KINGHORN BIODIVERSITY MONTHLY REPORT - MAY 2023 by Robert Mill



The cranefly *Tipula fascipennis*, the 1,500th species of animal, plant, fungus, lichen or virus to be recorded at Kinghorn Loch. Found and photographed on 18 May 2023 by Robert Mill.

May 2023 in our area, as in the rest of the UK, had an unsettled start, although the thunderstorms that affected parts of England, bringing well above average rainfall to some places, missed us entirely. A high-pressure system began to build from the middle of the month, centred to the NW of Scotland. The effect of this was to bring dry weather for all, but while western Scotland enjoyed hours and hours of sunshine, the east coast, including Fife, had to endure day after day of persistent chilly winds off the North Sea and often low cloud that did not burn off till the middle of the day. Local rainfall as measured by the SEPA gauge at The Ecology Centre was only 27.8 mm, 60% of average (SEPA, 2023). Twenty-three of May's 31 days were completely dry and of the 8 on which rain did fall, only five were significant amounts with most of the month's rain (19.2 mm, 70% of the months total) being concentrated on 6th, 7th and 8th; most of the rest fell on 10th (4 mm) and 20th (3.8 mm). Since 20th until the time of writing (mid June) it has once again been almost totally dry. Despite the chilly winds, Fife ended up having slightly above average temperatures. Daily maximum temperatures were below or at the long-term average in our area on 1st-6th, 12th, 21st and 22nd, and above average on 7th-11th, 13th-20th, and 23rd-31st (Met Office, 2023).

Compared to April, there was considerable plant growth at the Loch during May, although by the month's end there were the first signs of grass beginning to dry out because of lack of regular rainfall. My impressions were that there seemed to be far fewer pollinating insects, notably hoverflies and bees, visiting flowers than I would have expected, possibly due to the constant east wind from mid-month and, in the case of hoverflies in paricular, the unusually long spell of dry weather, although there is also concern about a national, indeed global, longer term decline in pollinators. There is now a UK Pollinator Monitoring Scheme, which is encouraging people to do some 'citizen science' by recording all the pollinators that visit a flower species such buttercups, dandelions and thistles in a small area over 10 minutes. You can find all the details, including recording form and tips on identifying the main flowers and insect groups (you don't need to name them to species level, just that it's a honey bee, bumblebee, other kind of bee, wasp, hoverfly, other kind of fly, beetle etc.) at https://ukpoms.org.uk/ and there's also a mobile phone app.

Now that a path has been recently opened connecting the Kinghorn Community Land Association (KCLA) ecocemetery site with both the B923 and The Ecology Centre, I now record the biodiversity of both that area and the much smaller KCLA plot of land north of the Lochside Grange houses. Both these areas adjoin TEC's land and most of the grassland species occur in both. It was a great month for finding previously unrecorded species at the Loch and the figure reached, and passed, 1,500 on the 18th. The honour goes to a cranefly species, Tipula fascipennis, whose portait is at the top of page 1. It has taken just under two years to get to 'Species 1500' from 'Species 1000' (Greater Knapweed on 28 June 2021 (Mill, 2021). The 27 additions to the Loch's list (abbreviated NLR [new Loch record] especially in figure captions) comprised 1 fish, 1 bee, 1 hoverfly (possibly two: see later), 3 other flies, 2 bugs, 1 beetle, 1 spider, 1 centipede, 1 millipede, 1 woodlouse, 4 fungi and 10 flowering plants, increasing the total from 1,490 (30 April) to 1,517 on 31 May. However, unfortunately, the habitats of two of the month's new Loch records were changed shortly after they were

AROUND THE LOCH Birds: The same number of bird species, 55, was recorded at and around Kinghorn Loch during May 2023 as in April, although the species mix was a little different. The most unusual record was of a **Wheatear**, written on the whiteboard in the hide when I visited on 1st, although no-one posted about it on the Kinghorn District Wildlife Group (KDWG) Facebook page or anywhere else I've traced so unfortunately I've no more information about this record. They have been recorded at the Loch before, but not

found and, in the case of one of them, the plant has already gone.

regularly, so any information about this sighting would be very welcome: please contact me via Lee Brown at The Ecology Centre.

Summer visitors included several **Willow Warblers**, a good number of



Barn Swallow (*Hirundo rustica*), 29th. Photo Robert Mill.

