

ON THE DISTRIBUTION OF THE NIGHTINGALE
DURING THE BREEDING SEASON
IN GREAT BRITAIN.

BY

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INTRODUCTORY.

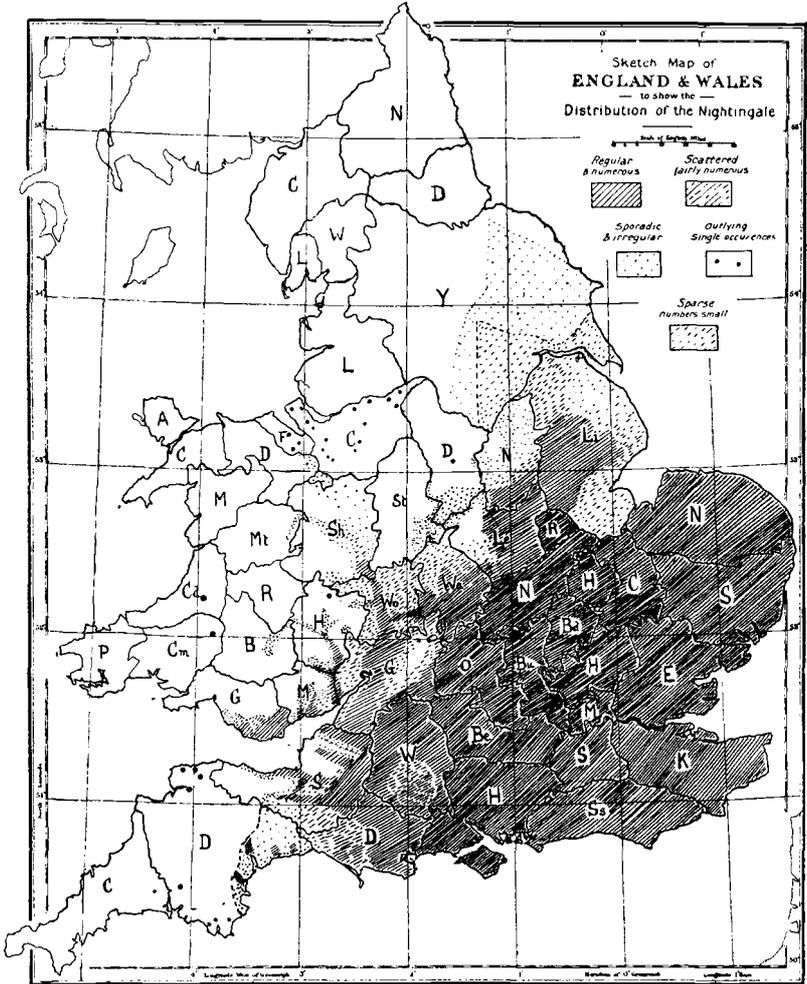
IN the south-eastern counties the Nightingale (*Dauilas luscinia*) is of general distribution, although even here there are certain localities where it becomes scarce or is altogether wanting. Thus it is a scarce bird on the Chiltern Hills in southern Oxfordshire and Buckinghamshire, and also on the high ground of the Marlborough Downs and the treeless expanse of Salisbury Plain, while even in Kent it is less numerous above 500 feet. Still, it is unnecessary to go into detail in the following counties : Kent, Sussex, Surrey, Hampshire, Middlesex, Berkshire, Oxfordshire, Buckinghamshire, Hertfordshire, Essex, Suffolk, Norfolk, Cambridgeshire, Bedfordshire, Huntingdonshire, and Northamptonshire. In Wiltshire it is also tolerably general in all suitable ground, but avoids the high downlands and open plains, where cover is lacking. Rutlandshire may also be included among the counties where it breeds regularly, and the present inquiry has been chiefly devoted to those counties which lie on the edge of its range, or where the distribution is local only.

These include Devonshire, Dorsetshire, Somersetshire, Gloucestershire, Monmouthshire, Glamorganshire (Carmarthenshire and Cardiganshire), Brecknockshire, Radnorshire, Herefordshire, Worcestershire, Warwickshire, Montgomeryshire, Shropshire, Staffordshire, Derbyshire, Leicestershire, Lincolnshire, Nottinghamshire, Yorkshire, Cheshire, Denbighshire, and Flintshire, and possibly Lancashire, Durham, and Northumberland. These we will now proceed to consider in detail, as the Nightingale is entirely absent from the other counties not mentioned here.

