

KINGHORN BIODIVERSITY MONTHLY REPORT – AUGUST 2023 by Robert Mill



The nationally Endangered **Wall Brown** butterfly (*Lasiommata megera*) is spreading locally, bucking the UK national trend of severe decline (see page 9). **Left:** a male on the Mire Path, 7 August 2023. **Right:** a female on a wall in the vicinity of Kinghorn Loch, 30 August 2023. Photos Robert Mill.

The weather in August continued July's unsettled and usually cool pattern, though, in common with much of central and eastern Scotland (Met Office, 2023a, b), not nearly as much rain fell. In fact, only 42.6 mm of rainfall was collected at SEPA's rain gauge at the Ecology Centre, less than half the site's August average (90.6 mm; SEPA, 2023). The UK as a whole experienced two named storms in August, Antoni on 4th/5th and Betty on 18th/19th (Met Office, 2023b). The first one mainly affected southern England and Wales but Betty did affect Scotland and brought the month's highest daily rainfall to the Kinghorn gauge, 9.4 mm on 18th (SEPA, 2023). Fifteen days were totally dry, almost twice as many as in July. Like July, sunshine hours were only average in our part of Scotland and nowhere had above-average values (Met Office, 2023a,b). Temperatures, however, were slightly above average, especially night-time minima. In our area, day-time maxima were average or below on 1st-2nd, 4th-7th, 18th and 23rd-31st, and above-average on 3rd, 9th-17th and 19th-22nd, with the warmest day locally and UK-wide being 10th (Met Office, 2023b). Overall, August's weather was much better for biological recording trips than July's.

In consequence, a bumper 'crop' of 43 species was added to the Loch's list during August: 1 mammal, 1 moth, 2 caddisflies, 3 Hymenoptera (one parasitic wasp, one gall-wasp and one ant), 2 bugs, 1 hoverfly, 1 dragonfly, 3 spiders and allies (one true spider and two harvestmen), 9 slugs and snails, 1 worm, 8 flowering plants and 11 fungi. These are, particularly in figure captions, abbreviated NLR (new Loch record). The grand total increased from 1,569 (31 July) to **1,612** on 31 August.

AROUND THE LOCH Birds: Like July and for similar reasons, August tends to be a quiet month for recording birds, particularly away from the coast. Even so, 55 species were recorded on and around Kinghorn Loch in August 2023, four more than the same month last year. Once again, I am indebted to Paul Williams (hereafter abbreviated PW) for many of the records. There was a slow transition from summer to autumn, marked by the return of **Cormorant** to the Loch (18th and 24th, PW) as well as a one-day visit by **Tufted Duck** (1st, PW); both will soon be regular visitors or residents on the Loch once again. Most **summer migrants**, particularly warblers, remained all month although **Blackcap** was not recorded after 17th. No **Swifts** were noted at all but **Barn Swallows** and **Sand Martins** were seen on all or most visits while three **House Martins** were also present on 17th (PW). The pair of **Little Grebes (Dabchicks)** was seen together with two chicks (PW, 17th), which is great news as they have not bred successfully at the Loch for a year or two. **Sparrowhawks**, including at least one juvenile, were seen (or more often heard, particularly the noisy juvenile) on at least six occasions and **Buzzards** on five, while a single **Kestrel** was seen on 19th by PW. A **Jay** was also seen by Paul Williams on 19th. A sighting of one, probably two, **Mistle Thrush(es)** by PW on 6th near Craigenalt Farm confirmed my suspicion (see last month's report) that there is a resident pair at the Loch. There was one record of **Goldcrest** (10th, PW). **Grey Wagtails** were seen on at least four dates, with two birds on 23rd and 30th and four present on 17th (PW); however, **Pied Wagtail** was not recorded in August. **Linnets** were seen on numerous occasions

and **Yellowhammers** by PW on 3rd and 6th. The full list of birds recorded at the Loch during August 2023 is: *Blackbird, Blackcap, Black-headed Gull, Blue Tit, Bullfinch, Buzzard, Carrion Crow, Chaffinch, Chiffchaff, Coal Tit, Common Gull, Common Whitethroat, Coot, Cormorant, Curlew, Dabchick (Little Grebe), Dunnock, Farmyard / hybrid geese, Feral Pigeon, Goldcrest, Goldfinch, Great Crested Grebe, Great Spotted Woodpecker, Great Tit, Greenfinch, Grey Heron, Grey Wagtail, Greylag Goose, Herring Gull, House Martin, Jackdaw, Jay, Kestrel, Lesser Black-backed Gull, Linnet, Long-tailed Tit, Magpie, Mallard, Mistle Thrush, Moorhen, Mute Swan, Pheasant, Robin, Rook, Sand Martin, Song Thrush, Sparrowhawk, Starling, Swallow, Tree Sparrow, Tufted Duck, Willow Warbler, Wood Pigeon, Wren, Yellowhammer.*

Mammals, amphibians and fish: A **Field Vole** seen by myself and two others scuttling into a hole in the dyke alongside the Great North Road track above Craigenalt Farm on 30th was a new Loch record. August's other really notable mammal sighting was an **Otter** seen close to the Gullet Sluice dam in the SE corner on 22nd by Paul Williams. Paul also saw **Brown Hares** twice (two on 1st, one on 4th), **Rabbit** on 10th and 17th, **Roe Deer** on 10th, and **Grey Squirrel** on 1st. He also recorded **Common Toad** on 1st and 19th while Chris du Feu and myself also found one on 25th while looking for slugs in the nursery.

