

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 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. 2018 records were again all from rural areas or near to woodland, or parks and other open spaces with woodland and/or scrub. They included areas where they had been recorded in 2017 such as near Jubilee Country Park, Scadbury Park and High Elms and areas where they had not previously been recorded such as Snag Lane, Spring Park, West Wickham Common, gardens near Elmstead Woods, adjacent to the River Ravensbourne in Queensmead Recreation Ground, a garden near Bromley Civic Centre and another adjacent to Ravensbourne School playing fields and countryside on the opposite side of Hayes Lane.

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.

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. UK numbers have been slowly improving. The surveys carried out in 2017 and 2018 show bullfinch, though not present in large numbers, is widely distributed within the London Borough of Bromley, so this survey will be discontinued. Efforts to help improve bullfinch numbers must continue, including trying to link areas where they have been reported, especially in the more urban areas.

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.

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

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.

Bromley Biodiversity Partnership Habitats & Species Sub-Group

Priority Species Reports 2017/2018

In Bromley, hedgehogs are now generally rarely recorded, but surveying in 2017 highlighted a few areas in the borough where records have been sent from several gardens. These recordings were generally near areas of open space, e.g. in Petts Wood near Crofton Woods and near Betts Park, Penge. An article about the hedgehog survey in The Petts Wood Gazette helped generate recordings. In 2019 20 hedgehog sightings were reported directly to the Bromley Biodiversity Partnership G-mail address. The majority were from the West Wickham area following an article in the West Wickham Residents Newsletter, again highlighting the importance of local newsletters in helping to obtain records. Sightings were mainly from gardens around West Wickham football and cricket club, Corkscrew Hill with some closer to Langley Park Golf Course. There were also some records from gardens near Poverest Recreation Ground/Covet Wood. In 2019 contact will be made with other groups producing newsletters to see if they will take articles asking for records of Bromley's priority species.

In addition to the records submitted by members of the public, 3 sites: Downe Orchard, Jail Lane and Clockhouse Orchard were surveyed by Sue Holland and Steven Lofting of *idverde/RSPB* using hedgehog footprint tunnels baited with dog food, but no hedgehog footprints were recorded. Further sites will be surveyed later in 2019.

Leaflets have been posted targeting streets where hedgehogs have been sighted, giving advice on how to help hedgehogs as they travel through their gardens and green spaces. Through this we hope to not only gain more records of sightings but to encourage residents to improve their way of gardening, and garden usage to provide more safe havens for our spikey friends.

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 sightings which include some of those from Bromley.

As we find out more about the location of hedgehogs in LBB the importance of improving links between the green spaces near where they are seen, providing safe corridors along which hedgehogs can travel and forage is becoming increasingly obvious. These links can be via wildlife friendly gardens, Churchyards, allotments, paths bordered by scrub or long grass etc. It is also important to improve the availability of information regarding how to look after hedgehogs. Bromley Biodiversity Partnership will continue to ask for records during 2019 and will contact householders in areas where there have been several hedgehog sightings to encourage neighbours to get together and follow guidance set out in Hedgehog Street. See 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 second paragraph).

General advice is set out below:

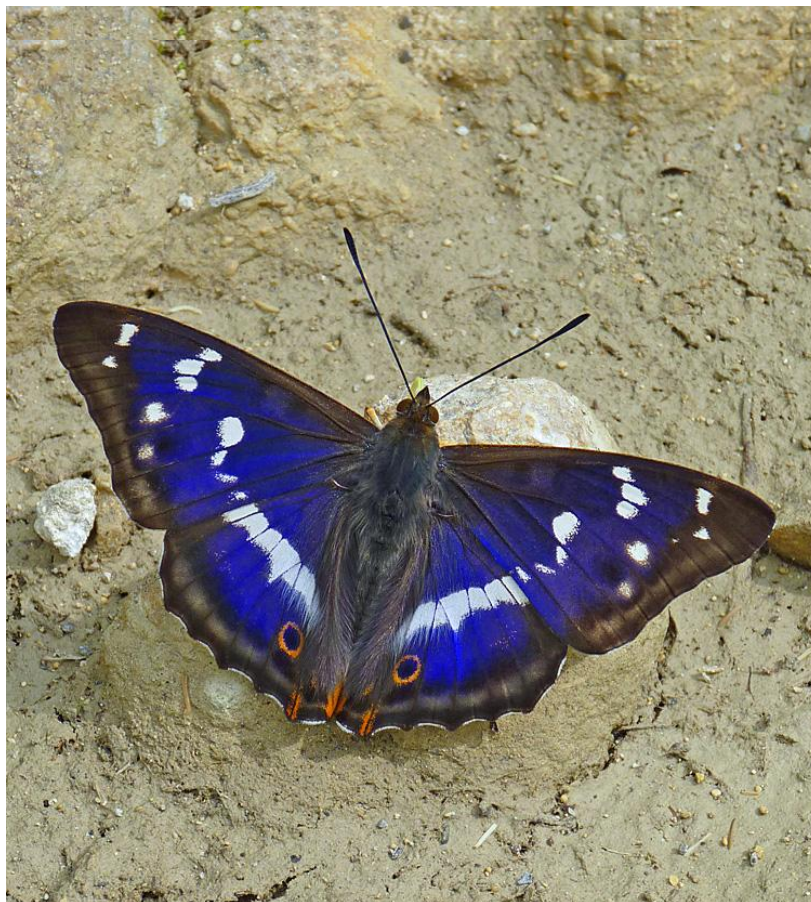
- Hedgehogs travel quite long distances when looking for food, often 2kms or more every night, so make sure walls and fences at site boundaries have safe gaps for hedgehogs to pass through. A gap measuring 13cms x 13cms beneath a fence should be sufficient to enable a hedgehog to pass from one garden 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.

Bromley Biodiversity Partnership Habitats & Species Sub-Group
Priority Species Reports 2017/2018

- 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
- Please continue sending records to bromleybiodiversity@gmail.com or sue.holland@idverde.co.uk

Bromley Biodiversity Partnership Species & Habitats Sub-group
January 2019

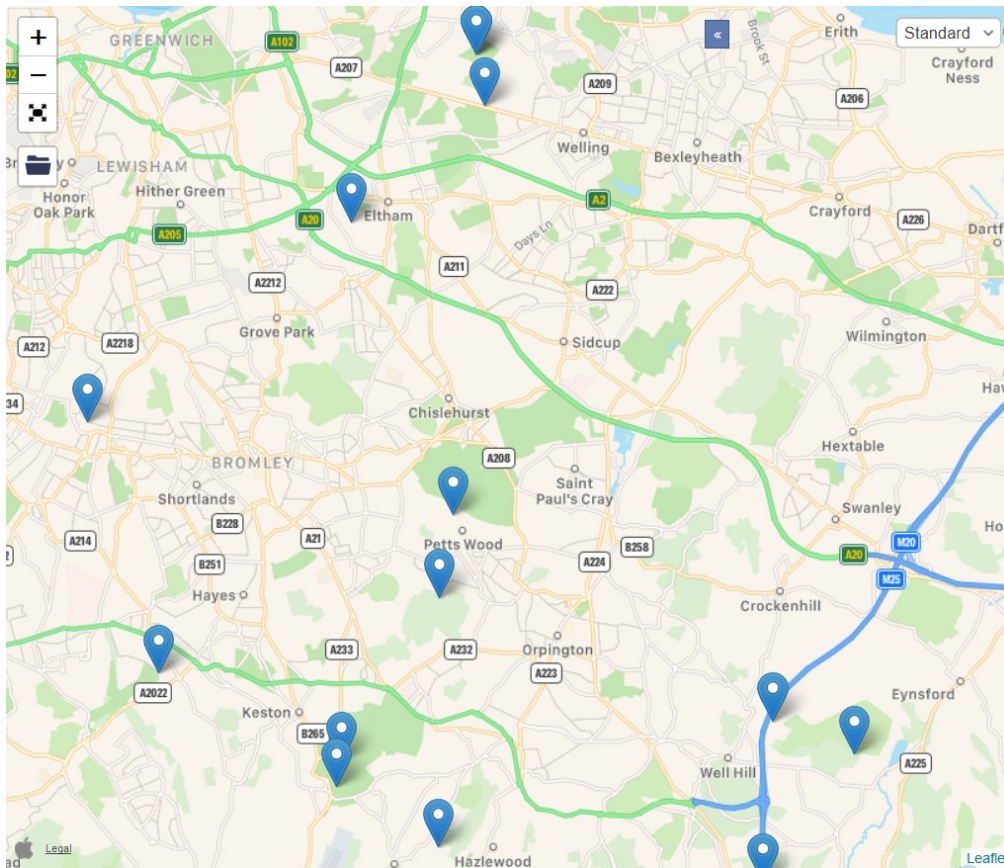
Purple Emperor Butterfly *Apatura iris*



In response to the poster asking for sightings of Purple Emperor we collected three records of adult male Purple Emperor that may otherwise have gone unrecorded. Although the number of sightings are low, it is nonetheless encouraging to know that this rare butterfly is present in the London Borough of Bromley. The survey will be repeated in 2019 with the poster being distributed across Bromley as widely as possible.

