

The long road north



By Mike Toms
GBW Organiser

If I were to sum up the Nuthatch in just three words, I would have to resort to 'striking', 'bold' and 'grumpy'! This is a bird full of character, a brash and often noisy interloper at the garden feeding station, whose unseemly behaviour has its origins in the need to find food.

With its sweeping black eyestripe, steel-grey upper-parts and dagger-like bill, the Nuthatch is a striking bird, a buccaneer that delivers poise and attitude to favoured gardens. Nationally, just one in five Garden BirdWatch gardens receive a visit from this species in any given week, making it a notable visitor for many. For others it can be an almost daily visitor, coming to peanuts presented in wire-mesh feeders.

The Nuthatch has a patchy distribution across its predominantly southerly British range, displaying a clear preference for gardens located close to suitable breeding habitat. This means that the chances of a Nuthatch visiting your garden will vary tremendously, depending on where you live and how close you are to a patch of deciduous or mixed-

deciduous woodland. However, over recent years the species has been spreading north, extending its breeding range further into the southern half of Scotland. This means that an increasing number of Garden BirdWatchers may soon be treated to the Nuthatch's antics and displays of intolerance.

A BIRD WITH ATTITUDE

The Nuthatch has a well-deserved reputation for being antisocial and markedly intolerant of other Nuthatches (and indeed many other species of bird). The root of this aggression lies in the Nuthatch's adoption of year-round territoriality, a pattern of behaviour rarely seen in small garden-visiting species (see box on opposite page). Nuthatches will often display their rather grumpy character when

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visiting hanging peanut feeders, striking out at any Greenfinches or other birds that attempt to share the feeder.

The aggressive tendencies can also be seen during territorial disputes which, perhaps unsurprisingly, seem to occur on a regular basis throughout the course of the Nuthatch's day. Intensive studies of breeding Nuthatches have revealed that some individuals may spend several hours each day involved in conflicts with neighbouring birds, despite the fact that such encounters only rarely result in a change in territory ownership or size. Most of these interactions are restricted to posturing and calling behaviour but they can sometimes escalate into full-blown fights.

Studies have revealed two main types of threat display; the mild display involves the bird raising and fanning its tail, tilting its bill upwards and opening its wings slightly – the whole display directed towards the interloper. Less commonly witnessed is a more aggressive display in which the bird stretches forwards with its feathers sleek against the body. Again the wings are partly opened and the tail fanned but this time the bird appears highly agitated and frequently beats its wings. In most cases such posturing is as far as the encounter goes but fights can and do occur, the two birds grabbing at each other with their strong feet and stabbing with their dagger-like bills. Injury and even death are not uncommon. It is not just the males that become involved in these combats; females may also join in, highlighting the strong bond that exists between the pair.

A CLOSE BOND

Nuthatches are active birds, constantly patrolling their territories and they are often encountered as established pairs, the female accompanying the male as he effectively beats his bounds. The male and female maintain close contact through a series of soft, low calls. If one bird strays then the other may become even more vocal, calling out for its mate. Interestingly, the male seems to take an active role in shepherding his female around, even to the degree of driving her back into the territory should she stray too close to its boundary. This behaviour parallels the fact that the male is dominant over the female outside of the breeding season; she will give way to him and won't approach a bird feeder until he leaves it. During the early part of the breeding season, when the female starts building the nest, the tables are turned and it is the female who is dominant over the male.

MUD GLORIOUS MUD

Nuthatches are cavity nesters and have usually selected a suitable site by the end of March. The favoured cavity is likely to be in a tree, between three and 10 metres off the ground but individuals have been recorded using nestboxes, holes in walls or buildings and even hayricks. Invariably, the entrance to the selected cavity is larger than required by the bird, so it uses mud to reduce the size of the hole down to roughly 3 cm in diameter. In some cases a substantial quantity of mud is required. Walpole-Bond, writing in his *History of the Birds of Sussex* noted how he obtained 5 lbs of mud from a ragged cleft in an apple tree and 11 lbs of mud from a nest hole fashioned in a hayrick. The human owners of a nestbox commandeered by a pair of Nuthatches will soon discover the birds' fascination with mud. Not only will the Nuthatches plaster around the entrance hole, but they will often cement the lid to the box and the box to the tree!