Common Whitethroats, as well as Sand Martins and Blackcaps. There was evidence of Swallows breeding in the mill buildings as in previous years, and a single **Swift** was seen on three dates (13th, 23rd and 25th) by Paul Williams. However, compared to previous years, Chiffchaffs seem thin on the ground (or in the trees!) at the Loch this year, with just two being heard singing regularly, and **House Martins** were not seen by anyone (although I saw them elsewhere – see the Beach and Coast section later in this report). One pair of Great Crested Grebes near the hide raised two chicks, both of which were still OK by the end of May despite regular visits to the Loch by at least one Grey Heron. and incubation had begun on a nest elsewhere by the end. Dabchicks (Little Grebes) were also present all month, raising hopes of breeding. Neither Pochard nor Shelduck were seen and the only recorded Tufted Duck sighting was by me on 1st. As in April, there was one record of Kingfisher (two on 5th: Ela Dobroć, KDWG). Lapwings were frequenting fields in the Rodan Braes area, with nine seen by Andy Pay on 18th and two by Paul Williams the next day. There were no fewer than eight sightings of up to three Grey Wagtails by various people and it is possible that a pair bred, while Pied Wagtail was seen on 1st and 13th. Other sightings included Reed Bunting on 13th and 23rd and Yellowhammer on three dates. The full list of birds recorded at the Loch during May 2023 is: Blackbird, Blackcap, Blue Tit, Bullfinch, Buzzard, Carrion Crow, Chaffinch, Chiffchaff, Coal Tit, Common Whitethroat, Coot, Cormorant, Dabchick (Little Grebe), Dunnock, Farmyard / hybrid geese, Feral Pigeon, , Goldfinch, Great Crested



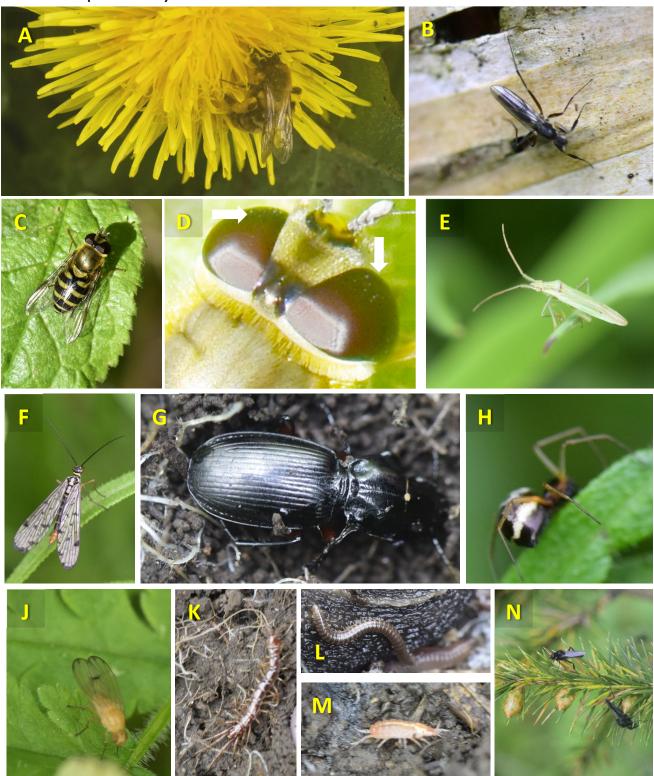
A young Common Toad (*Bufo bufo*), 5th. Photo Robert Mill.

Grebe, Great Tit, Greenfinch, Grey Heron, Grey Wagtail, Greylag Goose, Herring Gull, Jackdaw, Jay, Kestrel, Kingfisher, Lapwing, Lesser Blackbacked Gull, Linnet, Long-tailed Tit, Magpie, Mallard, Moorhen, Mute Swan, Pheasant, Pied Wagtail, Reed Bunting, Robin, Rook, Sand Martin, Skylark, Song Thrush, Starling, Swallow, Swift, Treecreeper, Tree Sparrow, Tufted Duck, Wheatear, Willow Warbler, Wood Pigeon, Wren, Yellowhammer.

Mammals, amphibians and fish: Lee Brown (TEC) and myself found a young Common Toad under one of the stumps on 5th while we were looking for invertebrates. Roe Deer were seen by Pauline Bell (KDWG) on 2nd and by Paul Williams on 19th. Paul also saw a Grey Squirrel on 19th and a Rabbit on a date not supplied. Mole hills were present all month although few fresh ones were noted. Coming back from one of my walks I was recognised by a local angler who told me he was aware of Pike,

Perch and Common Roach in the Loch; the Roach is an addition to my Loch biodiversity list.