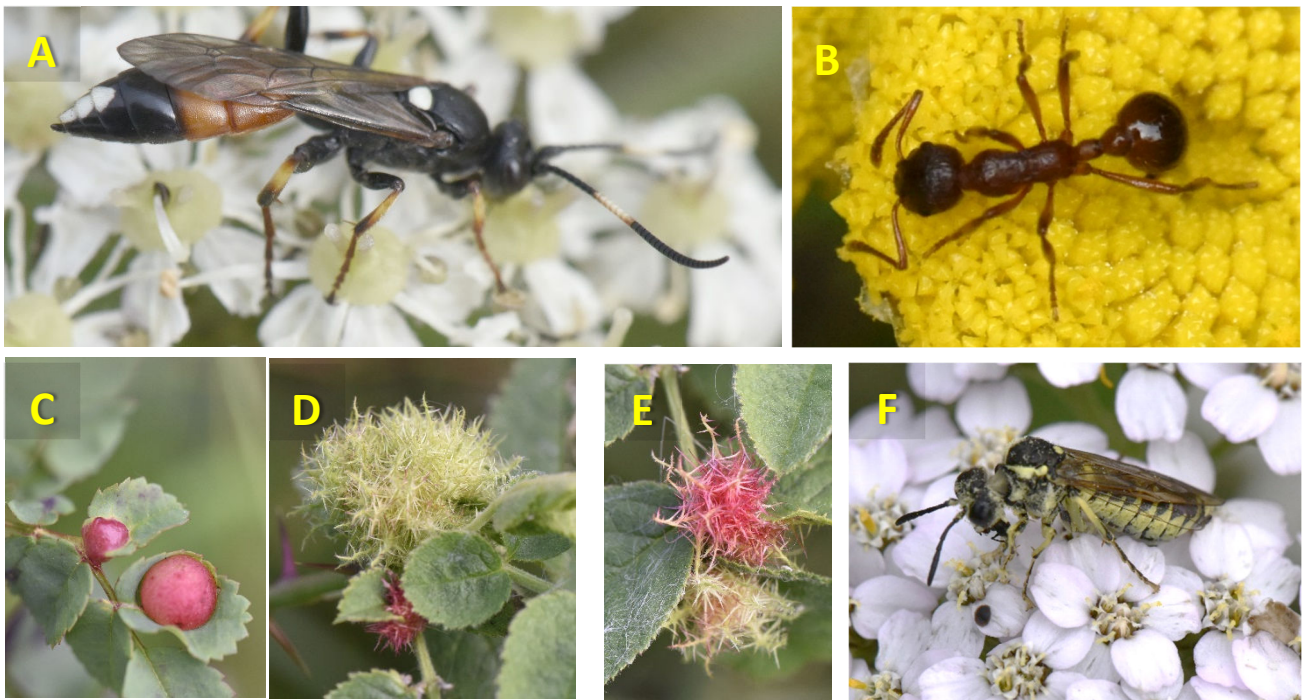
Invertebrates ('minibeasts'):



New or notable Loch caddisfly records, August 2023. **Top:** Speckled Peter (*Agrypnia varia*) caught in moth trap 31st, NLR. **Bottom left:** *Athripsodes aterrimus* on Tansy, 5th, first Loch record since 1900. **Bottom right:** Small Red Sedge (*Tinodes waeneri*), caught in moth trap 31st, NLR. Photos Robert Mill.

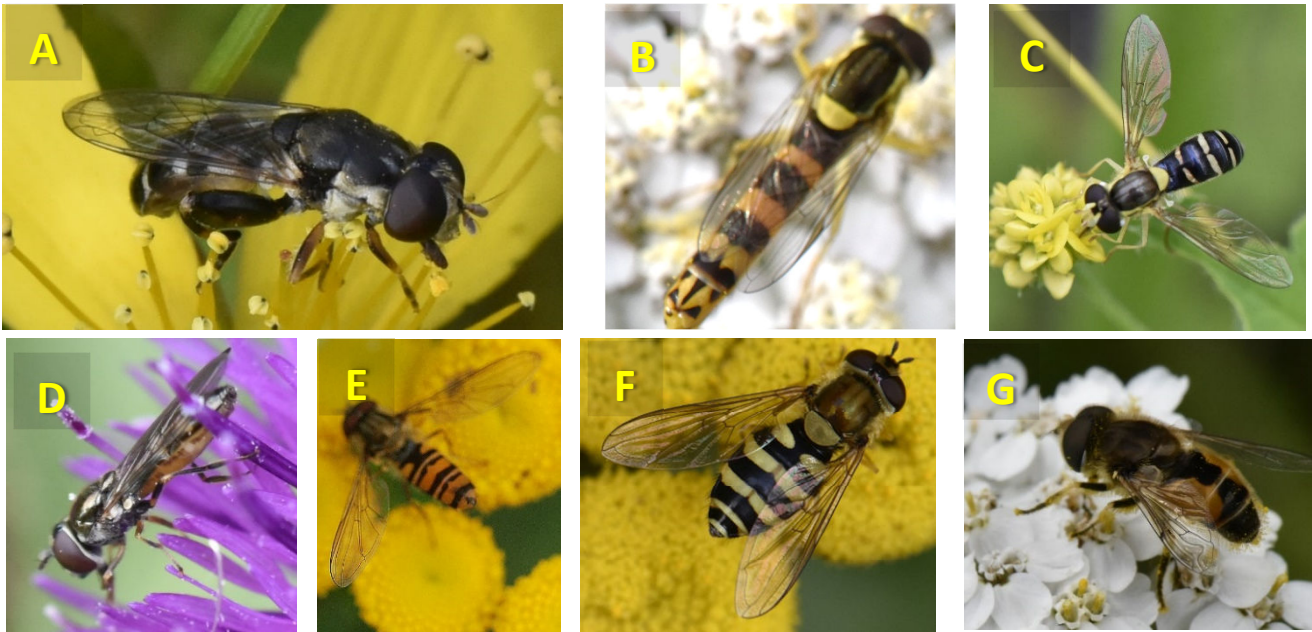
August was another good month for invertebrates: 113 species were recorded, 24 of which were NLRs. Nine **butterfly** species were recorded; **Small White** was the most frequently seen by far, on 16 dates, followed by **Meadow Brown** and **Red Admiral** (6 dates each), **Speckled Wood** and **Peacock** (5 dates each) and **Small Tortoiseshell** (6th, 10th and 22nd). There were single records of **Green-veined White** (myself on 5th), **Comma** (Paul Williams, 11th) and **Wall Brown**, which I saw basking on, appropriately, a dry-stone wall by the track from Kissing Trees Lane to the covered reservoir and Craigenalt Cottages on 30th. Thirteen **moths** were recorded, including one (rather unwelcome) NLR: **Horse-chestnut Leaf-miner (*Cameraria ohridella*)**, found as its larval mine on its host plant. Two other previously recorded leaf-mines of moths were also found, as well as more caterpillars of the **Cinnabar Moth** on 5th. **Day-flying moths** included **Silver-ground Carpet** (3rd),

Yellow Shell (10th) and **Nettle-tap** (31st). The moth trap borrowed from George Guthrie was also set up on the night of 31st at The Ecology Centre. Individuals of six different species were trapped: **Lesser Yellow Underwing**, **Mouse Moth**, **Sallow**, **Setaceous Hebrew Character**, **Square-spot Rustic** and **Twinspot Carpet**. All have been previously trapped at the Loch. However, three **caddisfly** species were also trapped that night (31st) and two of them were NLRs: **Speckled Peter** (*Agrypnia varia*) and **Small Red Sedge** (*Tinodes waeneri*). The third, **Crescent Cinnamon Sedge** (*Limnephilus lunatus*), was also recorded last year. In fact, the number of individual caddisflies trapped that night (11) exceeded the number of moths (7)! A fourth caddisfly species, a very dark, almost black, one called **Athripsodes aterrimus**, was also found in August, resting on a Tansy flowerhead on 5th. This was apparently the first record of this species at the Loch or its vicinity for more than 120 years; the only local record in the National Biodiversity Network (NBN) database is one from Kinghorn in 1900 assigned by NBN to grid square NT2587 which includes the bulk of the Loch apart from its eastern shore which is in NT2687, the 1-km square (monad) in which I found it.



