



## Wider countryside seed mixes to support the Jersey Pollinator project and Birds On The Edge winter bird crops



The following lists have been developed to support insect pollinators and wild bird populations in Jersey. These mixes are a guide and can be adapted to fit site specific requirements, however, we would be hesitant about planting other species than these in the countryside. There are lots of different options available to suit different sites and budgets. These mixes have been designed to consider both managed and unmanaged, agricultural sites for nature conservation and farming.

**Note 1: None of these mixes should be sown within 400 metres of designated or proposed [Sites of Special Interest \(SSI\)](#) that has been listed for its ecological or botanical interest.**

**Note 2: With any change in the use of agricultural land, you will need to contact the Lands Control Team on tel. 441600 to confirm whether or not any conditions are attached to the land in order to determine whether alternative uses would be granted”.**

**Flowers for free** – Before considering planting a seed mix for your site the first consideration should be whether natural regeneration of wildflowers is most appropriate and likely to be successful. Sites immediately next to existing species-rich grasslands have much better success with natural regeneration. On infertile and light soils naturally regenerated habitats are likely to contain a greater range of wildflowers and fewer undesirable weeds. However, on most fertile arable land natural regeneration tends to be unreliable and rapidly becomes dominated by weeds.

### Permanent or semi-permanent flower rich grassland seed mixes

Description	Info	Seed Mix	Seeds	Rationale
Permanent seed mix	<p>Aim to develop a flower-rich stable grassland (please note this mix will not produce flowers in the first year).</p> <p>Flowering - April to September</p> <p>Longevity - 10 to 20 year</p> <p>Cutting - frequent in year one. Best removed.</p> <p>Location - warm, sunny and sheltered. Good for protecting watercourses.</p>	<p><b>Wildflower and grass mix (perennial)</b></p>	<p><b>Wildflowers</b></p> <p>2% Common Knapweed            3 % Oxeye Daisy            1 %Yarrow            4 %Common Vetch            2 % Wild Carrot            3 % Red Campion            2 % Wild Red Clover            2 % Self-heal            1 %White clover  <b>20.0%</b></p> <p><b>Grasses</b></p> <p>10 % Common Bent            40 % Crested Dogstail            30 % Slender-creeping Red-fescue  <b>80.0%</b></p>	<p>Diversity of flowers; good for wide range of pollinators and other insects.</p>

Description	Info	Seed Mix	Seeds	Rationale
Semi-permanent Pollen & Nectar seed mix	<p>Aim to develop a flower-rich semi-permanent grassland (please note this mix will not produce flowers in the first year). It may also need to be re-sown after year two.</p> <p>Flowering - June to July</p> <p>Longevity - 3 to 4 years</p> <p>Cutting - Frequent in year one. Best removed but can be left.</p> <p>Location - Warm, sunny and sheltered. Tolerates high fertility and weed pressure.</p>	<b>Pollen and Nectar mix (Perennial)</b>	<p>As Above with no grasses Or</p> <p><b>Premium Pollen and nectar mix Wildflowers</b></p> <p>12.5 % Yarrow 17.5 % Common Knapweed 12.5 % Wild Carrot 17.5 % Bird's-foot Trefoil 7.5 % Red Clover 7.5 % White Clover 25 % Common Vetch</p> <p><b>No grass</b> <i>*Note may need to be sown every few years.</i></p>	This mix has one of the best all round plant combinations for delivery and value.

### Sowing

Seeds need both warmth and moisture to grow and may be sown at any time of year when these conditions are met. Every year is different so there isn't an exact date but the following is a useful guide:

- Create a firm, fine, weed-free seed bed and sow ON THE SURFACE.
- September-October and March-April usually produce the best conditions.
- September-October sowing is generally less demanding on heavy land as it is easier to achieve a good seed bed at this time of year.
- Consider both September-October and March-April sowing as this spreads the risk and eases workload.
- To help achieve even sowing it may help to bulk the seed with a convenient volume of an inert carrier such as sand.

### Management

- Management of sown habitats is VERY important. Aftercare is needed for different site and mixes. E.g. Lack of cutting is a major cause of failure.
- Wildflower and Pollen & Nectar habitat will require frequent cutting in year one.
- Leave some tall grass over winter for bumblebees to hibernate and nest in. After year one consider rotational cutting so some tall grass is left overwinter insects.
- Mow when weeds obscure sown species.

