

Pollinators and Plants:

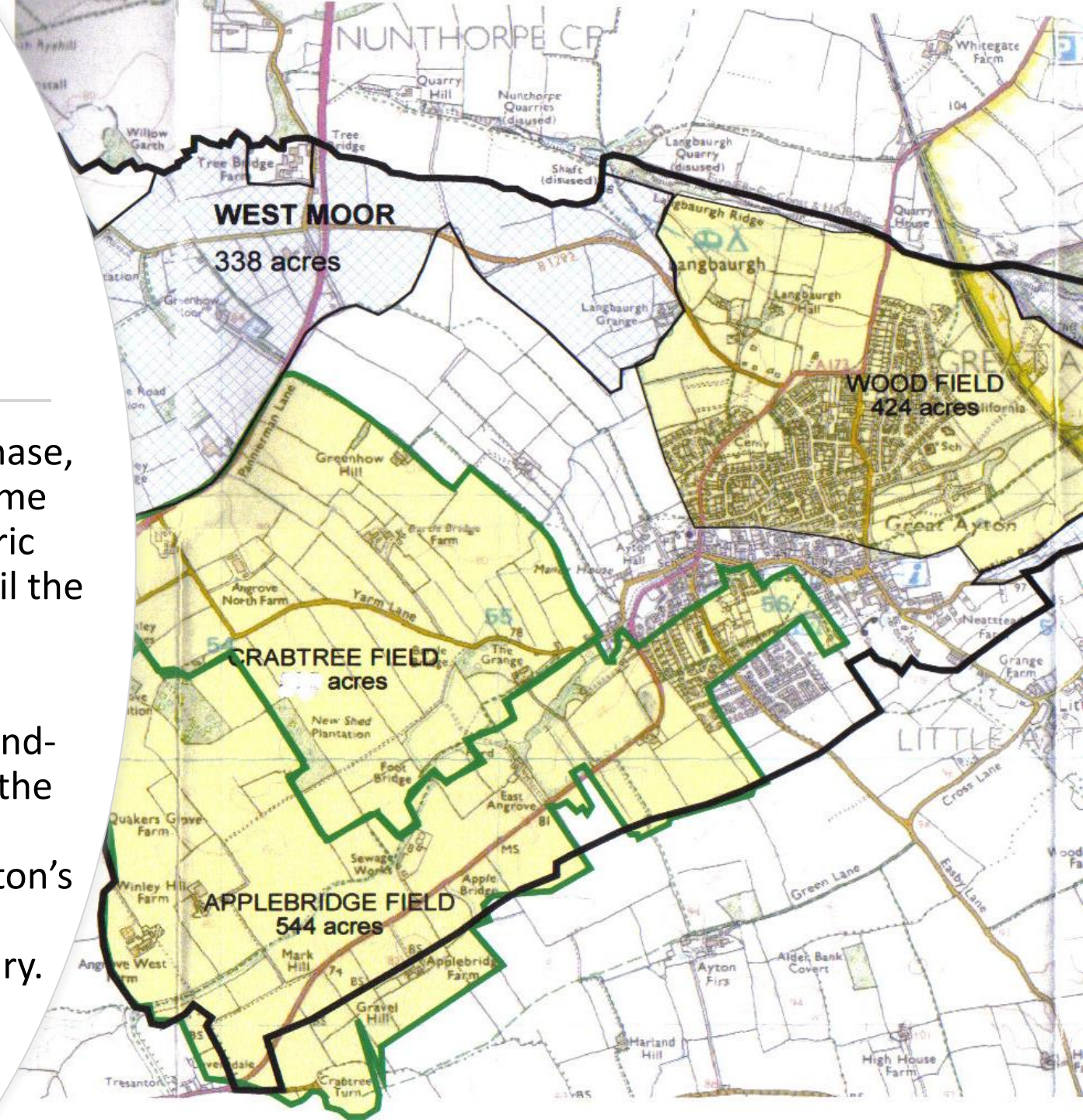
the story of Great Ayton's High Street through the eyes of pollinators

