

## KINGHORN BIODIVERSITY MONTHLY REPORT – JULY 2024 by Robert Mill

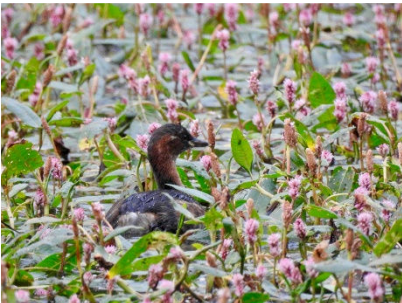


Watercress (*Nasturtium officinale*) at the marsh, flowers and unripe seed-pods, 30th July (left) and flowers and leaves, 14th August (right). New Loch record. See text, p. 5. Photos Robert Mill.

2024's cool and unsettled summer continued through July; once again, temperatures were consistently and persistently below average in the first half and frontal systems brought several spells of rain (Met Office, 2024a,b). It was the coldest start to July since 2004 (Met Office, 2024b). Although parts of southern England enjoyed a heatwave later in July, those warm temperatures were not felt to anything like the same extent in Scotland. Overall, only the Scottish central belt ended up with average temperatures, both the Highlands and Borders being below-average for the month. Both rainfall and sunshine amounts in our area were also below average. The Kinghorn Loch rain gauge only collected 35.8 mm, half the July mean of 70.9 mm; almost a third of this amount, 10.8 mm, fell on 20th (SEPA, 2024). So the month can be summed up as cool, dry and dull.

I made ten visits to Kinghorn Loch during July and Paul Williams (PW) made six. As usual I am deeply indebted to him for sending in bird records from the Loch and wider Kinghorn area. There were fifteen additions to the Loch list during July: 4 flies, 1 beetle, 1 sawfly, 3 fungi (all powdery mildews) and no fewer than 6 flowering plant taxa (5 species and 1 variety). In addition to these, I corrected two omissions of earlier new records that for some reason not been properly entered into the master file, making the total increase for July 17, from 1,725 on 30 June to **1,742** on 31 July.

**AROUND THE LOCH Birds:** 59 bird species were recorded on and around Kinghorn Loch during July, four more than in June and two more than in July last year. Despite being a lone



One of two Little Grebes at the Loch, 1st. Photo Paul Williams.

parent after her mate was accidentally run over by a car at the jetty on 29 June, the remaining adult **Mute Swan** still has a full family of five cygnets. Dan Haas (eBird) saw two **Shelducks** on the Loch on 12th, while Paul Williams recorded **Tufted Ducks** at the same time (one on 11th, two on 12th). However, the **Red-breasted Merganser** that had been visiting during spring and up till last month was not seen. **Grey Partridges** were again in the Red Path Brae Path end of the horse pasture next to the Craigencalt access track (17th and 19th). Three **Swifts** were seen on 12th by both Paul Williams and Dan Haas. Two **Little Grebes** were present on 1st after their apparent absence during June (PW) and I also heard their 'whinny'-like calls on 5th and 30th. Meanwhile, the 'west end' pair of **Great Crested**

**Grebes** hatched another 'humbug' from their second breeding attempt (PW, 8th) while the 'east end' pair also hatched a chick, so things are looking brighter on that front than a month ago. The only **wader** record was of a fly-over by a **Curlew** on 12th. **Black-headed Gulls** continued to trickle back but numbers remained quite small, while **Common Gulls** also started to return from 12th onwards. A single **Cormorant** was present

for most of July, with a second one also present on 1st (PW), while **Grey Heron** visited the Loch on at least five occasions. All three resident **raptors** were recorded during July; by the end of the month, juvenile **Sparrowhawks** were very vocal and also taking short flights around the trees in the woodland next to the allotments. Less commonly recorded members of the crow family were **Rooks** (seen by myself on 22nd and by PW on 31st) and a **Raven** that flew along the south edge of the Loch heading towards Burnside Pond (PW, 31st). **Skylarks** were heard or seen on three dates in the first half of July. **Swallows** were again present all month, while single **Sand Martins** were recorded on 12th by both PW and Dan Haas, and on 23rd by PW. I saw a **House Martin** on 3rd and Dan Haas noted three on 12th. **Willow Warblers**, **Chiffchaffs**, **Blackcaps** and a **Common Whitethroat** all remained for all or most of July but June's **Sedge Warbler** was not evident. **Grey** and **Pied Wagtails** were once again seen on several occasions, with three Greys seen on 12th by Dan Haas, who also saw July's only **Meadow Pipit** that day. **Linnets** were only noted on 17th by myself and 31st by PW. **Yellowhammers** were recorded by either PW or myself on seven dates and PW also recorded **Reed Bunting** on 5th and 11th. The full list of birds recorded at the Loch during July 2024, in the systematic order of the *British List* (BOU, 2022), is: *Greylag Goose, Farmyard geese hybrids, Mute Swan, Shelduck, Mallard, Tufted Duck, Grey Partridge, Pheasant, Swift, Feral Pigeon, Wood Pigeon, Moorhen, Coot, Little Grebe (Dabchick), Great Crested Grebe, Curlew, Black-headed Gull, Common Gull, Herring Gull, Lesser Black-backed Gull, Cormorant, Grey Heron, Sparrowhawk, Buzzard, Kestrel, Magpie, Jackdaw, Rook, Carrion Crow, Raven, Coal Tit, Blue Tit, Great Tit, Skylark, Sand Martin, Swallow, House Martin, Long-tailed Tit, Willow Warbler, Chiffchaff, Blackcap, Common Whitethroat, Goldcrest, Wren, Song Thrush, Blackbird, Robin, Tree Sparrow, Dunnock, Grey Wagtail, Pied Wagtail, Meadow Pipit, Chaffinch, Bullfinch, Greenfinch, Linnet, Goldfinch, Yellowhammer, Reed Bunting.*

