

Woodpecker and Nuthatch Survey 1994-95



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Introduction

The aim of this survey was to identify the distribution and range within Cumbria of the woodpeckers and Nuthatch. These are a closely related group of birds that occupy broadly similar habitat, that of deciduous woodland. This habitat is fairly abundant over large parts of the county and is likely to be secure and unchanged at least within the boundaries of the Lake District National Park.

A variety of questions were also in the back of our minds, based on the apparent trends within the populations of these species: – is Green Woodpecker really declining in the north? – is the recently recorded spread of the Nuthatch still continuing at the same pace? – is Lesser Spotted Woodpecker really as rare in the county as we think? – indeed is the Great Spotted Woodpecker as stable as it appears?

These four species lend themselves to being part of the same survey as there are many similarities between them. All four are resident within Britain, though none are present in Ireland. There is little evidence to show that any of them move far within Britain, though there are some autumn immigrant Great Spotted Woodpeckers from northern Europe. Each of them is a hole nester, with the three woodpeckers excavating their own while the Nuthatch uses natural cavities, including an increasing uptake of nest boxes both in natural woodland and in rural gardens. All species are fairly noisy especially in the spring-time, consequently are reasonably easy to discover, however actual nest site location can be particularly difficult.

Method

To organise the survey Cumbria was divided into four areas. A coordinator for each area allocated 10km squares to surveyors.

Surveyors targeted any areas with trees, ranging from farmland with scattered trees though to woodland. Survey work was conducted during the breeding season from April to July inclusive and ideally all suitable nesting habitat was to be visited at least once during the breeding season.

Surveyors recorded data on field sheets. The same criteria were used as in the British Trust for Ornithology's *The Atlas of Breeding Birds in Britain and Ireland* (1968-72), (possible breeding – recorded in breeding habitat, no other evidence; probable breeding – singing male or pair in territory; confirmed breeding – various criteria including adults entering or leaving nest site; fledged young etc.)

Maps of presence/absence of each species were generated using the *Recorder* database at Tullie House Museum, where the more detailed breeding information is stored.

Habitat data were also collected, recording the dominant and second most dominant tree species within 25m of the bird. Nest data consisted of tree species, height of nest, whether the tree was dead or alive and altitude. People were encouraged to send in supplementary records and these were included in the data set.

Over 90% of suitable nesting habitat was surveyed. Data was entered on the mapping database, 'Recorder', at Tullie House Museum and tetrad distribution maps were produced.

Finding nest holes proved very difficult for most observers; only Great Spotted Woodpecker and Nuthatch sites were found in good enough numbers to invite analysis.

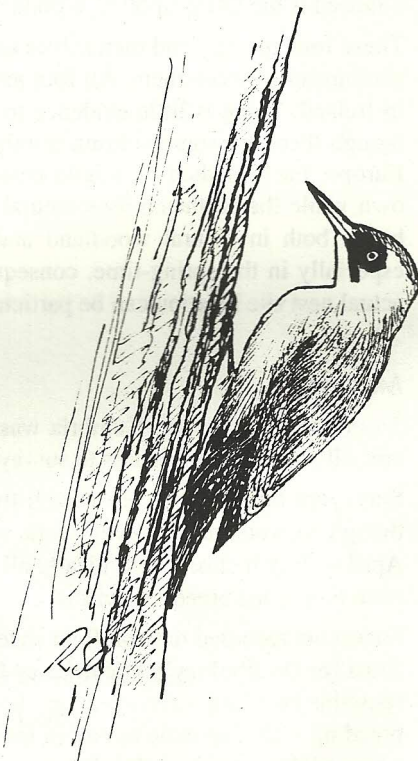
Green Woodpecker

The species is not difficult to discover during the breeding season due to its loud, laughing 'yaffle' cry. The survey shows that the Green Woodpecker has consolidated in the south and west Lake District since it was first found, as recently as 1945, though both the 1988-91 and this survey shows evidence of a continuing decline in the north-east of the county.

The map suggests that Green Woodpeckers find river valleys important. The species is largely absent from areas of managed arable farmland.