Wednesday 10th February 2021

Martin Allen and Caryn Loftus

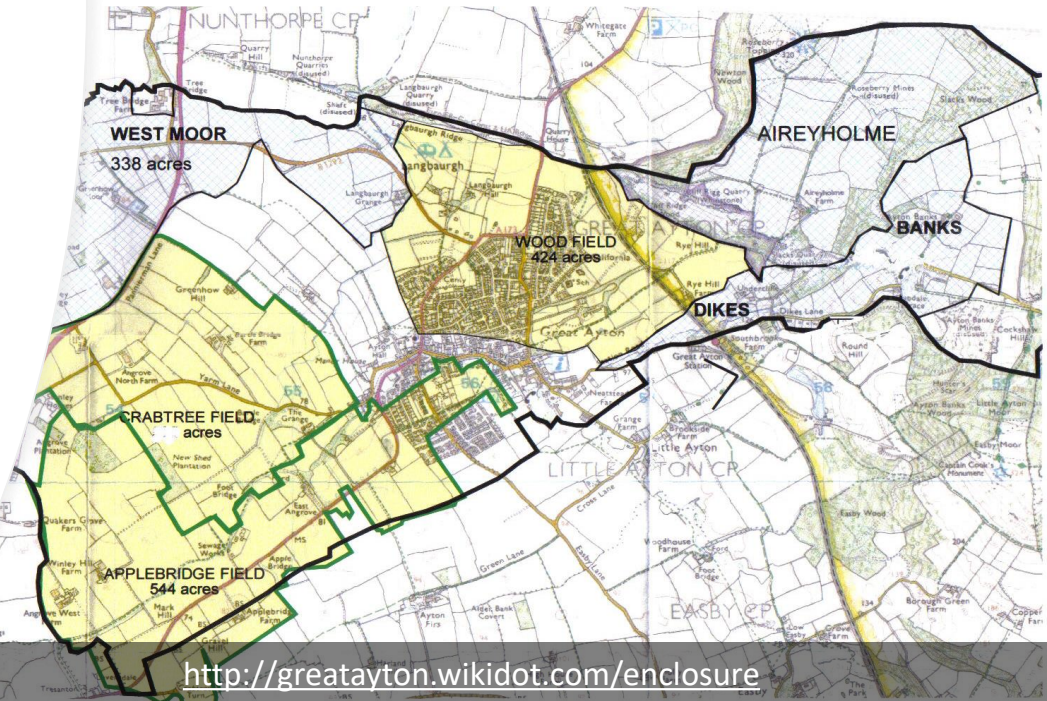
Pre-1600s

- First settlement phase, extending from some unknown prehistoric date, probably until the tenth or eleventh century AD.
- Second phase in land-management was the open-field phase, which lasted in Ayton's case until the mid-seventeenth century.



Medieval Great Ayton

- Loss of woodland to make Wood Field
- The wildflower-rich grazing moors and scrub
- Floodplain Meadows
- Enclosure brought hedges, but wildflower plant communities were ploughed up



A NEW Orchard & Garden:

OR,

THE BEST WAY FOR PLANTING, GRAFFING, AND
to make any Ground good for a Rich *Orchard*: Particularly in
the North, and Generally for the whole Common-wealth, as in Nature,
Reason, Situation, and all Probability, may and doth appear.

With the Country House-wifes *Garden for Herbs* of Common use.
Their Virtues, Seasons, Ornaments, Variety of Knots, Models
for Trees, and Plots, for the best Ordering of Grounds and Walks.

AS ALSO

The Husbandry of *Bees*, with their several Uses and Annoyances:
All being the Experience of Forty Eight Years Labour, by William Lawson,
reprinted from the Third Edition with a Preface by Eleanour Sinclair Rohde.

Whereunto is newly added the Art of Propagating Plants with the true
Ordering of all manner of Fruits, in their Gathering, Carrying home, and
Preservation.



Pains, bring fruitful gains.

Nemo fidi natus.



A Pastel drawing of a House at Great Dylton which was built by Capt. Cook's Father which House the soldiers
went to live at before.

1600s-1700s

– wealth of area
increases due to
enclosure of open
fields

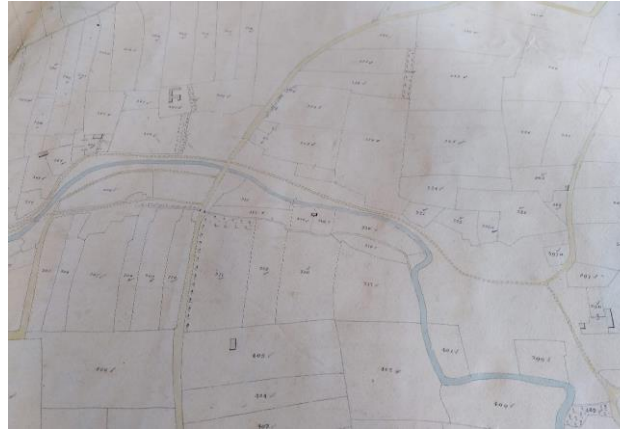
Q: Was early planting of gardens and orchards
influenced by the publication of local author
William Lawson, in 1618, of 'A New Orchard
and Garden'?

Q: Are there any paintings/old photographs of
planting in gardens?

1800s to present day

-
growth of Great Ayton

- Q: Do any residents have old garden planting plans with their house deeds?



Solving Works
H. H. H. H.
C. H. H. H.
Dec 12th 1884

My Dear Brother

I am very happy to hear you are there
a chance of your coming to the farm
as far I am sure it will be a pleasure
to you we wrote down a list of things to do
since and in the letter expressed a wish to
have from you before Christmas and
get a paper and high paper to have any and
you quickly granted we received all your
previous letters but the last one and
some directed to the house below