Loch Hymenoptera records, August 2023. **A:** an ichneumon wasp (*Ichneumon extensorius*) on Hogweed, 10th, NLR. **B,** a red ant (*Myrmica ruginodis*) on Tansy, 16th, NLR. **C,** Galls of *Diplolepis spinosissima* on Burnet Rose leaves, 26th, NLR. **D & E,** Green and red colour forms of Robin's Pincushion galls (*Diplolepis rosae*) on Dog Rose, 30th. **F,** Mating sawflies (*Tenthredo notha* species aggregate) on Yarrow, 14th. Photos Robert Mill.

Fourteen Hymenoptera (bees, wasps, ants etc.) were recorded in August. Three of them were NLRs: the parasitic ichneumon-wasp *Ichneumon extensorius* (10th), a small red ant, *Myrmica ruginodis* found on Tansy near the dam on 16th, and lastly the reddish pea-like galls on Burnet Rose leaves caused by the gall-wasp *Diplolepis spinosissima* (26th, also 31st). This is a close relative of *Diplolepis rosae*, the causer of **Robin's Pincushion galls** on Dog Roses, two of which were found on 30th. The galls of yet another gall-wasp, **Common Oak Spangle Gall** (*Neuroterus quercusbaccarum*), were found on oak leaves on 26th. The most frequently seen **bees** were **Common Carder Bee** (12 dates) and **Buff-tailed Bumblebee** (11) followed by **Honey Bee** (7) and **Large Red-tailed Bumblebee** (5, with no sightings after 16th by which its favourite late-summer sources of nectar and pollen – thistles and similar plants – had largely stopped flowering and were instead producing thistledown). **Gypsy Cuckoo Bumblebee** (3rd; a July 2023 NLR) and **Early Bumblebee** (10th) were both seen once in August, as was **Black Ant** (1st). It also seemed to be another poor wasp season as **Common Wasp** was only recorded three times (1st, 10th, 26th), all as single individuals. However, on 14th there were numerous sawflies (*Tenthredo notha* species-aggregate) on Yarrow flower-heads in the KCLA meadow next to The Ecology Centre, including some mating pairs, and one or two were also seen at TEC on 16th.



August Loch hoverflies: **A**, Thick-kneed Hoverfly (*Syrirta pipiens*), 30th. **B**, male Long Hoverfly (*Sphaerophoria scripta*), 14th, NLR. **C**, Unidentified hoverfly species belonging to *Sphaerophoria*, 16th (see text). **D**, Grey-spotted Boxer (*Platycheirus albimanus*), 10th. **E**, Marmalade Hoverfly (*Episyrphus balteatus*), 1st. **F**, Humming Syrphus (*Syrphus ribesii*), 16th. **G**, Plain-faced Drone-fly (*Eristalis arbustorum*), 16th. All photos Robert Mill.

Ten, possibly eleven, **hoverfly** species were recorded in August but numbers seemed low. A male **Long Hoverfly** (*Sphaerophoria scripta*), a NLR, was photographed on 14th. The genus been previously recorded at the Loch on the basis of a female not identifiable to species. **Humming Syrphus** (*Syrphus ribesii*) and **Marmalade Hoverfly** (*Episyrphus balteatus*) were seen on four and five dates respectively but, particularly in the case of the latter, very few were seen compared with some Augusts when I still worked at the Royal Botanic Garden Edinburgh and, at their peak of abundance (typically early to mid-August), hundreds of Marmalade Hoverflies would be seen in a single hour or less of recording, with several jostling for position on an individual flower. **Common Drone-fly** (*Eristalis tenax*) was seen on 1st and 31st and there were single records of **Tapered Drone-fly** (*Eristalis pertinax*; 14th), **Plain-faced Drone-fly** (*Eristalis arbustorum*; 16th), **Bumblebee Blacklet** (*Cheilosia illustrata*; 3rd), **Short Melanostoma** (*Melanostoma mellinum*; 16th), **Grey-spotted Boxer** (*Platycheirus albimanus*; 10th) and **Thick-kneed Hoverfly** (*Syrirta pipiens*; 30th), as well as a 'mystery' hoverfly photographed on 16th (see photo C above). Neither I nor Andy Pay were able to put a name to it, so Andy kindly sent my photo to the UK Hoverflies Facebook forum. Their consensus was that it was a species of *Sphaerophoria*. However, the markings on the abdomen are narrower and paler than in any



Left: The fungus gnat *Sciara hemerobioides*, side view, 3rd. **Right:** Noon Fly (*Mesembrina meridiana*), 26th. Photos Robert Mill.

species photographed by Stephen Falk in his comprehensive collection of photographs of the British species of this genus (Falk, 2011 onwards), so its real identity remains unsolved but may well have been an example of the dark form of Long Hoverfly. Twenty-three other **flies** were recorded at the Loch in August, 10 as larval leaf mines and three as galls on relevant host plants, the other 10 as adult flies. None were NLRs although one of July's, *Eriothrix rufomaculata*, was seen again on 3rd and

16th and the mines of the other, *Pegomya betae* (agg.), had developed further (5th). *Gymnocheta viridis* was seen by me throughout the month, while *Helina impuncta* (3rd), **Noon Fly** (*Mesembrina meridiana*; 26th), *Tricholauxania praeusta* (3rd) and the common autumn crane fly *Tipula paludosa* (10th) were each seen once, as was the relatively large, long-legged fungus gnat, *Sciara hemerobioides* (3rd). In side view this species is black and yellow and superficially quite similar to some sawflies such as *Tenthredo notha* (see photo). The galls of *Wachtliella persicariae* were eventually found at the marsh (31st) but they were far less numerous or conspicuous than during the 2021 recording season, when they could hardly be missed.



August 2023 Loch invertebrates: **A**, A minute pirate bug, *Temnostethus gracilis* on Common Orange Lichen, 3rd, NLR. **B**, Common Darter dragonfly (*Sympetrum striolatum*), 27 July (photo Paul Williams who also recorded it on 11th, 22nd and 31st August). **C**, Mating Common Blue Damselflies (*Enallagma cyathigerum*), 16th. **D**, Common Hawker Dragonfly (*Aeshna juncea*), 11th (NLR). Photo Jörg Hempel [from Wikipedia; reproduced unaltered under Creative Commons Attribution-ShareAlike 3.0 Germany (CC BY-SA 3.0 DE) licence]. **E**, the harvestman *Mitopus morio*, 1st, NLR. **F & G**, the harvestman *Dicranopalpus ramosus*, 3rd, NLR (**F**, close-up of body; **G**, whole harvestman showing full extent of the legs). **H**, Autumn Orbweaver Spider (*Metellina segmentata*), 31st, NLR. **J**, Galls of the gall mite *Aceria pseudoplatani* on underside of Sycamore leaf, 5th. All photos Robert Mill except B and D.