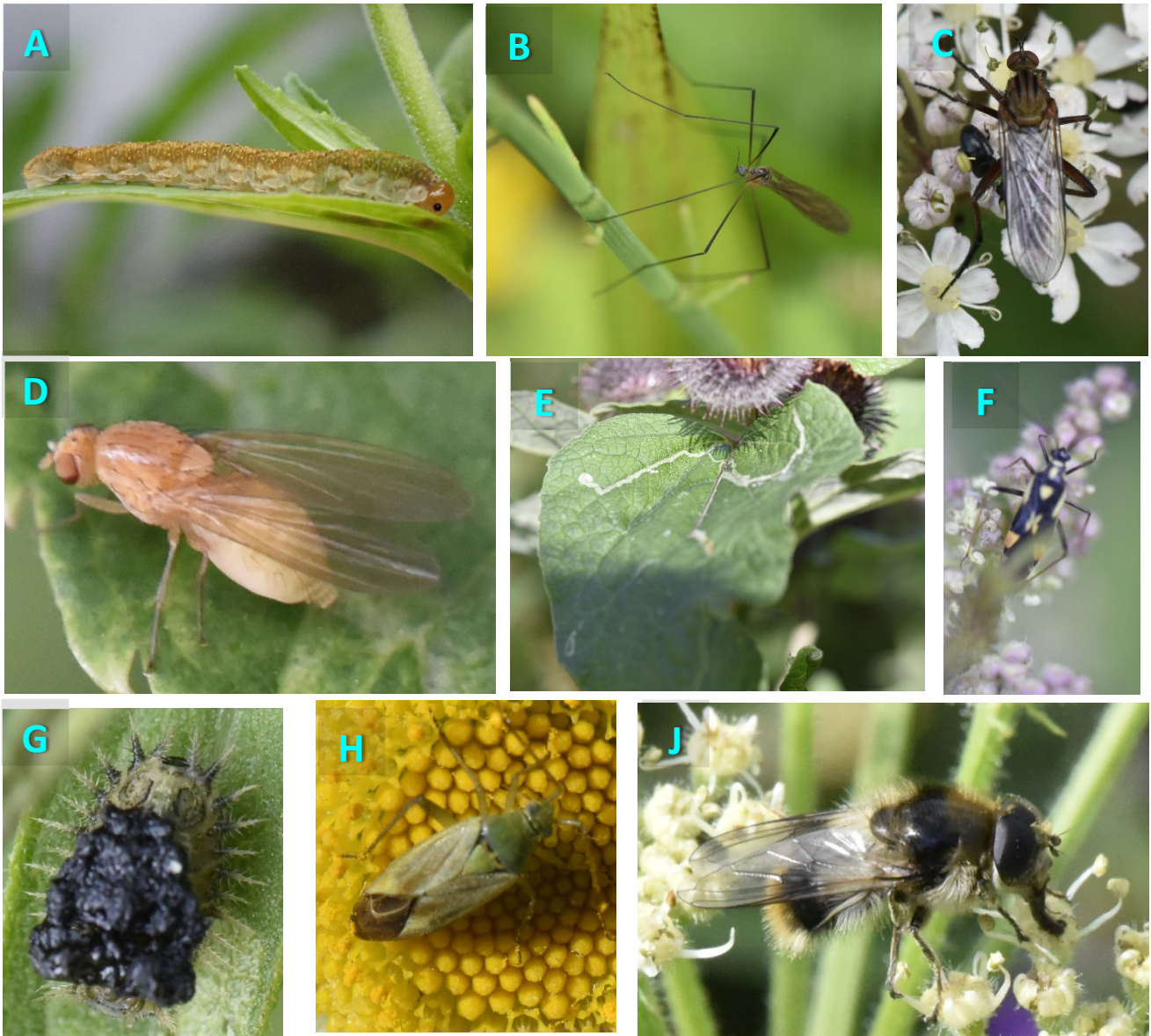
**Mammals, amphibians and fish:** Single **Rabbits** (1st and 12th), **Roe Deer** (1st, 11th and 12th) and **Grey Squirrels** (31st), all seen by Paul Williams, were July's only mammal records.