Many theories have been advanced at different times to account for the irregular distribution of this species, such as

the presence of a heavy, clayey soil, as opposed to a light, sandy one, being necessary to its welfare. Walcot voiced a popular belief in the south of England, that it is only to be met with "where the cowslip grows kindly." Many people in the Midlands believe that it is unable to cross the Trent. But the study of the following details covering the distribution in each county will, we think, leave little doubt in the minds of our readers that the real obstacles which prevent the general distribution of this species over the greater part of England and Wales are the ranges of elevated land, which it instinctively avoids. Even in counties like Oxfordshire or Berkshire, which lie well within its breeding-limits, it is common only in the wooded lowlands. On the Lambourn Downs in Berkshire, along the Chilterns in Oxfordshire and Buckinghamshire, and on the Cotswolds, it is practically unknown. But these isolated masses of hills and downs of no great height do not interfere with the gradual dispersal of the species by means of the river-valleys. The more important mountain-systems, on the other hand, rising to heights of 1,000 feet or more, present insuperable obstacles. In the Devonian peninsula the high plateau of Exmoor on the north and Dartmoor on the south, mark the western limits of the species, except where a few birds have skirted the coast line and reached the Tamar valley. Similarly the great Cambrian system, extending from the Berwyns south through Montgomery, Radnorshire, and Breconshire to Glamorganshire, with outlying spurs in Shropshire, form an impassable barrier on the west.* From the northern counties the great Pennine Chain, the backbone of England, reaches down into the West Riding of Yorkshire, east Lancashire, and north Derbyshire, while high-rolling plateaux occupy parts of north Staffordshire and west Derbyshire. The limits of this system practically mark the northern range of the Nightingale. On the west side a comparatively small stream of migrants work their way up from the Severn valley

* In South Wales, however, a migratory stream passes along the north coast of the Bristol Channel westward, avoiding the mountains of Glamorganshire, and a pair or two appear to have penetrated up the Towy valley as far as Llandovery, and it is said to have been once heard in the Teifi valley.





into Cheshire, while on the east side larger numbers work their way down the broad vale of Trent and along the Lincolnshire border into the eastern half of Yorkshire, from Huddersfield to Teesmouth eastward.

A large number of ladies and gentlemen have taken considerable trouble in answering our questions and collecting information. Without the kind help thus furnished, it would have been impossible to produce an account of the Nightingale's distribution with any pretence to accuracy; in addition, therefore, to those mentioned in the following pages, we desire to express our indebtedness to Mr. E. R. Bankes, Mrs. R. G. Beecheno, Mr. T. J. Beeston, Mrs. E. L. Calcraft, Messrs. F. Coburn, C. F. Davies, H. M. Dodington, A. H. Duncalfe, Harold Evans, W. F. Evans, N. G. Hadden, Major G. Haines, Rev. C. Homan, Messrs. F. A. Knight, A. G. Leigh, and Stanley Lewis, Miss G. Lister, Mr. H. W. Mapleton, Col. H. Meyrick, Messrs. C. J. M. Packe, R. Perkins, W. J. P. Player, C. Pym, V. Ransome, N. G. Richardson, E. S. Rodd, J. Rodley, G. N. Sowerby, Joseph H. Symes, James Turner, and T. W. Wilson.

DEVONSHIRE.—The presence of Nightingales in Devonshire has for so long been looked upon by the public as something out of the ordinary, that their occurrence seems seldom to have passed unrecorded. These numerous records have been carefully gone into from time to time by Messrs. W. S. M. D'Urban, Murray A. Mathew, E. A. S. Elliot, and other Devon ornithologists, so that it is a comparatively easy task to define, on broad lines, the breeding-range of the bird in this county. If a line be drawn from Dartmouth through Totnes, Ashburton, Lustleigh, Dunsford, Crediton, and Tiverton to Bampton, near the Somersetshire border, this will represent tolerably accurately the western boundary of its breeding-range. (It is perhaps worthy of note that a continuation of this line northwards to Watchet also marks off fairly accurately the western boundary in Somerset.)