Invertebrates ('minibeasts'):



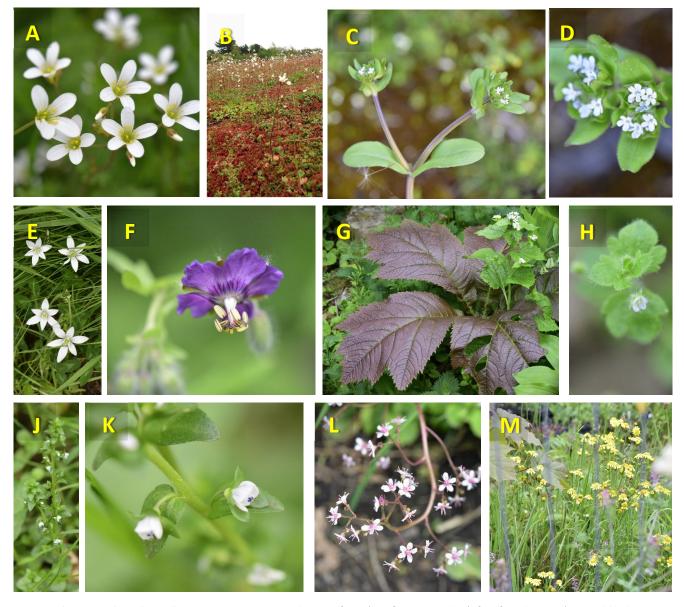
May Loch invertebrates: A, Gwynne's Mining-bee (Andrena bicolor), 7th, NLR. B, A dance fly, Tachypeza nubila, 18th, NLR. C & D, Hairy-eyed Syrphus (Syrphus torvus), 9th, NLR; photo D is the head much enlarged to show the white hairs on the eyes (arrowed) that are diagnostic of this species. E, the grass bug Stenodema laevigata, 18th, NLR. F, the scorpion-fly Panorpa germanica, 18th. G, Common Black-clock Beetle (Pteruchus madidus), 5th, NLR. H, the spider Microlinyphia pusilla, 18th, NLR. J, the fly Tricholauxania praeusta, 18th, NLR. K, Stone Centipede (Lithobius microps), 5th, NLR. L, the snake millipede Cylindroiulus britannicus on the body of a slug, 5th, NLR. M, Rosy Woodlouse (Androniscus dentiger), 5th, NLR. N, Two St Mark's Flies (Bibio marci) on larch twig, 7th. All photos Robert Mill.

Compared with March and April, far more invertebrates were out and about in May, although, as I noted in my introductory paragraph, actual numbers of some species seemed lower than 'typical' years, and some species that I would have expected to be active by the end of May were not seen at all. Four butterfly species were reported. Orange-tips were seen frequently from 8th onwards and Small Whites from 7th (and also during April). Speckled Wood was seen three times, by Paul Williams (16th) and myself (26th, 29th). The only record of Small Tortoiseshell was on 13th by Paul Williams. Buff-tailed Bumblebees were around most days, but Common Carder Bee, which is usually very tolerant of inclement weather, was only seen twice (7th, 21st). Gwynne's Mining-bee (Andrena bicolor) was a NLR; it was found visiting dandelion flower-heads in the ecocemetery land on 7th and in TEC's land on 9th. Another mining bee, Chocolate Mining-bee, was seen on 18th. The first Early Bumblebees of 2023 were seen by myself on 9th and 22nd – thus, not as 'early' as Bufftailed Bumblebees, Common Carder Bees and Honey Bees, all of which were seen earlier in the year as well as during May. Black Ants were spotted by the track up to the Farm (9th). It was a good month for hoverfly diversity (though not abundance as mentioned earlier), with at least 11 (maybe 12) species seen, most of them by Andy Pay on 23rd. He recorded seven species with certainty (Cheilosia illustrata, Eristalis pertinax, Leucozona lucorum, Myathropa florea, Platycheirus albimanus, Rhingia campestris, Xylota segnis). Another species he saw that day may have been Cheilosia impressa, which, if correct, would be not only a new Loch record but also new for Ordnance Survey grid square NT28, which covers the wider Kinghorn/Burntisland area from Silversands Bay by Aberdour in the SW to Seafield in the NE and from near Mossmorran in the NW to Pettycur in the SE. Unfortunately, he was unable to get a photograph that would have confirmed the identification. As well as Andy's seven definite records, I photographed Hairy-eyed Syrphus (Syrphus torvus) on 9th (NLR); one of my photos, when enlarged considerably, revealed its diagnostic hairy eyes that separate it from both Humming Syrphus (S. ribesii), which is already known from the Loch, and Glass-winged Syrphus (S. vitripennis) which is yet to be recorded there. I also recorded three other hoverflies from the Loch area in May: Migrant Hoverfly (Eupeodes corollae) on 9th, Short Melanostoma (Melanostoma mellinum) on 18th and Furry Dronefly (Eristalis intricaria) on 29th. Common Pollen Beetle was found inside a dandelion flowerhead on 9th. Among the ten other flies that I was able to identify, there were three NLRs: Tipula fascipennis on 18th which I have already highlighted as being the 1,500th species recorded at the Loch, a brown fly called Tricholauxania praeusta, and a dance fly, Tachypeza nubila, both of which were also found on 18th. This slender, dark brown, long-legged fly runs quickly up tree trunks; I used to see the species quite often on trees in the Royal Botanic Garden Edinburgh but this was the first time I have seen one at the Loch. I also saw St Mark's Flies (Bibio marci) on 7th (very numerous), 9th and 18th, a Greater Bee-fly (Bombylius major) on 9th, another crane-fly species *Tipula lateralis* on 18th, and a greenbottle mimic, *Gymnocheta viridis*, on 22nd, while Andy Pay spotted an example of *Tachina fera* on 23rd. Of the three bug species found, one was the ubiquitous Common Froghopper whose larval frothy 'cuckoo-spit' began to be seen from the end of the month. The other two, Campion Aphid (Brachycaudus lychnidis species aggregate) and the grass bug Stenodema laevigata, were both NLRs. Sadly, the small area of flower meadow in which the latter was found on 18th had been mown or scythed short by the time I made another visit on 29th to where it had been.