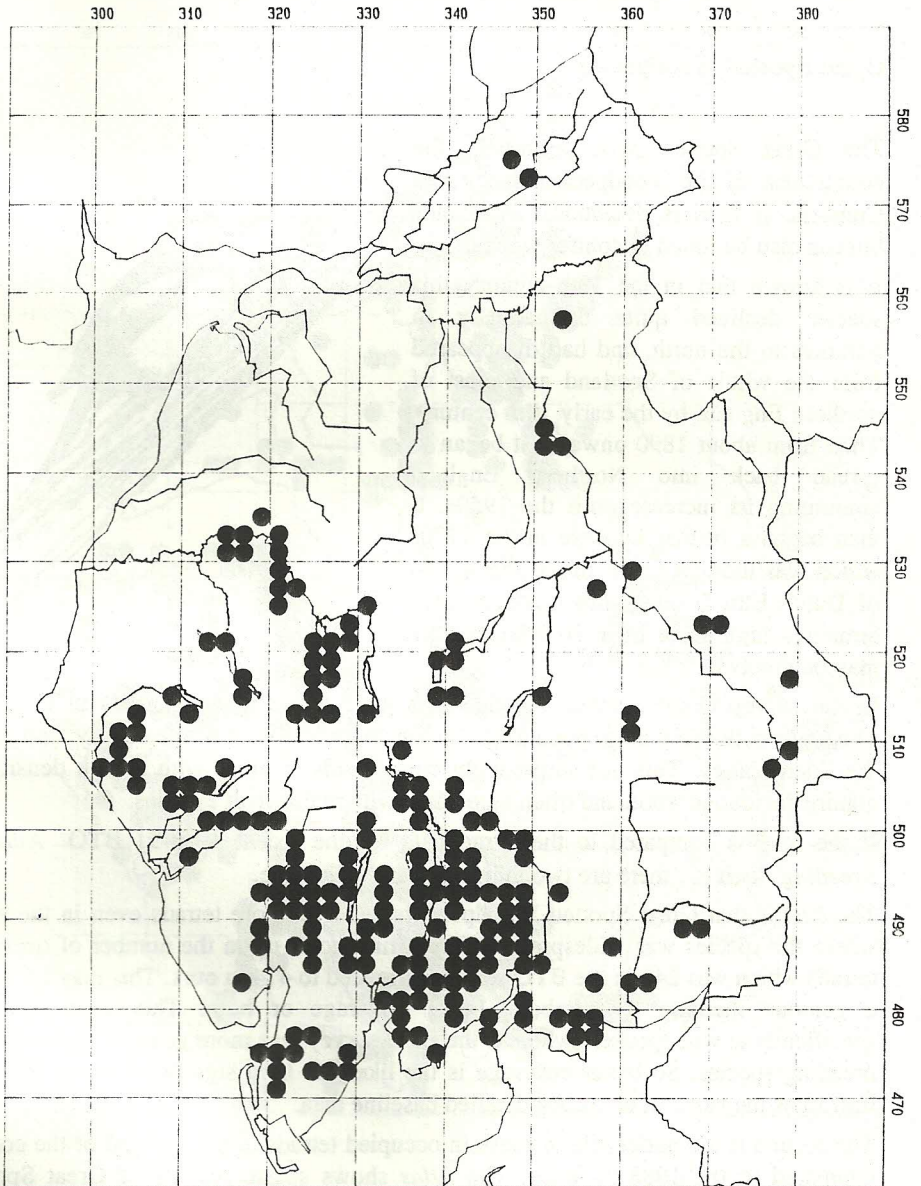
In some areas, eg. Whinlatter and Ennerdale, Green Woodpeckers were present in coniferous forestry woodland, managed as an economic concern, though they were thought to be nesting in nearby deciduous stands; if the present policy of integrated mixed woodland is continued by the Forestry managements the future for Green Woodpeckers could be brighter.

Surprisingly no nest sites were recorded.



Green Woodpecker

Symbol: tetrads Key: ● 1994-5



With just under two hundred tetrads found holding Green Woodpeckers during the breeding season, the estimated population for the county would be in the lower region of the 101-1000 pairs suggested in the *Cumbria Bird Report*.

Great Spotted Woodpecker

The Great Spotted Woodpecker is the commonest of the woodpecker species in Cumbria. It favours deciduous woodlands but can also be found in conifer woods.

It is known that in the 18th century this species declined quite dramatically in numbers in the north, and had disappeared from the whole of Scotland and most of northern England by the early 19th century. Then from about 1890 onwards it began to spread back into Northern England continuing its increase until the 1950s. It then began a further increase in the 1970s which was thought to be due to the spread of Dutch Elm Disease, but numbers have remained high since then, so other factors may be involved.