Eleven species of **bug** were recorded, two of them being NLRs: ***Orthotylus ochrotrichus*** on 3rd, and a tiny black pirate bug, ***Temnostethus gracilis*** (also 3rd), which was not noticed in the field and only seen when looking at photographs of lichen on tree bark. Apart from these, **Common Flower Bug** was recorded three times, two separate adult **Common Froghoppers** were found on 3rd, **Pond Skater** and **Potato Capsid** were both recorded twice, and there were single finds of **Common Nettle Bug**, **Common Nettle Aphid**, **Common Sycamore Aphid** and the gall of **Elm-currant Aphid**. As in July, the only two identifiable **beetles** recorded in August were **7-spot Ladybird** (10th, 14th) and **Red Soldier Beetles**, seen on five dates between 1st and 11th but not afterwards. As well as these, an as yet unidentified black **ground beetle** was found upside-down and seemingly in poor condition on the Great North Road track (10th), and another small unidentified black beetle was caught in the moth trap (31st). Three or more **Common Hawker dragonflies** were seen by Paul Williams at the marsh on 11th (NLR) but he was unable to obtain a good photograph of them. He also saw **Common Darters** on the same day as well as on 22nd (more than six present) and 31st (four), and in last month's report I omitted to mention that he had seen at least one on 27 July; his photograph of that one is included here. **Common Blue Damselflies** were seen frequently up until 18th and a **Blue-tailed Damselfly** was seen on 1st.

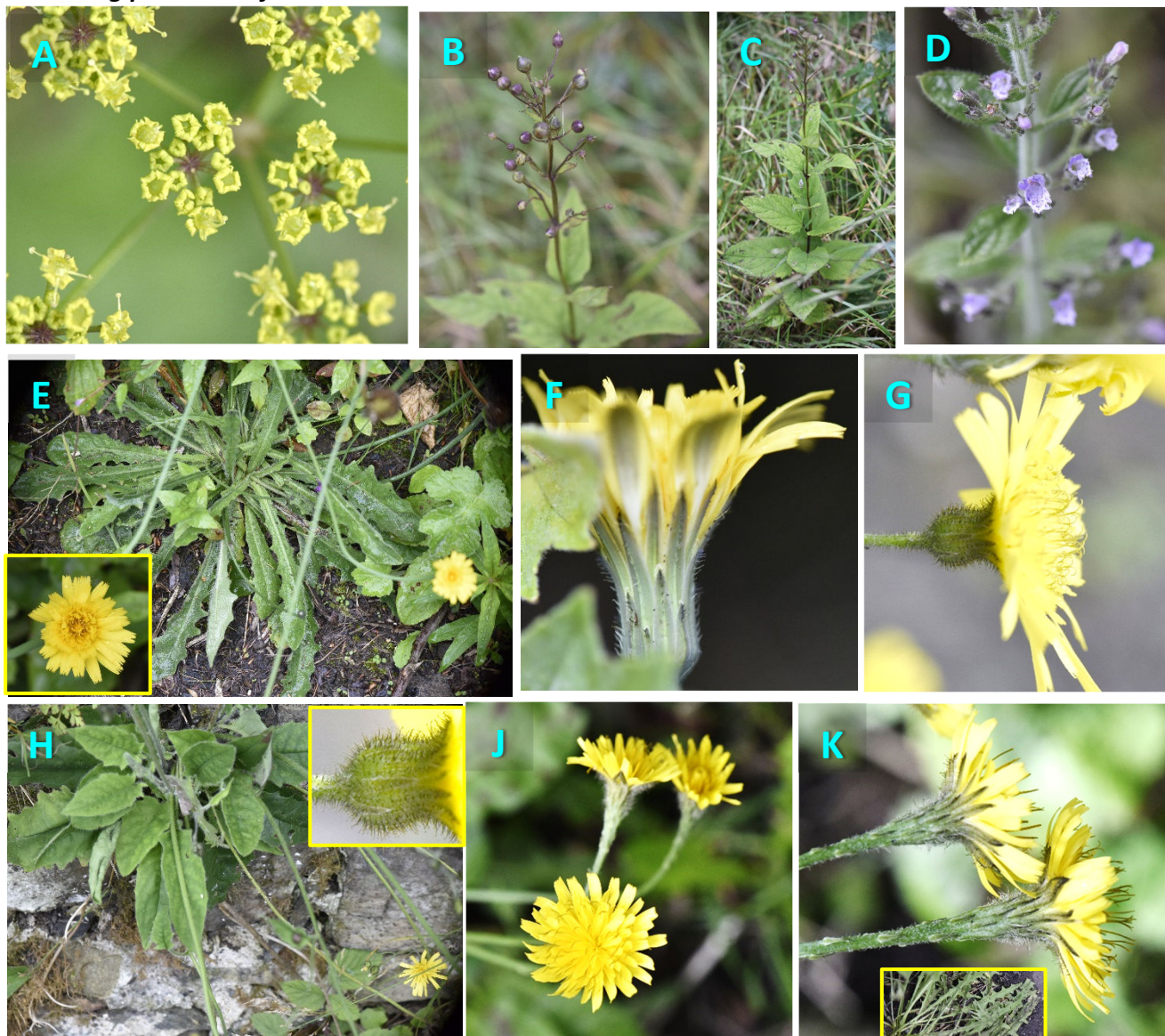
Six arachnids (spiders and allies) were found, three of them NLRs. These were the **Autumn Orbweaver spider (*Metellina segmentata*)** on 31st and two **harvestmen: *Mitopus morio*** found on a Tansy flower-head on 1st, and the exceptionally long-legged (even for harvestmen) ***Dicranopalpus ramosus*** on nettle (3rd). Three **gall mites** were also found: ***Aceria pseudoplatani*** on sycamore leaf under-sides (5th), ***Eriophyes laevis*** on Alder (10th, 18th and 31st) and ***Eriophyes pyri*** on rowan (16th).