Two beetles were found, one of which (Black Clock Beetle, *Pterostichus madidus*) was a new Loch record (5th); the other was **7-spot Ladybird**, seen on 9th and 22nd. Three damselfly species were seen: Large Red Damselfly by Andy Pay on 23rd, Blue-tailed Damselfly by me on 26th, and Common Blue Damselfly on 29th, also by myself. A scorpion-fly whose characters match *Panorpa germanica* was found at the marsh on 18th and at the lochside near the Craigencalt car park on 26th. A spider, *Microlinyphia pusilla*, found near the marsh on 18th, was another NLR. Brown-lipped Snail (*Cepaea nemoralis*) was seen on 9th, while a very odd find was several broken shells of periwinkles (*Littorea* spp.) on the Great North Road track beyond the farm. As these are marine molluscs, they must have been either discarded by a passing walker or dropped by a seagull. They have not been added to my Loch list as they could not survive in the fresh water of the Loch. Lastly, a search under several of the stumps in the 'stumpery' by Lee and myself on 5th yielded the final three new May Loch records among the invertebrates: Stone Centipede (*Lithobius microps*), the snake millipede *Cylindroiulus britannicus*, and Rosy Woodlouse (*Androniscus dentiger*).

Flowering plants and ferns:

142 wild or naturalised flowering plant species, four ferns, two horsetails and 43 obviously cultivated flowering plants were noted during my May visits to the Loch. Ten of the 142 were new Loch records, more or less evenly balanced between British native or archaeophyte species and neophytes (those introduced to Britain since 1500AD, mostly but not all of them garden plants occurring spontanously in wild habitats).



New plant records at the Loch, May 2023. A & B, Meadow Saxifrage (Saxifraga granulata), first found on 1st (A, in wild habitat, 21st; B, in profusion on one of TEC's Sedum roofs, 8th). C & D, Cornsalad (Valerianella locusta), 9th (C, habit; D, flowers close up). E, Garden Star-of-Bethlehem (Ornithogalum umbellatum), 7th. F, Dusky Cranesbill (Geranium phaeum), 18th. G, Rodgersia (Rodgersia podophylla), 18th. H, 'False Ivy-leaved Speedwell' (Veronica hederifolia subsp. lucorum), 18th. J & K, Thyme-leaved Speedwell (Veronica serpyllifolia), 18th (J, habit; K, flowers close up). L, London Pride (Saxifraga × urbium), 22nd. M, Oxford Ragwort (Senecio squalidus), first found 26th, photographed on 1 June. Photos: B, Lee Brown (TEC); all others Robert Mill.

