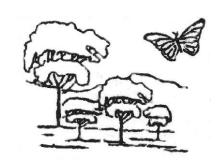
# **Yare Valley Society**

Enhancing the Valley for wildlife and informal recreation

## Newsletter 120 July 2023



A big thank you to all who came along to support the Society at our AGM. It was particularly pleasing to see a number of people expressing interest in joining the committee. The formal business was concluded in the first half hour. We then had a presentation by Sarah Gelpke of the Norfolk Rivers Trust on the work she has been overseeing on the river Yare to restore the river to a state better able to sustain biodiversity. The presentation was very well received and created a lot of interest. A little more on the river later in the Newsletter.

# Two events to promote the Valley wildflower meadows.

Matt Tomlinson of the "Friends of Strawberry Field and UEA Meadows" has organised events for the next two Saturdays:

# The Big Butterfly Count and use of a bird song id app.

Saturday the 15th of July 10-11am

Meet at the Strawberry Field top gate (or find us on the top of the field if running a bit late).

Matt writes: "Roger Carter from our group has kindly agreed to do the Citizen science project - The Big Butterfly count, on Strawberry Field. This will simply involve recording butterfly species seen in a 15 minute time window, we will likely use the 2 patches of wild marjoram to do this."

"I thought that after that we could use a great little app to see which bird species are around the field margins by recording 10 or 20 minutes of bird song using the merlin bird id app, the app will identify which species are heard. If you would like to do this please upload the app and test that it's working. It's really a great app to have!"



**Photo: Kate Stephenson** 

See https://bigbutterflycount.butterfly-conservation.org/

#### For the App:

https://www.bing.com/videos/search?q=merlin+bird+app&qpvt=merlin+bird+app&view=detail&mid=7E0B F171CA0FD8D125367E0BF171CA0FD8D12536&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq %3Dmerlin%2Bbird%2Bapp%26qpvt%3Dmerlin%2Bbird%2Bapp%26FORM%3DVDRE

#### **Yellow Rattle Seed Collection**

Sunday the 23rd of July 10-12am

Meet at Marston marshes - at the bottom corner (go down church lane past Eaton Vale scout centre and on reaching the railway crossing take the footpath on the left, running parallel to the train track, and enter the marsh).

Matt writes: "We have permission to collect Yellow Rattle seeds from Marston Marshes. These will be vital for us to continue to enrich the UEA meadows and it was a great success last year. However, many more are needed this year. Please come along if you can. Please don't go to Strawberry Field for this one."

"Everyone is welcome, I will bring coffee and biscuits on both dates".

More on the Friends of Strawberry Field and UEA Meadows on Facebook:

Friends of Strawberry Field and UEA meadows | Norwich | Facebook

Please support Matt's important work on improving the biodiversity of the Yare Valley.

#### Why Yellow Rattle?

Yellow Rattle has a role in creating and sustaining wildflower meadows. As the Yellow Rattle roots develop, they spread out, and seek out the roots of plants nearby, particularly coarse grasses, and take water and nutrients from them. The growth of the grasses is supressed, and this gives room for other wildflowers to flourish. In addition, the Yellow Rattle is valuable in itself for its nectar rich flowers that sustain pollinators such as bees and butterflies.



**Photo: June Gentle** 

Yellow Rattle encourages other wildflowers

### Dead fish in the Yare

Dead fish were spotted in the Yare between the UEA and Cringleford Bridge in the second half of June. Sarah was able to give some account of this at the AGM, and has since sent us more details. It seems it was the reduction of dissolved oxygen in the water that caused the problem.

After the incident was reported, the Environment Agency acted by operating aerators 24 hours a day and having staff there overnight. They stopped the aeration after a survey found the dissolved oxygen had risen from about 7% to nearer normal levels of 50%, and no further fish were found to be in distress.

It was estimated that 200-300 hundred fish were killed, mostly 4-12 cm. They checked all the overflows and there was no evidence of sewage. Having found no evidence of pollution, they suspect the low oxygen levels were due to road run off - cold water plus organic material/silt which increased the biological oxygen demand and resulted in a crash in dissolved oxygen levels.



Aerating the river water at Cringleford

**Photo: Paul Hann** 

Similar incidents occurred on other UK rivers at this time, and other contributory factors might expect to be the existing poor state of our rivers combined with the high temperatures experienced in June.

If you see a similar incident occurring on the river, or any other concerning incident such as visible pollution, please report it direct to the Environment Agency on 0800 80 70 60. Please photograph the incident if possible. The Society would like to know (with photos) of such incidents as well, so that action can be followed up if necessary.

# Biodiversity Baseline established for UEA Broad Hay Meadow.

Matt Tomlinson of "Friends of Strawberry Field and UEA meadows" and Emily of the "Friends" joined forces with UEA students from the conservation and wildlife society and the climate and biodiversity action group in June to do some simple quadrat surveys on UEA Broad Hay Meadow.

