An illustrated guide to collecting and propagating seed of hay meadow flowers

> in the Yorkshire Dales and the Forest of Bowland AONB







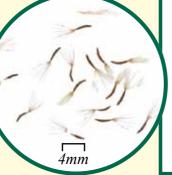


## Small seeds - sow in trays



## Rough Hawkbit

Flowering time: June – September Seed head like a small dandelion clock but slightly creamier in colour on a thinner stem. Seeds are dispersed by the wind. Height: 10-40cm





## Great Burnet

Flowering time: June – September Dull crimson seed heads look very similar to the flower heads, just more 'crispy'. Seeds are dropped as seed heads break down. Height: up to 120cm



## Large seeds - sow in pots



## Meadowsweet

#### Flowering time: June – September

Found in damp meadows and on meadow edges. Seed head consisting of whorled seeds set in sixes around the flowering stems. Seeds are shaken from the stems when dry and ripe. **Height: up to 120cm** 



## Melancholy Thistle

Flowering time: July – August Seed head like a large thistle 'brush' but often drooping over, hence its name. Seeds are either dispersed by wind or dropped as the seed head breaks down. Height: up to 120cm





## Large seeds - sow in pots



## Meadow Vetchling

#### Flowering time: July - August

Pods are green turning to black, just like miniature pea pods, set in pairs up the stem of the plant, which climbs and scrambles up other plants, clinging on with tendrils. Seeds are fired from the pods as they dry and pop open.

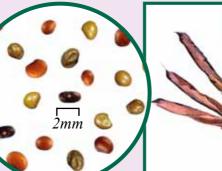
Height: 30-120cm

## Bird's-foot Trefoil

#### Flowering time: May – September

Pods are green, in groups of five with a point on the tip, just like miniature pea pods but very slender and straight. Plant creeping on the ground. Seeds are fired from the pods as they dry and pop open.

#### Height: 10-50cm





## Large seeds - sow in pots



## Wood and Meadow Crane's-bill

#### Flowering time: June - August

Seed heads end in a pointed beak, hence their name. Seeds are held individually in capsules at the base of the beak, and are fired by a spring mechanism

when ripe.

Height: 30-70cm







## Common Knapweed

#### Flowering time: July – September

Seed heads look very much like the buds, forming within the scaly bulbous base of the flower, opening into a 'brush'.

Seed is dropped as the seed head breaks down in the frost.

#### Height: 15-100cm





## Sow only into existing grassland



## Yellow Rattle

#### Flowering time: May - August

Seed heads papery and brown when ripe. Seeds winged all around and rattle within the pods when ripe, hence its name.

Seeds are dispersed by the wind.

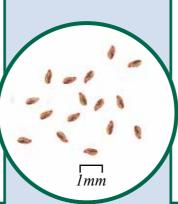
Height: up to 30 cm

## Eyebright

4mm

Flowering time: June – October Tiny seeds within heart-shaped seed pods held close to the stems. Seeds dispersed by the wind.

Height: 10-50cm





# Notes on seed collection, cleaning, storage and propagation

#### Seed collection, cleaning and storage

Seed heads can be collected by hand once the flowers have set seed. Hay meadow species can be found in road verges, churchyards and hedgebanks as well as within meadows.

Try to do your collecting on warm dry afternoons. Collect small amounts of each species, using paper bags and labelling with species, place and date. Seed heads should dry in the bags if well ventilated. Once dry, tip each bag onto paper with a fold down the centre, remove seeds from pods, remove any pieces of leaves and stalks and store each species in a labelled envelope. Store the envelopes in the fridge until February/March. This mimics the winter temperatures the seeds would experience naturally.

#### Propagation of small seeds

Fill seed trays <sup>3</sup>/<sub>4</sub> full with a low nutrient, peat-free seed/cutting compost. Carefully sprinkle the seed over the top of the compost, making sure that the seeds are thinly spread out. Cover the compost with a single layer of fine grit, water and place outside. Germination will begin as the soil warms. Ensure that the seedlings do not dry out, and transfer them to individual pots once they have two true leaves. Handle using these leaves rather than the stem.

#### Propagation of large seeds

Fill 9cm pots 3/4 full with a low nutrient, peat-free seed/cutting compost. Carefully place 3 seeds on the top of the compost. Cover the compost with a single layer of fine grit, water and place outside. Germination will begin as the soil warms. Ensure that the seedlings do not dry out, and transfer them to individual pots once they have at least two true leaves and are looking crowded. Handle using leaves rather than the stem.

#### Sowing only into an existing grassland

Yellow rattle and eyebright are both parasitic on grass roots and so whilst they may germinate in compost, they will not survive. To establish, they must been sown into an existing grassland. In September, make sure the grass is very short, create bare ground by raking or harrowing, and then scatter the seed at 3-4gm per square metre. The seeds will germinate in the springtime. These species are annuals, so need to flower and set seed every year before the grass is cut in order for them to drop seed and germinate the following year.



The Hay Time project works with farmers and landowners to restore meadows in the Yorkshire Dales and the Forest of Bowland AONB.

We provide advice on meadow management and restore meadows that have lost some of their wildlife value using seed harvested from nearby species-rich donor meadows. We involve volunteers in the work and provide educational opportunities for schools and the public.

For further information please contact: Yorkshire Dales Millennium Trust on 015242 51002 - info@ydmt.org Forest of Bowland AONB on 01200 448000 - bowland@lancashire.gov.uk

The Yorkshire Dales Millennium Trust (YDMT) is a small charity doing big things to support every aspect of life in the Yorkshire Dales. YDMT has helped to deliver over 1,500 inspiring projects worth more than £25 million to date.

Since we started in 1996 our work has evolved to meet the changing needs of this special landscape and the communities within it. Some of our current work includes:

- Restoring hay meadows, home to hundreds of species of wildlife
- Providing education and training for local young people
- Planting broadleaf trees to create hundreds of new native woodlands
- Funding and supporting hundreds of community projects.

We could not do any of this vital work without the support of people who love the Yorkshire Dales. To find out how you can be part of it visit www.ydmt.org

The Forest of Bowland Area of Outstanding Natural Beauty (AONB) is a nationally protected landscape and is internationally important for its heather moorland, blanket bog and rare birds. The AONB is managed by a partnership of landowners, farmers, voluntary organisations, wildlife groups, recreation groups, local councils and government agencies, who work to protect, conserve and enhance the natural and cultural heritage of this special area. The Forest of Bowland was designated as an Area of Outstanding Natural Beauty in 1964 and covers 300 sq miles of rural Lancashire and North Yorkshire.

For further information visit www.forestofbowland.com

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