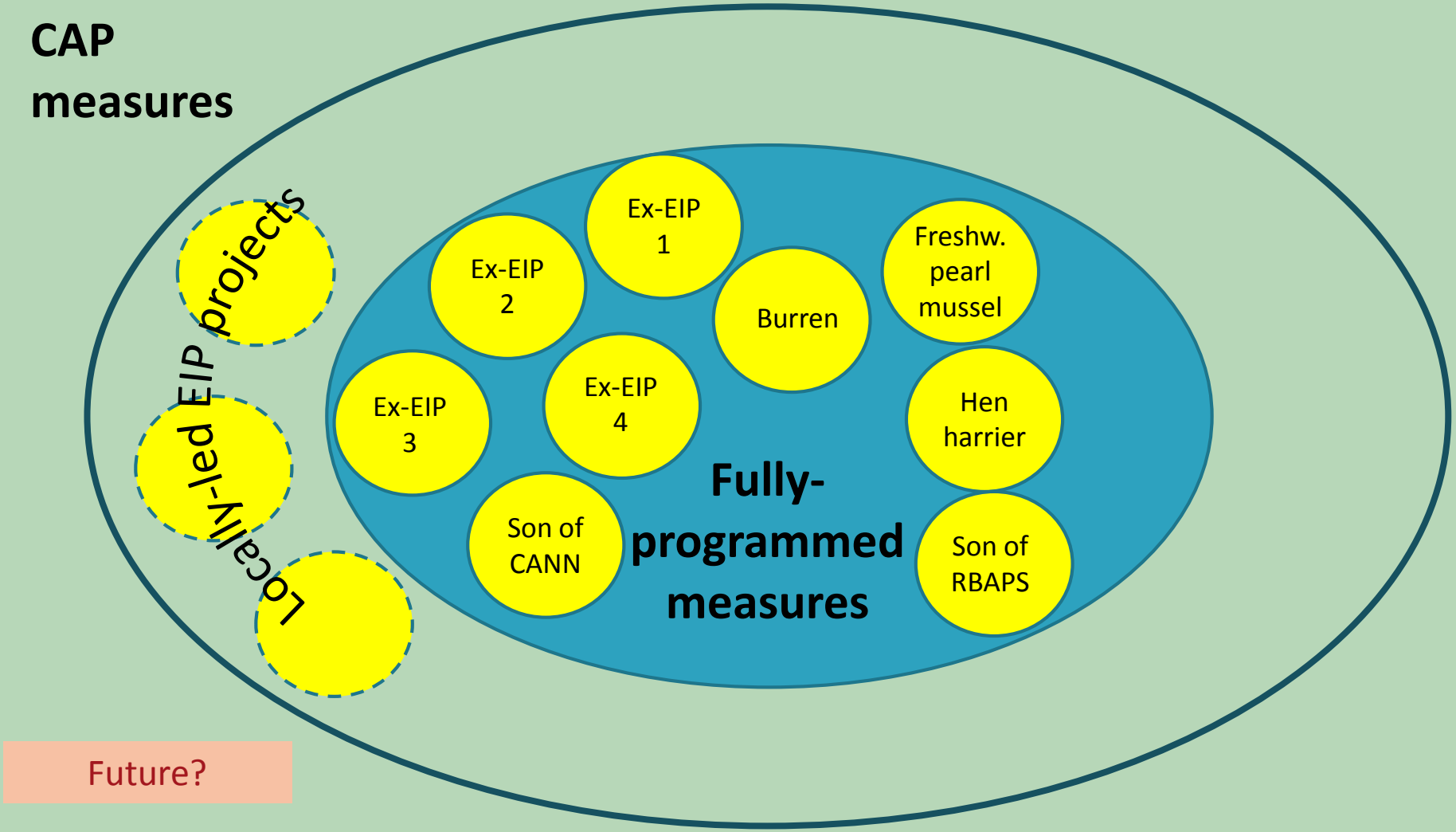
Lessons from the RBAPS project

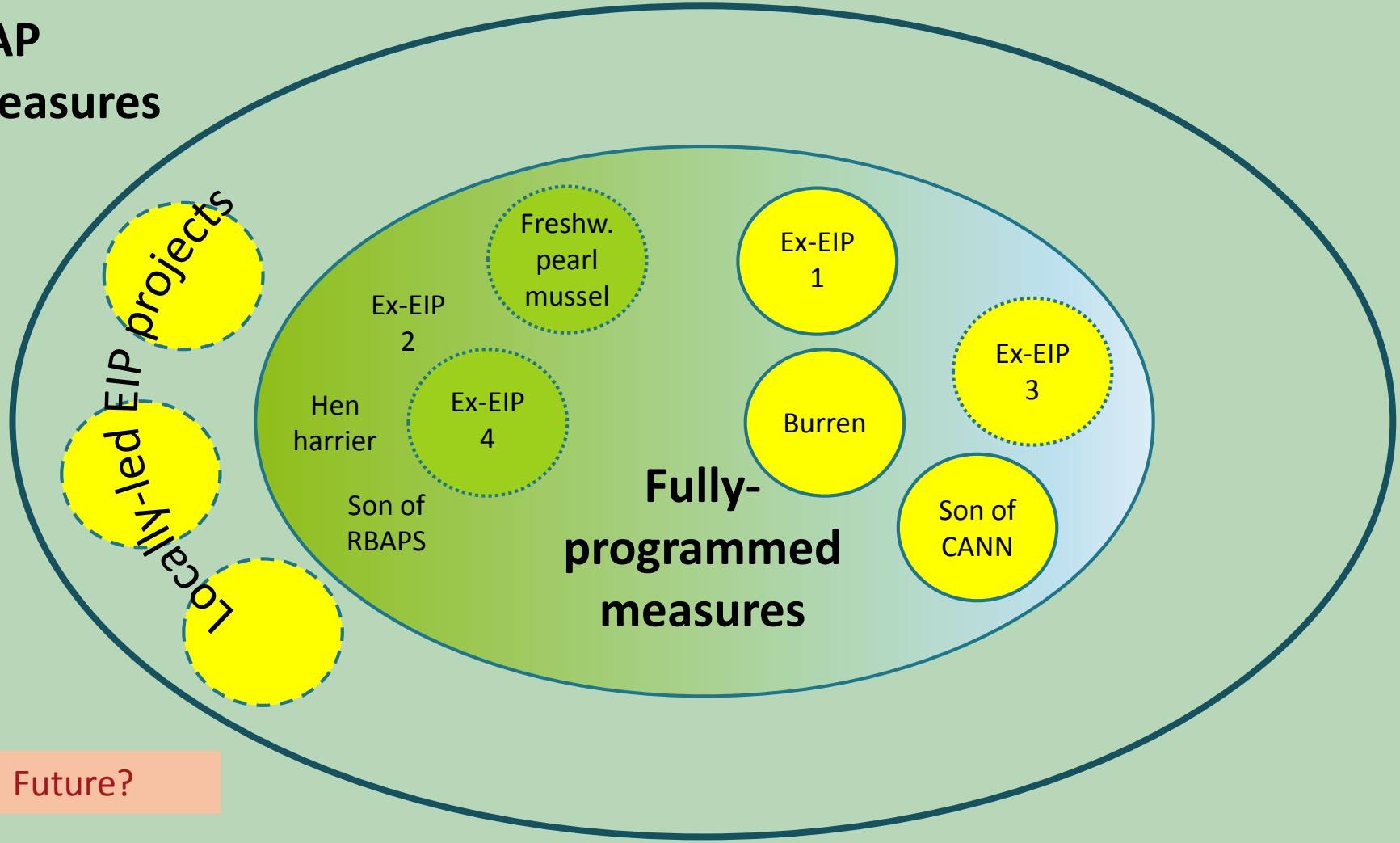
- Stand on the shoulders of any available giants!
- Be open-minded; question your own default modes of thinking & acting (e.g. concentrating on the best); report honestly
- Govt. not being transparent about AECS payment calculations is a real obstacle
- Locally-relevant doesn't have to be locally-generated, but it would add a lot
- Shows up need for clear thinking on monitoring vs. evaluation
- Shows need for thinking about delivery (and how to deliver delivery!)
- In some cases, raises difficult questions about targeting
- In other cases, seems straightforward in principle and prob. easily transferrable

What IS the ideal model of measure development?