In the survey Great Spotted Woodpeckers were found in 414 tetrads in Cumbria. There are noticeably large populations in the south and west of the county, and down the Eden Valley. This not surprisingly corresponds to areas with a high density of mature deciduous woodland often associated with major river systems.

If the map is compared to the tetrad data for the recent 1988-91 BTO *Atlas of Breeding Birds* ... there are two things that are noticeable.

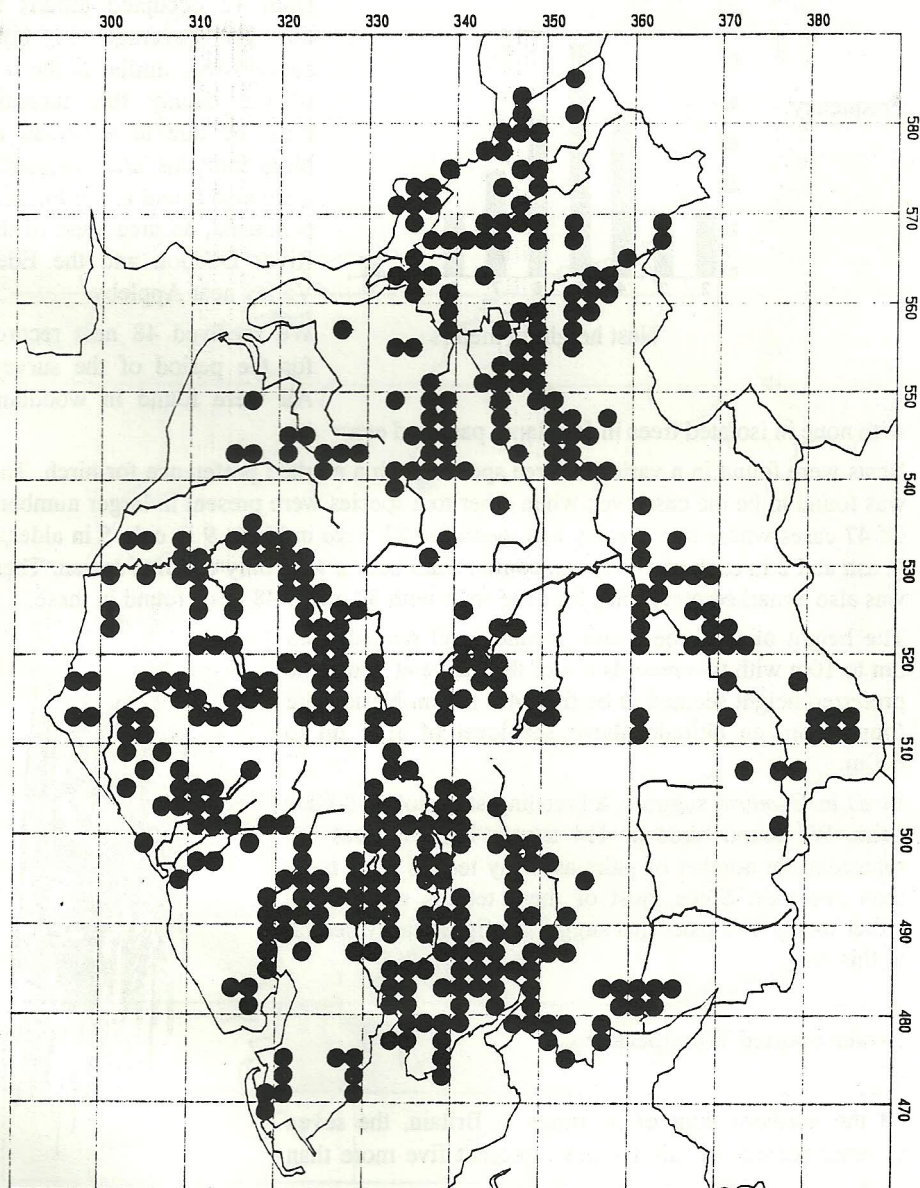
The first is that Great Spotted Woodpeckers occur in more tetrads even in the areas where the species was widespread before. This shows up in the number of occupied tetrads which was 248 in the BTO survey compared to 414 in ours. This may be due to a genuine increase in numbers, better coverage or both. This survey looked specifically at woodpeckers whereas the BTO survey was more general, looking at all breeding species. So better coverage is the likely to be a significant factor and this illustrates the value of obtaining detailed baseline data.

