

## **Bullfinch *Pyrrhula pyrrhula***

Bullfinch are resident in the UK and are found in woodland, scrub and orchards. They are sometimes seen in gardens especially those connected to a patch of thick scrub or woodland by thick hedgerows. UK bullfinches tend not to move more than a few kilometres during their lifetime and form strong, lasting pair bonds so they are often seen in pairs throughout the year. Adults feed on berries and seeds such as dock, nettle, ash, birch and bramble. They also eat buds in spring which has led to their persecution in the past. They nest in thick scrub, dense hedgerows and scrubby woodland 1-2 metres above ground. The nest is a loose structure of twigs, lichens and moss, lined with hair and fine roots. 4-5 eggs are laid in April/May, then incubated for 12-14 days by the female who is fed by the male during this time. When the eggs hatch both parents feed the chicks on insects. Young fledge at 12-18 days and the adults often have a second brood. In winter residents can be joined by the slightly larger relatives from northern Europe. Records for Bromley borough in 2017 were all from rural areas or near to parks which included areas of woodland and scrub. These included Lilly's Wood, the Cudham and Downe Valleys, Darrick Wood, Keston, Jubilee Country Park, Scadbury Park, adjacent to Walden Recreation Ground, near Crofton Woods/Parkfield Recreation Ground and in South Norwood Country Park. The bullfinch survey will continue and it is hoped there will be further records particularly from the Elmstead Woods/Sundridge Park area, Monks Orchard/Park Langley area and along the Rivers Ravensbourne and Cray.

### **Threats to bullfinch**

Loss of nesting sites: reduction of scrub & hedgerows, over-trimming of hedges, tidying up  
Reduction in insects for developing young.

Loss of seeds and berries due to loss of hedgerows, scrub and rough grassland adjacent to hedges  
Reduction in availability of 'weed' seeds due to herbicide use and 'tidying up' (again).

According to the British Trust for Ornithology breeding bullfinch numbers fell by more than 50% 1970- 2000 (BTO). UK numbers have been slowly improving, but there are few records for Bromley. Those received in 2017 are mainly from rural or semi-rural areas or adjacent to open spaces with hedgerows and scrub. Further records are needed, so surveying will continue in 2018, but some measures can be put in place.

### **Measures to help Bullfinch in Bromley**

- To increase nesting sites and improve numbers of seeds and insects for adult and young bullfinches, promote wild areas in your local park, school and sports grounds and garden, plant hedgerows of native species and maintain some areas of bramble scrub.
- Link wild areas via thick hedgerows.
- Decrease pesticide and herbicide use and encourage others to do the same.
- Feed birds in your garden.
- If you have a cat, keep it indoors between dusk and dawn and use a collar with a bell or ultrasonic device.

### **Small Tortoiseshell Butterfly (*Aglais urticae*)**

This is a widespread butterfly occurring in gardens as well as the wider countryside. The caterpillars feed in a communal silk nest and were previously a common site on nettle patches. Numbers had declined in recent years due to habitat loss, dry summers affecting nettle growth and by attack from the parasitic fly *Sturmia bella*. However, Small Tortoiseshell butterflies now appear to be increasing both nationally and locally so it has been decided not to ask for further records in 2018 but to ask instead for records of the majestic Purple Emperor Butterfly which was presumed extinct in Kent during the late 1980's but now seems to be making a slow comeback, with a number of recent records in the south of Bromley Borough. Any Purple Emperor records will be invaluable in the identification of new local breeding colonies so that we can protect and pro-actively manage these woodland sites.

It remains important to help Small Tortoiseshell butterfly to continue to recover its local population by allowing meadow plants to flower in parks and by providing suitable nectar plants including knapweed, scabious and marjoram and in more wild areas of gardens, parks and the wider countryside: ivy, bramble and thistles. If you look for patches of uncut nettles in sunny corners of parks, countryside and your garden you may be rewarded by this beautiful butterfly visiting to lay her eggs and her progeny may later delight you with a flash of orange, black and blue on a summer's day.