To the east of this line the bird is entirely confined to the river-valleys, and breeds regularly in those of the Teign, Exe, Otter, and Axe, and, occasionally, at a few spots on the coast between the Dart and the Dorsetshire border. Its numbers are greatest about Bovey and Trusham in the Teign valley, and this may be said to be the largest colony in Devonshire, the

neighbourhood of Exeter (Stokewood) being the locality where they are the next most numerous. To the west of the line above-mentioned, the Nightingale has only occurred sporadically, the most westerly record being one from Horrabridge, only a few miles east of the Tamar, which forms the Devonshire and Cornwall boundary.

To Mr. W. S. M. D'Urban, who has kindly revised the above statement, we are indebted for some further interesting information with regard to this bird's distribution. Contrary to popular belief, it would appear that there is no evidence of any real increase in its numbers, or in the area it occupies in Devonshire, for wherever the bird is now known to breed, inquiries seem to indicate that it has always been there. With regard to its numbers, these have always varied greatly from year to year, and any actual increase that has taken place of late years is wholly accounted for by the protection now afforded them, and the stopping of the "catching" that was formerly very prevalent, particularly in the neighbourhood of Exeter. Its numbers are never very great, and in some years the birds are probably much less numerous than in others.

With regard to the factors in its distribution, Mr. D'Urban refers to an old idea, that the area occupied by it corresponded with the distribution of the cowslip, but points out that while this is roughly true, the cowslip is absent in the Nightingale's chief haunt in the Teign valley. The chief factors limiting its westward spread are no doubt the high land (unsuited to its habits) of Dartmoor and Exmoor, while its need for shelter from the prevailing north-westerly winds, and its liking for thick copses, practically limits its distribution to the river-valleys and certain sheltered spots near the coast.

Mr. D'Urban also suggests that the presence or absence of the wood-ant (*Formica rufa*), on the pupæ of which the young are largely fed, and the abundance of whortle-berries, particularly in the oak-copses of the Teign, also have some bearing on the Nightingale's distribution in Devonshire.

DORSETSHIRE.—Although the Nightingale is generally distributed throughout Dorsetshire, Mr. W. Parkinson Curtis points out to us that the distribution is by no means an even one. Large areas occupied by the drift-gravel plateau, and other similar formations, are characterized by large fir-woods with, in some districts, copses of birch, poplar, oak, and some elm. Here the Nightingale would appear to be quite scarce, while in the chalk districts the woods abound with rich undergrowth, and Nightingales are numerous, and, in some years, very abundant. While still common in suitable localities in

the west of the county, there seems to be no doubt that on the whole its numbers are less than in the east. The normal yearly fluctuations in numbers would, therefore, be more apparent in the west than in the east; at the same time there seems to be some ground for saying, that there has been a slight increase in the west during the last thirty years.

SOMERSETSHIRE.—There seems to be ample evidence that the Nightingale has increased greatly in numbers during the last thirty years, and is still increasing throughout those parts of the county of Somerset where it is found, while at the same time it is slightly extending its range westwards.

It appears to be most numerous and generally distributed, particularly in the river-valleys, in the east and south-east of the county, from the Wiltshire and Dorsetshire borders to as far west as a line through Wells and Glastonbury. In the extreme south, about Chard, near the Devonshire border, however, its distribution becomes more patchy, and although increasing, its numbers are comparatively small. These increase, however, a little further north, about Ilminster, to become large again, further north still, as the Vale of Taunton is reached.

North of the Mendips it is less numerous, but still generally distributed throughout the county between these hills and the valley of the Avon. Immediately south of Clevedon the country appears to be unsuited to its habits, and it only occurs sporadically about Weston. Along the southern slopes of the Mendips, in certain sheltered copses and passes leading through them, the Nightingale is sparingly distributed, though in very variable numbers year by year, but becomes more numerous and regular, both in numbers and distribution, as one passes eastwards up the valley of the Axe towards Wells. It is along this valley that a definite westward spread has taken place within comparatively recent years.