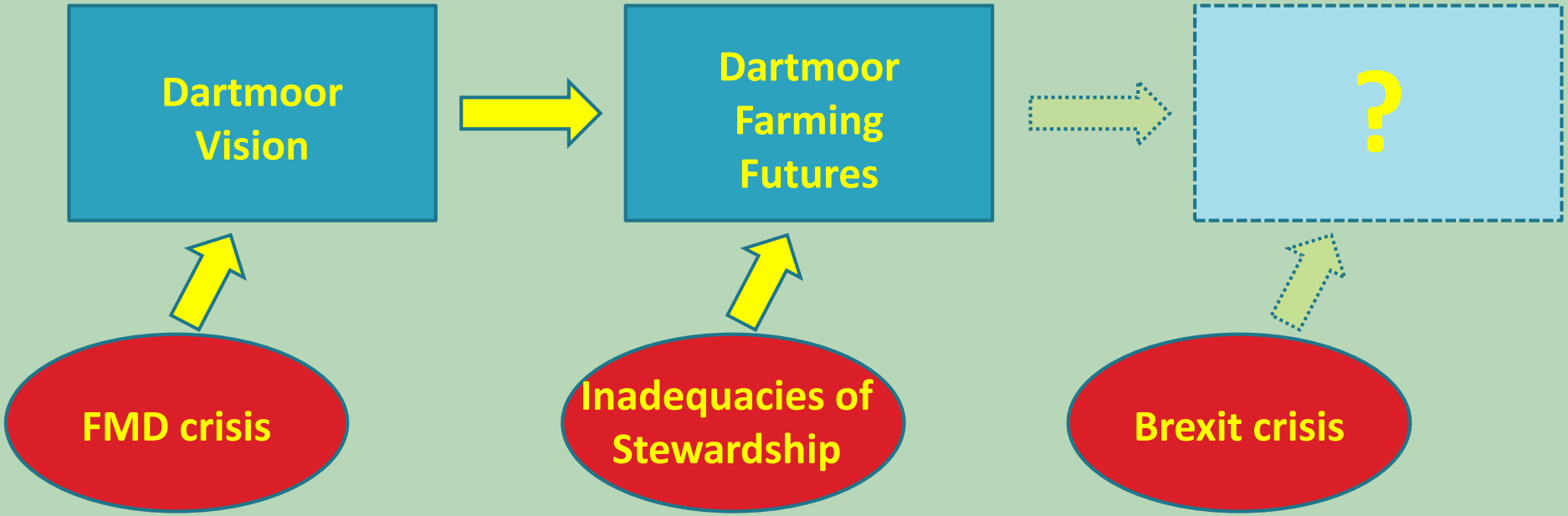
- Analysis > Vision/Objectives > Measures
- Dartmoor and Burren suggest it's probably helpful to separate the visioning and the measure designing, but can 'normal' policy development cope with that?
- How does the partnership get set up? At what stage? What is the role of the State?
- Where does rejection/disappointment come in?
- Probably more than one possible model, but again, how can policy development pathways optimise both engagement and usefulness/timeliness

Mainstreaming – what does it mean?


CAP measures
Locally-led EIP projects
Ex-EIP 1
Ex-EIP 2
Ex-EIP 3
Ex-EIP 4
Burren
Freshw. pearl mussel
Hen harrier
Son of CANN
Son of RBAPS
Fully-programmed measures
Future?