**Invertebrates ('minibeasts'):** 64 different invertebrate species were recorded and identified at the Loch during July, more than June's unusually low figure but still less than May's total of 83. As always, a few remain unidentified. Six of them were new Loch records (NLRs).

Six **butterfly** species were recorded during July: **Green-veined White** (17th), **Small White** (5 dates), **Speckled Wood** (4 dates), **Ringlet** (six dates), **Meadow Brown** (7 dates, first seen on 5th) and **Red Admiral** (two on 12th, Paul Williams; one each seen on 15th by myself and 31st by PW). Four **moths** were seen during July: a **Nettle-tap** on Ox-eye Daisy (5th), a **Yellow Shell** on 12th, the striking, yellow-and-black caterpillars of the **Cinnabar Moth** (29th, on Ragwort, their food-plant), and the larval leaf-mine of **Golden Pigmy** on bramble (30th). The very dark caddis-fly **Athripsodes aterrimus** was recorded for the second year running on 21st.

Ten species of Hymenoptera were seen in July. One of them was a NLR: this was the larva of a sawfly that is most likely to be **Tenthredo livida**; this was found on a plant near the hide on 23rd by Paul Williams. I am indebted to Paul for getting in touch with a sawfly expert at the Natural History Museum in London, who suggested that it was likely to be this or another species with a very similar larva, **Tenthredo colon**. Both have similar food-plant preferences but the NBN Atlas (2024a, 2024b) shows that although both species have been found in Fife, *T. livida* is much the commoner of the two. The most frequently seen **bees** were **Buff-tailed Bumblebee** and **Large Red-tailed Bumblebee** (seven dates each) and **Common Carder Bee** (six occasions) while there were four sightings of **Honey Bee**, two records each of **Early Bumblebee** and **White-tailed Bumblebees** and one of **Common Wasp** on 30th. **Burnet Rose Galls** (*Diplolepis spinosissima*) and the mine of **Alder Leaf-miner** (*Fenusa dohrnii*) were also found.

July was another poor month for **hoverfly** abundance although eight species were found compared with only four in June. These were **Humming Syrphus** (*Syrphus ribesii*) on several dates, **Bumblebee Blacklet** (*Cheilosia illustrata*) on 3rd, **Footballer** (*Helophilus pendulus*) on 5th, **Broad-banded Epistrophe** (*Epistrophe grossulariae*) and **Plain-faced Drone-fly** (*Eristalis arbustorum*) on 8th (PW), **Melanostoma scalare** on 12th, **Marmalade Hoverfly** (*Episyrphus balteatus*) on 29th and **Common Drone-fly** (*Eristalis tenax*) on 30th.



**Kinghorn Loch invertebrates, July 2024.** **A**, Larva of a sawfly provisionally identified as *Tenthredo livida*, 23rd, NLR. **B**, a cranefly, *Dicranorampha cf. adjunctum*, 15th, NLR. **C**, a dagger fly (*Empis livida*), 12th, NLR. **D**, *Meiosimiza rorida*, 22nd, NLR. **E**, mine of *Phytomyza lappae* on Wood Burdock (*Arctium nemorosum*), 30th, NLR. **F**, *Grypocoris stysi* on nettle, 12th. **G**, Larva of Thistle Tortoise Beetle (*Cassida rubiginosa*), 29th, NLR. **H**, Potato Capsid (*Closterotomus norwegicus*) on Ox-eye Daisy disc florets, 13th. **J**, Bumblebee Blacklet hoverfly (*Cheilosia illustrata*), 3rd. Photos: **A**, Paul Williams; **B-J**, Robert Mill.