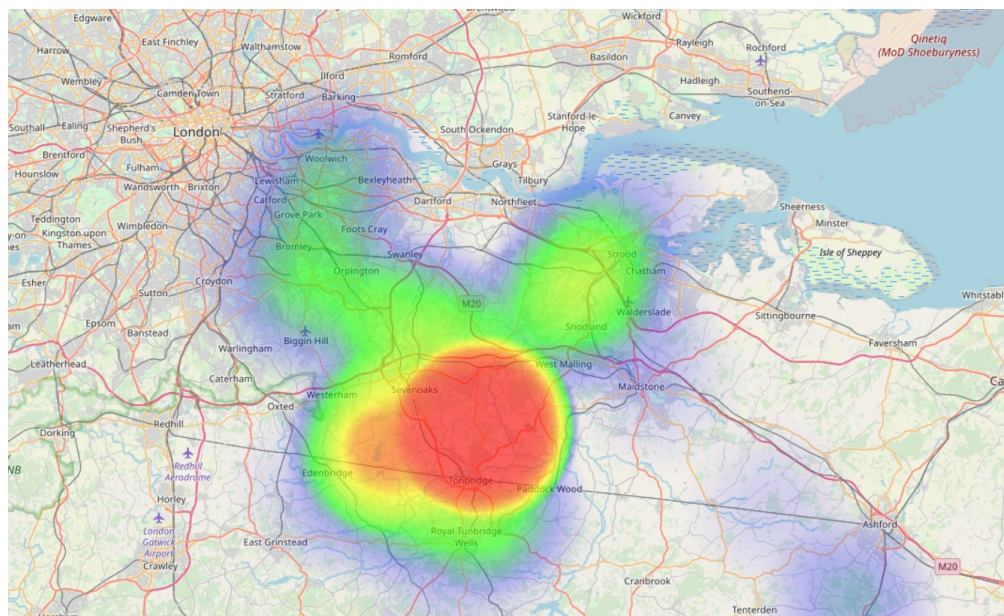
Purple Emperor Butterfly Records 2018				
Taxon	Site	Grid ref.	Recorder	Date
Purple Emperor	Holwood Estate	TQ 42091 63173	Steven Lofting	29.06.2018
Purple Emperor	Fairoak Close Crofton Wood	TQ 43940 66847	Public Survey	24.06.2018
Purple Emperor	Wood Lodge Lane West Wickham	TQ 38515 65266	Janet Blackman	04.07.2018

Bromley Biodiversity Partnership Habitats & Species Sub-Group Priority Species Reports 2017/2018



Distribution

Local records including data from Kent Butterfly Conservation dating back to 2010.



The Hotspot map of sightings since 2010 shows that although not as densely populated as mid-Kent, Bromley does have higher than average Kent County populations of Purple Emperor

Larval Food Plants

Larval Food plants are usually Goat Willow, *Salix Caprea* or Sallow, *Salix cinerea* although other *Salix* species are occasionally used. The preferred food plant trees have large crowns or grow at ride edges with the eggs being laid in the shady part of the willow canopy. We should look to favourably promote these somewhat unfashionable trees at sites where we have recent sightings. *Salix sp.* Require a damp habitat near to rivers or on poor draining soils and Crofton Wood SSSI would appear be an ideal site for selective management of these trees and is thought anecdotally to be a historic host to Purple Emperor and we now have a record there for 2018. Caterpillars of a large number of moth species also feed on *Salix sp.*, including Puss Moth, Willow Ermine, Eyed Hawkmoth, Poplar Hawkmoth, several of the Prominent family and Red Underwing.