No fewer than 14 **molluscs (snails and slugs)** were recorded at the Loch in August, of which 9 were NLRs. The number was boosted by Chris du Feu's visits to the nursery to record land molluscs (mainly slugs); these are typically very under-recorded as there are very few experts and even fewer who, like Chris du Feu, specialize in slugs rather than snails. Prior to his visits, only three slug species were known from the whole Loch area: **Large Roundback Slug (*Arion ater* aggregate)**, **Hedgehog Slug (*Arion intermedius*)** and **Dusky Slug (*Arion subfuscus*)**. That total has now increased to 11 by the discovery by Chris of eight NLRs during the month, all in the relatively small nursery area. These were **Tramp Slug (*Deroceras invadens*)** and **Netted Field Slug (*Deroceras reticulatum*)** on 3rd, 17th & 25th; **Large Red Slug (*Arion rufus*)** on 17th; **Green-soled Slug (*Arion flagellus*)**, **Budapest Keeled Slug (*Tandonia budapestensis*)** and **Three-band Slug (*Ambigolimax* sp.)** on 17th and 25th, and **Blue-black Soil Slug (*Arion hortensis*)** and **Leopard (or Tiger) Slug (*Limax maximus*)** on 25th. Photographs of most of these were obtained when he and I visited the nursery on 25th although we did not re-find Large Red Slug. As for snails, **White-lipped Snail (*Cepaea hortensis*)** was the ninth mollusc NLR (Chris du Feu, 17th), while its close relative the **Brown-lipped Snail** was found by Chris du Feu on 25th and by me on 31st. **Garden Snail (*Cornu aspersum*)** was seen on 3rd and 17th by Chris du Feu and **Garlic Glass Snail (*Oxychilus alliaria*)** by him on 25th. The month's final invertebrate record, found by myself and Chris du Feu while hunting for slugs on 25th, was a **Common Brandling Worm (*Eisenia fetida*)**.



Loch mollusc and worm records, August 2023. **A**, Leopard or Tiger Slug (*Limax maximus*). **B**, Three-band Slug (*Ambigolimax* sp.; note three darker lines along front two-thirds of body). **C & D**, Budapest Keeled Slug (*Tandonia budapestensis*; **D** shows characteristic dark band along underside). **E**, Blue-black Soil Slug (*Arion hortensis*); note pale colouration along lower flank. **F**, Tramp Slug (*Deroceras invadens*; pale vestigial shell arrowed). **G**, Netted Field Slug (*Deroceras reticulatum*). **H**, Dusky Slug (*Arion subfuscus*; trail of characteristic orange body mucus highlighted by red box at bottom left). **J & K**, Green-soled Slug (*Arion flagellus*; **G**, top view; **K**, sole view showing pale green colour). **L**, Common Brandling Worm (*Eisenia fetida*). All NLRs except **H**. All photographed on 25th by Robert Mill with Chris du Feu.

Flowering plants and ferns:



August 2023 Loch plant records. **A**, Wild Parsnip (*Pastinaca sativa*), 5th. **B & C**, Common Figwort (*Scrophularia nodosa*), 10th (**B**, fruits; **C**, whole plant). **D**, Lesser Calamint (*Clinopodium nepeta*), 31st. **E & F**, Common Cat's-ear (*Hypochoeris radicata*), 5th (**E**, basal leaves, with flower-head top-view inset; **F**, flower-head in side-view). **G & H**, Grand-toothed Hawkweed (*Hieracium grandidens*), 10th (**G**, flower side-view; **H**, whole plant with glandular involucre of flower in **G** inset). **J & K**, Autumn Hawkbit (*Leontodon autumnalis*), 11th (**J**, flower-heads; **K**, flower-heads side view with basal leaves inset). All NLRs. Photos Robert Mill.

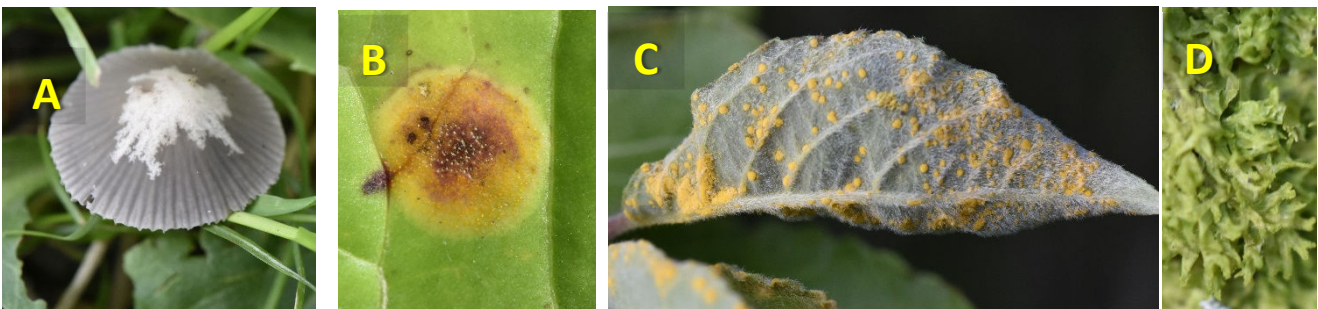
Two horsetails, six ferns, 223 wild or naturalised flowering-plant species of which 176 were in flower (including a further 8 NLRs), and 68 cultivated flowering-plants were noted during my August visits to the Loch. Yet another overlooked tree was discovered, this time **Grey Alder (*Alnus incana*)** beside the track along the northwest shore of the Loch towards the hide (30th). It differs from ordinary Alder (*Alnus glutinosa*) by its more ovate, more sharply toothed leaves with acute (not rounded) tips and which are very pale beneath. Three of August's flowering-plant NLRs resulted from my efforts to identify the yellow late summer 'dandelion-like' flowers around the Loch. **Common Cat's-ear (*Hypochoeris radicata*)** was found on 5th, **Autumn Hawkbit (*Leontodon autumnalis*)** on 11th and I even managed to name a hawkweed: '**Grand-toothed Hawkweed**' (*Hieracium grandidens*) by the Great North Road (10th). Fortunately, relatively few (about 25) of Britain's 300-or-so hawkweed species occur in Fife and only about five are common (Ballantyne, 2002), so it was fairly easy to arrive at the identity of the one I found. A plant of **Tutsan (*Hypericum androsaemum*)**, either overlooked (though past flowering) or newly arrived, was found in the woodland by the NW shore of the Loch (31st) and, until found in flower, assumed to be the wild species (NLR) rather than the hybrid *H. x inodorum*. A plant of **Common Figwort (*Scrophularia nodosa*)**, another NLR, was in fruit beside



More August 2023 new Loch plant records. **A**, Tutsan (*Hypericum androsaemum*), 31st. **B & C**, Grey Alder (*Alnus incana*), 31st (**B**, leaves upper-side; **C**, leaf under-side). All NLRs. Photos Robert Mill.