The second is the noticeable increase in occupied tetrads in the far west of the county compared to the 1988-91 *Atlas*. The *Atlas* shows sparse records of Great Spotted

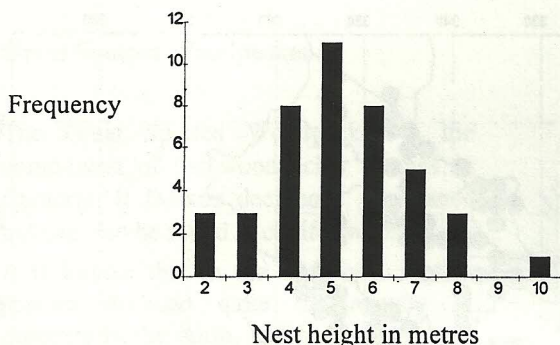


Great Spotted Woodpecker

Symbol: tetrads Key: ● 1994-5



Numbers of nests recorded at different heights



Woodpecker in this area in 1988-91 but the present survey shows a dramatic increase: from 12 occupied tetrads to 60. As coverage in both surveys was similar to the rest of the county this increase must be due to a spread of birds into this area. Increases were also found in the Furness peninsula, an area west of the River Duddon and the Eden Valley near Appleby.

We received 48 nest records for the period of the survey. All were found in woodland

with none in isolated trees in farmland, parkland etc.

Nests were found in a variety of tree species with a marked preference for birch. This was found to be the case even when other tree species were present in larger numbers. Of 47 cases where tree species was identified 23 were in birch, 9 in oak, 5 in alder, 3 in ash and 2 in each of sycamore, conifers and beech, with only one in a rowan. There was also a marked preference for dead trees with 30 out of 48 nests found in these.

The height of the hole above ground level ranged from 2m to 10m with two records out of this range at 20m. The preferred height seemed to be from 4m to 6m. Nests were found from an altitude above sea level of 10m up to 600m.

Birds in Cumbria suggests a breeding status of 101-1000 pairs. We found birds in 414 tetrads but this does not represent the number of pairs as many tetrads have more than one pair. Since most of these tetrads would hold either one or two pairs this suggests a figure fairly central to this range.