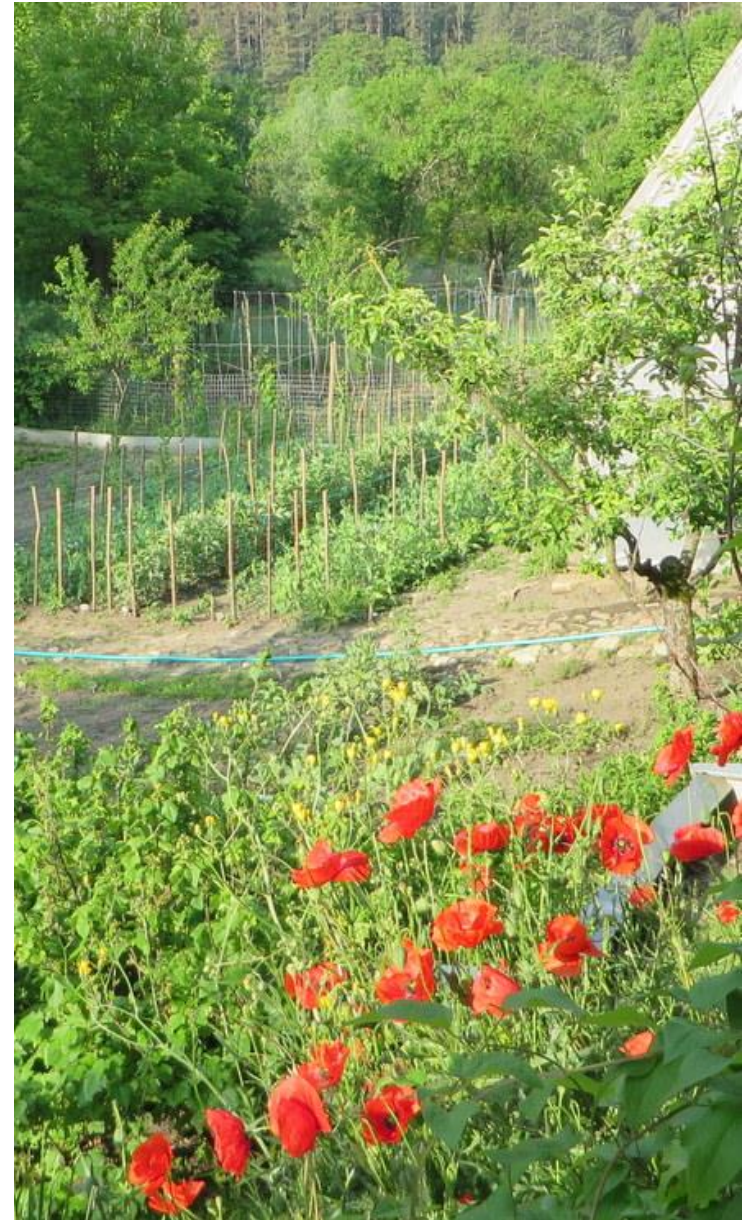
I suppose you must have heard from
me just after we were married we
were then living in part of the house
with Sister and I tell what a nice house
he has built in California he bought half
an acre of land and on one half he has
corn house on potatoes for the pigs on
themselves the house stands on the other
half 10 yds from the house of the house
in the house of the house of the house





Change from 1940 onwards

- More loss of pasture
- Mechanical cutting of hedges
- Herbicides for arable weeds
- Loss of vegetable gardens & scruffiness
- More easy-maintenance lower flower-diversity

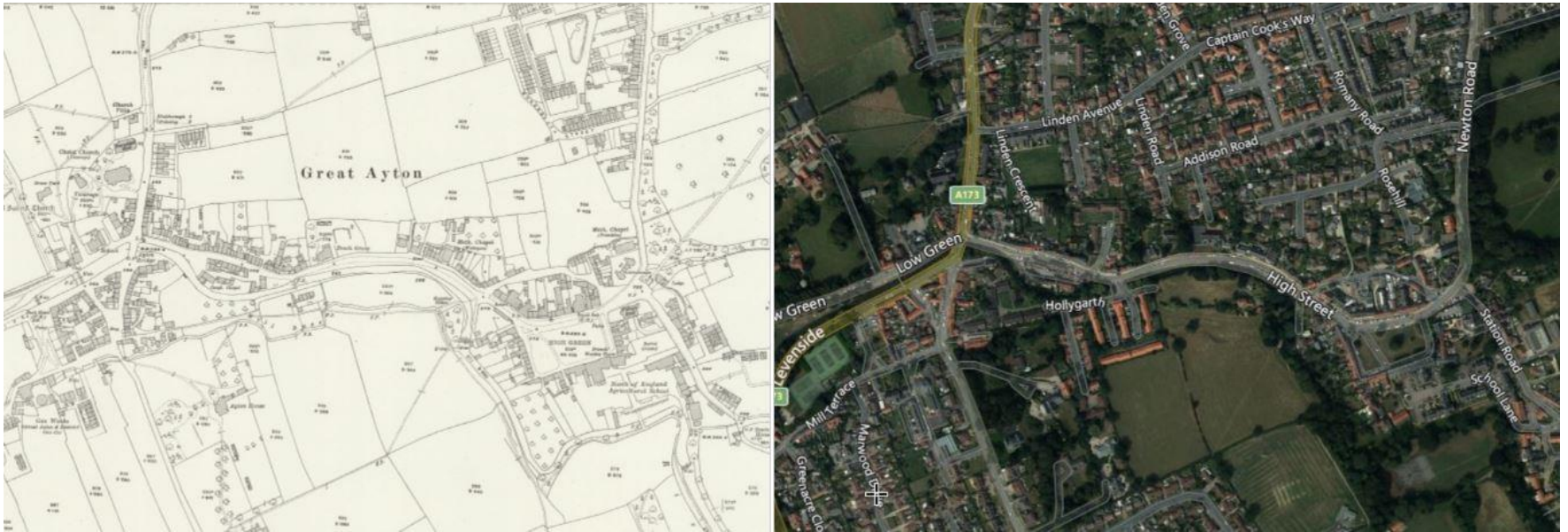


Change over the last one thousand years in Great Ayton.

- Open-access spacious biodiverse landscape
- Compartmentalised privatised monocultures



Great Ayton's High Street



Reproduced with the permission of the National Library of Scotland

High Green

Q: Why were there a lot of orchards marked on the 19th century OS maps of the village?

Q. Do any residents have memories/remnants of old orchards in the village?



High Green - orchards

- Orchards in the area were tall fruit trees, mainly apple
- Planted in a grid on species-rich grassland
- Grazing by lambs/ram and/or used for hay.
- Often where honey-bee hives were located.