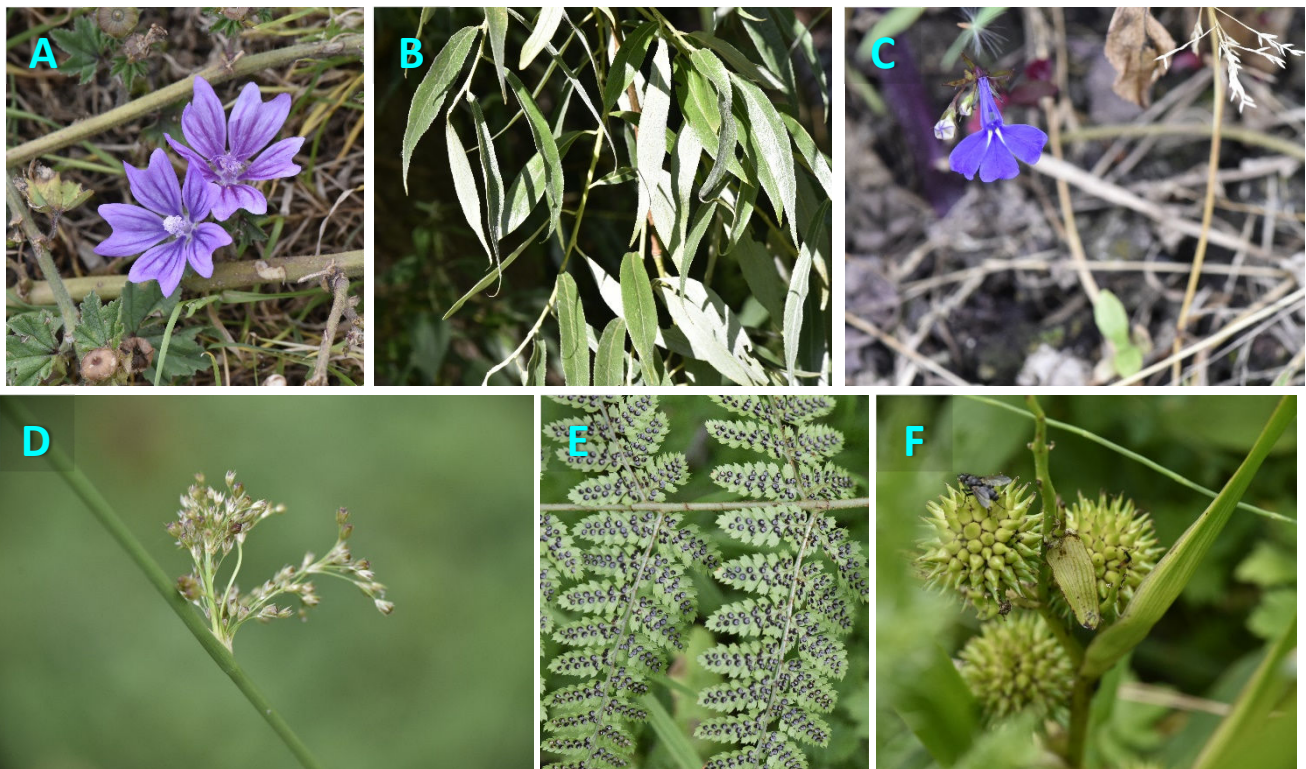
Nineteen other flies were also recorded; four of them were NLRs. These were *Dicranorampha cf. adjunctum* (15th), *Empis livida* on 12th, *Meiosimiza rorida* (22nd) and a leaf-miner on Burdock, *Phytomyza lappae*, on 30th. In addition, Paul Williams photographed **Broad Centurion** (*Chloromyia formosa*) on 8th, the second month running this species has been found after a six-year gap (see June's report). **Greenbottles** (*Lucilia sericata*) were seen on almost every visit, while **Bluebottle** (*Calliphora vicina*) was seen on 5th and the large midge *Chironomus plumosus* was recorded on 3rd and 29th. The leaf-mines of nine species, besides *Phytomyza lappae*, were also found, as well as the galls formed by the gall midges *Dasineura urticae* on nettle and *Hartigiola annulipes* on beech.

Five different species of bug were found. **Potato Capsids** (*Closterotomus norwegicus*) were seen on 5th, 12th, 5th, 17th and 29th, often being numerous on Ox-eye Daisy, where they sit in the middle of the yellow zone of disc florets in the centre of the flower-head. The striking black-and-yellow *Grypocoris stysi* was seen by PW on 9th and myself on 12th and **Common Sycamore Aphid** (*Drepanosiphium platanoidis*) on 12th and 15th. Finally, I found the leafhopper *Empoasca vitis* again on 29th in the same area as last month, and **Common Froghopper** 'spittle' until the 15th. Of the four beetles recorded during July, the very 'spiky' larva of **Thistle**

**Tortoise Beetle (*Cassida rubiginosa*)** was a NLR (29th). **Red Soldier Beetles (*Rhagonycha fulva*)** were almost ubiquitous all month, particularly on Hogweed umbels where mating pairs were often seen. **Pollen Beetles (*Brassicogethes aeneus*)** were also seen on five dates and 7-spot Ladybird once (12th). **Common Blue Damselflies** were seen on 11 occasions throughout the month, especially but by no means only near the Loch or ponds. **Blue-tailed Damselflies** were also seen by Paul Williams on 2nd and by myself on 3rd, 15th and 17th. Finally, I found a **Common Green Lacewing (*Chrysoperla carnea* agg.)** sheltering almost invisibly under a sycamore leaf on 5th.

All July's four identified **arachnids (spiders, mites etc.)** were gall-mites: ***Aceria cephalonea*** (21st) and ***Aceria pseudoplatani*** (5th) on Sycamore, ***Eriophyes exilis*** on Small-leaved Lime (5th, 17th) and ***Eriophyes laevis*** on Alder (8th, 15th, 30th). **Snails** found during the month included **Garden Snail** (5th), **Brown-lipped Snail** on 30th and the less frequently seen **White-lipped Snail** on 15th.

