

## KINGHORN BIODIVERSITY MONTHLY REPORT - JUNE 2022 *by Robert Mill*



Brooklime (*Veronica beccabunga*) by the Loch, 16 June 2022. First record since 1997. Photo Robert Mill.

Although my recollection is that locally we had some pretty chilly winds in June, the official Met Office data (Met Office, 2022) record that June was actually warmer than the long-term (1991-2020) average, especially along the east coasts of both Scotland and England. However, the very high temperatures experienced in some areas of England, where 30°C was exceeded, did not reach Scotland. So far this year, every month has been warmer than the long-term average. Eastern Scotland was also much drier than average, with our area (and the rest of the southern and eastern Fife coast) receiving less than half the normal rainfall, while it was also slightly sunnier than average.

Another 22 species were added to the Loch list during June: 1 bird, 1 butterfly, 1 moth, 1 bee, 2 sawflies, 1 hoverfly and 2 other flies, 1 aphid, 1 gall mite, 10 flowering plants and 1 powdery mildew. This meant that the cumulative Loch total increased from 1,328 on 31 May to **1,350** on 30 June. 'New Loch record' is abbreviated NLR, especially in photo captions.

### **AROUND THE LOCH**

**Birds:** Fifty-seven bird species were recorded at or around Kinghorn Loch during June. These included one NLR: a pair of **Garganey** recorded by both Nigel Voaden and Andy Pay on 1st – a great start to the month, even if they did not stay. Garganey are Britain's only summer-migrant duck species, so, contrary to what I wrote last month, spring/summer migrants did continue to arrive during June. A flock of **Pochard** was present between 8th and 11th – numbers varied from 10 to 14, always with only a single female, the others being drakes. Other **ducks** included a **Shelduck** on 14th (Francesca Bouaoun, eBird website), as well as up to four **Tufted Duck** throughout June; these accompanied the Pochards mid-month. Small numbers of **House Martins** (two or three) were recorded on three dates (10th, Paul Williams; 14th, Francesca Bouaoun; 28th, Andy Pay), with **Sand Martins** seen on 3rd (6, Francesca Bouaoun), 14th (Francesca) and 28th (Andy) and **Swallows** present throughout June (on 28th, Andy found a Swallow's nest with eggs in one of the mill buildings but suspected it might have been deserted). However, **Swifts** were only recorded on 10th, when two were seen by Paul Williams. Once again, **Sedge Warbler** was not reported at the Loch by anyone during June but the other **warblers** all continued to sing. A **Common Sandpiper** was perched on the edge of the jetty on 24th (Tim Nicholson, KDWG) – at least the second record this year. One pair of **Great Crested Grebes** was present all month and nested on a raft also shared by a nesting pair of **Mute Swans**. This pair of grebes raised two chicks. A second pair of Great Crested Grebes was also present for a short while, between 8th and 11th at least (Paul Williams), after which they disappeared. However, **Dabchicks**, which were absent during the spring

months, unexpectedly returned near the end of June, with a pair recorded on 24th (Fraser Nicol, TEC) and at least one was seen on 30th by myself. **Raptor** records included single **Buzzards** on 3rd (Francesca Bouaoun) and 21st (Paul Williams), and **Kestrel** on 10th, 11th and 21st (all Paul Williams). **Yellowhammers** were recorded by Francesca Bouaoun on 3rd and by Paul Williams on 10th and 21st. The full list of birds recorded at the Loch during June 2022 is: *Barn Swallow, Blackbird, Blackcap, Blue Tit, Bullfinch, Buzzard, Carrion Crow, Chaffinch, Chiffchaff, Coal Tit, Collared Dove, Common Kestrel, Common Magpie, Common Pheasant (Ring-necked), Common Sandpiper, Common Starling, Common Whitethroat, Coot, Dunnock, Farmyard / hybrid geese, Feral Pigeon, Garganey (NLR), Goldcrest, Goldfinch, Great Black-backed Gull, Great Crested Grebe, Great Tit, Greenfinch, Grey Heron, Grey Wagtail, Greylag Goose, Herring Gull, House Martin, House Sparrow, Jackdaw (Eurasian), Lesser Black-backed Gull, Little Grebe (Dabchick), Long-tailed Tit, Mallard, Moorhen, Mute Swan, Pied Wagtail, Pochard, Robin, Rook, Sand Martin, Shelduck, Siskin, Skylark, Song Thrush, Swift, Tree Sparrow, Tufted Duck, Willow Warbler, Wood Pigeon, Wren, Yellowhammer.*

**Mammals and amphibians:** No **amphibians** were reported at the Loch during June, while the only definite **mammal** records were of **Brown Hare** on 11th and 21st (both by Paul Williams). A rodent nest found while renovating the Pond area at the west end has not been identified but water vole has been more-or-less ruled out.