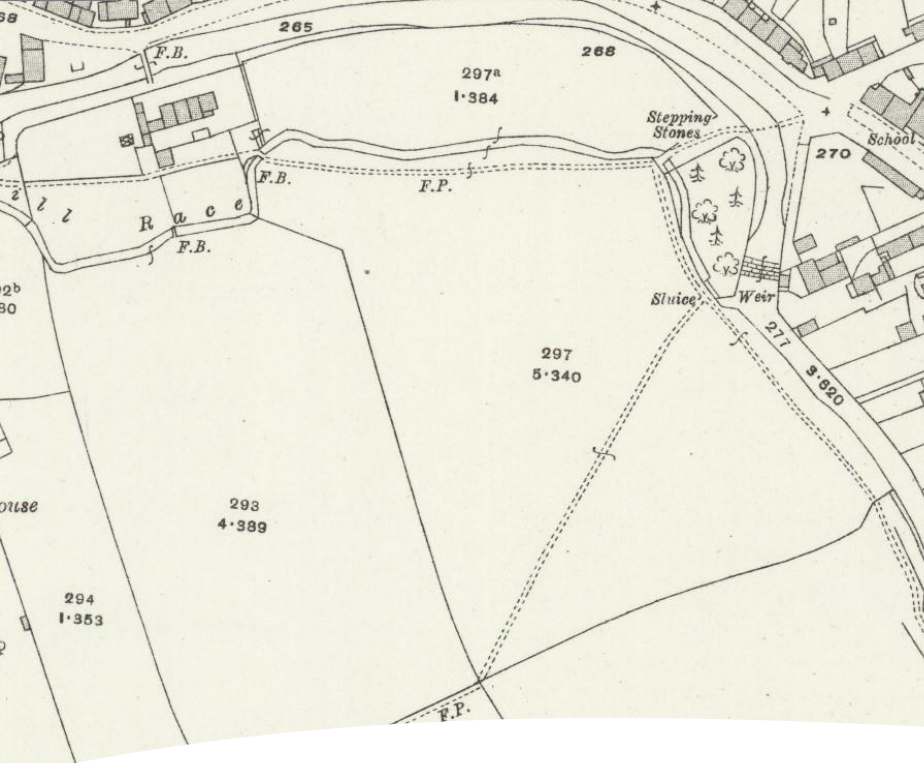
With thanks to:
Nick Jacott and Helen Herring for photos



High Green - plants

- Fantastic winter bulbs already
- Add cowslips and buttercups interplanted with daffodils around the edges?
- What new trees should be added?





Waterfall Park

- The 25" OS map from 1927 shows Waterfall Park and the course of the old mill race.
- The LIDAR image on the right shows clearly the old ridge and furrow in what was part of Applebridge field.

www.captcook-greatayton.com/locations/waterfall-park

Waterfall Park - Beetles

- Seriously, once you start looking they are everywhere
- Pollen beetles, dock beetle and red soldier beetle shown here



By James Lindsey at Ecology of
Commanster, CC BY-SA 3.0,

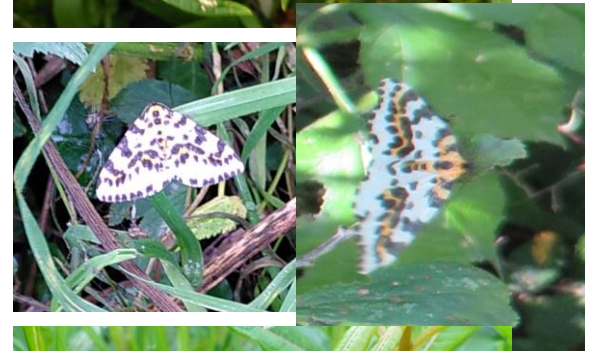


By sarefo - Own work, CC BY-SA 3.0,

Waterfall Park - plants

- Already 48 species of flowers, 23 of trees and shrubs, plus 17 grass, ferns and sedges
- We added another 9 wildflowers that are good for pollinators – look out for the primroses now