The first addition of the month was **Meadow Saxifrage** (*Saxifraga granulata*), the first plant of which was found on 1st in deep shade under a shrub near the entrance to the TEC building – a most unusual habitat for this lovely British native that, as its name suggests, is typically found in flower meadows and areas where grass is left uncut. As the month progressed, more and more plants were found, in groups in the TEC sanctuary area, on the 'Tadpole' (the roundabout at the end of the Ecology Centre's access road next to its car park), around the edge of the TEC car park, and further down the east side of the Loch near TEC's raised beds. TEC established that the source of all these plants was the Sedum roofs on both the TEC offices and café building and a shed near the raised beds. TEC told me that the management of these Sedum roofs has changed fairly recently and this has obviously benefitted the growth of Meadow Saxifrage plants that had been among the *Sedum* plants on these roofs – they had a wonderful flowering season this year (see photo **B** above), and presumably also had a good 2022 season as well for so many seeds to have been dispersed around the site last year that have germinated this spring. The next NLR was **Garden Star-of-Bethlehem** (*Ornithogalum umbellatum*), a plant of which was found in the wild near Craigencalt Cottages on 7th.

Subsequently, other small populations have been found in May and early June in various spots around the Loch, from near the dam to as far away as up the Rodan Braes track, just within the limit of the area on which I base my 'Loch list'. Cornsalad (Valerianella locusta) was found at Craigencalt Farm on 9th; this is common along parts of the coastal path near Kinghorn, and locally within Kinghorn itself, but I had not previously found it anywhere within the Loch recording area. Four NLRs were added on 18th; one was Dusky Cranesbill (Geranium phaeum) in two wild situations, one along a woodland margin and the other in a small flower meadow that had sadly been mown by 26th so that no plants were left (although, as it is perennial, it may regrow from the roots if left uncut; regrowth of some species had already begun by 16 June). The others were the lilac form of Ivy-leaved Speedwell (Veronica hederifolia subsp. lucorum; sometimes called 'False Ivyleaved Speedwell'), meaning that both it and the typical subsp. hederifolia are present at the Loch; Thymeleaved Speedwell (Veronica serpyllifolia); and another garden plant in a wild habitat, Rodgersia (Rodgersia podophylla). London Pride (Saxifraga x urbium) was found in the wild beside the track from Craigencalt Cottages on 22nd. Finally, on 26th Early Forget-me-not (Myosotis ramosissima) was found on bare ground exposed to full sun (a habitat to its liking), and Oxford Ragwort (Senecio squalidus) was found growing in a fenced-off area that is one of the few to which I don't have access, so I had to take a photo through the railings a week or so later to confirm its identity. Unfortunately, when I made my next visit to that part of the Loch on 8 June, the area where it was growing had been weeded and everything had gone; since the Oxford Ragwort had not had time to set seed, this particular plant has had a very short life at the Loch! Some firstflowering dates were Shining Cranesbill (Geranium lucidum), 7th (2022, Apr 23rd); Horse Chestnut (Aesculus hippocastanum), 7th (2022, 8th); Orchard Apple (Malus domestica), 7th (2022, 4th); Wild Strawberry (Fragaria vesca), 7th: 2022, 8th); Wild Garlic (Allium ursinum), 9th (2022, 8th), Sweet Cicely (Myrrhis odorata), 18th (2022, 8th); Yellow Iris (Iris pseudacorus), 18th (2022, 27th); Silverweed (Potentilla anserina), 22nd (2022, same date); Elder (Sambucus nigra), 26th (2022, 27th); Foxglove (Digitalis purpurea), 29th (2022, a week earlier, 22nd) and White Clover (Trifolium repens), 29th (2022, 27th). These dates indicate that most species came into bloom on approximately the same date as last year although a few were significantly later, such as Shining Cranesbill, Sweet Cicely and Foxglove.

Cryptogams I don't tend to record these as much during the summer, other than plant pathogens such as mildews and rusts, as most are present all year round (mosses and lichens) or mainly in autumn (most 'mushroooms and toadstools') and they are far more easily recorded when there is less vegetation. Seven fungi were recorded, four of which were NLRs. One of these was a large toadstool found on 9th, Shaggy Parasol (*Chlorophyllum rachodes*). The other four were pathogens: a rust, *Puccinia chaerophylli*, on Sweet Cicely leaves (18th) and two 'white mould' leaf spots, *Ramularia calthae* on Marsh Marigold leaves (18th) and







Some new Loch fungi records, May 2023. Left: Shaggy Parasol (Chlorophyllum rachodes), 9th. Centre: an orange rust, Puccinia chaerophylli, on Sweet Cicely (Myrrhis odorata) leaf rachis, 18th. Right: a white mould, Ramularia calthae, on Marsh Marigold (Caltha palustris) leaves, 18th. All photos Robert Mill.