the track towards Rodan Braes (10th). On 5th I found a curious yellow-flowered member of the carrot family at the SE corner of the Loch that I struggled to identify as it seemed to be very atypical; I photographed it again several times later in the month and eventually concluded that it was a particularly stunted form of **Wild Parsnip (*Pastinaca sativa*)**, barely 15 cm high instead of up to 1.3 m. The final August flowering plant NLR, found on 31st, was another identification challenge. I at first thought that it was Wild Basil (*Clinopodium vulgare*), which occurs on the Binn hill above Burntisland, and the Loch would have represented an extension of its distribution in our area. However, it turned to be a close relative, **Lesser Calamint (*Clinopodium nepeta*)**, which as a wild plant in Britain is confined to southeast England. How it came to be amongst other 'weeds' in a wild situation at the Loch is therefore a bit of a mystery. On 3rd I checked the identity of another flowering privet bush, this time beside the gate to the track along the NW shoreline; like those checked in July, it was found to belong to **Garden Privet (*Ligustrum ovalifolium*)**. A third new location at the Loch for **Chinese Mugwort (*Artemisia verlotiorum*)** was found on 18th, this time in the jetty area where 11 plants were growing. Unlike the two original sites and the two new ones found in July, these looked like they might have been deliberately planted and, at the time of writing (mid-September), seemed to be in poor condition.

Few, if any, plants started flowering for the first time during August. However, some species started for a second time, such as **Garlic Mustard (*Alliaria petiolata*)** and **Cow Parsley (*Anthriscus sylvestris*)**. In such cases, only a few plants flowered again, not the whole population. Ripe fruits of **Hawthorn (*Crataegus monogyna*)**; from 5th), **Ash (*Fraxinus excelsior*)**; from 10th), **Burnet Rose (*Rosa spinosissima*)**; from 10th), **Apple (*Malus domestica*)**; from 10th), **Rowan (*Sorbus aucuparia*)**; from 14th), **Dog Roses (*Rosa canina* agg.)**; from 18th, probably earlier) and **Lords-and-Ladies (*Arum maculatum*)**; from 25th were noted.



Loch cryptogams, August 2023. **A**, Pleated Inkcap (*Parasola plicatilis*), 3rd, NLR. **B**, Coltsfoot Gall Rust (*Puccinia poarum*), 12th, NLR. **C**, The rust *Melampsora caprearum* on Goat Willow, 11th, NLR. **D**, Bluish Veilwort (*Metzgeria violacea*) on willow trunk, 30th. Photos Robert Mill.

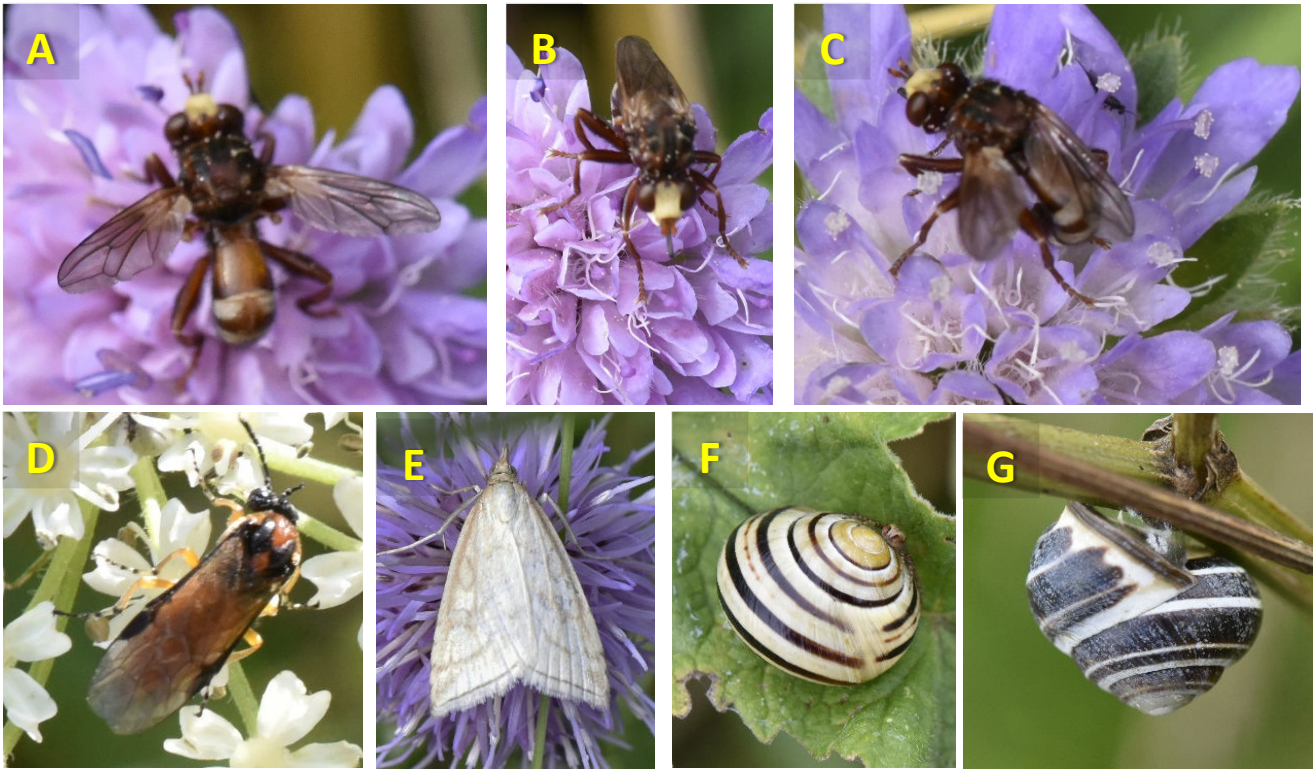
Cryptogams Forty-six different **fungi** species were recorded at the Loch during August, 11 of them being NLRs. In total they comprised Champion Smut, 2 'mushrooms' and allies, 13 powdery mildews, 6 'white moulds', 7 rusts, the leaf-galling fungus *Taphridium umbelliferarum* and 16 other leaf-spots. New records included **Pleated Inkcap (*Parasola plicatilis*)**, a delicate grey 'mushroom' (3rd); the leaf spots ***Mycocentrospora acerina*** on Wych Elm (1st), ***Phyllosticta aucupariae*** on Rowan (31st), ***Phyllosticta sambucicola*** on Elder (3rd), ***Septoria sorbi*** on Rowan (3rd) and ***Sphaerulina gei*** on Herb Bennet; the powdery

mildews *Erysiphe prunastri* on Bird Cherry (3rd August 2023) as well as on Blackthorn (17 August 2022, accidentally omitted from last year's spreadsheet), *Erysiphe flexuosa* on Horse Chestnut (31st) and *Golovinomyces depressus* on Burdock (3rd); and the rusts *Melampsora caprearum* on Goat Willow (1st etc.), and the scientifically somewhat confusingly named *Puccinia poarum* (12th) on Coltsfoot ('Coltsfoot Gall Rust'; the Latin name 'poarum' means 'of grasses'). Six lichens (none new) and the usual two viruses (EMARaV virus on Rowan, RVCV on Raspberry) and cyanobacterial scum were also recorded, as well as the terrestrial algae *Desmococcus olivaceus* and *Trentepohlia aurea* and the liverwort *Metzgeria violacea* (Bluish Veilwort) which was found in large mats up a willow trunk on 30th.