The nest is built by the female, the male only really contributing by feeding the female once she settles down to lay her eggs and begin incubation. The eggs are laid between late April and the end of May. Data from the BTO's *Nest Record Scheme* have revealed the Nuthatch to be one of the birds that is, on average, laying its eggs earlier now than it was a few decades ago. Over the same period there has been an increase in the average number of chicks in a brood. On average, brood size increased by 1.55 young between 1968 and 1998. These two factors may be linked and are likely to result from the effects of global climate change, something which may also have contributed to the recent northwards expansion in breeding range.

FACT BOX

Common name:
Nuthatch

Scientific name:
Sitta europaea

Family:
Nuthatches (Sittidae)

UK population:
144,000 breeding territories
winter numbers unknown

Conservation status:
Green listed

Migratory status:
Resident

Breeding:
Clutch size: 6–8 eggs
Incubates: 16–17 days
Young in nest: 24–25 days
Number of broods: 1 (2)
Breeding season: Mar–Jun
Age at first breeding: 1

Typical lifespan:
2 years

Max. recorded lifespan:
11 years, 9 months

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A HOME FOR LIFE

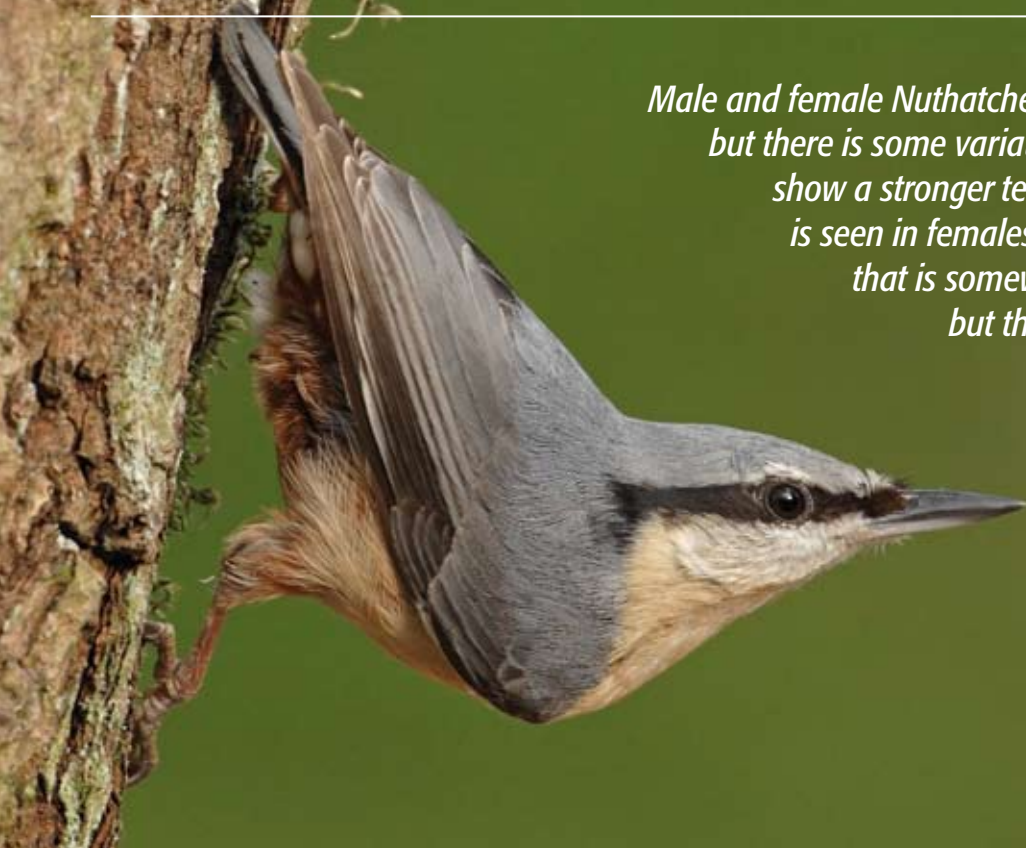
Nuthatches are monogamous and maintain territories throughout the year.

Such behaviour provides the pair with an intimate understanding of the area in which they live; where to find food at different times of the year, where to roost and where nesting opportunities may be found. Year-round territory is more typical in larger birds, such as birds of prey and certain members of the crow family, and is rare in small birds.