Ramularia didyma on Creeping Buttercup leaves on 29th. Another rust, **Nettle Rust** (**Puccinia urticata**) was found infecting Stinging Nettle plants on 29th. At least seven different **lichens** were noted although all had been found previously. The **EMARAV virus** was once again prevalent on rowan leaves near TEC but it does not seem to be doing much harm to the trees.

VILLAGE, BEACHES AND COASTAL PATH



A Hedgehog (*Erinaceus europaeus*), Lochside Grange between Kilcruik Road and B923, 10th. Photo Andrea Mill.

Graham Sparshott, the official Fife bird recorder, recorded three notable birds off the Kinghorn coast in May: a **Black Guillemot** (a Fife scarcity, particular so far up the Firth of Forth) on 19th, a **Roseate Tern** on the same day, and a small, slim **Ringed Plover** presumed to be of the Siberian race *tundrae* (sometimes called **Tundra Ringed Plover**) on 27th. A **Little Gull** was also seen by him on 27th. Other, commoner, birds seen by him during his migration watches off East Braes (full details at www.trektellen.org) were 13 **Bar-tailed Godwits** on 14th (and one on 27th), 43 **Common Scoter** on 19th, two **Manx Shearwaters** on 19th, 5 **Red-throated Divers** on 14th, and either one or two **Shelduck** on 14th, 19th and 27th. However, in one of his posts he commented that for much of the month, particularly during the normal peak of the spring migration season, the winds

and other weather conditions at the site had been unfavourable in May and he consequently reported few sightings in the month. By contrast, Paul Williams sent in a long list of 63 species from Seafield and the coastal path. This included several wader species, either on passage to breeding grounds on simply lingering from winter, such as three **Whimbrel** there on 8th (and I saw one south of Seafield Cave on 16th), **Purple**Sandpiper on 8th (23 present) and 19th, a single Sanderling on 22nd, single Dunlins on 19th and 22nd,

Curlew and Oystercatcher frequently, and Turnstones on five dates. He and I both saw small groups of 4-5

Ringed Plover between 19th and 25th. Seabirds recorded by him included two Black-headed Gulls on 29th (most are still away at breeding grounds and none have been seen at the Loch since March), Common Terns







Left: Prickly Cockle (Acanthocardia aculeata), Seafield, 8th. Centre: Blue Jellyfish (Cyanea lamarckii), Kinghorn, 28th. Right:

Beadlet Anemone (Actinia equina), Kinghorn, 30th. Photos Robert Mill.

and **Fulmar** on three dates, a large flock of more than 450 **Eiders** off Seafield Tower on 21st, **Gannet** on six occasions, **Common Guillemot** on 20th and **Razorbill** on 8th and 29th. A selection of his other sightings includes either one or two **Lesser Whitethroats** on seven dates from 8th onwards, **Linnets** on numerous dates, a **Kestrel** on 16th, a **Sparrowhawk** on 29th and a single **Swift** on 24th. A **Peregrine** was also spotted near Seafield on 24th by Tim Nicholson (KDWG) and I saw a **Whinchat** in a bush there on 16th. Up to 15 (maybe more) **Fulmars** were on the cliffs at Kinghorn, and I heard the deep croak of a **Raven** at Pettycur (14th). **Sedge Warblers**, which were inexplicably absent from Kinghorn Loch, were at Seafield, East Braes, and the Burnside Path and pond in Kinghorn (two singing males heard or seen by me and others on several dates).

Paul Williams noted **Rabbit** at Seafield while my wife Andrea saw a **Hedgehog** on both 10th and 19th during evening dog walks around the Lochside Grange / Glebe Place area. Pauline Bell (KDWG) saw a **Stoat** at Seafield on 11th while Bruce Meldrum (KDWG) saw two near the Harbour View Café in Kinghorn on the same

day. Bruce also saw **Bottlenose Dolphins** off Kinghorn on 2nd and 15th. Both **Common** and **Grey Seals** were seen by Paul Williams at Seafield during May.