**Invertebrates ('minibeasts'):**



**New and other invertebrate records, Kinghorn Loch area, June 2022.** **A**, Dark Green Fritillary (*Speleia aglaja*), 16th, NLR: a distant shot of the butterfly (arrowed) resting sideways on Ragged Robin (enlargement, inset). **B**, Fork-tailed Flower-bee (*Anthophora furcata*), 13th, NLR. **C**, Female of hoverfly *Meliscaeva auricollis*, 30th. **D-F**, Common Blue Damselfly (*Enallagma cyathigerum*): **D**, male, 23rd; **E**, female, 24th; **F**, mating pair (male above female whose body is bent backwards), 30th. **G**, Common Sycamore Aphid (*Drepanosiphium platanoidis*), 22nd, NLR. **H & J**, Two sawfly mines on birch leaves, 30th, both NLRs: **H**, *Fenusella nana*; **J**, *Scolioneura vicina*. Photos: **B**, Andy Pay; all others, Robert Mill.

June was a much better month for invertebrate records than May. Among several NLRs, the month's insect highlight must surely be a beautiful **Dark Green Fritillary butterfly** seen by myself at the marsh on 23rd. Although I did see it briefly at quite close range, it flew fast and scarcely settled on anything for more than a couple of seconds so I was only able to manage a very poor, very distant photo. Whenever it did settle, it tended to be on flowers of **Ragged Robin**, even though its larval food plant (as with some other fritillary species) is violets. Other **butterflies** recorded were **Speckled Wood** (4th, 6th, 13th and 24th), **Orange Tip** (8th, 14th), and both **Small White** and **Peacock** on 4th. There was no moth trapping,

but adult moths of **Triple-barred Argent** (4th) and **Nettle-tap** (23rd and 30th) were seen, as well as the leaf mines of **Sycamore Midget** (30th) and **Beech Pigmy** (30th, NLR). **Fork-tailed Flower Bee** (*Anthophora furcata*), found by Andy Pay on the Rodan Braes on 13th, was a new record for the Loch area, as were the leaf mines of two sawflies, *Fenusella nana* and *Scolioneura vicina*, on birch leaves by the Loch-side on 30th. **Large Red-tailed Bumblebees** were noted for the first time this year on 4th and the other common **bees** were also all recorded, as well as **Tree Wasp** (16th, Elaine O'Rourke, KDWG). Elaine also photographed a **Ruby-tailed Wasp** species, possibly *Chrysis ruddii* for which there is a 2007 Loch record, on 19th (KDWG). Twelve different **hoverfly** species were seen, eleven of them on the Rodan Braes by Andy Pay on 25th. One of these, an unidentified species of the genus *Parhelophilus*, was a new Loch record regardless of whichever species it was. I also saw some of Andy's species around the Loch during the month, as well as a female *Meliscaeva auricollis* on 30th. The leaf mine of *Phytomyza cirsii* on thistle was a new Loch record, as was a small fly with a dazzlingly iridescent green thorax and abdomen, several of which were seen along the east shore of the Loch on 30th. These were most probably a species of *Microchrysa*, either **Green Gem** *M. flavicornis* or **Black-horned Gem** *M. polita* – the two species differ by the colour of their antennae (Green Gem has mainly yellow ones, Black-horned has black ones). The only new Loch record among **bugs** was **Common Sycamore Aphid** (*Drepanosiphium platanoidis*) on 22nd, which I had also found earlier in the month along the Burnside Path on 16th and therefore suspected it must occur at the Loch as well. **Common Froghopper** (*Philaenus spumarius*) 'cuckoo-spit' was evident all month on plant stems. A **Seven-spot Ladybird** larva was found on 16th, and the first **Red Soldier Beetles** (*Rhagonycha fulva*) of the year were seen on 30th. **Common Blue Damselflies** (*Enallagma cyathigerum*) were seen on several dates throughout the month, being particularly numerous at the marsh on 23rd and 24th. Finally, the galls of three **gall mites** were found during the month; one of these, *Aceria cephalonea* on sycamore leaves on 30th, was a new Loch record.