## Agricultural cultivars seed mixes - Seed mixes for commercially managed sites

Description	Info	Seed Mix	Seeds	Rationale
Early potato cover crop under <u>annual</u> management	<p>Site under commercial use. Primarily for potatoes. Field ploughed early in the year and available general April.</p> <p>Flowering - June to September</p> <p>Longevity – 9 months</p> <p>Cutting - Sep or Apr before re-sowing. Leave or remove</p> <p>Location - Warm, sunny and sheltered. Avoid placing near watercourses.</p>	<b>Annual mix for pollinators</b>	<p><b>Wildflowers</b></p> <p>30% Wild Red Clover 30% White Clover 20% Common Vetch 10% Phacelia 5% Cornflower 5% Corn Marigold <b>100%</b></p> <p>See the following mixes in <b>table 2</b> that will provide wildlife benefit also as a cover crop.</p> <ul style="list-style-type: none"> <li>• <b>Bee mix</b></li> <li>• <b>Fodder radish</b></li> <li>• <b>Hot Mustard</b></li> </ul>	<p>Following best practice its suggested using pollen and nectar mix in potato fields to avoid birds becoming habituated, and losing their food source mid-winter</p> <p>Good for insects attracted to open flowers.</p>
Under <u>annual</u> management	<p>First annual crop (non-commercial) environmental crop, second year commercial crop (crop rotation).</p> <p>Combined planting for both wild Bird and insect pollinators ('Bumblebird' mix) can also be very beneficial.</p> <p>Flowering - June to September</p> <p>Longevity – 1 year</p> <p>Cutting - Cut at end of Winter (Apr) before re-sowing. Leave</p> <p>Location - Warm, sunny and sheltered. Avoid placing near watercourses. Tolerates high fertility.</p>	<p><b>A combined mixture (annual) Bumblebird mix</b></p> <p><b>Or</b></p> <p><b>Other Annual mix for pollinators and birds</b></p>	<p><b>Wildflowers</b></p> <p>15% Fodder Radish 10% White Millet 10% Gold of Pleasure 10% Crimson Clover 7% Phacelia 8% Sunflower <b>60%</b></p> <p><b>Cereal</b></p> <p>20% Spring Barley 20% Spring Triticale <b>40%</b></p> <p>A ranges of mixes can be used and different mixes can be alternated on different years to increase soil fertility. See the following mixes in <b>table 2</b> that will provide wildlife benefit.</p>	<p>Use pollen and nectar mix or bird crop or a combination of both as long as crop will be in the ground until spring in any year</p> <p>This lower cost option, annual seed mix is designed to provide both Spring and Summer flowers for pollinators, and insect and seed resources for farmland birds. It is robust and grows well on fertile soils.</p>
Under <u>biennial</u> management	<p>Field not in currently used for commercial production (resting or in rotation).</p>	<p><b>Combined Bumblebird mix (annual)</b></p> <p><b>Or</b></p> <p><b>Other Annual mix for pollinators and birds</b></p>	<b>As above</b>	<p>Use pollen and nectar mix or bird crop or a combination of both as long as crop will be in the ground until spring in any year.</p>

Description	Info	Seed Mix	Seeds	Rationale
Fallow land, field margins, unmanaged patches	<p>Grasses with Flowers (Perennial)</p> <p>Flowering - June to September</p> <p>Longevity - 10 to 20 years</p> <p>Cutting - Once in yr. 1 to control weeds. Every 3 to 5 years to prevent scrub. Can be left</p> <p>Location – Particularly good for protecting watercourses</p>	Grassy mix enhanced for pollinators	<p>Grassy mix enhanced for pollinators</p> <p><b>Wildflowers</b></p> <p>7.5 % Vetch</p> <p>3.5 % Common Knapweed</p> <p>3.0 % Wild Carrot</p> <p>3.5 % Bird's-foot Trefoil</p> <p>2.5 % Yarrow</p> <p><b>20.0%</b></p> <p><b>Grasses</b></p> <p>10 % Common Bent</p> <p>40 % Crested Dogstail</p> <p>30 % Slender-creeping Red-fescue</p> <p><b>80%</b></p>	<p>Small patches and areas adjacent to fields can be useful refuges for pollinating insects.</p> <p>Protecting water resources from pollution by pesticides and fertilisers is essential. Sowing or allowing to grow natural buffer strips adjacent to ditches and streams with tall, grass species is suggested. These seed mixes are cheap and reliable, providing good weed control, and are able to tolerate challenging situations, such as northfacing, damp corners. They typically contain few flower resources for insect pollinators, but they do provide nesting and hibernation sites for bumblebees and other beneficial insects that eat crop pests, such as beetles and spiders.</p>