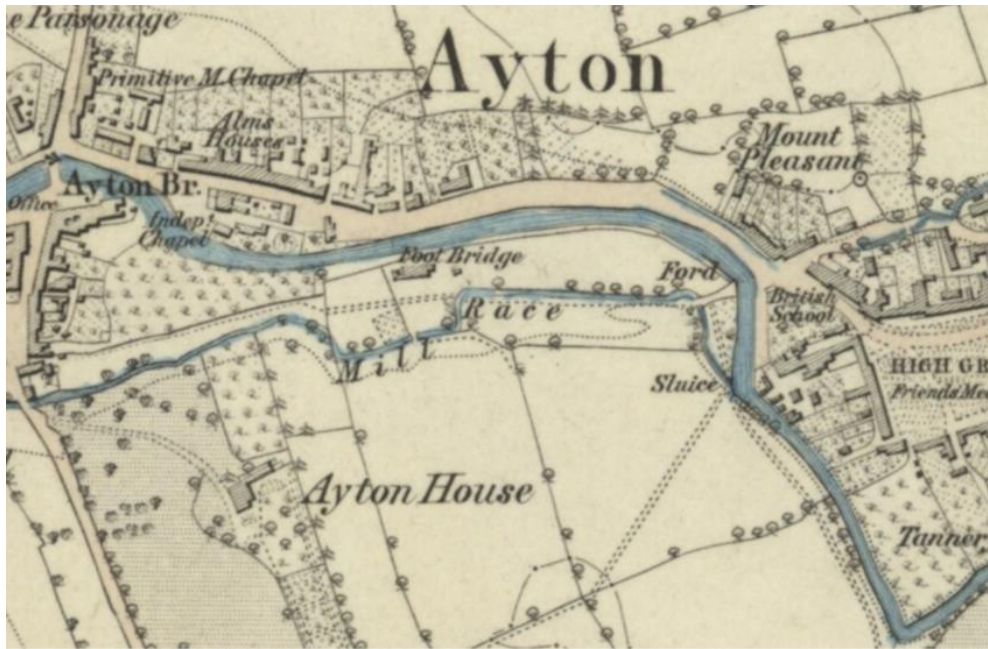


By Richerman - Own work, CC BY-SA 3.0

Village Hall - Butterflies and moths

Village Hall - plants



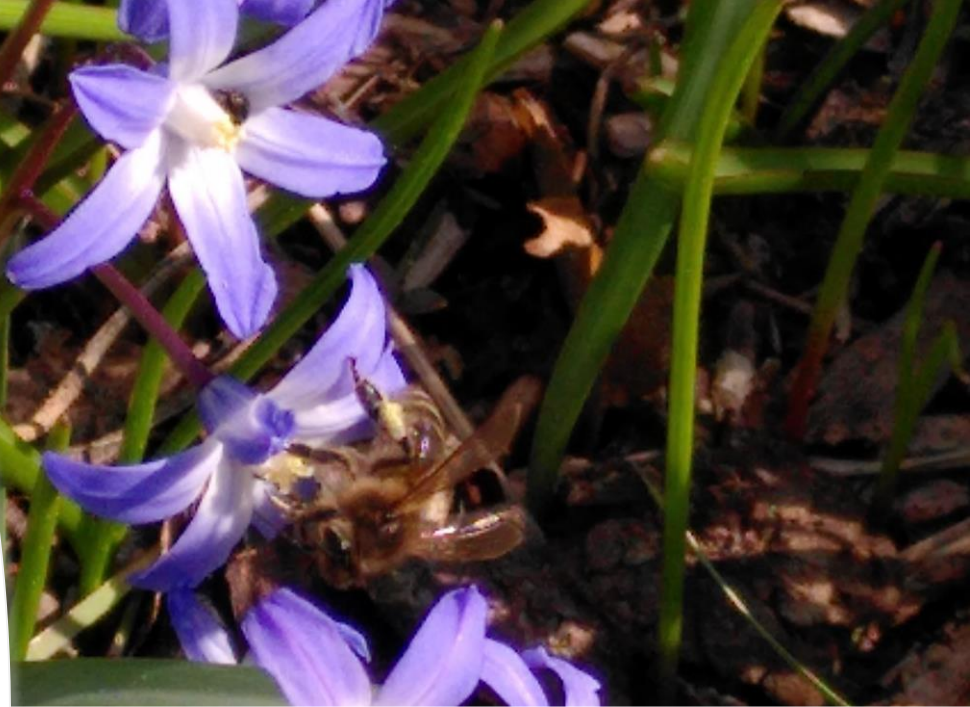


Beech
Close

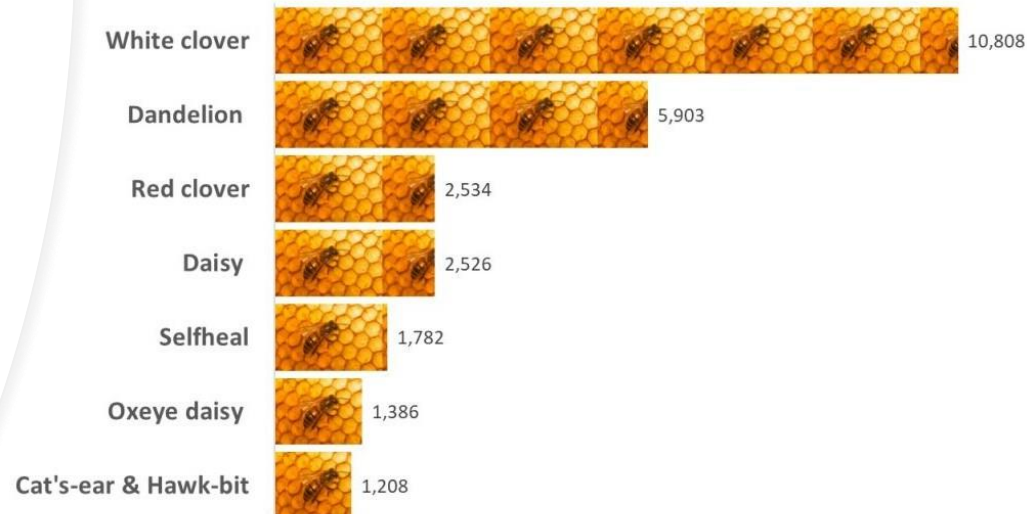
- 1853
- 2019

Beech Close - Honey and solitary bees

- Honeybees aren't native
- We can measure the amounts of nectar a plant produces
- Plantlife do this for your lawn and white clover makes lots of nectar
- <https://www.plantlife.org.uk/veryflowercounts/2019-results/>



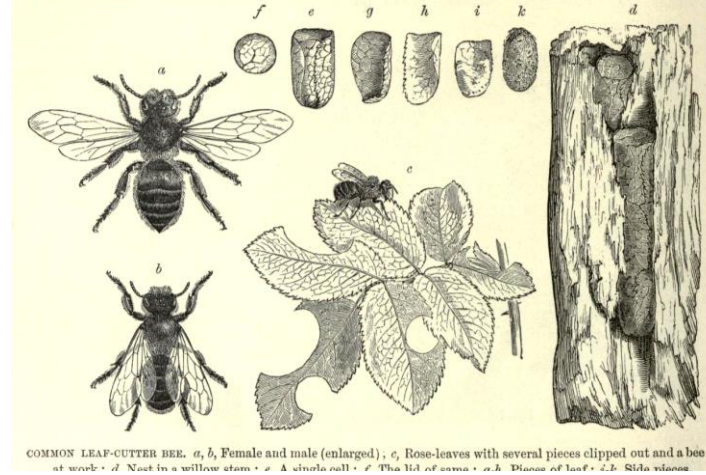
Top 7 nectar producers were (average μg nectar sugar/quadrat/day):