Between the river Axe and the Polden Hills lies the alluvial tract known as the "Peat Moors," which extends from the shores of the Bristol Channel to just beyond Glastonbury; in this area the Nightingale appears to be known only as a passing migrant, the fact of its being unknown as a breeding-bird being probably solely on account of the lack of suitable breeding-haunts in this district. In certain parts of the Polden Hills, e.g. about Walton, the bird seems to be particularly numerous, and is fairly common around Bridgwater, between these hills and the Quantocks. To the south-west of Bridgwater its distribution appears to follow fairly accurately the fertile valley of the Tone, round the foot of the Quantocks, where, in the neighbourhood of Taunton, the bird is a well-

known, numerous, and increasing visitor. West of Taunton its numbers begin to thin out, and it becomes scarce to the west of Milverton and Wellington, while about fifteen miles west of Taunton, near the Devonshire border, it is almost, if not quite, unknown. In the Exmoor country and the adjacent district as far east as the Quantocks, the Nightingale is quite unknown, and correspondents long acquainted with this area inform us that they have never known of one being seen or heard. The only exceptions to this statement are the recent records from the neighbourhood of Minehead, on the north coast, and these furnish interesting evidence of the westward spread of this bird—thus they were heard at Carhampton, four miles east of Minehead, in 1900, and at Dunster, two miles east of Minehead, and Tivington, two miles west of that town, in 1903. This last would appear to be the farthest westward point at which the Nightingale has bred in Somerset. The Rev. R. Chichester, of Minehead, now informs us that in 1905 or 1906 there were at least five pairs of birds close by Dunster, but that, although in most years now there is one pair about Dunster or Carhampton, its visits are not yet regular, and some seasons pass without a Nightingale being heard. Reports from the Porlock neighbourhood, slightly further west, appear to lack substantiation.

GLoucestershire.—The distribution of the Nightingale in this county has been worked out as recently as 1902 by Mr. W. L. Mellersh, in his *Treatise on the Birds of Gloucester*, so that it is not necessary to do more here than summarize what he there says. He points out very clearly that the distribution is entirely dependent on the physical conditions of the country. On the Cotswolds, as a whole, the bird is scarce, while on the higher portions, although there are many snug valleys with copses apparently suitable for it, it is a great rarity, owing, probably to the frosty nights of April and May at this elevation. In the north-west of the county it is not common in the woods themselves, but outside, amongst the open valleys and copses between the Forest of Dean and Tewkesbury, it is more numerous than in any other part. In the Severn Vale, while it is only less numerous than about Tewkesbury, its haunts are chiefly confined to a narrow belt between the Cotswolds and the Vale, including the little valleys that ascend a short way up into the hills.

MONMOUTHSHIRE.—For information about this county we are mainly indebted to Mr. Iltud Gardner, of Abergavenny, who states that the Nightingale is distributed fairly regularly all over Monmouthshire *for so irregular a bird*. It is clear,

however, from the details which he gives, that as in Herefordshire, its distribution is mainly dependent upon the river-valleys; thus it occurs most frequently and abundantly in the Wye Valley, on the eastern border of the county, and thence less abundantly along the Herefordshire border formed by the Monnow, as far as the outlying localities mentioned under the latter county. Nightingales are also fairly numerous along the valley of the Usk as far north as Llanover, a few miles south of Abergavenny, and occur, and have done so for more than thirty years, according to Mr. R. C. Banks, as regular visitors in some numbers around Newport, in the lower part of the valley. It seems probable from Mr. Gardner's statements, that the Nightingale is found sporadically in suitable localities along the several branches of the river Usk between Newport and Abergavenny, but exact information is wanting, as it is also for the western mining district, though as regards this locality, the presence of the bird is perhaps less probable.

GLAMORGANSHIRE.—The Nightingale seems to have made its first appearance in Glamorganshire about the year 1868, and there is no doubt that it has gradually established itself, and has increased largely in numbers, especially during the last ten years, in the south-east of the county. It has often been stated that Bridgend forms the westward limit of its range, but there are records of its breeding in several localities, within the last three years, between Bridgend and Port Talbot, so that the bird would appear to be slowly spreading along the coast.

The distribution in Glamorgan would seem to resemble somewhat that in Devonshire. Thus it occurs in all the river-valleys between the eastern boundary and Port Talbot, about as far inland as the Great Western Railway line from Cardiff to Bridgend, and at many suitable spots near the coast within this boundary. It is specially numerous in the Vale of Glamorgan, round Beaupre and Llandough, round Cardiff (where its numbers have been put, in 1910, at between twenty and thirty pairs, within a seven mile radius of the centre of the city), and in the flat country to the north of Cardiff about Llanishen. In the latter district the Nightingale ranges further north than elsewhere in the county, and has been reported within the last three years from the Rhondda Valley. Reports from further west, in the Swansea neighbourhood, have not yet been verified.

