

10.3 Wild Bird Cover

Definition: wild bird cover is a spring sown crop mixture, sown on improved or arable ground, which is left unharvested to provide food for farmland birds.

Aim: to provide food, primarily during winter, in the form of crop and weed seeds for farmland birds. Wild bird cover will also provide summer food for chicks and adult birds in the form of weed seeds and invertebrates. Arable weeds, many of which have declined in recent decades, and invertebrates are also likely to benefit from this option.

Biodiversity objectives: the option contributes to the NI Biodiversity Action Plan targets for the Irish hare, Chough and Yellowhammer. The NI priority species – Skylark, Reed bunting, Linnet and Tree sparrow – will also benefit

Management requirements

- Must not be sited on land used to fulfil set aside requirements.
- Wild bird cover must be sown on improved or arable ground only.
- Individual plots must be at least 0.2 ha, with a minimum width of 6m. Total area of wild bird cover in a single field or in adjacent fields must not exceed 2 ha.
- On arable cropping farms with machinery for cultivating and sowing, or where wild bird cover has been grown successfully in the past 2 years, up to 2 ha or 10% of the farm (whichever is the greater) may be wild bird cover, with a maximum of 8 ha in one undertaking/agreement.
- On other farms a maximum of 2ha may be initially entered as wild bird cover, with an option to increase the area after 2 years up to 10% of the farm, with a maximum of 8ha in one undertaking/agreement.
- If more than 2 ha of wild bird cover is to be grown, then plots must be split up over the farm.
- Undersowing is not permitted.
- Sow seed between 1 March to 31 May.
- Two-year mixes must contain kale and at least one from the following: quinoa, spring barley, spring oats, spring wheat, spring triticale, and linseed.
- One-year mixes must contain a spring cereal (oats, barley, triticale) and one from the following: quinoa, oilseed rape, linseed and mustard.
- Wild bird cover must be retained from establishment to 1 March the following year.
- No cultivations are permitted from establishment to 1 March the following year.

- Glyphosate and fertiliser can be applied during establishment but **pesticides** must not be applied to the growing crop.
- Grazing is not permitted except between 1 March and establishment.
- Siting of supplementary feeding sites, drinking troughs, temporary silage clamps and storage of big bale hay or silage is not permitted.
- Crops that fail to establish successfully, or, in the case of two-year mixes, that have a very low kale population in the spring following establishment must be re-sown.
- The area should not be used for access, turning or storage.

Further advice

Location

Wild bird cover should be sited next to thick hedges where possible. If there are no hedges, sites should be preferably next to woodland or scrub. Plots of around one hectare are most beneficial, as they hold seed for longer into the winter. Plots may be kept in the same place or rotated.

Establishment

Good establishment is critical to the success of wild bird cover. Soil testing should be carried out and lime applied where necessary. The optimum pH for most crops is 6.5 but some crops (oats, linseed, triticale) can tolerate more acid soils. Glyphosate may be used before cultivation to control grass weeds, especially where wild bird cover follows permanent grassland or stubbles containing couch grass (scutch grass). The sterile seedbed technique to control broad-leaved weeds is recommended, as herbicide application is not permitted after sowing. Low weed levels, provided they do not prevent crop establishment, are beneficial. Weeds such as redshank and fat hen attract insects, which birds use for feeding chicks, and also provide an important seed source. Inorganic fertilisers and organic manures may be applied to the seedbed in accordance with crop requirements. Two thirds normal rates should suffice as the aim is to create a more open crop which increases access to fallen seeds for birds.

Sowing wild bird cover

Sow between 1 March and 31 May. Drilling is the preferred sowing method as seeds are placed at the correct depth. However if a drill is not suitable or available acceptable results can still be achieved, with care, by broadcasting.

Surface sown seeds are at risk of being eaten by birds and rodents while deeply sown seeds may have insufficient energy reserves for successful emergence of seedlings. Small seeds require shallower sowing than larger seeds.

Careful seedbed preparation helps control sowing depth and ensures good seed/soil contact. In “fluffy”, unconsolidated seedbeds rolling prior to sowing can reduce the risk of deep planting.

A seed drill is best suited to sowing mixtures where the seed is of a similar size e.g. kale and quinoa. Seed may be mixed in the drill if it is not already pre-mixed.

The following methods can be used where the mixture comprises seed of different sizes (e.g. cereals and brassica). Drilling one component and broadcasting the next or drilling one component and over-drilling or cross drilling the next. All ingredients should be sown on the same day in case poor weather delays sowing of the remaining ingredients.