Extracts from Butterfly Conservation Species Action Plan, Purple Emperor *Apatura iris* (2000):

The Purple Emperor is univoltine with adults flying from late June until mid-August. The males occasionally descend to the ground, usually in mid morning, where they probe for salts either from road surfaces or from animal dung. Males set up territories on prominent 'master trees' from mid day onwards and can occasionally be seen perching on outer, south-facing branches, or soaring gracefully between trees. Some of these trees are used in successive years but others are more temporary. Contrary to popular belief, such trees are not always oaks and alternatives are nearly always found if a 'master' tree is felled (though loss of such trees is still undesirable). The Purple Emperor requires large blocks of broad-leaved or mixed woodland or clusters of smaller woods and/or dense scrub where willows such as Goat Willow are abundant. The Purple Emperor has always been associated with well-wooded districts, often on clays or in valleys where damp conditions promote abundant growth of suitable willows. Although the butterfly is often associated with ancient woodland, it can spread to adjacent secondary woodland if suitable willows are abundant. The butterfly has undergone a modest re-expansion during the last two decades and has re-appeared (or has been re-discovered) in several counties after long absences: including east Devon, Kent, Nottinghamshire and Northamptonshire.

Management

Retain numerous willows wherever possible, especially along ride edges, in damp areas and in new woodland planting. In addition to rotational ride management, the provision of willow bushes and trees of different ages away from ride edges, in scallops, glades and at box junctions will help maintain populations. It is also important to ensure continuity because the food plants are comparatively short-lived trees. They can regenerate freely in damp conditions but, if natural regrowth is sparse, they can be readily propagated by pushing cuttings into the ground during the autumn. Unfortunately, low re-growth is often threatened by deer browsing and trees may need to be protected.

Martin Jordan, Bromley Biodiversity Partnership Species and Habitats Sub-Group
December 2019

House Sparrow *Passer domesticus*

House sparrows are resident throughout the UK, living in groups often first noticed by their noisy cheeping. They live for 3-4 years (occasionally for much longer), mate for life and often return to the same nest site every year, building nests quite close together of dry grass lined with feathers and hair in holes, crevices or hedges. They will also use nestboxes. Between April and August each pair may lay 2-3 clutches of 2-5 eggs. The young are fed on invertebrates, including aphids, caterpillars, beetles and grasshoppers. When these are scarce, seeds and vegetable matter are also given, but the adults rarely travel more than 60-80metres from the nest site. Young birds leave the nest after 14-16 days, but the parents continue to feed them until they are fully independent at about 4 weeks. They then often form small flocks. Adult birds are mainly seed eaters but they also eat insects.

According to the RSPB, UK house sparrow numbers fell 71% between 1977-2008. In urban areas experiments have shown that lack of invertebrates for birds in the nest is one factor, but although providing supplementary mealworms improved the numbers of fledging birds, the numbers surviving to breed the following year only showed marginal improvements even when seeds were supplied. Research is ongoing, with a reduction in colony numbers noted to coincide with areas where air pollution from vehicle emissions is high.

55 records were submitted for the 2018 survey, from many parts of the borough of which 7 reported that they had started seeing house sparrows again following a gap when none had been seen for a number of years. 1 resident from Beckenham stated that 2018 was the first time she had seen them since moving into her current house 14 years ago, another reported, '1st time in years'. Residents from West Wickham recorded 'the first siting for 10 years', 'the first for a very long time' and 'Yes they are coming back'. A population in Leaves Green, Biggin Hill has grown to over 30. So may be some good news here. Records included 20 from West Wickham – thanks, in part, to an article in the residents association newsletter, but there were also 6 from Orpington, 5 from Beckenham and records from Penge East Station, Petts Wood, South Norwood, Norman Park, St. Paul's Cray, Downe, Hayes, Coney Hall, Chislehurst, Gravel Road, Lovibonds Ave., Crown Lane, near Hoblingwell Wood and near Sundridge Park. In 2019 short articles asking for records of priority species in the London Borough of Bromley, including house sparrow, will be submitted to some residents association newsletters.

Threats to House Sparrow

Reduction in invertebrates for developing young.

Loss of habitat for both adult birds (loss of long grass providing seeds) and for invertebrates which provide food for young (loss of *native hedgerow and tree species).

Reduction in availability of 'weed' seeds due to herbicide use and frequently mown turf.

Loss of nesting sites: reduction of scrub & hedgerows, over-trimming of hedges, tidying up.

Improved house insulation – loss of nesting opportunities in eaves etc.

Air pollution

Measures to help House Sparrow in Bromley

- Increased planting of *native species; shrubs, trees and other plants to increase invertebrate numbers, e.g planting of *native species rich hedgerows, planting/encouraging the growth of native species in gardens.
- More and larger *wild areas in local parks, school and sports grounds and gardens, including long grass, to provide invertebrates and seeds.
- Maintain some areas of scrub and manage climbing plants to provide multiple nesting sites.

