

# Countryside Stewardship Options

There are number of arable options available through Countryside Stewardship. Some of these options are highly beneficial for arable plants and others are not as beneficial.

Targeting management is essential, and if located where arable plants are present some of these options will result in a boost for the arable plant community and associated wildlife.

Each arable option is listed below and the pros and cons of each for arable plants is discussed. The benefits for other arable wildlife and the wider environment are not discussed here.

Many of the options highlighted as having negative effects on arable plants may not be as detrimental if rotated around the farm.

**AB7 – Whole crop cereals:** As this option specifies spring cultivation, it is more likely to benefit spring germinating rather than winter germinating arable plants. Crop harvesting late summer / early autumn is beneficial for arable plants as it enables plants to

flower and seed, completing their lifecycle. The harvest date is unspecified within Countryside Stewardship documents, and early harvests may prevent arable plants setting-seed. The restriction of herbicide application encourages the growth of arable plants.

## Options that are beneficial for arable plants

**AB2 – Basic overwinter stubble:** A good option for spring germinating arable plants, but not as favourable for winter germinating arable plants.

**AB4 – Skylark plots:** The creation of fallow plots in winter sown crops is likely to benefit winter germinating arable plants particularly if the plots are not created through herbicide use or subsequently treated with herbicide.

**AB5 - Nesting plots for Lapwing/Stone Curlew (HT):** See information for AB4.



**AB10 – Unharvested cereal headland:** A good option for arable plants, particularly those that are spring germinating as cultivation is specified to be carried out during spring.

**AB11 – Cultivated areas for arable plants:** A good option for both spring and winter germinating arable plants. Targeting is based on plants with an Important Arable Plant Area (IAPA) score of 4 or more and can be used as part of the Wild Pollinator and Farm Wildlife Package.

**AB13 – Brassica fodder crop:** Could be beneficial for spring germinating arable plants if cultivated early in the year, but the last date for crop establishment is 31 July, which is fairly late for spring germinating arable plants. Arable plants should have set seed by 15 October, after which livestock can be allowed to graze the fodder.

**AB14 – Harvested low-input cereal:** A good option for both spring and winter germinating arable plants.

**OP1 – Overwintered stubbles:** An option for organic land. Similar to AB2, but an overwinter cover crop needs to be established on 10-50% of the area. Cover crops are not beneficial for winter germinating arable plants and should be restricted to areas of low arable plant interest.



**Options that are neutral for arable plants**

**AB9 – Winter bird food:** Not particularly beneficial for arable plants as the aim of this option is to smother naturally occurring annual species to allow the high seed producing species to dominate. Use of an annual mix would be better than a mix with biennials or perennials as the regular cultivation will allow annual plants to appear within the sown winter bird food crop.

**AB12 - Supplementary winter feeding for farmland birds:** No effect on arable plants.

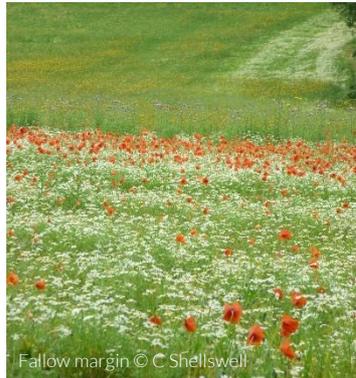
**OP2 – Wild bird seed mixture:** An option for organic land. This option encourages cultivation every second year and, as such, does not promote growth of annual arable plants as much as when cultivated annually.

**OP3 – Supplementary feeding for farmland birds:** An option for organic land. See information for AB12.





Corncockle © C Shellswell



Fallow margin © C Shellswell

**Options that are detrimental for arable plants**

**AB1 – Nectar flower mix:** This option involves the planting of perennials which means management is then not suitable for annual arable plant species that need regular disturbance. The dense growth of perennials is unlikely to favour arable plants that tend to grow in more open environments.

**AB3 – Beetle banks:** May negatively affect arable plant populations if located in a diverse part of the field. However, as beetle banks are more often situated within fields, particularly to break-up large fields and provide in-field habitat for invertebrates, this management is less likely to affect diverse plant communities which are usually found along field margins.

**AB6 – Enhanced overwinter stubble:** This option prevents annual cultivation and as such, is unlikely to be beneficial for arable plants.

**AB8 – Flower-rich margins and plots:** See information for AB1.

**AB15 – Two-year sown legume fallow:** This option prevents annual cultivation and, as such, is not beneficial for arable plants.

**AB16 – Autumn sown bumblebird mix:** This option favours perennials and biennials and, as such, does not promote growth of annual arable plants.