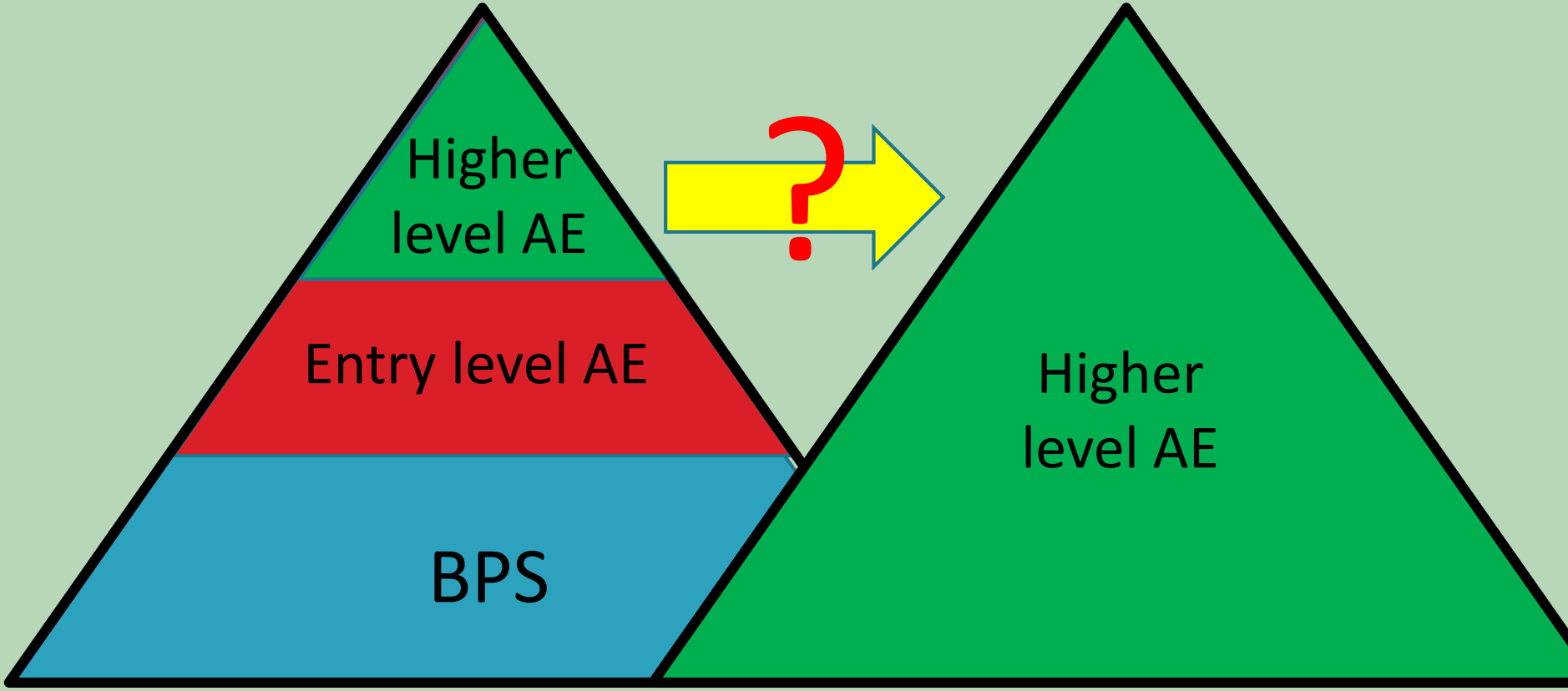

CAP measures
Locally-led EIP projects
Freshw. pearl mussel
Ex-EIP 1
Ex-EIP 2
Ex-EIP 3
Hen harrier
Ex-EIP 4
Burren
Son of RBAPS
Fully-programmed measures
Son of CANN
Future?

Is there an English pathway?



Major challenges

- Finding enough time
  - ‘to do the job’
  - to build trust
- Finding enough capacity
  - During development
  - For implementation
- Finding enough political will
  - Cui NON bono!
  - Being realistically positive while not fetishising/presenting as panacea
  - Who cares about the ‘not so good’?
- The ‘full coverage’ dilemma. If not, what’s the vision? Doesn’t it fit better into a suite of complementary measures?


Higher level AE
Entry level AE
BPS
?
Higher level AE

Only Government can provide a clear pathway

Results Based Agri-Environment Payment Scheme

Grassland conference

27 November 2018