Beech Close - plants

- Leafcutter bees use rose leaves from gardens
- Wool carder bee uses fluff from the plant Lamb's-ears
- They all like dandelions 😊

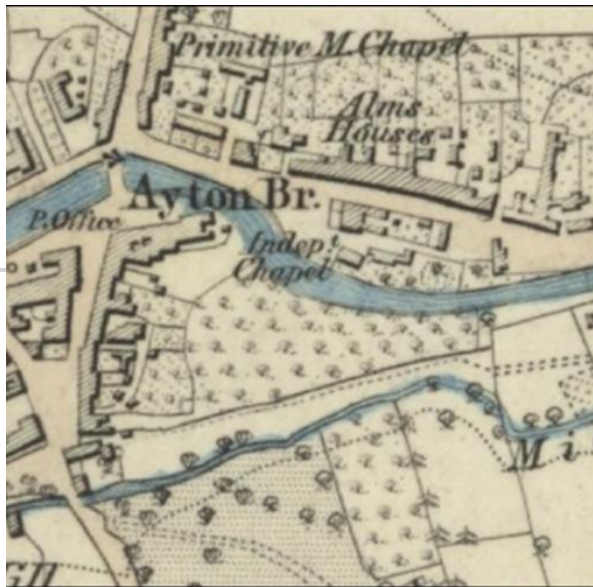
Engraving by Richard Lydekker - Lydekker, R. 1879 The Royal Natural History. Volume 6. Frederick Warne and Co. page 36, referenced on page 43, Public Domain

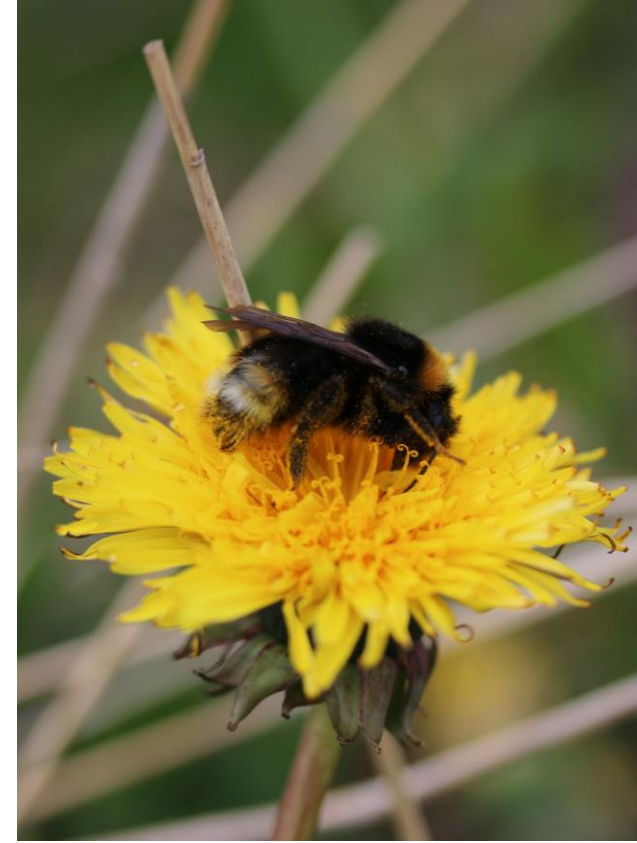


1858·August·21st·YORK·HERALD·¶

STOKESLEY·PETTY·SESSIONS·--·On·Saturday,·before·Jas·W·Pennyman,·and·George·Marwood·Esqrs.·--·Anthony·Pearson,·of·Stokesley,·was·charged·by·John·Lowther,·Great·Ayton,·with·opening·his·house·for·the·sale·of·beer·before·12:30·clock·a.m.,·on·Sunday,·the·8th·inst.·Fined·6d·and·costs·---·William·Eccles·of·Great·Ayton,·was·charged·by·Elizabeth·Cail,·of·the·same·place,·with·wilfully·damaging·some·apples·in·her·orchard.·Fined·4d·and·costs·¶
---·Humphrey·Sanderson,·of·Great·Ayton,·is·charged·by·the·said·Elizabeth·Taylor,·with·the·like·offence.·Fined·4d·and·costs.¶

Hollygarth





Hollygarth - Bumblebees

- 24 different species in the UK
- Colony numbers are adversely affected if there is no food in September