Where seed is broadcast, harrowing after sowing can help to cover seed, but care should be taken to avoid burying small seeds too deeply. Rolling after broadcasting can help ensure good seed/soil contact, and may be all that is needed after broadcasting small seeds. A fertiliser spreader can be used to broadcast the seed if it is mixed with a bulking agent such as fertiliser or sand. If broadcasting, increase seed rates by between one third (for smaller seeds) and a half (for larger seeds).

Re-establishing Wild Bird Cover

Use a flail type topper or conventional topper to pulverise stems and clear brash before ploughing. If carried out by early March removing the vegetation will allow birds access to fallen seed and may also allow the use of the stale seedbed technique for weed control.

Wild Bird Cover Mixes

Wild bird cover can be made up of a mix that is sown every year or a mix that is sown every other year. Recommended seed rates are lower than those for commercial crop production as a more open crop increases access to fallen seeds and weeds for birds.

One-year mixes must contain a spring cereal (oats, barley, wheat, triticale) and at least one from the following: quinoa, oilseed rape*, linseed, mustard*. An example of a one-year mix is oats and linseed. This mix is a good option on heavier, acid soils. Note that these rates are for drilled seed, increase seed rate by one third to a half if broadcasting.

Oats and linseed: 60 kg/ha of oats and 25 kg/ha of linseed

*Do not include brassicas (oilseed rape, mustard etc.) if using the one-year mix as a break crop between kale mixes.

Two-year mixes must contain kale and at least one from the following: quinoa, barley, oats, wheat, triticale, and linseed. Kale must be included because it is the only crop that seeds in the second year. The other component of the mix provides seed in the first year. Examples of two-year mixes are given below. Note that these rates are for drilled seed, increase seed rate by one third to a half if broadcasting:

Kale and quinoa: 2.5 kg/ha of kale and 5 kg/ha of quinoa

Kale and cereal (oats, barley, wheat, triticale): 2.5 kg/ha of kale and 60 kg/ha of cereal

Crops for wild bird cover mixes can be purchased as straights or as a branded mixture. In branded mixtures it is important that **at least two of the species in any mixture are suitable for Northern Ireland growing conditions**. The following crop species are discouraged: sunflowers, red clover, peas, maize, buckwheat, millet, sorghum, artichokes, canary grass, beans and fodder beet. These either do not reliably set seed in NI or do not provide the right type of seed for farmland birds.

Making up mixes from straights

The sowing rates in the table can be used when making up mixes. For example, for mixes with two crop types the sowing rate should be halved, if three crop types are sown each one should be sown at a third of the usual rate. However, use at least 2.5 kg/ha kale in two-year mixes, as kale will be the sole seed source in year two. Rates are lower than commercial crop rates to create a more open crop.

Species	Sowing rate * kg/ha (kg/acre)	Optimum pH range	Sowing depth (cm)
Kale	5.0 (2)	6.5 - 7.0	1 - 1.5
Oilseed rape	7.5 (3)	6.0 - 6.5	1 - 1.5
Mustard	12 (5)	6.0 - 6.5	1 - 1.5
Quinoa	10 (4.5)	6.0 - 6.5	2 - 3
Spring Triticale	125 (50)	5.5 - 6.5	2 - 3
Spring Oats	125 (50)	5.5 - 6.5	2 - 3
Spring Barley	125 (50)	6.0 - 6.5	2 - 3
Spring Wheat	125(50)	6.0 - 6.5	2 - 3
Spring Linseed	60 (25)	5.5 - 6.5	2 - 3

* Sowing rate given for drilled seed. Increase seed rate by one third to a half if broadcasting.

Advantages/disadvantages of different crop types

Kale attracts a wide variety of birds but requires a pH of over 6.5 and is prone to club root if sown too frequently in the same place. If planting, check soil pH, and leave a gap of three years between kale crops to prevent club root. The kale variety “Caledonian” offers greater resistance to club root where brassicas are grown more often than one year in four. Thousand-headed kale is more winter hardy and better suited to northern areas. Maris Kestrel is a short variety more resistant to lodging.

Quinoa is related to fat hen. It produces a large amount of nutritious seed and is good for a wide range of birds.

Oats, triticale and linseed are more tolerant of acid soils (pH down to 5.5).

Triticale is less liable to rabbit damage than other cereals, and the stiff straw stands throughout the winter. Ensure that spring triticale varieties are used for spring sowings.

Barley is more suited to lighter soils.

Recent research has shown that different birds prefer different crop species.

Using this information, crops can be grown to benefit certain bird species.

Yellowhammer used cereal, kale, linseed and oilseed rape;

Skylark used kale and linseed;

Tree sparrow used kale, oilseed rape, quinoa, mustard and cereal;

Linnet used linseed, oilseed rape, mustard and kale;

Reed bunting used oilseed rape, kale and quinoa.

Management plans are provided for
participants in the
**Environmentally Sensitive Areas and
Countryside Management Schemes**