Studies have revealed that a pair of Nuthatches requires a minimum space of about one hectare of good quality habitat in order to successfully raise a family. The size of the territory that is defended during the winter months is slightly smaller than that used for breeding.



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Male and female Nuthatches are pretty similar in appearance but there is some variation between the two sexes. Males show a stronger terracotta colour to their flanks than is seen in females. Very young birds have plumage that is somewhat duller than seen in the adults but they soon become indistinguishable from older birds.

FINDING FOOD

The Nuthatch lacks the stiff tail feathers so characteristic of other trunk-feeding species (e.g. Treecreeper and the woodpeckers). This means that the tail is not used for support, the bird relying instead on the grip and strength of its long claws and powerful legs. These allow it to forage 'head-down' on a trunk (a very different strategy from that used by the Treecreeper) and the Nuthatch also uses them when foraging on branches for invertebrates.

Invertebrates are the favoured food throughout the summer months but as these decline in availability with the approach of winter, so the Nuthatch begins to take increasing numbers of tree seeds. Insects and other invertebrates may be taken from the bark, from buds and from leaves. In addition, the Nuthatch is remarkably proficient at 'fly-catching', dashing from a branch to grab an insect in flight, sometimes even hovering to achieve this feat.

A range of tree seeds is taken during the winter, with those of Hazel and Beech especially favoured. Others, such as oak, Hornbeam and even Yew, are also taken, the larger items being wedged into a crack or fissure and then smashed open with the bill. Larger insects, especially those with hard wing cases, may also be treated in the same manner. Food caching is another feature of feeding behaviour, tree seeds often being cached for some time, while invertebrates are normally retrieved within a few hours of being stored. This is where an

intimate knowledge of the territory is helpful, the pair able to not only locate, access and defend favoured food sources but also able to readily recover food from their caches.

THAT BEAK

One of the most obvious features of the Nuthatch is its dagger-like beak. Although it looks pretty formidable, it is not strong enough to drill into wood in the manner adopted by our woodpeckers. Instead it is used to remove pieces of bark, allowing the bird to access the rotten wood beneath and the invertebrates it may contain.

The name 'Nuthatch' derives from the Middle English word 'nuthak' which roughly translates as 'nut hacker'. No doubt this refers to the habit of smashing open nuts having first wedged them into a crevice. It makes equally short work of peanuts presented at garden feeding stations.

The Nuthatch bill changes very slightly in length through the seasons, matching the change from animal food to seeds and back. Rather than being adaptive, this may just reflect a change in the degree of wear that comes from switching from a soft diet to a hard one that wears down the bill at a faster rate.

THE LONG ROAD NORTH

An examination of the historical literature shows that, up until the end of the Nineteenth Century at least, Nuthatches bred no further north on a regular basis than Harrogate in



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THE LONG ROAD NORTH

The maps below show the gradual northerly spread in the occurrence of regular breeding by Nuthatches. Even within the core breeding range (red) there is local variation in the abundance of breeding pairs. Data collected through Bird Atlas 2007–11 project will highlight the pattern of variations in abundance across Britain and Ireland.



Yorkshire. The first few years of the Twentieth Century saw an expansion of the southerly breeding range into County Durham and also into the west of Wales, areas that had previously been unoccupied, but no real inroads were made into areas of apparently suitable habitat within the Scottish Borders. Interestingly, a number of attempts were made to establish the species in Scotland, most notably by the Duke of Argyll at Inverary, but these appear to have been unsuccessful.

A range expansion did happen, however, with a noted spread into new areas within northern England from the 1940s onwards (see box on opposite page). While this brought the species ever closer to Scotland it was not until 1989 that breeding was finally confirmed from the Scottish Borders. The 1990s was a period of rapid colonisation within the Borders, the bird making use of the suitable woodland habitat to be found on many of the larger Scottish estates. By 2004, the breeding population within the Borders had risen to exceed 220 pairs – a remarkable achievement given the Nuthatch's sedentary nature. A similar, though less dramatic colonisation was noted in Dumfries and Galloway, with birds also reaching Ayrshire. Since 2000, we have seen Nuthatches reported from across much of Scotland, the first records in an area often coming from garden feeding stations, highlighting the role that BTO Garden BirdWatchers can play in helping to chart the establishment of this species within Scotland.

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