**Flowering plants and ferns:** 234 wild or naturalised flowering plant species were recorded around the Loch



**Kinghorn Loch flowering plants and ferns, July 2024.** **A**, Common Mallow (*Malva sylvestris*), 29th, NLR. **B**, White Willow (*Salix alba*), 30th, NLR. **C**, Garden Lobelia (*Lobelia erinus*), 21st in wild situation, NLR. **D**, Soft Rush (*Juncus effusus* var. *effusus*), 15th, NLR (of the variety). **E**, Broad Buckler Fern (*Dryopteris dilatata*), 15th. **F**, Branched Bur-reed (*Sparganium erectum*), 15th. Photos Robert Mill.

during July, of which 194 were in flower at some time during the month and the other 40 in a vegetative state, in bud, or with young or ripe fruits. Fifty-two cultivated plant species were also noted, of which 47 were in flower. There were six new Loch records, of which five were species and the sixth a variety. They were: **Oat (*Avena sativa*)** found on 17th along a field margin as one of two relics of previous cultivation (this year's crop in the field concerned being oilseed rape); **Garden Lobelia (*Lobelia erinus*)** found as a single plant in a 'wild' situation amongst various weeds on 21st; **Common Mallow (*Malva sylvestris*)** on 29th, a species quite common in the village but previously unrecorded from the Loch and its surroundings; true **Watercress (*Nasturtium officinale*)**, found at the marsh on 30th (photos, p. 1); **White Willow (*Salix alba*)**, also found on 30th and which I have obviously overlooked on many occasions; and the typical loose-headed variety of **Soft Rush, *Juncus effusus* var. *effusus***, which was located for the first time at the marsh on 15th (the other variety, var. *subglomeratus* with compact flower-heads, was previously known and seems to be by far the commoner at the marsh). Finding the **Watercress** plants in the marsh was particularly exciting. When George West conducted his survey of the Kinghorn Loch marsh's flora in 1905 (West, 1910), he did not list any watercress

among the plants he found there. Indeed, he said it was uncommon and, of all the Fife lochs he studied, he only found it at Lindores Loch, Camilla Loch and what he called ‘Burntisland Reservoir’, which is now Cullaloe Local Nature Reserve. When I first started recording the biodiversity of the Loch and marsh in 2021, the Pond, as well as the outflow from Craigenalt mill race, were choked with a tall, lanky vigorous sterile hybrid, *Nasturtium* × *sterile* (Hybrid Watercress). This was eradicated from the Pond when it was renovated by TEC in 2022; it also seems to have gone from the mill race area. However, on 30th I was surprised to find watercress plants growing elsewhere in the marsh that were totally different in ecology and behaviour. These were much smaller, were coexisting happily with Water Mint, Lesser Water-parsnip and other marsh plants (rather than dominating everything) and were producing seed pods that, although not yet ripe, were fattening and clearly going to produce viable seed. When this seed is set, the plants’ identity will have to be verified but in the meantime I am regarding them as true Watercress (*Nasturtium officinale*) rather than the closely allied and similar Narrow-fruited Watercress (*Nasturtium microphyllum*). As well as differences in seed pods and seeds, these two species have different ecological preferences, with true Watercress being much the commoner species in basic (calcareous) habitats like the Kinghorn Loch marsh.



**More Kinghorn Loch flowering plants, July 2024.** **A**, Common Twayblade (*Neottia ovata*), 15th. **B**, Plicate Sweet-grass (*Glyceria notata*), 15th, first Loch record since 2014. **C**, Common Figwort (*Scrophularia nodosa*), 15th, second Loch record. Photos Robert Mill.

As well as these new records, I found **Rough Chervil** (*Chaerophyllum temulentum*), one of last month’s NLRs, at several additional locations around the Loch during July, confirming my suspicion that I had previously overlooked it. On 3rd, I found a third location for **Smaller Cat’s-tail** (*Phleum bertolonii*), this time in the eastern monad, NT2687. During another visit to the marsh on 15th, I also found a second site for **Common Figwort** (*Scrophularia nodosa*) which I had found previously only by the track to Rodan Braes, as well as **Plicate Sweet-grass** (*Glyceria notata*), the first record of this marsh grass since 2014.

First-flowering dates at the Loch noted for selected flowering-plant species in July 2024, with 2023 dates in parentheses, were: **Common Water-plantain**, 3rd (13th); **Lesser Water-parsnip**, **Great Willowherb** and **Marsh Woundwort**, 8th (13th); **Harebell** and **Garden Privet**, 12th (5th); **Tansy**, 21st (13th); **Teasel**, 29th (22nd); **Wood Burdock**, 30th (22nd); and **Mugwort**, 30th (18th). Generally, plants of wetland habitats came into flower 5-10 days earlier than last year whereas plants of roadsides and grassy places such as Teasel, Burdock and Tansy were a week or more later. In the case of Tansy in particular this seems to be a longer trend: its first flowering dates since I started recording in 2021 have been (all July): 2021, 9th; 2022, 4th; 2023, 13th and this year 21st, no doubt having consequences for the various insects and other biodiversity that depend on it for food or nectar.