### Flowering plants and ferns



**New and other Loch plant records, June 2022.** **A**, Veitch's Ceanothus (*Ceanothus × veitchianus*), 4th, NLR. **B**, Garden Asparagus (*Asparagus officinalis*), 4th, NLR. **C**, Bloody Cranesbill (*Geranium sanguineum*), 30th, NLR. **D**, Common Fiddleneck (*Amsinckia micrantha*), 30th, NLR. **E**, Dame's Violet (*Hesperis matronalis*), 4th. **F**, Broad-leaved Everlasting Pea (*Lathyrus latifolius*), 16th. **G**, Welled Thistle (*Carduus crispus*), 16th, confirmation of 2018 BioBlitz record; inset top centre, lower leaf and winged stem. **H**, Bittersweet (*Solanum dulcamara*), 16th. Photos Robert Mill.

Three ferns (**Male Fern, Bracken, and Common Polypody**) were noted in May as well as **Field Horsetail** and **Water Horsetail**. 147 species of **flowering plant** were in flower around the Loch in June, together with another 17 that were obviously cultivated. Ten of the 147 were new Loch records. As in May, they were a mixture of truly wild, native species (**Field Rose, *Rosa arvensis*: 16th; Scentless Mayweed, *Tripleurospermum inodorum*, 16th and 24th** and presumably overlooked last year; **Lesser Stitchwort, *Stellaria graminea*, 23rd**), native species that however may have been planted (**Bloody Cranesbill, *Geranium sanguineum*, on the bank beside the Craigencalt access road from 16th – very common as a truly wild plant along certain stretches of the coastal path; Greater Spearwort, *Ranunculus lingua*, at the dipping pond with its smaller relative Lesser Spearwort on 30th**), casuals and aliens (**Common Fiddleneck, *Amsinckia micrantha*, 30th**) and cultivated plants growing in ‘wild’ situations or that I was assured were not deliberately planted (**Wheat, *Triticum aestivum* from 16th; Rock Stonecrop, *Petrosedum forsterianum* on the jetty wall from 16th; Veitch’s Ceanothus (*Ceanothus × veitchianus*) well-hidden behind the car park from 4th; Garden Asparagus *Asparagus officinalis* at the edge of a precipice near the farm on 4th**). As well as all these NLRs, there was one other important re-discovery during June: **Brooklime (*Veronica beccabunga*)** was found flowering by the southeast shore of the Loch on 16th. This was one of the species that George West noted at the marsh during his survey in 1905. It has not recently been found there although TEC plans to re-introduce it as part of its efforts to re-instate or increase species that have disappeared or markedly declined there over the past 120 years or so. The most recent record of Brooklime at the Loch is one in the National Biodiversity Network database dating back to 1997, so my re-discovery of it would appear to be the first record this century. **Wetted Thistle (*Carduus crispus*)**, flowering from at least 16th, was a confirmation of a 2018 BioBlitz record. Other plants noted flowering for the first time in June 2022 were **Broad-leaved Everlasting Pea (*Lathyrus latifolius*)**, **Woody Nightshade (*Solanum dulcamara*)**, **Ragwort (*Jacobaea vulgaris*, formerly *Senecio jacobaea*)**, **Ragged Robin (*Silene flos-cuculi*)**, **Lesser Spearwort (*Ranunculus flammula*)**, **Smooth Hawksbeard (*Crepis capillaris*)**, **Yarrow (*Achillea millefolium*)**, **Perennial Rye-grass (*Lolium perenne*)**, **Hedge Woundwort (*Stachys sylvatica*)**, **Biting Stonecrop (*Sedum acre*)**, **Feverfew (*Tanacetum parthenium*)** and **Hybrid Watercress (*Rorippa × sterilis*)** from 16th, **Lady’s Bedstraw (*Galium verum*)** and **Hedge Bedstraw (*Galium mollugo*)**, **Wild Carrot (*Daucus carota*)**, **Dwarf Mallow (*Malva neglecta*)**, **Meadow Vetchling (*Lathyrus pratensis*)**, **Tufted Vetch (*Vicia cracca*)** and **Northern Marsh Orchid (*Dactylorhiza purpurella*)** from 23rd, and **Red Clover (*Trifolium pratense*)**, **Rest-harrow (*Ononis repens*)**, **Bladder Campion (*Silene vulgaris*)**, **Meadowsweet (*Filipendula ulmaria*)**, **Field Scabious (*Knautia arvensis*)** and **Agrimony (*Agrimonia eupatoria*)** from 30th.