The main **butterfly** news was the discovery of more **Wall Browns** at the original Seafield site on 22nd and a few days later near the Tower on 25th (Paul Williams). Paul also found a population at the summit of the Binn Hill on 30th that appeared to be breeding. **Red Admiral, Small Tortoiseshell, Orange-tip, Small White, Greenveined White** and **Speckled Wood** were all seen by me and/or Andrea on a walk from Kinghorn to Seafield Tower and back on 16th, while **Peacock** was recorded at Seafield on 22nd by Paul Williams. Few other noteworthy land invertebrates were spotted at sites other than the Loch. As well as the commonly recorded shells such as **Common Limpet, Edible Mussel** and **Baltic Tellin, Prickly Cockle** was found on the beach at Seafield by me on 8th, while I found a **Beadlet Anemone** on rocks at the SW end of the beach at Kinghorn (30th). The first **jellyfish** of the summer began to be washed up: I found both **Common (Moon) Jellyfish** and **Blue Jellyfish** at Kinghorn on 28th.

As at the Loch, during May the plants in bloom around the village and coastal path gradually transitioned from those of spring, such as **primroses** and **cowslips** (**Primula vulgaris** and **P. veris**), **Flowering Currant** (**Ribes sanguineum**), bulbous plants like **bluebells** (the British native species **Hyacinthoides non-scripta** and the



Village and coastal plants, May 2023. A, Dame's Violet (Hesperis matronalis), track across Kinghorn golf course, 25th. B, Common Storksbill (Erodium cicutarium), by golf course, 25th. C, Purple Milk-vetch (Astragalus danicus), Kinghorn, 25th. D, Red-hot Poker (Kniphofia uvaria), Pettycur, 26th. E, Fairy Foxglove (Erinus alpinus), on a Kinghorn wall, 19th. Note the 2 shorter upper petals and 3 longer lower ones, distinguishing it from Aubrieta. F, Purple Toadflax (Linaria purpurea), Kinghorn, 19th. G, Snow-in-summer (Cerastium tomentosum), coastal path, 26th. H, Kidney Vetch (Anthyllis vulneraria), Kinghorn, 30th. J, Sea Sandwort (Honckenya peploides), Seafield, 8th. K, Common Rock-rose (Helianthemum nummularium), Pettycur, 26th. L, Sea Mouse-ear (Cerastium diffusum), Pettycur, 14th. M, Thrift (Armeria maritima), Pettycur, 14th. Photos Robert Mill.

invasive hybrid between it and the Spanish *H. hispanica*, known as *H. x massartiana*), Alexanders (*Smyrnium olusatrum*) and Lesser Celandine (*Ficaria verna*, which in fact remained in flower in a few places all month), to those of early summer.

In the village, numerous clumps of Fairy Foxglove (*Erinus alpinus*) as usual turned an old stone wall near Eastgate purple from mid-May. In previous years I hadn't looked at the plants closely and assumed they were Aubrieta (*Aubrieta deltoidea*), a plant of which does grow on a wall on the opposite side of the road (see last month's report). However, this year I chose to cross over to the wall where the masses of 'Aubrieta' grow, on the side of the road that has no pavement, and take some close-up photos before the next car came. I was astonished to find that instead of the four equal-length petals that Aubrieta has, there were in fact five unequal ones: two smaller ones in the upper half of the flower and three larger ones in the lower half (see photo E on page 8)! Therefore, the plant could not possibly be Aubrieta but is instead Fairy Foxglove, which belongs to the speedwell and plantain family, Plantaginaceae, rather than to the cabbage family Brassicaceae as Aubrieta does. Also in the village area, Purple Toadflax (*Linaria purpurea*) was just starting to flower on a patch of waste ground off Barclay Road (19th). Kidney Vetch (*Anthyllis vulneraria*) was in bloom at the harbour on 30th and a somewhat atypical form of Mossy Pearlwort (*Sagina procumbens*) was on the harbour wall. Unlike the form I most commonly see on pavements and similar habitats, which has prostrate stems, dark green leaves and flowers without petals, this plant (photo E on this page) had paler green leaves, semi-upright stems and flowers with whitish petals (see top left and right corners of the photo).

Along the track across the golf course on 25th I re-found plants I had also seen in 2021 and 2022 such as Dame's Violet (*Hesperis matronalis*), Common Storksbill (*Erodium cicutarium*) and Purple Milkvetch (*Astragalus danicus*). There seemed to be fewer plants of the last-named plant than I remembered from previous years and I noticed that Spring Beauty (*Claytonia perfoliata*), a non-native plant that can be invasive, had become much more numerous in the vicinity.



