



Establishing wildflower mixes on farmland

Bespoke training event


26 October 2022

Where to sow

When to sow

How to sow

Subsequent management

A landscape photograph showing a transition from a field of purple flowers on the left to a field of yellow grain on the right. A red line is drawn across the image, separating the two areas. In the background, there are green trees and a power line tower under a cloudy sky.

**Habitat loss is a primary reason for species decline.
Putting habitats back is the best place to recovery.**

HABITAT QUALITY NOT QUANTITY



***Habitat quality and variety is the key to biodiversity increase
Appropriate management is vital***



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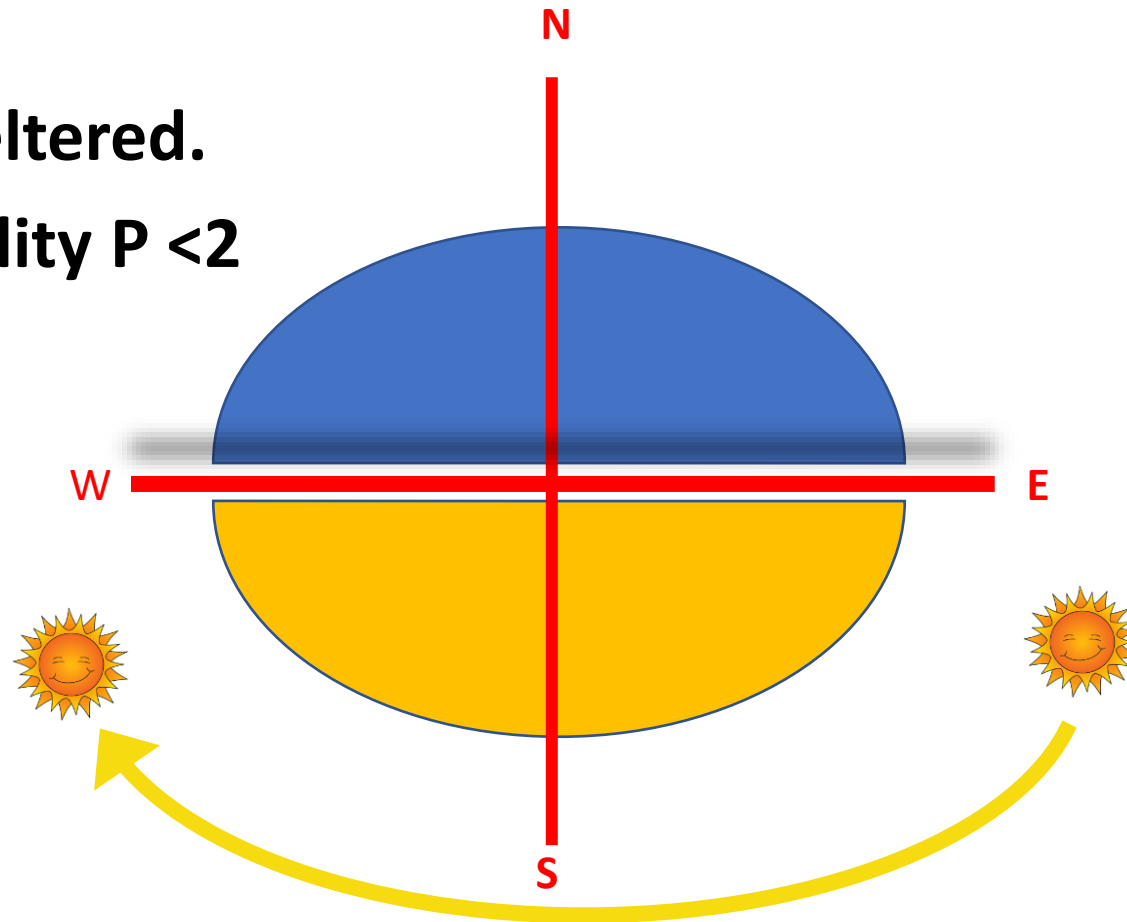
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CREATING FLOWER MIXES

WHERE TO SOW.

Warm, sunny, sheltered.

Area of least fertility $P < 2$



HEDGES;

North south tall

East west shorter

CREATING FLOWER MIXES

WHAT TO SOW: 90% Grass + 10% Flower @ 20 kg/ha

80% grass + 20% flower @20kg/ha

~~Legume + Grass. 80%+20% @ 20kg/ha~~

P&N (Legume based) @ 10-12 kg/ha

Tussocky grass @ 20kg/ha

NB. High number of species = low individual seed number

CREATING FLOWER MIXES

GROUND PREPERATION.

In autumn/spring spray of existing veg with Glyphosate.
Plough, bury trash, then create a firm fine weed free seed bed.
Let the field regrow weeds then spray of again.
Do not cultivate after last spray.

CREATING FLOWER MIXES

A green tractor with yellow wheels is pulling a red sowing machine across a field. The sowing machine has a large red hopper on top and is spreading seeds into the soil. The field is brown and appears to be recently tilled. In the background, there are trees and a cloudy sky.

WHEN TO SOW.