### **Cryptogams**

Few cryptogams were recorded during June, although mildews, rusts and other pathogenic fungi did begin to appear. Two **rusts** were found, including the very obvious orange galls of ***Phragmidium rosae-pimpinellifoliae*** on Burnet Rose, first found at the Loch by me last year. A mildew on thistle leaves is almost certainly another new Loch record beyond the 22 definite NLRs of June, but it could belong to any one of three species that require microscopic examination to identify. Another powdery mildew, on leaves of ***Persicaria amphibia*** (30th) and only noticed while looking at photographs, turned out to be ***Erysiphe polygoni***, a NLR, while **Rose Powdery Mildew (*Podosphaera pannosa*)** was found on the leaves of Japanese rose (*Rosa rugosa*) on the same day. **Campion Smut** was noticed in the flowers of Red Campion (4th) and the first signs of **tar spot (*Rhytisma acerinum*)** began appearing on sycamore leaves (4th). No **lichens** were recorded and ***Trentepohlia aurea*** was the only terrestrial alga record.



Corncockle (*Agrostemma githago*) by the new link to the Burnside Path, 30 June. Photo Robert Mill.

## VILLAGE, BEACHES AND COASTAL PATH

**Bottle-nosed Dolphins (*Tursiops truncatus*)** were off Kinghorn beach on 13th, 14th and 19th, and off Pettycur on 19th and 22nd (Bruce Meldrum; numerous photos posted by him on the Kinghorn Photos website).

The Fife bird recorder, Graham Sparshott, carried out further migration watches at East Braes (Kinghorn) during June; these are available at the Trektellen website (<https://www.trektellen.org>). They included 79 **Kittiwake** on 4th and 32 on 5th, a **Lesser Whitethroat** on 5th, one **Mediterranean Gull** on 18th, 24 **Puffins**, 30 **Goosander** and eight returning **Curlews** on 19th, 30 **Manx Shearwater** on 12th and 33 on 19th, 71 **Common Scoter** on 19th with fewer on other dates, a **Great Skua** on 25th, and a **Roseate**

**Tern** and 23 **Swifts** on 20th. Paul Williams recorded 51 species at Seafield during June, the most notable being a single **Grey Partridge** on 9th, a **Kestrel** on 6th, and two **Lesser Whitethroats** that day and one on 19th. **Ringed Plovers** seen by him there may well have been early returners at the start of autumn migration. Paul also saw a **Meadow Pipit** and **Reed Bunting** at Grangehill on 21st. On one of our own trips to Seafield, my wife and I saw two dead **Gannets** washed up on the beach (7th), no doubt casualties of the avian flu epidemic that is severely affecting seabird colonies along the east coasts of Scotland and England this year.



One of two dead Gannets (*Morus bassanus*) washed up on Seafield beach, 7th. Photo Robert Mill.



Hoverfly *Leucozona lucorum*, Grangehill, 2nd. Photo Andy Pay.

Insect records included the hoverfly ***Leucozona lucorum*** at Grangehill on 2nd (Andy Pay), my record of **Common Sycamore Aphid** from Burnside Path (16th), and many **Common Blue Damselflies** at the field designated as a planned eco-cemetery next to Kinghorn Loch (4th, Karen Thomas, KDWG). There was a very large **Lion's Mane Jellyfish (*Cyanea capitata*)** washed up on Kinghorn beach on 24th (Evelyn Ralston, Kinghorn Photos) while I found **Blue Jellyfishes (*Cyanea lamarckii*)** washed up on the beaches at both Pettycur (18th) and Seafield (21st), as well as at Burntisland during a rock-pooling event organised by The Ecology Centre on 22nd where we also found a **Beadlet Anemone** and various marine worms.