**Cryptogams** Thirty fungi were recorded during July, three times as many as in June, reflecting the increase of mildews and other pathogens as summer progressed. Indeed, almost half July’s fungal records (14 out of 30) were of mildews, as were all three of the month’s fungal NLRs. These were *Golovinomyces asperifoliorum* on Russian Comfrey (*Symphytum* × *uplandicum*) on 15th, *Erysiphe penicillata* on Alder (21st) and *Erysiphe symphoricarpi* forming a mild infection on Snowberry (*Symphoricarpos albus*) on 30th. (This was the second



**New fungal records, Kinghorn Loch, July 2024. Left:** *Erysiphe penicillata* on Alder, 19th. **Right:** *Erysiphe symphoricarpi* on Snowberry, 30th. Photos Robert Mill.

occasion in July that I had found this mildew – see p. 10 for the other and some additional information). The other 11 mildews had all been recorded previously, as had the four rusts, five white moulds, one smut and six other leaf spots that were recorded. Seven lichens, three bryophytes and two terrestrial algae were also noted.

## VILLAGE, BEACH AND COAST

My wife Andrea, who visits Kinghorn beach regularly for dog-walking and swimming, drew my attention to a **new whale and dolphin sightings board** that has been put up near the viewpoint in front of the Harbour View Café. She photographed it on Wednesday 14 August; as you can see, it gives a summary of what was seen in July, plus the most recent two days' sightings. July's summary was: **Fin Whale**, two on 1 day; **Humpback Whale** seen on 2 days; **Minke Whale**, 16 days; **Bottle-nosed Dolphin**, 13 days; **Harbour Porpoise**, 17 days. It shows what a hot-spot for whales and dolphins the Kinghorn/Pettycur area is. Sightings according to this useful new board are far more numerous than indicated on websites like the Whaletrack sightings map by Hebridean Whale and Dolphin Trust (<https://whaletrack.hwdt.org/sightings-map/>). Filtering this map for all species for July 2024 yields 'only' 13 records, one being from Burntisland, compared with the 49 summarised on the board. Two species on the board (Humpback and Fin Whales) aren't included in Whaletrack's July Kinghorn records at all; conversely, that website does give a record of eight **Common Dolphins** on 18 July that is not on the board, unless it was one of the three sightings of 'unidentified whale/dolphin'.



Bird and land mammal sightings around Kinghorn during July were mainly by Paul Williams (PW), with additional ones by myself and various people on eBird. As in June, there were no bird sightings made in our area during June by the Fife recorder, Graham Sparshott.

Three **Shelducks** were at Pettycur on 27th (Paolo Man & Elan Zucchetti, eBird). **Eiders** were once again numerous all along the coast but as in June there were few **sea ducks** offshore. No **Common Scoters** were seen during July but Paul Williams saw three rather unseasonal **Goldeneyes** off the coastal path between Kinghorn and Seafield Tower on 20th. He noted **Goosanders** there on 1st, 20th and 31st, as well as 60 off Seafield on 11th. Meanwhile, Francesca Bouaoun (eBird) saw 15 **Red-breasted Mergansers** in Kinghorn Bay on 10th. These were all the duck records for July. I heard a **Stock Dove** singing in the grounds of Grangehill House on 22nd. **Waders** began to return from their Arctic breeding grounds as 'autumn' passage began. Therefore, as well as the more-or-less resident **Oystercatchers** and **Curlews**, **Ringed Plovers**, **Redshanks** and **Turnstones** (all from 5th), **Bar-tailed Godwits** (from 20th) and even three **Sanderling** (31st) had been seen by PW at Seafield by the end of the month. **Gulls** also began to come back from breeding grounds: at least four **Kittiwakes** were at Seafield on 10th; **Black-headed Gull** numbers built up, the highest counts being 23 at Kinghorn on 10th (Francesca Bouaoun) and 50 at Pettycur on 27th (Paolo Man and Elan Zucchetti); and small numbers of **Common Gulls** were seen off Seafield, Pettycur and elsewhere by various observers including myself. **Sandwich Terns** were often seen off the coastal path, Kinghorn and Pettycur by various observers, with over 80 off Seafield on 20th (PW). Smaller numbers of **Common Terns** were also seen by myself off the coast path near Kinghorn (25th), at Seafield on 1st, 20th and 31st (PW) and at Pettycur on 17th (Jon Penman, eBird). Two **Arctic Skuas** were also seen in Kinghorn Bay on 8th by Simon Pinder, heralding the start of the