**HS2 – Take historic and archaeological features out of cultivation:** Arable plants require regular cultivation.

**HS3 – Reduced-depth, non-inversion cultivation on historic and archaeological features:** The vast majority of arable plants require inversion cultivation. Seeds often need to spend time at depths under the soil prior to germination for the seed coat to be able to break open and embryo to grow. Low tillage options reduce the opportunities for this to occur and over time it appears that the populations of arable plants are declining under this management.

**HS9 – Restricted depth crop establishment to protect archaeology under an arable rotation:** See information for HS3.

**OP4 – Multi-species ley:** An option for organic land. Arable plants are annuals and some species require annual cultivation to thrive such as Corn Buttercup. Others require regular cultivation but their seeds can survive for several years in the soil under grass. Species with large irregular shaped seeds tend to require more regular cultivation than those with small and round seeds.

**OP5 – Under-sown cereal:** An option for organic land. Under-sowing cereals with grasses and/or legumes prevents growth of arable plants that tend not to be very competitive.



Common Hemp-nettle © C Shellswell



Rampion Fumitory © C Shellswell

**SW1 – 4 m to 6 m buffer strip on cultivated land:**

Arable plants tend to be found on the margins of arable fields and require regular cultivation. Establishing permanent grass strips along margins will prevent arable plants from growing. See information for option OP4.

**SW3 – In-field grass strips:**

See information for SW1. Grass strips within the centre of a field are less likely to affect arable plants in conventionally farmed holdings as they tend to be found along field margins.

**SW4 – 12 m to 24 m**

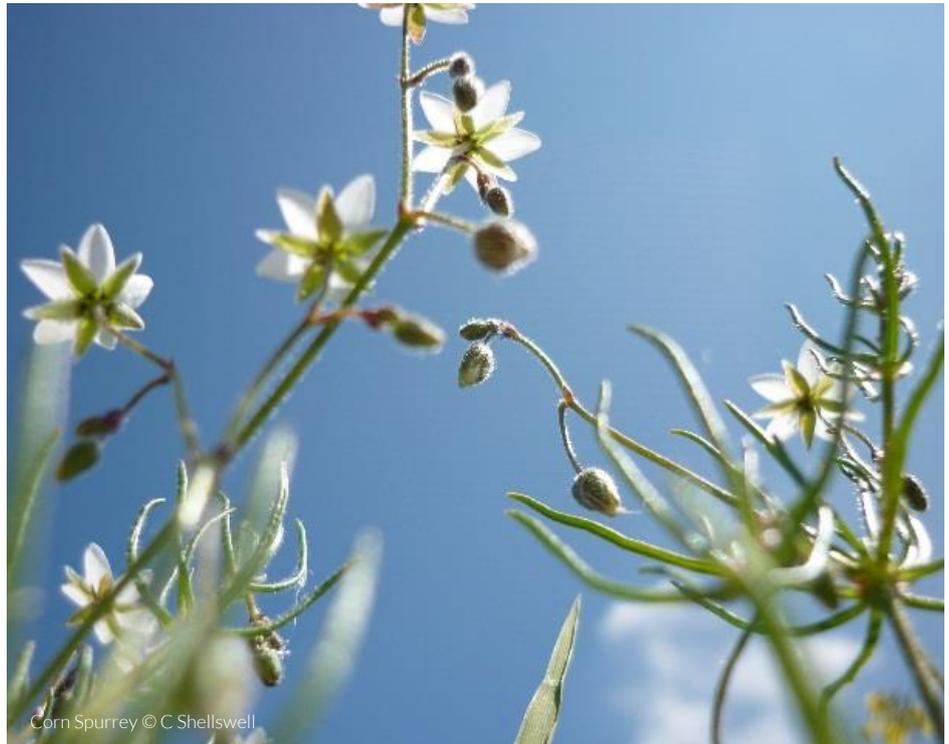
**watercourse buffer strip on cultivated land:** See information for SW1.

**SW5 – Enhanced management of maize crops:**

Maize crops do not tend to support rare arable plants as they often require heavy fertiliser inputs. They develop into a dense crop which reduces the amount of light available for sensitive arable plants. A winter cover crop is established for this option which would also be detrimental for autumn/winter germinating arable plants. See information for SW6.

**SW6 – Winter cover crops:** Arable plants require regular cultivation in spring or autumn/winter (species depending) and then need to be left undisturbed until they have flowered and set seed completing their lifecycle. This option prevents this from occurring to species that germinate in autumn/winter.

**SW7 – Arable reversion to grassland with low fertiliser input:** Arable plants require regular cultivation, reversion to grassland management prevents growth of arable plants.



**SW15 - Flood mitigation on arable reversion to grassland:** See information for SW7.

**WD3 – Woodland edges on arable land:** Arable plants tend to occur along field margins and in field corners. Reverting margins to scrub prevents annual cultivation and therefore arable plant growth.

**WT2 – Buffering in-field ponds and ditches on arable land:** See information for SW1.

