Woodpecker Network – Lesser Spotted Woodpecker breeding project

7 March 2021

Background

The aim of the project is to encourage the recording by volunteers of Lesser Spotted Woodpeckers and their nests in England and Wales. The project is organised nationally on a volunteer basis by Ken Smith (the UK's leading expert on Woodpeckers) and his wife Linda.

Woodpecker Network volunteers are encouraged to visit suitable woodlands in early spring to look and listen for Lesser Spotted Woodpeckers. This is the best time to identify potential breeding territories. In April birds may be discovered excavating nest cavities.

If a nest is found the volunteer will visit at intervals to watch the nest and determine the outcome. If it is feasible Woodpecker Network arrange to check the nest contents with a nest inspection camera to determine the number of eggs and how many young fledge. Where possible records are submitted to BTO Nest Records Scheme.

The Network's activities were limited in 2020 but the project is continuing in 2021, as far as COVID-19 restrictions permit.

To date volunteers have found and observed 76 Lesser Spot nests and provided information on the outcome. This has increased the number of Nest Records submitted to the BTO from zero to around 15 per year. The results up to 2019 were published in Bird Study, (Smith and Smith 2020).

Volunteers are also encouraged to look out for Great Spotted and Green Woodpecker nests.

Guidelines for recording Lesser Spotted Woodpeckers

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Each spring Woodpecker Network encourage as many people as possible to find Lesser Spotted Woodpecker nests and record the breeding outcome. The aim of the Network citizen science project is for us all to work together to collect as much data as possible about the birds each year.

Finding breeding Lesser Spotted Woodpeckers

Lesser Spotted Woodpeckers are a challenge to all our birdwatching skills. They are pretty much invisible for most of the year and only in February and March do they call and drum with any regularity. Once they have settled on a nest site by mid-April, they are very inconspicuous and secretive until they are feeding young in late May.

They can be found nesting in any woodland but seem to be more abundant in well wooded areas and woods with high levels of dead wood or woods associated with wetlands. They often nest near the edges of woodland or in woodland fringes. The best bet for finding breeding birds is to check out past sites. The birds seem very site faithful so often turn up in traditional sites over many years. Drumming and displaying drops off rapidly through the day so early morning visits seem to be best.

In general, the Lesser Spot drum is much softer and for a longer duration than Great Spot and seems to tail off at the end rather than ending with a flourish. But it is still possible to be confused by a soft drumming Great Spot. With patience, you can get to see the bird to confirm identity. You can find examples of Lesser Spot calls and drumming on the xeno-canto website look for recordings made in England or western Europe.

Finding the nest

The next and probably the biggest challenge is to find the nest. There are a few tips to help you with this but there is no substitute for persistence. If you find the birds calling, drumming or displaying in an area of woodland there is a good chance they will nest in the vicinity.

Lesser Spotted Woodpecker nests are almost always in dead trees or dead limbs on live trees. So in March, before the leaves appear, have a thorough check around the displaying area and note any potential nest sites to be visited later. They particularly like dead alder, willow, birch, poplar, sycamore and beech but other species can be used.

In most years all the nests found were close (within 10 metres) to a stream or pond, so this seems to be important.

Then from April onwards make regular checks of these sites looking for birds, or any signs of nest excavation such as woodchips on the ground beneath the tree. Although it won't help you in your first year our most successful strategy is to make a point of always visiting last year's nest site. They frequently excavate in the same tree and have even been known to re-use the nest cavity itself.

The Lesser Spot nest hole is small, about 30mm diameter, for comparison a Great Spot nest hole is 50mm and Green Woodpecker, 70mm.

Recording breeding success - we can help you.

For most birdwatchers recording the contents of Lesser Spotted Woodpecker nests is simply not possible. By using video nest inspection cameras, we make this possible. However, for 2021, with the COVID 19 regulations Ken and Linda may only be able to travel a short distance to help monitor a nest, but otherwise, please record the information set out below.

If you find a nest ...

If you find a nest, please contact us as soon as possible so we can discuss how best to monitor it and whether it is appropriate to look inside the nest with the video nest inspection camera.