More coastal plants, May 2023. A, Cornsalad (Valerianella sp.; see text), coastal path, 16th. B, Wallflower (Erysimum cheiri, shades of yellow and bronze) and Snow-in-Summer (Cerastium tomentosum, white) on the cliffs at Pettycur, 14th. C, Wild Clary (Salvia verbenaca), coastal path, 16th. D, Alexanders (Smyrnium olusatrum) on the coastal path at Kinghorn, 4th. E, Mossy Pearlwort (Sagina procumbens), Kinghorn, 30th. F, Silverweed (Potentilla anserina), Seafield, 23rd. Photos Robert Mill.

On the coastal path between Kinghorn and Seafield **Cornsalad** had a really good year; as well as the plants on the clifftop that I mentioned and illustrated in my April 2023 report, in May I found many clumps beside the

path itself. All of them (see photo **A** on page 9) looked rather different to the plant found at Craigencalt on 9th May (photo **C** on page 5), being shorter, with much more densely arranged inflorescences of smaller flowers that had less blue tinge than the Craigencalt plant. Therefore, I wondered if all these plants along the coast path might belong to a different species, Keeled Cornsalad (*Valerianella carinata*) but to find out if that is the case I will have to go back later and examine ripe seeds, as the two species cannot be separated from one another by flower and leaf features.

Two more localities, new to me though no doubt previously known to others, for **Wild Clary (Salvia verbenaca)** were found along the coastal path. In Scotland, Wild Clary has only 58 records in the National Biodiversity Network's database; over 25 of these 58 are from the Burntisland/Kinghorn/Kirkcaldy area (NBN Atlas Scotland, 2023). They date back to as long ago as Lightfoot (1777), who recorded it from the Dysart side of Kirkcaldy. Most records are from Kinghorn or Pettycur, the earliest from here that I have traced so far being in or before 1809 (Maughan, 1811).

Also along the coastal path, patches of **Snow-in-Summer** (*Cerastium tomentosum*) were in bloom at Seafield (8th) and just beyond Kinghorn (16th), as well as on the cliffs at Pettycur (30th). **Sea Sandwort** (*Honckenya peploides*) was just beginning to bloom at Seafield (8th) and **Silverweed** (*Potentilla anserina*) was in flower there on 23rd.

At Pettycur, Thrift (Armeria maritima) was now flowering in quantity on the rocks at the top of the beach. Yellow Figwort (Scrophularia vernalis) and Wallflower were still in bloom though the figwort was beginning to look past its best. Masses of Common Rock-rose (Helianthemum nummularium) were flowering on and at the base of the cliffs there (14th onwards), while at the foot of the cliffs by the rough track along their base I came across a tiny plant that was unfamiliar to me; it turned out to be Sea Mouse-ear (Cerastium diffusum) which, although in the same genus as Snow-in-Summer, could hardly look more different: it is impossible to miss a patch of Snow-in-Summer but Sea Mouse-ear is very hard to spot. Also unmissable at Pettycur were the numerous clumps of Red-hot Poker (Kniphofia uvaria) which added a South African touch to the mixture of native and naturalised plants on the cliffs.

References

LIGHTFOOT, J. (1777). Flora Scotica. London: B. White. [Salvia verbenaca, vol. 1 p. 79.]

MET OFFICE (2023). May 2023 Monthly Weather Report.

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-past-events/summaries/mwr 2023 05 for print.pdf accessed 12 June 2023.

MAUGHAN, R. (1811). A list of the rarer plants observed in the neighbourhood of Edinburgh. *Memoirs of the Wernerian Natural History Society* 1: 215-248. [Maughan's paper was read before the Society on 9 December 1809, so the localities for *Salvia verbenaca* at Burntisland and Pettycur must have been known before that date.]

MILL, R. R. (2021). Kinghorn biodiversity monthly report - June 2021. [Until recently available for download on The Ecology Centre website; I hope that it will be reinstated soon.]

NBN ATLAS SCOTLAND (2023). Records of Wild Clary (*Salvia verbenaca*). https://scotland-records.nbnatlas.org/occurrences/search?q=Salvia+verbenaca&nbn_loading=true&fq=occurrence status%3A%22absent%22 accessed 20 June 2023.

SEPA (2023). Data for the Kinghorn Ecology Centre Rainfall Gauge, available online at https://www2.sepa.org.uk/rainfall/, accessed 12 June 2023.