## **Hedgehog *Erinaceus europaeus***

Hedgehogs are solitary animals except when raising young. They are nocturnal and during spring, summer and autumn spend the daytime sleeping in nests of leaves, waking at dusk to hunt for soil invertebrates such as slugs, snails, **beetles**, **earwigs**, worms, **caterpillars**, **and millipedes**. They have poor eyesight, relying more on an acute sense of smell, touch and hearing and may travel over 2 kms/ night searching for food. They mate in April then the male leaves the female. She gives birth to 3-5 blind, pink young about month later in a special maternity nest of leaves and grass. The babies quickly develop soft white spines, open their eyes at about 14 days old and grow more brown spines. Their mother takes them out on their first foraging trip at about 4 weeks and continues to suckle them until they can hunt for themselves. By 6 weeks they should be independent and will leave the nest area. In winter (November-mid March) when less food is available, hedgehogs hibernate in a nest of dead leaves and grass beneath deep leaf litter in woodland or beneath hedgerows, scrub or even garden sheds. Their body temperature drops from about 35°C to 10°C or less, their heart rate slows from about 190 beats/minute to about 20 and their respiration rate to 1 breathe every few minutes. If they weigh less than 450gms (1lb) they will not survive hibernation, so if you find a small hedgehog in autumn advice should be sought from a local expert or the British Hedgehog Preservation Society at [www.britishhedgehogs.org.uk](http://www.britishhedgehogs.org.uk) An adult hedgehog has 5,000-7,000 spines. When threatened it raises its spines and rolls into a tight ball. If it isn't quick enough, a dog, fox or even a cat can grab its back legs and prevent it from rolling up properly. If they survive their first year they may live for another 4-5 years. Some individuals have been recorded as reaching 10 years. Since 2000 hedgehog populations in England have fallen by more than 50% in rural areas, 33% in urban areas (see 'The State of British Hedgehogs 2015' published by the People's Trust for Endangered Species).

### **Threats to Hedgehogs in London Borough of Bromley**

- Decline in invertebrate numbers and decline in foraging areas (rough grassland, hedgerows, scrub- within gardens foraging areas lost to paving & decking).
- Loss of habitat for nesting/hibernating- scrub, wild undisturbed areas.
- Habitat fragmentation –wider, faster and more roads and secure gardens with lack of access for hedgehogs.
- Pesticides- reducing insect prey and also accumulating in predators such as hedgehogs.
- Hazards such as ponds with straight sides, netting and litter-especially cans and cups with remains of food in them.
- Use of strimmers on long grass or scrub where they may be sleeping during the day.

In Bromley hedgehogs are now generally rarely recorded, but surveying has highlighted a few areas in the borough where records have been sent from several gardens. These recordings are generally near areas of open space, e.g. in Petts Wood near Crofton Woods and near Betts Park, Penge. All Bromley's records have been submitted to the London Wildlife Trust. Click on <http://www.wildlondon.org.uk/hedgehog> to see LWT's map of hedgehog sitings which will include those from Bromley. Bromley Biodiversity Partnership

will continue to ask for records during 2018. Where hedgehogs have been seen why not get together with your neighbours and follow guidance set out in Hedgehog Street – see [www.hedgehogstreet.org](http://www.hedgehogstreet.org) and click on, 'highways for hedgehogs'. There are many other tips for helping hedgehogs on both this site and the British Hedgehog Preservation Society website (see above).

General advice is set out below:

- Hedgehogs travel quite long distances when looking for food, often 2kms or more every night, so make sure walls and fences at site boundaries have safe gaps for hedgehogs to pass through. A gap measuring 13cms x 13cms beneath a fence should be sufficient to enable a hedgehog to pass from one garden to the next.
- Make sure you have areas within your garden, park, allotment, sports or school grounds that are undisturbed, with long grass and some scrub.
- Check long grass or scrubby areas for hedgehogs before cutting or strimming.
- Don't clear away all the dead leaves in autumn, leave some in a sheltered area out of the wind, preferably adjacent to a hedge or scrub where a hedgehog could hibernate undisturbed.
- If you have a bonfire, check any pile of brash etc. before burning it.
- Hedgehogs die in steep sided ponds because they can't get out. Make sure ponds have at least one gently sloping bank that a hedgehog can use to climb out. If the pond has steep concrete or plastic sides, add stones and/or water plants (preferably native) along one side to make a gradual slope.
- Consider planting a hedge of native species. This will support the invertebrates hedgehogs need and as the hedge matures, if it is well maintained, with a thick base, it will provide them with a home and a safe place to hibernate.
- Make sure no pesticides or slug pellets are used near any scrub, wild areas or hedgerows left for hedgehogs.
- Hedgehogs quite often become entangled with wire or plastic netting leading to severe cutting of their legs as they struggle to break free, so please ensure any wire or plastic netting is at a safe height for hedgehogs (30cms above soil level) or stored away when not in use.
- Consider making a hibernation box for hedgehogs. Place in a suitable place beneath logs and/or dead leaves for extra safety and insulation.
- If hedgehogs visit your garden provide them with some water to drink and maybe dog or cat food, but do not give them bread or milk because they cannot digest them.
- For further information on how to help hedgehogs visit [www.britishhedgehogs.org.uk](http://www.britishhedgehogs.org.uk)
- Please continue sending records to [bromleybiodiversity@gmail.com](mailto:bromleybiodiversity@gmail.com) or [sue.holland@idverde.co.uk](mailto:sue.holland@idverde.co.uk)

If you see a sick hedgehog (including one out during the day) please contact Mavis Righini at Prickles Hedgehog Haven on 0208 462 1168.