### Sowing

- Like many other crops a firm, fine and weed-free seed bed is required because wildflower and pollen & nectar seed is generally small.
- Sow seed mixtures evenly onto the prepared soil surface.
- To help achieve even sowing it may help to bulk the seed with a convenient volume of an inert carrier such as sand.
- One or two passes with a roll after sowing will firm and level the surface and create good seed/soil contact. Rolling is most important in dry weather.
- Do not roll when the soil is very wet as this may compact and damage the soil surface. If buried it will go dormant.

**Table 2 – Other seed mixes that provide wildlife benefit**

<b>Birds on The Edge</b>			
<b>Jersey Wildlife Winter Holding Cover</b>		<b>Wild Songbird Mix</b>	
Variety/Item	Description Percentage	Variety/Item	Description Percentage
Coleor Kale (Untreated)	10.96%	Spring Wheat	20%
Poacher White Millet	21.04%	Gold of Pleasure	5.04%
Sandoval Quinoa	12.00%	Poacher White Millet	10%
Sunflowers	32.00%	Sunflowers	20%
Mustard	2.00%	Buckwheat	10%
Phacelia	2.96%	Sandoval Quinoa	10%
Stand & Deliver	1.04%	Spring Triticale	24.48%
Utopia	3.04%	Baracuda Oil Radish	0.48%
Buckwheat	14.96%		
<b>Jersey Royal Company</b>			
<b>Bee Mix</b>		<b>Forage Raddish</b>	
Mustard	30%	Buckwheat	20%
Phacelia	30%	Common Vetch	20%
Hairy Vetch	25%	Phacelia	15%
Crimson Clover	5%	Oil Raddish	13%
Sweet Clover	5%	Tillage Raddish	12%
White Clover	5%	Black Oats	10%
		Green Globe & Samson St Turnips	10%
<b>Hot Mustard</b>			
Leaf Mustard	78%		
White Mustard	16%		
Fodder Raddish	6%		
<b>Growth Housing and Environment</b>			
<b>Autumn Barley mix</b>			
Autumn barley	80%		
Phacelia	10%		
Mustard	10%		

In practice different mixes vary considerably and require different management. Below are some general important points to take into consideration. Please follow the seed provider's recommendations on aftercare for the seed mix you choose.

**General Important points:**

1. It is better to manage a semi-natural habitat for native plants than to plough and sow with new plants. Protect semi-natural areas of the farm, including; banks; ditches and other field margins as these provide native plants perfect for our pollinating insects.
2. Do not use fertilizer or pesticides in conservation crops and aim to keep fertilisers and pesticides away from semi-natural habitats and hedgerows
3. Herbicides can be used to target pernicious weeds only by spot treatments.
4. Conserve existing flower resources on your land or farm.
5. Maintain or create some bare ground in sunny, dry locations for solitary mining bees to nest in.
6. Planting Spring-flowering trees AND sowing three to four different habitats for pollinators can provide for many of their needs.
7. Do not plough a bird crop field until April in any year.

**Sourcing Seed Mixes:**

The following list is for information and guidance only and does not constitute an endorsement of individuals or companies.

**Agricultural mixes**

**Local**

- David Dumosch Ltd Tel 862333
- Normans <https://www.normans.je/agriculture>

**UK**

- Kings <https://www.kingscrops.co.uk/>

**Permanent and semi-permanent wild flowers mixes**

We suggest using companies that sell seed of wild origin e.g.

- Emorsgate Seeds <https://wildseed.co.uk/home>
- Habitat Aid <https://www.habitataid.co.uk/>