CARMARTHENSHIRE.—Mr. A. Gwynne Vaughan informs us that, in the year 1898 a pair of Nightingales built a nest and laid eggs, five miles north of Llandovery in this county, but

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did not succeed in rearing any young. This seems to be the only occurrence of the Nightingale in Carmarthenshire.

CARDIGANSHIRE.—In the *Field* for July 9th, 1910, Mr. Max A. Wright records the fact that in the previous June he heard a Nightingale singing three miles south of Tregaron (presumably in the valley of the Teifi). The recorder appears to be well acquainted with the bird's song in Glamorganshire, and Mr. Harold Evans has also written to us about the record, which he describes as "quite authentic," so that in spite of the fact that the locality is far to the north-west of any previous record, it may, we think, be trusted. This individual bird was, of course, only a casual wanderer, and a single record such as this cannot be taken as indicating any real extension of range.

BRECKNOCKSHIRE.—With regard to this county, it seems clear from a consideration of the bird's distribution in Herefordshire and Monmouthshire, and the general physical features of the country, that if the Nightingale is to occur here at all, it would be most likely to do so either along the Usk or along one of the feeders of the Wye. On turning to Mr. Cambridge Phillips's *Birds of Brecon*, we find that this is pretty well what does happen, for there he refers to a popular local saying, that the Nightingale is never heard to the west of the Bwlch (i.e. about eight miles east of Brecon), and adds that although he has heard the bird near Brecon, he is disposed to believe that there is a great deal of truth in the saying.

At the same time, the normal northern range of the Nightingale in the Usk Valley is some considerable distance south of the Brecon border, while on the Herefordshire border on the Wye the bird is quite rare, so that it is not to be expected that it should occur in any numbers, or with any regularity, even in that portion of Brecon defined above. This is well illustrated in the case of the pair of birds referred to in the *Birds of Brecon*, which nested at Talgarth in the north-east of the county a few years prior to 1899; they did not appear the following year, but the same or another pair did a year or two later, and continued to do so on and off, as Mr. Cambridge Phillips informs us, up till 1907; since then he has not heard one, nor heard of one being seen.

From the rest of the county we have no certain information of the Nightingale ever having occurred, but should it do so it is only likely to be an odd straggler.

HEREFORDSHIRE.—In H. G. Bull's *Birds of Herefordshire*, published in 1888, the Nightingale is described as varying much in numbers, not at all abundant, and almost confined to the southern half of the county. In 1889 Mr. T. Hutchinson

compiled a list of Herefordshire birds for the *Transactions of the Woolhope Club*, and this gentleman has been kind enough to provide us with a list of the localities from which he had received well-authenticated records of the bird, together with information that has reached him since; he adds that he has no doubt that the bird is gradually extending its range towards the west, and that, from the length of time it is stated to remain, he has no doubt that it breeds in the county, but that he had not been able to hear of a nest actually having been found. Mr. A. B. Farn, of Breinton, near Hereford, however, tells us that a pair reared their young at Norton Common in 1908.

Taking Mr. Hutchinson's surmise as approximately correct, it is clear from the records that the distribution of the Nightingale in Herefordshire follows very closely the river-valleys. It is found in its largest numbers (Mr. Cambridge Phillips says in fair numbers yearly, and sometimes numerously) in the valley of the Wye as far north as a few miles south of Hereford. About Hereford it occurs less regularly, and its visits become less frequent and its occurrence more sporadic as the river is followed westwards, until about Hay, on the Breconshire border, Mr. Cambridge Phillips describes it as distinctly rare.

In the south-west Nightingales have occurred at several localities near the junction of the valleys of the Monnow and Dove, close to the Monmouthshire border, but their visits seem to be irregular, and probably represent the outposts of the bird's distribution along the valley of the former river, from its junction with the Wye at Monmouth.

From the north of Herefordshire there are several records from the valleys of Lugg and the Frome, which point to a gradual extension of range up these rivers. There do not seem to be any authentic records from as far north as Leominster, and from the Arrow and other rivers that here feed the Lugg from the west, there is definite information that the Nightingale has not yet been found along them. The localities in the east of the county from which it has been reported, besides those in the Frome valley, lie in the valleys of the Leadon and Teme, and suggest that the bird is spreading west from Gloucestershire and Worcestershire along these rivers.