Hollygarth - plants

A. ANNUALS

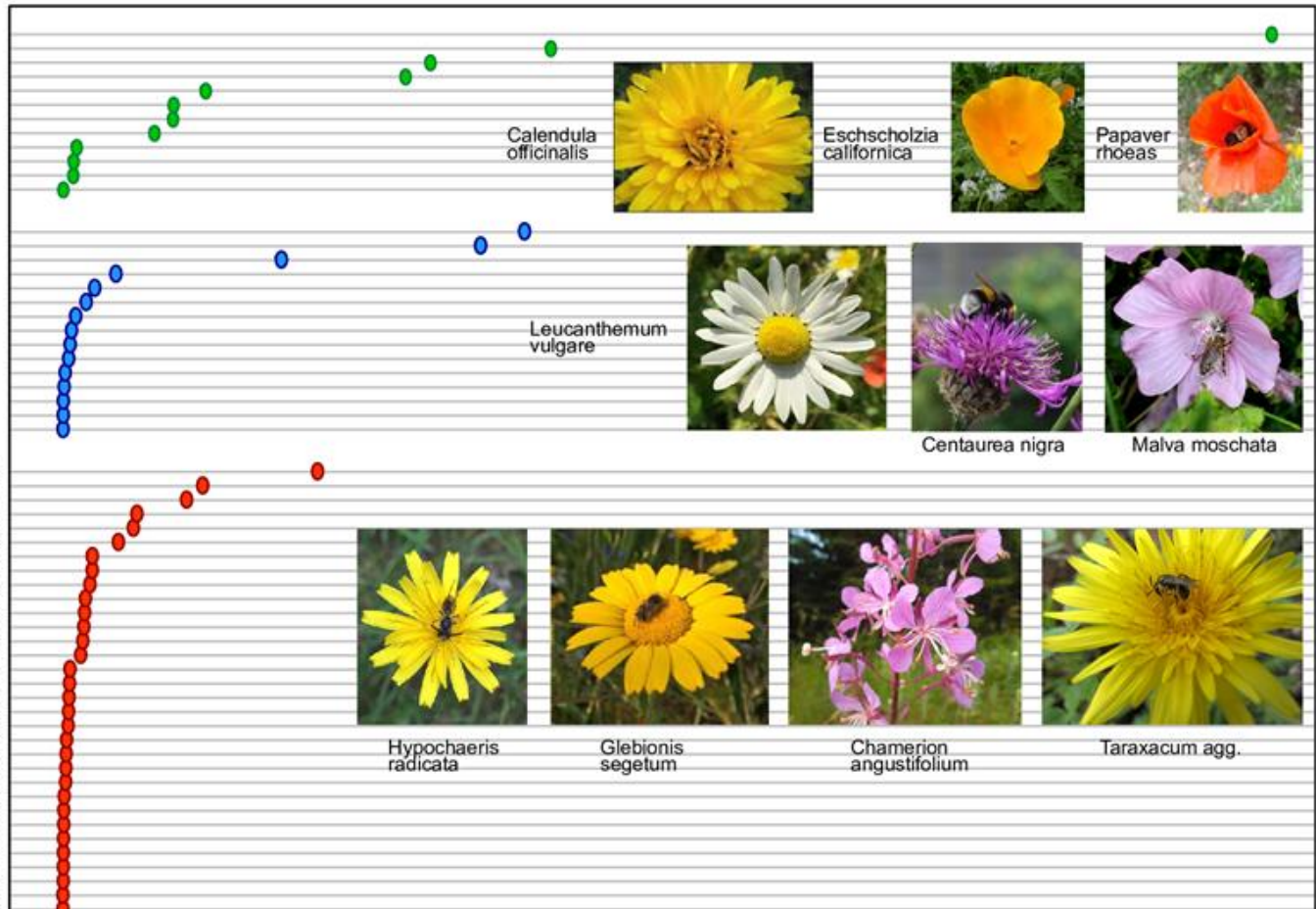
Papaver rhoeas
Eschscholzia californica
Calendula officinalis
Cosmos bipinnatus
Linum grandiflorum
Nigella damascena
Centaurea cyanus
Coreopsis tinctoria
Gypsophila elegans
Malcolmia maritima
Coreopsis picta
Lobularia maritima

B. PERENNIALS

Malva moschata
Centaurea nigra
Leucanthemum vulgare
Ranunculus acris
Leontodon hispidus
Silene dioica/latifolia
Echium vulgare
Reseda lutea
Lotus corniculatus
Prunella vulgaris
Trifolium pratense
Vicia hirsuta
Origanum vulgare
Daucus carota
Galium verum