VILLAGE, BEACHES AND COASTAL PATH

Unlike June and July, no particularly unusual birds were recorded around Kinghorn in August. Seabirds and waders were migrating. **Arctic** and **Great Skuas** were both recorded by Graham Sparshott (Fife bird recorder) off Pettycur (5th, 12th), with four Arctic seen on 12th and two of each off East Braes on 18th. **Common, Arctic** and **Sandwich Terns** were all recorded in August and mention must be made of three **Roseate Terns** that were at Kinghorn on 10 July (Fife Bird Club, 2023). As well as the five common gull species (**Black-headed, Common, Herring, Lesser Black-backed** and **Great Black-backed Gulls**), **Little Gulls** were recorded off Pettycur on 5th (three, Graham Sparshott), 12th (one, Graham Sparshott) and 18th (five, Kinghorn Ness, Ian Thomson). Graham saw 500 **Kittiwakes** and 32 **Common Scoters** off East Braes on 18th; smaller numbers of Kittiwakes were at Seafield (2nd, 3rd, 5th and 16th, Paul Williams) and off East Braes (5th). **Goosanders** were at Seafield (16th & 25th, Paul Williams) but there were no local **Red-breasted Merganser** sightings in August. There were movements of **Teal** off Pettycur on 12th (9, Graham Sparshott) and East Braes on 18th (24, Graham Sparshott) and some were at Seafield on 16th (Paul Williams). Eighteen **Manx Shearwaters** were off Pettycur on 5th, with fewer there and off East Braes on 18th (Ian Thomson, Graham Sparshott), while the only **Fulmar** record was by Ian Thomson at Kinghorn Ness (18th). As in July, single **Kingfishers** were seen at Pettycur (5th, Graham Sparshott) and Seafield (17th & 18th, Paul Williams). More wader species returned to local shores from northern breeding grounds, with **Bar-tailed Godwit, Dunlin, Purple Sandpiper** (from 16th), **Knot** (from 23rd) and **Sanderling** (1 on 29th) all being recorded at Seafield by Paul Williams in addition to already-present **Curlews, Oystercatchers, Ringed Plovers, Redshanks** and **Turnstones**; Paul also noted single **Whimbrel** at East Braes (6th, 18th). **Common Sandpipers** (either different birds or the same one moving along the coast) were at Pettycur (Graham Sparshott), East Braes and Seafield (Paul Williams) on 5th, the only August date when this species was seen in our area. During a migration watch at North Mire on the northern outskirts of Kinghorn on 6th, Graham Sparshott noted two **Dunlin** flying SW; he commented that this provides evidence that [migrating] birds [such as waders] cut inland off Kirkcaldy Bay. During the same 2½-hour watch he observed 78 **House Martins** and four **Barn Swallows** heading SW as well as small numbers of **Tree Pipits, Meadow Pipits, Swifts** and **Pied Wagtails** heading towards the coast and a single **Crossbill** going inland, while 25 **Willow Warblers** and 14 **Blackcaps** were foraging in the bushes. **Rabbits** were seen at Seafield on 5th and 10th by Paul Williams who also saw a single **Roe Deer** at North Mire on 11th. A **Minke Whale** was off Pettycur on 1st (Bruce Meldrum) and was also seen off Kinghorn (23rd, Gavin Wilkinson, Kinghorn District Wildlife Group) and the coastal path (27th, Bruce Meldrum, KDWG). Seven **Bottle-nosed Dolphins** were off Pettycur car park on 5th (Graham Sparshott) and at least six were seen there by George Lees (KDWG) on 30th. **Common** and **Grey Seals** remained on the rocks off Seafield all month.

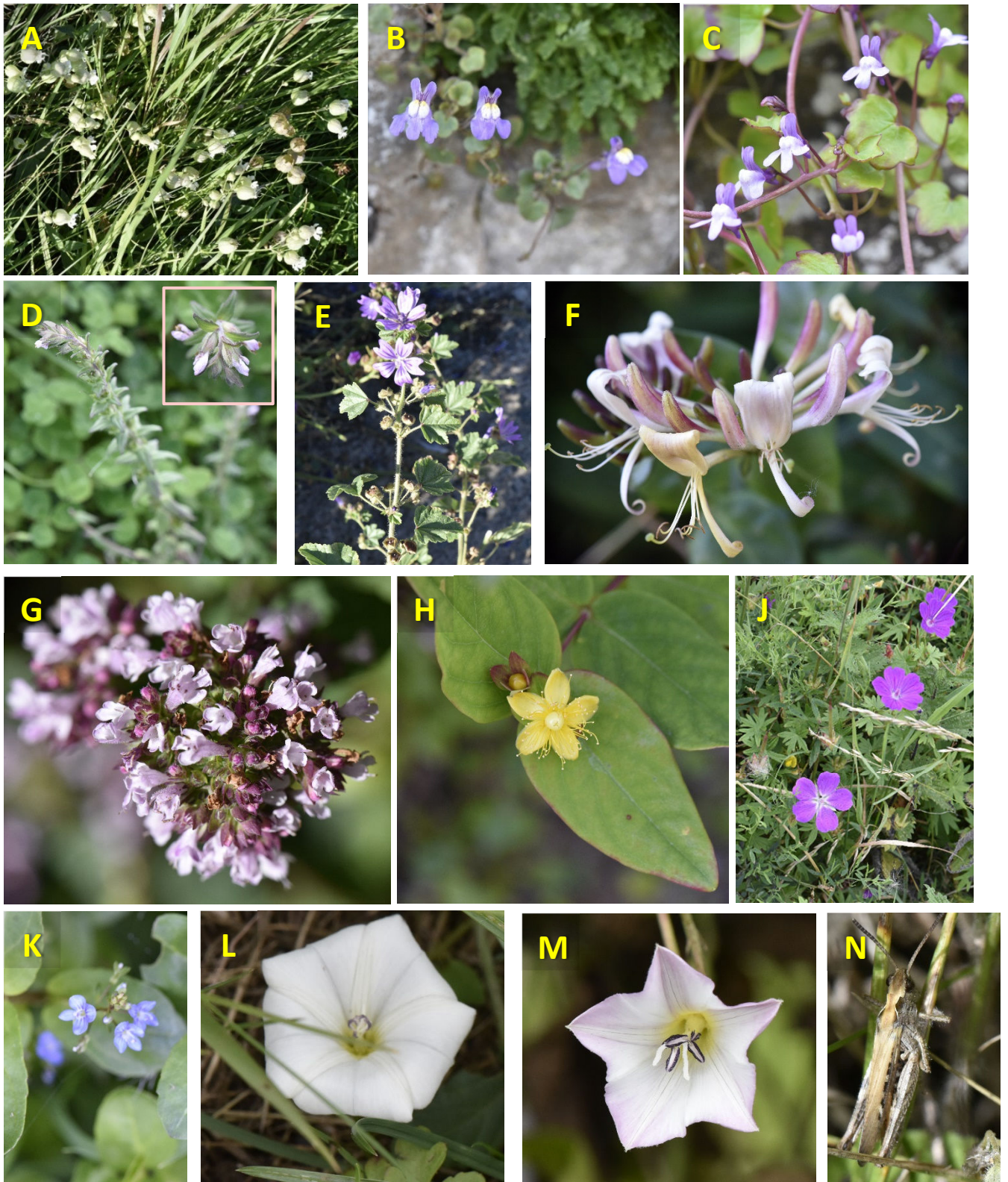
Wall Brown butterflies were seen at Mid and/or North Mire by myself on 7th and by Paul Williams (3 at Mid Mire and 2 at North Mire on 11th; one at Mid Mire on 19th). The numbers seen on 11th suggest that this species is now breeding in the Mid/North Mire area. It has been spreading northwards in southern Scotland and only started to colonise Fife a few years ago. Locally, it is known to breed in the Seafield area and at the Binn and appears to be doing well. However, at the UK level it is categorised as Endangered in the latest edition of the national Red List of butterflies (Fox et al., 2022) because of a 70% decline in its distribution between 2010 and 2019. Other butterflies recorded at Mid/North Mire in August were **Green-veined White** (19th, Paul Williams), **Small White** (myself on 7th and 24th), **Red Admiral** (myself, 7th) and **Peacock** (PW, 11th). Several **Pale Straw Pearl** moths (*Udea lutealis*) were also seen there (myself, 7th, 24th) and by the Kissing Trees lane nearby.