late summer ‘skua season’ on the Forth Estuary that tends to peak towards the end of August. **Guillemots** (4 at Kinghorn, 10th, Francesca Bouaoun; Seafield, 20th, PW) but not **Razorbills** were seen. However, the most frequently recorded **auk** species in July, just as it was in June, was **Puffin** which was recorded on four dates and at four locations; the highest count was five at Pettycur on 27th (Paolo Man & Elan Zucchetti). Nine **Fulmars** were still at Kinghorn on 10th (Francesca Bouaoun) but they had vacated the cliff when I visited it on 23rd. On 8th, Simon Pinder noted 23 **Manx Shearwaters** off Kinghorn, most of them heading east but five going west. **Gannets**, **Cormorants** and **Shags** were all frequently seen all along the coast, the highest counts being 50 Gannets and 12 Cormorants on 10th at Kinghorn (Francesca Bouaoun) and 40 Shags at Pettycur on 27th by Paolo Man and his companion. Stephen Sorbie of Kinghorn & District Wildlife Group (KDWG) sadly found a dead **Tawny Owl** at Grangehill on 8th. Another sign that summer is changing to autumn was the first sighting for a few months of a **Kingfisher** on the beach at Seafield on 24th (PW). The **Raven** that PW saw flying along the south edge of the Loch on 30th continued east towards the Burnside Pond. Most summer migrants such as swallows, martins and warblers remained all month but there were no records of **Grasshopper Warbler** except 1st at East Braes and the last record of **Sedge Warbler** was at Seafield on 11th, while **Lesser Whitethroat** was not recorded at all. However, I still remember being taught at university that ‘*absence of evidence is not evidence of absence*’ and it could be that the birds were still present but just not making themselves known by singing to protect their territory, now that the breeding season is almost over. **Pied Wagtails** were on the beaches at Seafield and Pettycur on various dates, while **Meadow Pipits** were at Seafield on 5th and Grangehill on 23rd (both PW). **Linnets** were frequently seen, especially at Grangehill where there was a flock of 54 on 12th (PW). Paul Williams noted **Reed Buntings** along both the Kinghorn—Seafield Tower and Seafield Tower—Seafield sections of the coastal path, and also **Yellowhammers** on 1st and 8th along the former stretch. I also saw a Yellowhammer at Mid Mire on 19th. In contrast to all the marine cetaceans, there were no noteworthy **land mammal** sightings in the Kinghorn area during July.



**Kinghorn area invertebrates, July 2024.** **A**, Black Carrion Beetle (*Phosphuga atrata*), coastal path between Seafield Tower and Seafield, 12th. **B**, Six-spot Burnet moth (*Zygaena filipendulae*), Pettycur, 27th. **C**, Pied Hoverfly (*Scaeva pyrastris*) on Field Scabious, Golf course track, 22nd. **D**, Blue Jellyfish (*Cyanistes lamarckii*), Kinghorn Beach, 31st. Photos: **A**, Paul Williams, **B-D**, Robert Mill.

July’s six **butterfly** species were pretty unremarkable: **Meadow Browns** and **Ringlets** along the coastal path and at Pettycur, with the former also seen by me at Grangehill on 22nd and the latter on 19th at Mid Mire; **Small Whites** along the coast path and Mid Mire, where I also saw a **Green-veined White** on 17th; a **Speckled Wood** by the coastal path on 8th; and finally two records of **Red Admiral** there on 1st and 8th (both PW). The only **day-flying moth** record was a **Six-spot Burnet** that I saw at Pettycur on 27th. The most notable of July’s other insect records was a **Black Carrion Beetle** that Paul Williams found under a dead Eider duck on the coastal path about halfway between Seafield Tower and Seafield breakwater on 12th. This seems to be the first record of this beetle from the Seafield area and only the third record from the whole of 10-km grid square NT28; the only others are both from the Burntisland area (NBN Atlas, 2024c). At Pettycur on 27th at low tide, I found a **Sea Urchin** attached to a rock, as well as both **Blue Jellyfish** and **Moon (Common) Jellyfish** washed up; the same two jellyfish species were also found at Kinghorn Beach on 31st.

At Mid Mire on 19th, **Stinking Iris (*Iris foetidissima*)** was again in flower at its shaded location although I didn't spot either of the plants further along the track that I found in flower last year. This may have been because I was spending most of my time looking in the other direction, trying to re-find any of last year's **Scarlet Pimpernel (*Lysimachia arvensis*)** plants along the field margin. I wasn't holding out much hope because towards the end of last year the field had been ploughed right up to the very edge. However, I did find a few, but much less than last year and the biggest amount, near one of the corners of the field, seemed to have disappeared completely along with a few plants of **Bugloss (*Lycopsis arvensis*)** that had also been there in 2023. On the plus side I did find two different species of brome-grass, **Barren Brome (*Anisantha sterilis*)** and **Soft Brome (*Bromus hordeaceus*)** as well as **Corn (or Wall) Speedwell (*Veronica arvensis*)**.



Plants of field margins and disturbed ground around Kinghorn, July 2024. **A**, Field Madder (*Sherardia arvensis*), Golf course track, 22nd. **B**, Goat's-beard (*Tragopogon pratensis*), Grangehill, 22nd. **C**, Silver Hair-grass (*Aira caryophyllaea*), Golf course track, 22nd. **D**, Soft Brome (*Bromus hordeaceus*), Mid Mire, 19th. **E**, Barren Brome (*Anisantha sterilis*), Mid Mire, 19th. **F**, Corn Speedwell (*Veronica arvensis*), Mid Mire, 19th. Photos Robert Mill.