Please keep a note of the date and time of your observations, the exact location and the species of tree and if you can, the height of the nest. Please record the behaviour of the adults at the nest.

Even without the nest inspection camera it is possible to work out the stage of the nesting cycle from the behaviour of the adult birds at the nest.

- During excavation, the bird will be seen excavating a cavity but only when it is deep inside emerging
 headfirst to throw out woodchips is the cavity anywhere near complete. Lesser Spots usually make a
 new cavity each year but often return to the same small area of woodland or the same dead tree if it
 is still standing. Birds often try an excavation but move on elsewhere before completing a cavity.
 This may be an important aspect of breeding so please record such failed cavities.
- During laying and incubation, the birds become very secretive and only change over every two hours
 or so at this stage it is easy to assume the nest is no longer active. It is worth being patient and
 waiting to confirm that the nest is still active if you have the time available or return regularly to
 increase the chance of detecting activity.
- During chick rearing the young are fed every 5-10 minutes and their age can be worked out from the adult behaviour. For the first week after hatching the young are always brooded by one of the adults so there is a changeover every time the young are fed. The young are usually fed inside the cavity until their last week when they can be fed at the nest hole with the adults only going in occasionally. For their last 2-3 days in the nest the young can be quite noisy making insistent begging calls (but not always) and can often be seen looking out of the nest hole waiting to be fed.
- Please take photographs, where appropriate, and take care not to disturb the birds.
- We are particularly interested in the food being brought for the young, for example, caterpillars or aphids. If these can be seen in photos so much the better.

We will treat all records in complete confidence and will not publish any details of nest sites. The nest records will be treated as confidential by the BTO.

Nest inspection cameras

We have developed and refined the nest inspection cameras over the last 15 years, initially to check out Great Spotted Woodpecker nests but as the technology has improved, we have been able to monitor Lesser Spots too. The camera systems are now simple to use and effective. They consist of a miniature video camera (like the ones incorporated in your mobile phone) and an array of light emitting diodes built into a probe which can look through the entrance hole into the nest cavity looking down to view the contents. The video images are sent by wi-fi to a mobile phone or ipad where they can be viewed and recorded. Currently we use commercial units supplied by a small UK company Wildlife Windows. The nest inspection is done from the ground with the video probe mounted atop a set of telescopic poles which allow it to look inside nest cavities up to 18-20m above the ground. The whole inspection process takes a few minutes and the disturbance to the birds is so low that we have never seen any adverse impacts. In visiting well over 1000 Great Spot and 60 Lesser Spot nests we have found no adverse impacts whatsoever



Lesser Spot nest inspection camera in action

The arrangements are quite straight forward. If you find a Lesser Spotted Woodpecker nest, we will visit or organise a visit with a nest inspection video camera to check the contents. We have four video systems available and, depending on demand, after the first visit we may be able to leave one with the nest finder to monitor the nest contents regularly until the young fledge.

Depending on the COVID-19 restrictions in force at the time we may be able to loan nest inspection cameras in appropriate circumstances. The loan of nest inspection cameras was suspended for 2020 due to covid-19 restrictions.

Risk Assessment

on the birds.

All volunteers should follow the BTO Code of Practice for Volunteer Fieldwork and any COVID related updates.

British Trust for Ornithology, General health and safety information for volunteer fieldworkers, https://www.bto.org/how-you-can-help/take-part-project/health-safety

British Trust for Ornithology, Nest Recording Scheme Code of Conduct, https://www.bto.org/our-science/projects/nest-record-scheme/taking-part/nrs-code-conduct

References

Ken W. Smith & Linda Smith (2020) Long-term trends in the nest survival and productivity of the Lesser Spotted Woodpecker *Dryobates minor* in Britain, Bird Study, 67:1, 109-118, DOI: 10.1080/00063657.2020.1780195

Smith, K.W. & Charman, E.C. 2012. The ecology and conservation of the Lesser Spotted Woodpecker. British. Birds 105: 294–307.

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