## **Stag Beetle *Lucanus cervus***

Adult stag beetles emerge from soil beneath dead wood from late May-July and can be seen flying erratically at dusk or sometimes grounded on pavements. They mate and the females lay eggs in soil adjacent to dead wood. Adults are occasionally seen apparently feeding on sap runs or soft fruit, but they are very short lived and die shortly after mating. Larvae hatch and burrow into dead wood which they eat, breaking it down and returning nutrients to the soil for 5-7 years until large enough to pupate. They then exit the dead wood, usually in April, and form a cocoon in which a pupa develops. This may be up to half metre below the soil surface. A beetle is finally formed after about 4 months. The young beetle remains in the soil over winter emerging to reproduce in late spring.

Stag Beetles are nationally scarce: their range has decreased since the 1970s so they are now mainly restricted to south & south-east of the UK. South and south-west London have important populations. They are declining in Europe & globally threatened.

43 records of stag beetles in the London Borough of Bromley were submitted to the Bromley Biodiversity Partnership Habitats and Species Sub-Group in 2017. They show a fairly wide distribution throughout the urban parts of the borough. The rural parts of the borough were less well represented but this may be due to several factors including lower numbers of recorders and the difficulties associated with seeing beetles flying in the dark in the countryside. In addition, quite large areas in the southern part of the borough have shallow, chalky soil which stag beetles generally avoid, possibly because in the cocoon stage and before leaving the soil as adults they tend to be found in quite deep soil.

London Wildlife Trust (LWT) have also been recording stag beetles so our records have gone to them and Greenspace Information for Greater London (GiGL) and in 2018 we will be asking Bromley residents to send records directly to LWT at <http://www.wildlondon.org.uk/stag-beetle-survey>

It remains important to look after Bromley's stag beetle population however and the following measures can help them maintain and hopefully improve numbers:

- Keep dead and decaying wood, including old fenceposts in situ where safe to do so and encourage others, including schools and sports grounds to do the same.
- When dead trees are to be felled, leave as much of the trunk uncut as safety issues allow.
- Avoid stump grinding, burning or chipping dead wood.
- Protect the area around dead wood from disturbance to prevent harm to newly laid eggs and pupae.
- Construct a stag beetle loggery using hardwood (not conifers) in an area which is partially shaded. See <https://ptes.org/get-involved/wildlife-action/help-stag-beetles/> and click on 'build a log pile for stag beetles instruction sheet'. NB log piles best for stag beetles involve burying logs vertically in soil as shown in the instruction sheet.
- Cover water-butts during the adult flying season (May to July).

- Rescue stag beetles from water butts (they can't swim) or the pavement where they may get trampled but put them close to where they were found and remember that females can nip so be careful and use gloves.
- Avoid using polythene sheets to control weeds because newly emerging stag beetles can get trapped beneath them and die.
- Avoid the use of insecticides.

## **Swift *Apus apus***

Swifts arrive in the UK in late April or May to breed, usually at traditional nest sites, and leave in July/August for South Africa. Whilst in Britain their chief requirements are food for themselves and developing young and safe breeding sites. Swifts feed on flying insects and spiderlings high up on air currents bringing between 300-1000 insects in each bolus of food they bring back for their chicks. The number of swifts arriving in the UK declined by 47% between 1995-2014 and more recent RSPB figures show a 51% decrease in their breeding numbers between 1995 and 2015.

In Bromley numbers recorded are now very low. The pilot study carried out this year returned only three definite records of breeding, in Mottingham, Hillcrest Road area Orpington and in the Petts Wood area. They have been seen flying at rooftop level near Orpington Station, which suggests they may have bred closeby but this needs further investigation. Swifts are also known to have bred in the Bromley South area in the past, but their numbers here have declined over the last 15 years from 12 in 2002 to 2 in 2014 and none have been seen since then in this area.

Records were also received of swifts flying above the Goddington Park area, Oakhill Road near Orpington Station, Friar Road & Robin Hood Green Poverest, Downe and High Elms, Leaves Green, Pickhurst Rise West Wickham and Hayes Road Bromley.

The swift survey will be repeated in 2018 with posters going out in April (earlier than in 2017). Bromley Biodiversity Partnership will be working closely with Bromley RSPB who are also carrying out a swift survey this year. We will both be asking for records of swifts flying at rooftop level or any evidence of breeding, with some RSPB members visiting allocated squares a minimum of once in May, June & July to record the location & number of swifts flying at rooftop level or entering a possible nesting site. If you would like to join the RSPB swift survey and have an allocated square, please get in touch with Bromley RSPB by e-mailing [bromleyrspb@gmail.com](mailto:bromleyrspb@gmail.com)

Meanwhile, although there may be many reasons why swift numbers have been dropping which we cannot influence because they live overseas for much of the year, there are 2 problems which it may be possible to address in Bromley borough: reduced nesting sites and reduced availability of insect prey.