Along the track across the golf course on 22nd, I found yet more **Smaller Cat's-tail (*Phleum bertolonii*)**. On disturbed ground by the track, I discovered a plant that was completely new to me – **Field Madder (*Sherardia arvensis*)**. This is a declining species in Scotland and as such is on the Scottish Biodiversity List. It was found with two other now uncommon cornfield 'weeds', **Scarlet Pimpernel** (seen also at Mid Mire) and **Bugloss (*Lycopsis arvensis*)**. **Wild Mignonette (*Reseda lutea*)** was also there, the first time I've found this species locally other than on the cliffs below, which I did a few days later on 27th. Elsewhere on 22nd, north of Grangehill, I found another two plants I don't see that often these days: **Red Bartsia (*Odontites vernus*)** and **Goat's-beard (*Tragopogon pratensis*)**.

Along the coastal path on 25th, I was delighted to find another clump of **Hare's-foot Clover (*Trifolium arvense*)** a little closer to Kinghorn than the plants I found last year. Growing with it in both spots was **Silver Hair-grass (*Aira caryophyllaea*)**. A few plants of **Thrift** were still flowering, both along the coast path on 25th and at Pettycur on 27th, but most were now in fruit. **Summer Snowflake (*Leucojum aestivum*)** was setting seed near the beach below Linton Court (25th). **Sea Campion (*Silene uniflora*)** was also still flowering at Pettycur on 27th, as were many plants of wild **Goldenrod (*Solidago virgaurea*)**.





**Coastal and village plants in and near Kinghorn, July 2024.** **A & B**, Hare's-foot Clover (*Trifolium arvense*), coastal path, 25th: **A**, original location found last year; **B**, with Silver Hair-grass (*Aira caryophylllea*) at newly found site. **C**, Sea Rocket (*Cakile maritima*), Pettycur, 27th. **D**, fruits of Summer Snowflake (*Leucojum aestivum*), coastal path, 25th. **E & F**, Frosted Orache (*Atriplex laciniata*), coastal path, 25th (also found at harbour, 24th). **G**, Grass-leaved Orache (*Atriplex littoralis*), harbour, 24th. **H**, Field Marigold (*Calendula arvensis*), village, 23rd. **J**, Pot Marigold (*Calendula officinalis*), village, 23rd. **K**, Procumbent Yellow-sorrel (*Oxalis corniculata*), churchyard, 24th. **L**, Creeping Cinquefoil (*Potentilla reptans*), churchyard, 24th. **M & N**, Common Mallow (*Malva sylvestris*): **M**, typical erect form with flower and fruit, harbour, 24th; **N**, robust prostrate form, churchyard, 24th. **O**, Goldenrod (*Solidago virgaurea*), Pettycur, 27th. **P**, White Stonecrop (*Sedum album*), Doo Dell, 24th. Photos Robert Mill.

In the village on 23rd, I found two different types of marigold, **Field Marigold** (*Calendula arvensis*) and **Pot Marigold** (*Calendula officinalis*) by walls within a few feet of each other. **Common Scurvy-grass** (*Cochlearia officinalis*) was still in flower by Kinghorn harbour (24th). The same day I found numerous plants of interest in the churchyard of the Kirk by the Sea, of which probably the most noteworthy was a large patch of **Creeping Cinquefoil** (*Potentilla reptans*); **Procumbent Yellow-sorrel** (*Oxalis corniculata*) and a very robust, prostrate form of **Common Mallow** (*Malva sylvestris*) were also found there.

Two species of liverwort were found in the village during July. The first was the **Common Liverwort** (*Marchantia polymorpha*) which was first found reproducing both sexually (although I only located female plants) and asexually near the Mill Burn on 23rd, and then the next day reproducing mostly asexually but again with a few female organs beside the Town Hall. The second (not shown) was **Crescent-cup Liverwort** (*Lunularia cruciata*), found on 23rd. At least eleven different **fungi** were found in the Kinghorn area in July. As



**Cryptogams around Kinghorn, July 2024. A & B**, Common Liverwort (*Marchantia polymorpha*): **A**, star-shaped female structures, 23rd; **B**, gemmae cups (asexual structures), 24th. **C**, Snowberry (*Symphoricarpos albus*), severely infected with the powdery mildew *Erysiphe symphoricarpi*, Grangehill, 27th. Photos Robert Mill.

at the Loch, all of them were mildews, rusts, white moulds and other leaf spots. The most notable was a very severe infection of Snowberry bushes outside Grangehill House by the mildew *Erysiphe symphoricarpi* on 22nd. There are only 46 records in NBN Atlas (2024d), none of them from Fife (the closest is the Craiglockhart area of Edinburgh). As noted above, I found a much lighter infection by the same mildew on Snowberry at the Loch on 30th. These could well be the first two Fife records of this mildew.

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