Grass and flower mixes: April-May or July- Sept
Warm, moist soils are ideal.

HOW TO SOW.

~~DRILL~~ **BROADCAST** on the soil surface and then ring roll.

BLACKGRASS SITES: Autumn cult. Spring spray then sow

Seedbed preparation
Think ahead

EXISTING TRACK.
Forced by spring power harrowing

EXISTING FIELD.
Autumn plough and winter weathering for spring beans

EXISTING FIELD.
Forced by spring power harrowing.

THE GOLDEN RULES.

Poor management = Poor results

FLOWER SEED **DEPTH** IS CRITICAL

SOW AT THE **CORRECT TIME** OF YEAR

PERENNIAL SPECIES MAY NEED **REPEATED CUTTING**

IN YEAR ONE TO REDUCE WEEDS/GROWTH..

CUTTING ANNUALS MEANS NO SEED =DEAD

CUTTING PERENNIALS MEANS FLOWERS NEXT YEAR



WEED PRESSURE



WEEDS IN YEAR ONE



SUMMER YEAR 2

FERTILITY



YEAR ONE MULTI CUTS



SUMMER YEAR 2

CUTTING FLOWER MIXES



Tall sward. Cuttings should be removed



Short sward. Cuttings can be left

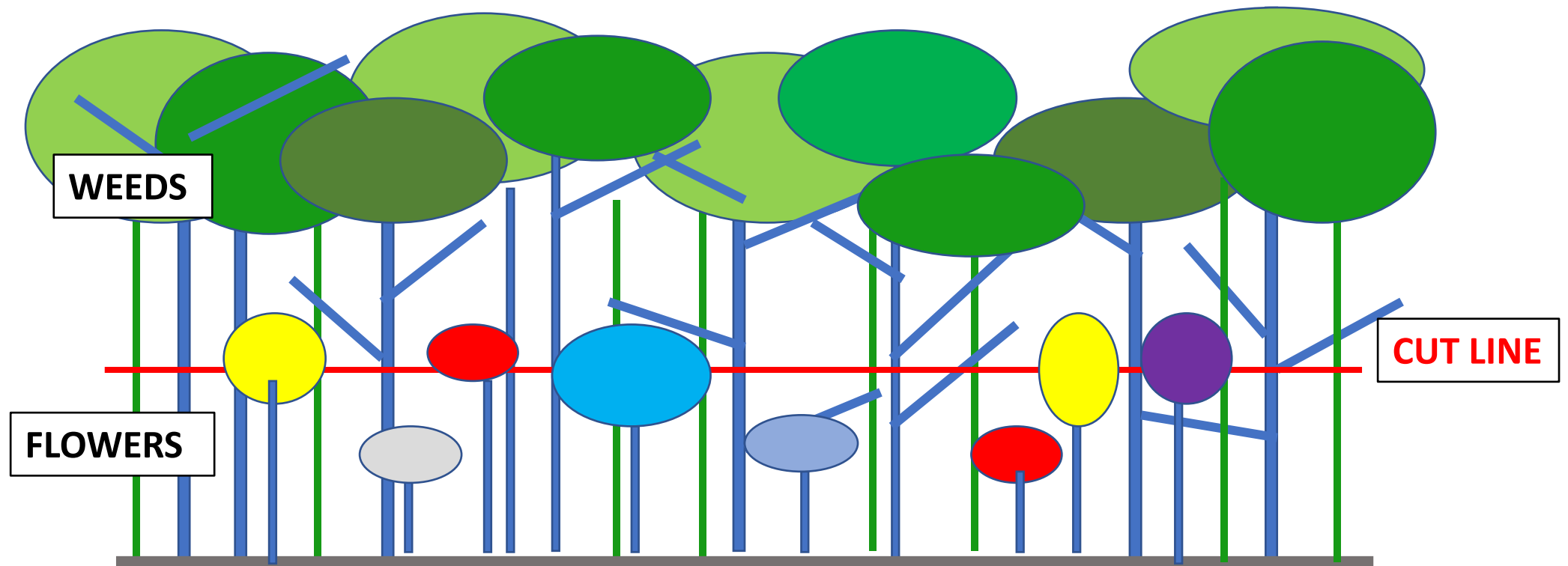


Hammer head "v" Y blades

Remember
Cutting kills annuals not perennials.
Daisies & Dandelions in your lawn!

CUTTING

When to cut a newly established flower mix.
Aim to let light reach the lower flowers.