### **Loss of nesting sites**

Swifts generally nest within holes and cavities in the roofs of older buildings in larger villages, towns and cities. With the increased drive for better insulation buildings are better sealed than in the past so swifts are returning to discover their nest site has gone or access is blocked. This situation could be remedied by the installation of swift bricks in new buildings or when houses are re-roofed or renovated so, especially in areas where swifts have been seen, when planning application is applied for new builds or renovations it is worth asking for swift bricks to be incorporated as a condition of permission being granted. They can also be put up by individuals. Swift bricks cost from £15 and are readily available on the internet. Ideally at least 2 should be put in since swifts tend to nest colonially and it is a good idea to purchase a CD of swift calls to attract them – these cost about £2. There is lots of advice about where and how to site them at [www.swift-conservation.org](http://www.swift-conservation.org). Swift boxes can also be bought or made but these do not last as long.

**Loss of Insect Prey**

It has been known for some time that insect numbers in Britain have been falling: most people have noticed how few insects are found on car windscreens after a long journey. A recent study carried out in Germany and reported in the Guardian showed a 76% decline in numbers trapped by the same method in nature reserves over a 27 year period. Planting more native species in gardens and encouraging the local authority, schools and sports grounds to plant hedgerows of native species and leave areas of grass uncut during the summer would help to increase prey items as native invertebrates in the UK are adapted to live on native species, so far more are found on these than on exotic plants. Decreasing pesticide and herbicide use and encouraging others to do the same would also help.



## **Common Toad *Bufo bufo***

Common toads spend the winter lying dormant in places such as compost heaps, beneath log piles or in crevices in walls, sometimes coming out to forage for invertebrates. They are generally nocturnal and emerge from 'hibernation' on damp, mild nights when the temperature is above 5 degrees Centigrade. In the Bromley area this is typically in February but will vary from year to year. When they are mature enough to breed (2-3 years old) they return to the pond where they were originally spawned. Males often start to move first and will wait around the pond for females to arrive and then climb on their backs. When they are returning to ponds many are killed on roads. Toadspawn is laid in long ribbons around pond plants in deeper water than frogspawn. Toadlets leave ponds in large numbers over a few days in summer. Toads spend most of their lives on land, living in scrub, woodland, beneath hedgerows or in coarse grassland feeding at night on insects, worms, slugs and other invertebrates.

According to Froglife, toad populations in south-east England have fallen by more than 68% since 1986. Records of toads in the London Borough of Bromley submitted to the Bromley Biodiversity Partnership Species and Habitats Sub-Group in 2017 show that there are breeding ponds in High Elms Country Park, gardens in Newstead Avenue near Newstead Woods, and West Way Petts Wood.

Records of toads in terrestrial habitat suggest it would be worth looking for breeding ponds in the Keston Common/Padmall area, ponds around Belmont Lane and Bull Lane allotments Chislehurst, Covet Wood area, ponds in the area of Lower Chesham Allotments Elmers End, Crystal Palace Park, near Bromley Hill cemetery, ponds near The Knoll and Westgate Road Beckenham, near Manor Park Road West Wickham and Green Street Green.

The toad survey will be repeated in 2018 with posters going out earlier than in 2017, ideally the beginning of February, with emphasis on finding more ponds where toads may be breeding. This will enable us to look at any problems the ponds may have and problems the toads may have regarding the roads around them.

### **Threats to Toads**

- Loss of suitable ponds
- Loss of suitable terrestrial habitat (scrub, rough grassland, hedgerows, walls with crevices)
- Habitat fragmentation: death on roads
- A decline invertebrate prey
- Pesticides (indirect effect: decline in invertebrate numbers, direct effect: build up of pesticide within toads from having eaten poisoned invertebrates).

### **The following measures could help toads in Bromley:**

1. Plant more native species in gardens and encourage others including schools and sports grounds to plant hedgerows of native species and leave areas of grass uncut during the summer. This would help to increase prey items available for toads because the invertebrates they eat tend to be adapted to live on native species rather than exotic plants.

2. Decrease pesticide and herbicide use and encourage others to do the same.
3. Have a wild area in your garden or local park with some scrub, a log pile and a pond.
4. When toadlets are emerging from ponds stop cutting or strimming grass in this area for a week or so until they have disappeared.
5. Consider contacting Froglife regarding helping toads cross roads: see [www.froglife.org/what-we-do/toads-on-roads](http://www.froglife.org/what-we-do/toads-on-roads)
6. Continue to send records to [bromleybiodiversity@gmail.com](mailto:bromleybiodiversity@gmail.com)