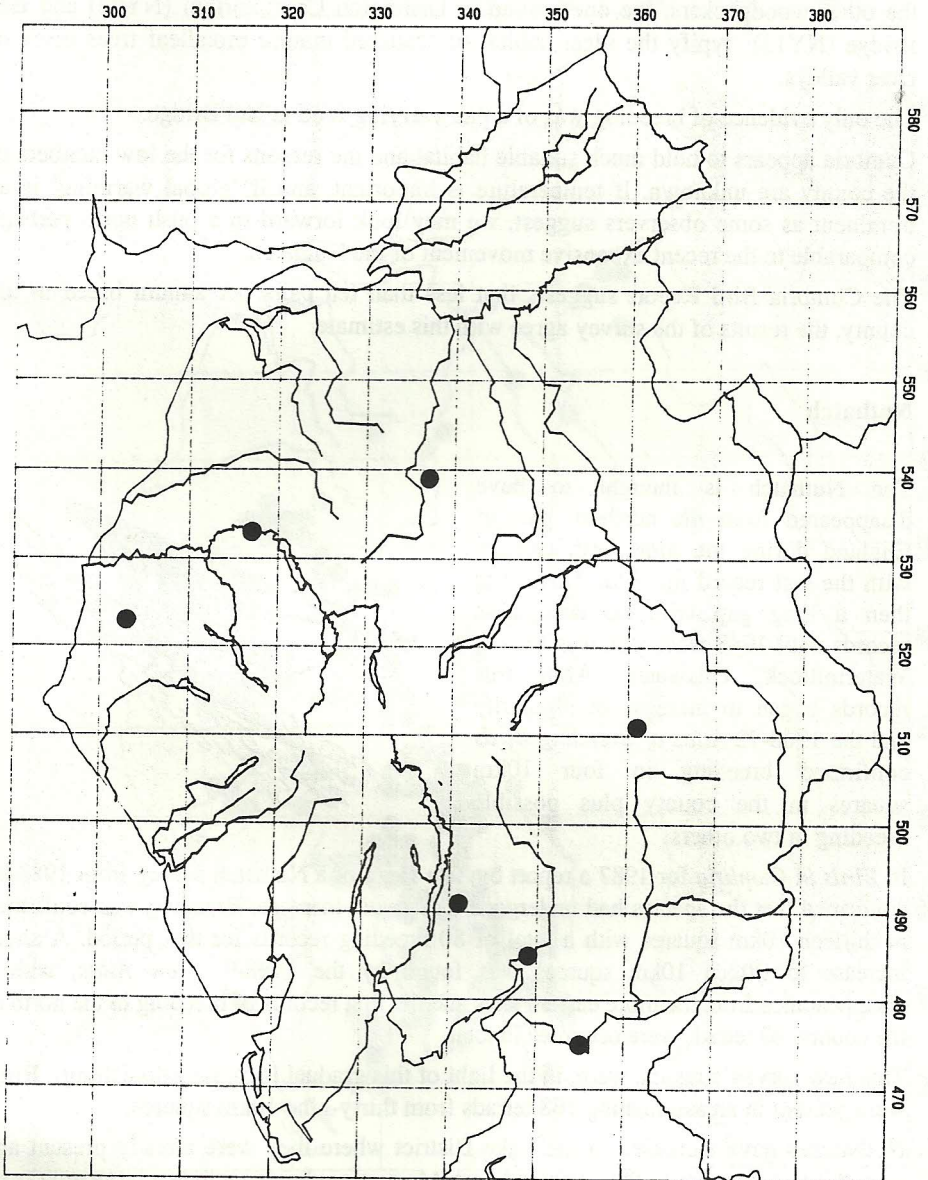
Lesser Spotted Woodpecker

At the northern limit of its range in Britain, the seven summer records of this species represent five more than



Lesser Spotted Woodpecker

Symbol: tetrads Key: ● 1994-5



were found during the 1988-91 BTO *New Atlas of Breeding Birds*.

This species is barely hanging on as a breeding resident; thirty years ago they were found more readily in the south of the county. Less dependent on true woodland than the other woodpeckers, the ones found at Distington Crematorium (NY02) and Isel Bridge (NY13) typify the ideal habitat of scattered mature broadleaf trees often in river valleys.

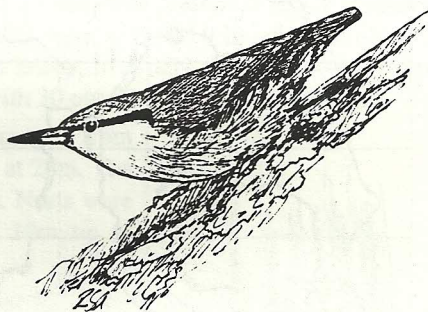
The only evidence of breeding was of a pair carrying food at Isel Bridge.

Cumbria appears to hold much suitable habitat and the reasons for the low numbers in the county are unknown. If temperature is important, and if 'global warming' is as imminent as some observers suggest, we may look forward to a push north perhaps comparable to the recent expansive movement of the Nuthatch.

The Cumbria Bird Report suggests that less than ten pairs per annum breed in the county, the results of the survey agree with this estimate.

Nuthatch

The Nuthatch is thought to have disappeared from the northern part of England during the nineteenth century with the last record in 1886. There was then a long gap with no acceptable records until 1948 when one was seen at Watermillock, Ullswater. After this records began to increase in regularity and the 1968-72 *Atlas of Breeding Birds* confirmed breeding in four 10km squares in the county plus possible breeding in two others.