SAME FIELD.
2013 Year one mown 6 times.
Heavy clay soil. P index 3-4

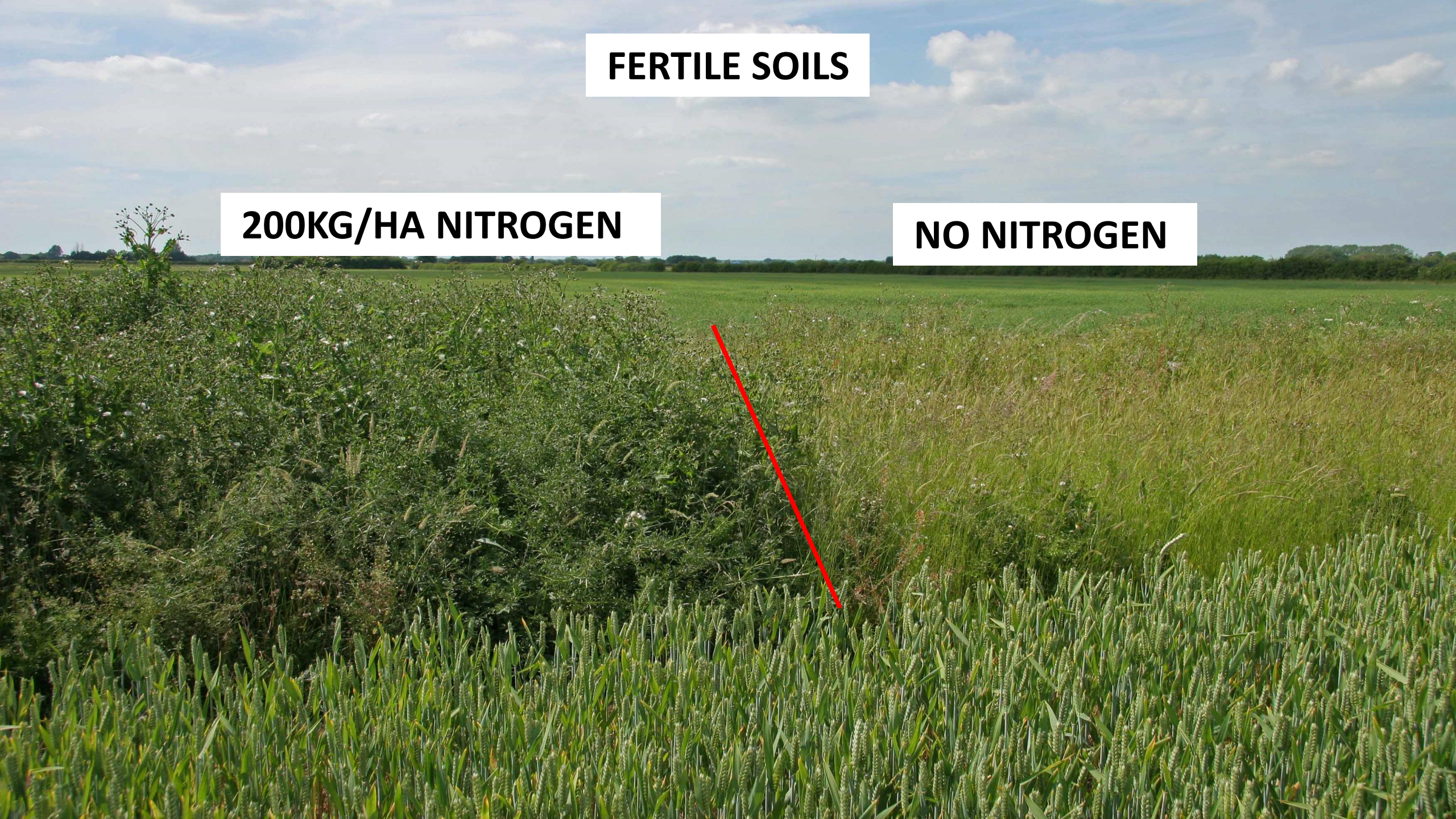
MOWING DOES
NOT
KILL PERENNIALS



FERTILE SOILS

200KG/HA NITROGEN

NO NITROGEN



CREATING FLOWER MIXES

PROBLEMS & NOTES:

Fertility P index >2

Weed pressure

Cutting kills wildlife!!

How often to cut ? (shading)

To expensive & difficult!



Reviving old flower areas

Can be difficult to succeed
Needs 60% soil showing
Old tussock areas, hard
Old flower areas, easier





COMMERCIAL FLOWERS



Name	Early season			Mid season			Late season		
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Black Medick									
Primrose									
Cowslip									
Red campion									
Wild red clover									
Meadow buttercup									
Yellow rattle									
Meadow vetchling									
Hoary plantain									
Common vetch									
Agric red clover									
Alsike clover									
Birdsfoot trefoil									
Cornflower									
Wild carrot									
Oxeye daisy									
Common poppy									
Tufted vetch									
Sainfoin									
Mignonette									
Kidney vetch									
Autumn hawkbit									
Yarrow									
Vipers bugloss									
Common knapweed									
Betony									
Rough hawkbit									
Selfheal									
Hedge woundwort									
Greater knapweed									
Corn marigold									
Devil's bit scabious									
Wild basil									
Field scabious									
Small scabious									
Agrimony									
Marjoram									
Musk mallow									
Teasel									

← Hungry gap →

Key: Coloured squares depict flower colour and flowering period



Habitat Creation and Management for Pollinators

Marek Nowakowski and Richard Pywell



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Book download and order hard copy

<https://www.ceh.ac.uk/book-habitat-creation-and-management-pollinators>

Agrii green horizons. one pagers and DVD's

<https://www.agrii.co.uk/greenhorizons/the-environment/>

<https://vimeo.com/638563546/1b72a8eb47>