Bromley Biodiversity Partnership Habitats & Species Sub-Group
Priority Species Reports 2017/2018

- Provide nest boxes: note the entrance hole needs to have a slightly wider diameter than that of blue tits – i.e 32 mm rather than 30mm. For instructions to make and site sparrow boxes (you need more than one as they live in colonies), see www.bto.org/sites/default/files/house_sparrow_nest_box_plan.pdf
- Link wild areas via thick hedgerows, scrub and/or rough grassland.
- Decrease pesticide and herbicide use and encourage others to do the same.
- Feed birds in your garden. If you know you have sparrows nearby, put out seeds and suet balls for adult birds, mealworms during the nesting season. They will feed on the ground or from a table.
- If you have a cat, keep it indoors between dusk and dawn and use a collar with a bell or ultrasonic device.

*More invertebrates in the UK are adapted to feed on native plants than non-native plants so these are more valuable for wildlife.

Reference, and to find out more, see RSPB website at www.rspb.org.uk

Bromley Biodiversity Partnership Species & Habitats Subgroup
January 2019

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 on damp, mild nights when the temperature is above 5 degrees Centigrade. In the Bromley area breeding typically occurs in March, sometimes going on into April, but will vary from year to year and according to site. When toads are mature enough to breed (2-3 years old) they return to the pond where they were originally spawned, travelling up to 400 metres (occasionally as much as 2kms) but if suitable ponds are constructed en route to the original breeding pond these may be used.

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 wound around the underwater stems of pond plants so toad ponds will have submerged and/or emergent plants. Vegetation around pond margins is also very important, providing toadlets leaving the pond protection from drying out and from predators such as birds. Native plants in and around ponds are always better than non-native as they are used as food by the invertebrates which are then eaten by toad poles and toads.

The ideal toad pond is deeper than that required by frogs and has a depth in some areas of 90cms. 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 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 was repeated in 2018 with posters going out earlier than in 2017. 24 records were received. Breeding was confirmed at Keston and toads were also reported breeding in the pond at Spring Park and in nearby garden ponds, garden ponds near Coney Hall, near Grove Park Cemetery, near Crofton Woods, near Sundridge Park (known in the past for ponds where toads bred) garden ponds near Hollydale Open Space, near the Hawkwood Estate in Chislehurst and in the Norman Park area. New areas where adult toads were reported include Nash Farm near Keston, Darrick Wood and Scadbury Park (under log near Pond 5). Toads had previously been noted breeding in most ponds at Scadbury during a 2016 pond survey.

Surveys in 2002/3 also recorded toads in Jubilee Country Park, The Warren, Bassetts Pond and Camden Park. It would be useful to recheck these sites in 2019.

Bromley Biodiversity Partnership Habitats & Species Sub-Group

Priority Species Reports 2017/2018

Next steps: Work for 2019

Results from 2017 and 2018 have revealed a few ponds where toads breed and many areas where the presence of juvenile toads suggest they are likely to be breeding nearby, but hard evidence regarding which ponds is often lacking. In 2019 we therefore need to look at some of the possible ponds to see if we can confirm where they are definitely breeding. The easiest and safest way to do this is to have a look, in daylight, for male and female toads in amplexus (a male on top of and holding onto the larger female) in or very near to a pond. Help with this would be very much appreciated but it is very important that great care is taken near ponds, the banks of which may be very slippery at this time of year. Using binoculars to look from a short distance away should be ok but we urge that no-one takes any risks in looking out for toads. If anyone is interested in having a look for toads in amplexus, please contact bromleybiodiversity@gmail.com Information received regarding when amplexus is first noted in the borough can be sent to interested parties so they know when to start checking nearby ponds.

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. If you are thinking of creating a pond which might be suitable for toads remember it needs to be about 90cms deep in some parts, contain pond plants which toadspawn could be wrapped around and include some marginal vegetation in which they can hide and feed on emergence. See <https://freshwaterhabitats.org.uk> for further advice.
5. When toadlets are emerging from ponds stop cutting or strimming grass in this area for a week or so until they have disappeared.
6. Consider contacting Froglife regarding helping toads cross roads: see www.froglife.org/what-we-do/toads-on-roads
7. Continue to send records to bromleybiodiversity@gmail.com

*Bromley Biodiversity Partnership Species & Habitats Subgroup
January 2019*