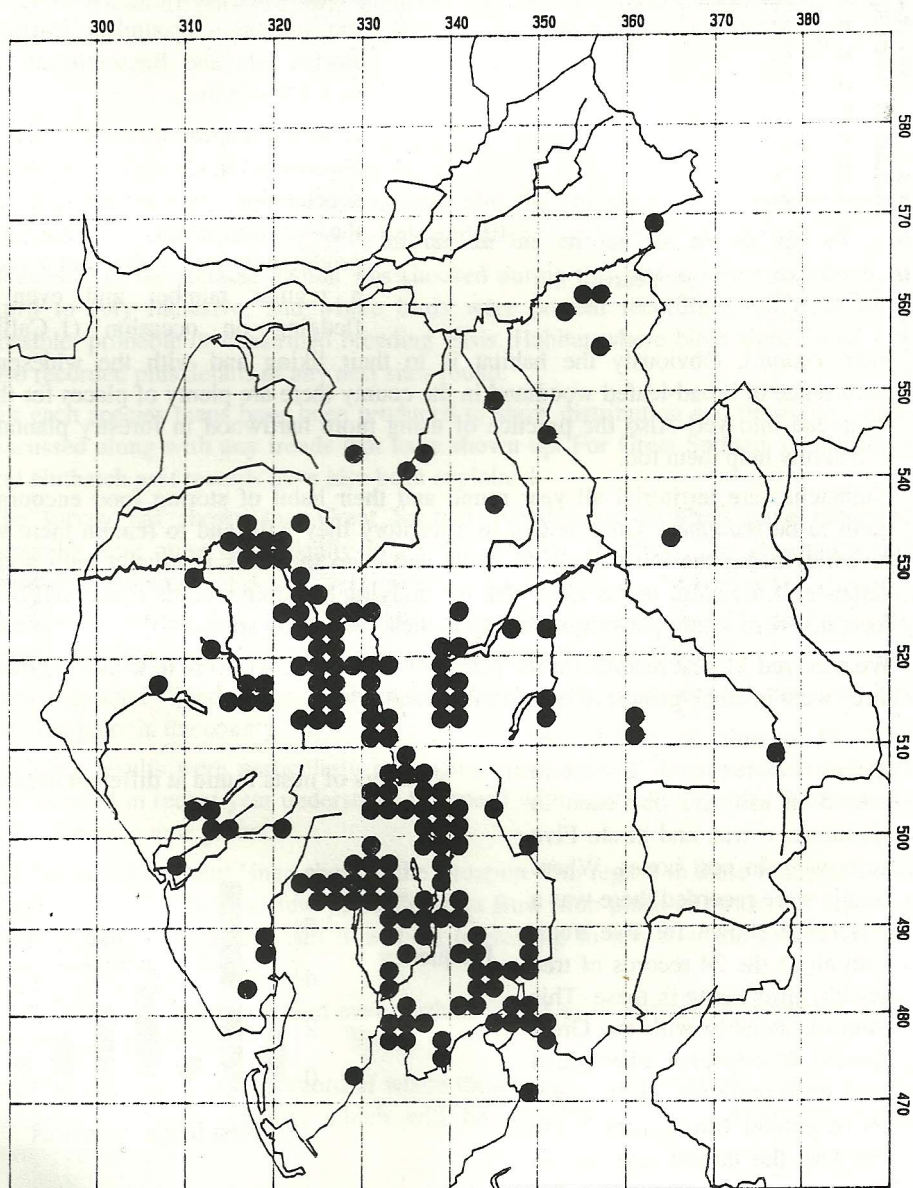
In *Birds in Cumbria* for 1987 a report by Tim Dean of a Nuthatch survey from 1983-85 confirmed that the species had undergone a dramatic increase. Breeding was confirmed in thirteen 10km squares with a total of 80 breeding records for that period. A slight increase to fifteen 10km squares was found by the 1988-91 *New Atlas*, with a disappearance from the more eastern sites and the first records of breeding in the north of the county; 47 tetrads were occupied in total.

This new survey's results were, in the light of this gradual increase astonishing! Birds were present in an astonishing 168 tetrads from thirty-nine 10km squares.

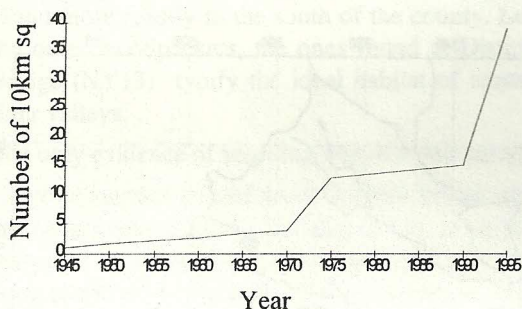
Nuthatches have increased in the Lake District where they were already present and spread into new areas to the north and east. Main strongholds include a large area from

Nuthatch

Symbol: tetrads Key: ● 1994-5



20th Century trend in nuthatch records



Ambleside southwards in a spreading triangle including Grizedale and the area around Witherslack down to Arnside; also the areas around Thirlmere, Borrowdale and Bassenthwaite and near Glenridding.