Wildlife seen at and near Mid Mire, August 2023. A-C, Ferruginous Bee-grabber (*Sicus ferrugineus*), 7th (A, wings outspread; B, front view; C, side view). **D**, Turnip Sawfly (*Athalia rosae*), 24th. **E**, Pale Straw Pearl (*Udea lutealis*), 7th. **F & G**, two very different colour forms of Brown-lipped Snail (*Cepaea nemoralis*) by Kissing Trees road, 7th. Photos Robert Mill.

Two other interesting insect finds during my visits to Mid/North Mire were a **Ferruginous Bee-grabber fly** (*Sicus ferrugineus*) on Field Scabious (7th) and **Turnip Sawfly** (*Athalia rosae*) on 24th. The former species has very few, all unconfirmed, Fife records in the National Biodiversity Network database while the nearest locality for the latter is Cullaloe nature reserve (NBN Atlas, 2023a, b). Also seen by the Mire Path were a **Seven-spot Ladybird** and a female **crane-fly** (*Tipula paludosa*), both on 7th, while on the same day two very different colour forms of **Brown-lipped Snail** (*Cepaea nemoralis*) were found more-or-less side-by-side on plants growing along the verge of Kissing Trees lane.

Scarlet Pimpernel (*Lysimachia arvensis*) and **Bladder Campion** (*Silene vulgaris*) both continued flowering around Mid Mire. Other interesting August plant records were **Fool's Parsley** (*Aethusa cynapium*) along the Burnside Path (11th), a single plant of **Italian Toadflax** (*Cymbalaria pallida*) on a village wall (22nd), looking noticeably different from the far commoner **Ivy-leaved Toadflax** (*Cymbalaria muralis*) growing on the same wall (and many others locally), **Tutsan** (*Hypericum androsaemum*) also in the village on 22nd, and **Purple Toadflax** (*Linaria purpurea*) in the countryside at Mid Mire (7th). **Honesty** (*Lunaria annua*) continued its second flowering this year at Mid Mire (7th, 24th); **Sweet Cicely** (*Myrrhis odorata*) also produced a few second flowers along the coastal path (4th) and **Brooklime** (*Veronica beccabunga*) was also still in flower at Doo Dell (22nd). **Field Bugloss** (an ever more scarce arable weed, like Scarlet Pimpernel) was also found at Mid Mire (7th). A single plant of **Red Bartsia** (*Odontites vernus*) was discovered along the Burnside Path (11th); this species is rather scattered in Fife, with far fewer records than in the rest of the central belt (NBN Atlas, 2023c). **Heath Groundsel** (*Senecio sylvaticus*), **Honeysuckle** (*Lonicera periclymenum*), **Common Mallow** (*Malva sylvestris*) and **Corn Sowthistle** (*Sonchus arvensis*) were seen in the village or harbour areas (22nd). **Hare's-foot Clover** (*Trifolium arvense*) continued flowering by the coastal path (4th), near where I originally found it last month; **Agrimony**, **Bloody Cranesbill**, **Meadow Cranesbill** and many others of the coastal plants in flower in July also carried on flowering for all or most of the month. A **Common Field Grasshopper** (*Chorthippus brunneus*) was also seen along the coastal path on 4th.



Coastal and village biodiversity, August 2023. **A**, Bladder Campion (*Silene vulgaris*), Mid Mire, 24th. **B**, Italian Toadflax (*Cymbalaria pallida*), village, 22nd. **C**, Ivy-leaved Toadflax (*Cymbalaria muralis*), village, 4 May 2023, for comparison with **B**: Italian has darker, less ivy-shaped leaves, flowers deeper purple with the side lobes in the lower half of the corolla less spreading and the middle lobe shorter than the other two, not longer as in Ivy-leaved. **D**, Red Bartsia (*Odontites vernus*), Burnside Path, 11th (inset, closer view of flowers). **E**, Common Mallow (*Malva sylvestris*), harbour area, 22nd. **F**, Honeysuckle (*Lonicera periclymenum*), village, 22nd. **G**, Wild Marjoram (*Origanum vulgare*), village, 22nd. **H**, Tutsan (*Hypericum androsaemum*), village, 22nd. **J**, Bloody Cranesbill (*Geranium sanguineum*), coastal path, 4th. **K**, Brooklime (*Veronica beccabunga*), Doo Dell Path, 22nd. **L & M**, Two forms of Field Bindweed (*Convolvulus arvensis*), coastal path, 4th. **N**, Common Field Grasshopper (*Chorthippus brunneus*), coastal path, 4th. Photos Robert Mill.

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