Results - Plant frequency in Broad Hay Meadow

| WHOLE MEADOW           |                                  |       |
|------------------------|----------------------------------|-------|
| SPECIES                | NUMBER OF<br>QUADRATS<br>PRESENT | %     |
| Yarrow                 | 39                               | 55.71 |
| Ribwort plantain       | 28                               | 40.00 |
| Smooth hawksbeard      | 18                               | 25.71 |
| Common vetch           | 15                               | 21.43 |
| Field bindweed         | 15                               | 21.43 |
| Dandelion              | 8                                | 11.43 |
| Meadow buttercup       | 7                                | 10.00 |
| Common Sorrel          | 7                                | 10.00 |
| Doves foot cranes bill | 6                                | 8.57  |
| Red dead nettle        | 5                                | 7.14  |
| Ragwort                | 4                                | 5.71  |
| Black meddick          | 4                                | 5.71  |
| Goatsbeard             | 3                                | 4.29  |
| Wild carrot            | 2                                | 2.86  |
| White clover           | 2                                | 2.86  |
| Yellow rattle          | 2                                | 2.86  |
| Mouse-ear chickweed    | 1                                | 1.43  |
| Bristly ox tongue      | 1                                | 1.43  |
| Cleavers               | 1                                | 1.43  |
| Lesser stitchwort      | 1                                | 1.43  |
| Musk thistle           | 1                                | 1.43  |
| Common field speedwell | 1                                | 1.43  |
| Hedge mustard          | 1                                | 1.43  |

The results are important, because they will make it possible to track changes to the meadow resulting from the yearly cut and collect and the gradual lowering of nutrient levels, and also the effect of adding more yellow rattle seed. The data should also be useful for helping to establish the biodiversity baseline that is necessary for the Norwich Biodiversity Strategy.

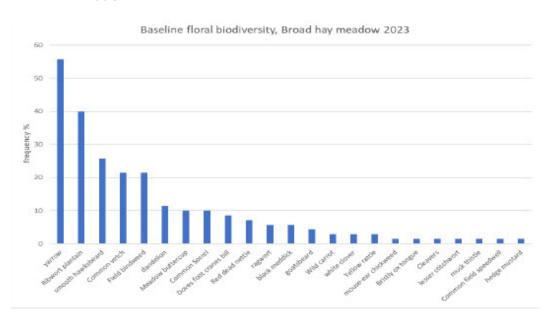
Table 1 shows the number of times each species was found in a quadrat.

Illustration 1 is a histogram of the data from table 1.

Not all the species of the meadow fell within the quadrats. Table 2 gives a complete list of species that have been found in the meadow in 2023.

A **full report** can be accessed from the News Page of the YVS Website.

Table 1.



| Meadow buttercup         | Ranunculus acris                   |  |
|--------------------------|------------------------------------|--|
| Thale cress              | Arabidopsis thaliana               |  |
| Creeping thistle         | Cirsium arvense                    |  |
| Hogweed                  | Heracleum sphondylium              |  |
| Doves foot cranes bill   | Geranium molle                     |  |
| Common field speedwell   | Veronica persica                   |  |
| Common dock              | Rumex obtusifolius                 |  |
| Ribwort plantain         | Plantago lanceolata                |  |
| Yarrow                   | Achillea millefolium               |  |
| Common Mallow            | Malva sylvestris                   |  |
| Common Vetch             | Vicia sativa                       |  |
| Mouse-ear chickweed      | Cerastium fontanum                 |  |
| Field Poppy              | Papaver rhoeas                     |  |
| Yellow rattle            | Rhinanthus minor                   |  |
| common sorrel            | Rumex acetosa                      |  |
| Wild carrot              | Daucus carota                      |  |
| Ragwort                  | Senecio jacobaea                   |  |
| Field bindweed           | Convolvulus arvensis               |  |
| Red clover               | Trifolium pratense                 |  |
| Hedge mustard            | Sisymbrium officinale              |  |
| Black medick             | Medicago lupulina                  |  |
| Cow parsley              | Anthriscus sylvestris              |  |
| Common nettle            | Urtica dioica                      |  |
| Bladder campion          | Silene vulgaris                    |  |
| Leers sedge              | carex leersii                      |  |
| Lesser stitchwort        | Stellaria graminea                 |  |
| smooth hawksbeard        | Crepis capillaris                  |  |
| Perforated St Johns wort | Hypericum perforatum               |  |
| False oat grass          | Arrhenatherum elatius              |  |
| Cats ear                 | Hypochaeris radicata               |  |
| Goats beard              | Tragopogon pratensis               |  |
| Ladys bedstraw           | Galium verum                       |  |
| Meadow barley            | Hordeum brachyantherum             |  |
| Ox eye daisy             | Leucanthemum vulgare               |  |
| musk thistle             | Carduus nutans                     |  |
| Greater mullien          | Verbascum thapsus                  |  |
| Hairy sedge              | Carex hirta                        |  |
| Bristly ox tongue        | Helminthotheca echioides           |  |
| Timothy-grass            |                                    |  |
| Cock's-foot grass        | Phleum pratense Dactylus glomerata |  |
| Red dead nettle          | Lamium purpureum                   |  |
| cleavers                 | Galium aparine                     |  |
| cieavei 5                | Gallulli apalifie                  |  |

Stories, pictures and news of activities in the Valley for possible publication in the Newsletter and/or on the YVS website and Facebook are always welcome at

yarevalleysociety@gmail.com.