It would appear that the spread of Nuthatches in Cumbria if anything is accelerating. Recent nestbox data in the county show a very good productivity rate with 6 and 7 young a regular number and even 10 fledging on occasion (J. Callion,

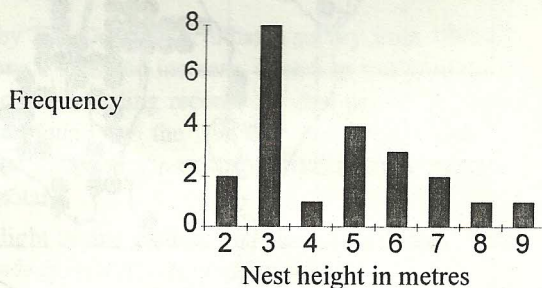
pers. comm.). Obviously the habitat is to their liking and with the widespread occurrence of broad-leaved woodland in the county there are plenty of places for them to spread into yet! Also the practice of using more hardwood in forestry plantation will surely help them too.

Nuthatches are territorial all year round and their habit of storing food encourages them to be sedentary. Once settled in a territory they will tend to remain there with juveniles being the most likely to move and even then this is usually only a short distance. It therefore seems likely that the outlying breeding records could well be the forerunners of future pockets of density in their continuing spread.

We received 31 nest records for the period of the survey. All were in woodland though three were in small groups of trees on farmland.

Of 27 records in which tree species was recorded 12 were in oak, 5 in ash and one each in sycamore, rowan and birch. Five nests were in nest boxes. Where details were recorded there was a preference shown for live trees, with all of the 24 records of tree nesting birds being in these. This contrasts notably with the Great Spotted Woodpecker where dead trees were preferred. Hole height above ground varied from 2m to 9m with the largest numbers in

Numbers of nests found at different heights



the lower end of the spectrum. 19 holes were between 2m and 3m above ground level with only 12 higher than this. Nests were found from an altitude of 10m to 290m above sea level.

Birds in Cumbria puts breeding numbers into the 101-1000 category: the survey suggests that despite the increase numbers are still at the lower end of this range.

Summary

A survey of the three woodpecker species plus the Nuthatch was completed by the Cumbria Bird Club during the years 1994 and 1995.

Over 90% of the suitable habitat was checked during this period in the months from April to July inclusive, and where birds were present recording was done on a possible, probable or confirmed breeding basis. Habitat where birds were found was also recorded plus details of any nest sites found.

For each species maps have been produced to show distribution and these have been discussed along with any trends that have shown up. For Great Spotted Woodpecker and Nuthatch nest records have also been explained.

The survey has shown that Great Spotted Woodpecker numbers have increased generally, and quite dramatically in the far west of Cumbria. The reason for this increase is unknown.

The results confirm that Green Woodpecker has undergone a noticeable decline in the north-east of the county whilst it has consolidated in the Lake District.

Lesser Spotted Woodpecker numbers were found to be much as predicted with less than ten pairs in the county.

Nuthatch results were particularly interesting showing that the increase in numbers documented in recent year understates the speed with which this species is increasing and colonising new ground.

This survey is a useful 'snap-shot' of the situation with regard to these four species in Cumbria. During the next few years Cumbria Bird Club plans to produce a breeding atlas of birds in Cumbria and it will be interesting to see how the results of this compare with this survey.

Will Nuthatches have increased even further? Will Lesser Spotted Woodpecker break the ten pairs barrier?

We now have an excellent record of where these species are found and in what sort of numbers within the county, which will be a useful aid in making any future comparisons.

Acknowledgements

This survey could never have happened without the dedicated support of Cumbria Bird Club members. We would like to say a big thank you for the time and effort they gave and the high quality of the work they did. John Day and David Sharpe deserve a special thank you for taking on the extra work of being Area Coordinators. Tullie House must be thanked for the use of their archiving system and Geoff Naylor for the many hours spent inputting data. We would also like to thank Jane Atkins for her help proof-reading and commenting on the script of this report.

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References

- Sharrock, J.T.R. 1976. *The Atlas of Breeding Birds in Britain and Ireland*. BTO.
- Gibbons, D.W., Reid J.B., Chapman, R.A. 1993. *The New Atlas of Breeding Birds of Britain and Ireland: 1988-91*. Poyser.
- Dean, T. The Nuthatch in Cumbria, its status and distribution. *Birds in Cumbria: A County Natural History Report*, Spring 1987; 55-64. Association of Natural History Societies in Cumbria.
- Cramp, S. (Ed.) 1977-1994. *The Handbook of the Birds of Europe, the Middle East and North Africa: Birds of the Western Palaearctic*. Volume 4; Volume 7. OUP.