Potentially the most interesting **plant** record of the month was one of **Corncockle (*Agrostemma githago*)** seen and photographed by myself beside the newly constructed link path from Willow Crescent to the Burnside Path (30th; photo, top of this page). This used to be a common arable weed many years ago throughout Britain but it is now almost extinct as a native wild plant. However, it is commonly grown in gardens and used in 'wildflower mixes' because of the beauty of its flowers. The Burnside Path plant was growing amongst many other arable weeds that still grow in and alongside the adjoining Golf Course Field. Therefore, it's not certain whether the Corncockle has grown from old seed that has germinated from a soil bank that has been disturbed after many years as a result of the path construction, or whether it is part of a seed mix of arable weeds that has been sown as part of the path construction work. If the latter, it is the only Corncockle plant to have germinated along the whole length of the new path. Two other interesting finds in the same area, both on 2nd, were **Common Star-of-Bethlehem (*Ornithogalum umbellatum*)** near the top of the Donkey Field Path (the track that goes steeply downhill from just off Kilcruik Road to the east end of the Burnside Path), and **Common Fiddleneck** (later also found at the Loch on 16th: see p. 3) in Willow Crescent.



**Village and coastal plants, June 2022. A & B, Hemlock (*Conium maculatum*), 2nd. Note spotted stem and finely cut leaves in B. C, Common Star-of-Bethlehem (*Ornithogalum umbellatum*), 2nd. D & E, Cut-leaved Cranesbill (*Geranium dissectum*), 2nd; also found at Loch (4th). F, Fuchsia (*Fuchsia magellanica*), typical variety; compare with the pale pink var. *molinae* found on a village wall in May. G, Seaside Daisy (*Erigeron glaucus*), 9th. H, Escallonia (*Escallonia rubra*), 18th. Photos Robert Mill.**

On June 2nd I followed the 'Golf Course Field Path' around the perimeter of the field of the same name (so-called because it was once part of Kinghorn Golf Course), starting at its SE end opposite Burnside Road and following it adjoining the golf course to its SW corner and then heading northwards along the field's west to near the B923 and back along the Burnside Path. Plants found included both **Guelder-rose (*Viburnum opulus*)** and **Wayfaring-tree (*Viburnum lantana*)** in the southeastern part, and a variety of arable weeds round the perimeter. These included **Field Pansy (*Viola arvensis*)**, **Cut-leaved Cranesbill (*Geranium dissectum*)** and **Green Field Speedwell (*Veronica agrestis*)**. Near the B923 end of the path, there was a small patch of **Japanese Knotweed (*Reynoutria japonica*)** and a magnificent specimen bush of the typical, red-and-purple form of **Fuchsia (*Fuchsia magellanica*)** – compare the photo with last month's of var. *molinae* that I found growing out of a wall in the village on 19 May.

Around the village on 17 June I found numerous plants of **Hemlock (*Conium maculatum*)** at the bottom of the Donkey Field Path near its junction with the Burnside Path. This looks rather like ordinary (not Giant) Hogweed (= Cow Parsnip) but has the **leaves very finely dissected** and the **stem spotted with purple**. It is **highly poisonous to both people and pets**, and **CAN BE FATAL**, so **please stay safe and keep yourselves, your children and your pets away from the patch**. On the same day I continued on to explore the network of paths along the clifftops above Kinghorn Beach. There, in a tiny damp spot at the base of one of the cliffs above the path, I found more **Brooklime**, the day after I had re-discovered it at the Loch! Also flowering was a single plant of **Wild Clary (*Salvia verbenaca*)**, the first time I have found it in the village rather than at Pettycur. I visited Pettycur the following day (18th) and, by a track behind the dunes below Sandhills caravan park, found **Escallonia (*Escallonia rubra*)**, **Rose of Sharon (*Hypericum calycinum*)** and more **Wild Clary**. My last coastal trip of the month was a walk along the coastal path from Nethergate towards Seafield on 29th; **Wild Thyme (*Thymus drucei*)**, **Bloody Cranesbill (*Geranium sanguineum*)**, **Rest-harrow (*Ononis repens*)**, **Common Rock-rose (*Helianthemum nummularium*)**, **Agrimony (*Agrimonia eupatoria*)** and **Hemp Agrimony (*Eupatorium cannabinum*)** were all in flower.

## Reference

MET OFFICE (1 July 2022). June extends run of warm months. <https://blog.metoffice.gov.uk/2022/07/01/june-extends-run-of-warm-months/> accessed 19 July 2022.