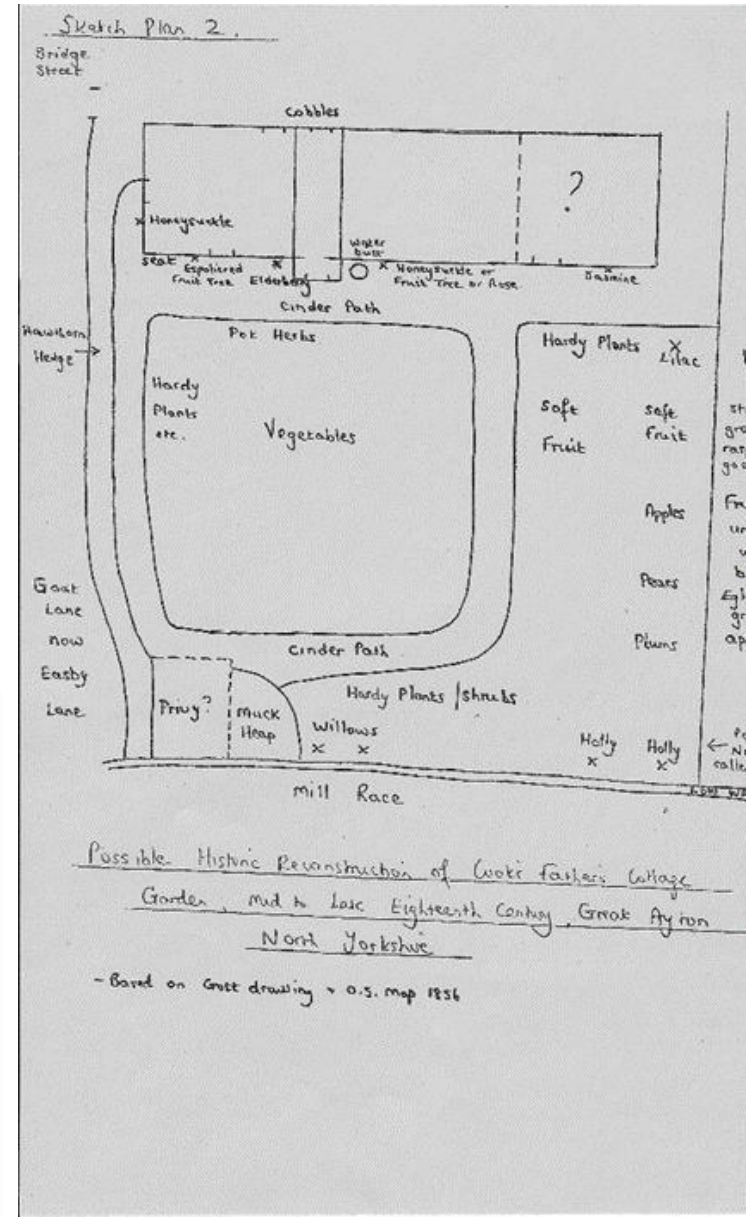
C. WEEDS

Taraxacum agg.
Chamerion angustifolium
Glebionis segetum
Hypochaeris radicata
Tripleurospermum inodorum
Scorzoneroideae autumnalis
Crepis capillaris
Bellis perennis
Matricaria discoidea
Sonchus oleraceus
Lapsana communis
Cirsium arvense
Senecio jacobaea
Ranunculus repens
Cerastium fontanum
Geranium molle
Veronica persica
Vicia cracca
Epilobium montanum
Lamium purpureum
Galeopsis tetrahit
Sinapis arvensis
Trifolium repens
Stellaria graminea
Plantago lanceolata
Fumaria officinalis
Epilobium dilatatum
Polygonum aviculare
Sisymbrium officinale
Persicaria maculosa
Galium album (syn. G. mollugo)
Capsella bursa-pastoris

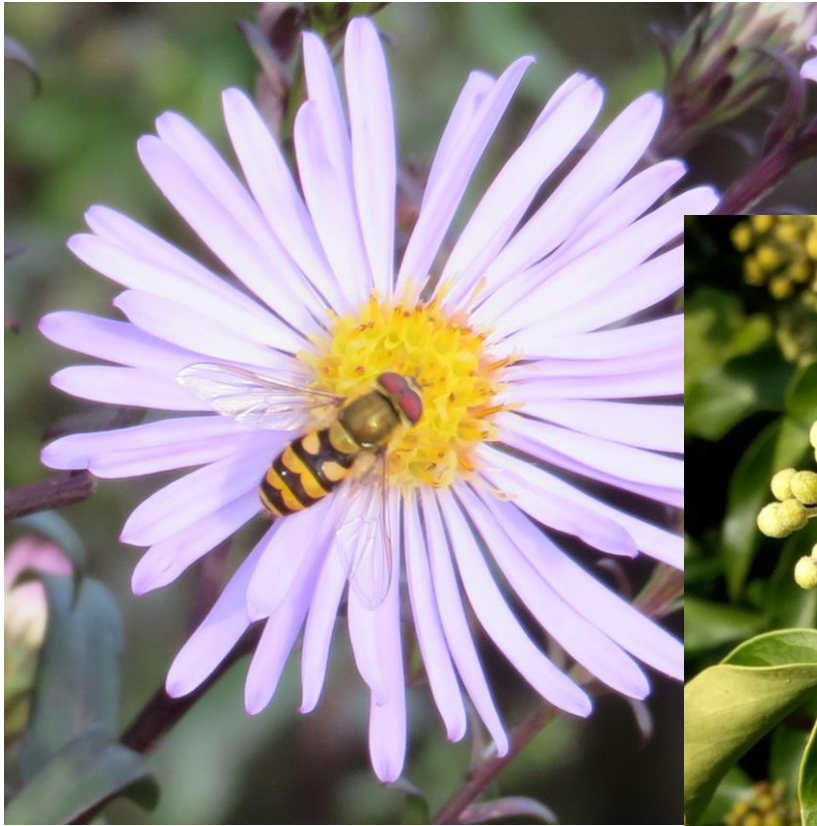




Cook Family Memorial Garden



Cook Family Memorial Garden - Hoverflies and other flies





Cook
Family
Memorial
Garden -
plants





Low Green





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Low
Green -
wasps



Additional areas of interest

- Station garden; planting alder buckthorn, the food plant for brimstone butterfly caterpillars
- Churchyard – a change of management allows it to flower




What next?

Two things we can do

- More native plants in public places
- More flowering plants (native or non-native) in our gardens



[illegible]

BUG
Brighten Up Great Ayton

Bug Trail

The story of Great Ayton's High Street
through the eyes of pollinators

BUG HERITAGE FUND

Helped by money raised by National Lottery players,
through a National Lottery Heritage Fund grant.

With the support of:
The Mayor of Great Ayton
The North York Moors National Park Authority
Great Ayton Town Council
For further information visit our website or contact us via email

Brighten Up Great Ayton

Bug Trail

The story of Great Ayton's High Street through the eyes of pollinators

visitgreatayton.com/bug-trail

Seven icons representing different insects are shown above the map, each with a corresponding trail post number:

- Dragonfly (Post 1)
- Bee (Post 2)
- Butterfly (Post 3)
- Ladybug (Post 4)
- Beetle (Post 5)
- Fly (Post 6)
- Wasp (Post 7)

See me to install the app

Take a walk through Great Ayton and spot all 7 trail posts in the village.

Complete a 'brass' rubbing for each post and you can get a sticker from the Tourist Information desk in The Discovery Centre, on the High Street.

Look out for the trail leaflet, visit our webpage or download an augmented reality app to find out more about the history of Great Ayton's High Street through the eyes of pollinators.

HERITAGE FUND