There remains a single locality, Kimbolton in the north of the county, which appears to be widely separated from any other established centre in Herefordshire. Birds appear to have occurred there for some years past, and it is stated that numbers of people journeyed up there from Leominster to hear

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them singing in 1908 and 1909, while in some years as many as three or four could be heard singing at once. It seems probable that these birds represent an "overflow" from the valley of the Teme where, in the neighbouring district of Worcestershire, the Nightingale breeds fairly regularly.

WORCESTERSHIRE.—Though somewhat irregularly distributed the Nightingale does not appear to be absent from any large area. It is most plentiful in the valleys of the Severn, Avon, and Teme, and such parts of their tributaries as run through low and fertile places. The higher and comparatively barren regions of the county are seldom visited. Its numbers vary greatly from year to year, but it is said to have increased much within living memory in the south-east of the county. Its visits to the Malvern district, on the Herefordshire border, would appear to be irregular.

WARWICKSHIRE.—Warwickshire being one of those counties that still lacks a book devoted to its fauna, detailed information has been a little hard to come by, and being near the western boundary of the Nightingale's range, it would be desirable to work out its distribution with greater accuracy than is at present possible. It will be fairly correct, however, to say that over the greater part of the county, as far north as the latitude of Birmingham, the bird is generally, and fairly numerously, distributed. It occurs in greatest numbers in lower-lying alluvial tracts, e.g. below 200 feet in the valleys of the Avon, Arrow, and Stour, in the southern division of the county. In the northern half it is decidedly less numerous, though still uniformly distributed up to Birmingham, while in this area its numbers are largest in the valley of the Blythe, below 300 feet. North of Birmingham information is very scanty, and it seems probable that its distribution thins out rapidly, as Mr. Steele Elliot regards it as a rare bird at Sutton Coldfield, near the Staffordshire border. There seems to have been a steady increase in numbers throughout the southern two-thirds of the county during the last ten years.

MONTGOMERYSHIRE.—All the occurrences of the Nightingale within the county-limits are from the Severn Valley, between where the river flows into Shropshire and a few miles above Montgomery. The most southerly locality is Abermule, where it was heard for two or three years by the Severn (Rev. F. O. Philpott). At Leighton it was heard singing in May, 1900 (Bruce), and about 1869 another was frequently heard at Guilsfield, near Welshpool (Beck). Near the junction of the Fyrnwy and Severn one or two pairs haunt the Shropshire border near Kinnerley (H. E. Forrest).

DENBIGHSHIRE AND FLINTSHIRE.—Mr. H. E. Forrest's collected notes and observations in his *Fauna of North Wales*, show that the Nightingale is certainly a visitor at irregular intervals to the southern part of Flintshire, and the outlying portion, as well as on the eastern border of Denbighshire, where it marches with that of Flintshire. In the outlying part of Flint, Mr. Forrest quotes records from the borders near Ellesmere, Malpas, and Penlly, while it occurred at Overton in 1902 and 1905. In east Denbighshire it has frequently occurred near Wrexham, and also at Gresford, Rossett, and the Nant-y-frith Woods, while in Flintshire it has been recorded from Colomondy, Mold, Gredington, and Holywell.

SHROPSHIRE.—Mr. H. E. Forrest's researches have shown that the Nightingale occurs regularly in the south of the county, mainly along the Severn Valley, between Bewdley and Buildwas, specially affecting the neighbourhood of Bridgnorth, Linley, and Broseley. Beyond these limits it is of very irregular occurrence, but in some seasons extends its range northward to Shrewsbury or a few miles beyond, but still keeps chiefly to the Severn Valley. The limits of its range, however, as well as its numbers, fluctuate considerably from year to year. In 1902 at least six pairs nested close to Shrewsbury, while in 1909 Mr. Forrest only knew of one pair which reared their young, though one or two more were reported. As a rule they keep to the valley, and on both sides it is extremely rare to find them at any distance from the river. The elevated plain which occupies the northern part of the county and extends into Cheshire and Staffordshire, is also avoided, as a rule. There are, however, a few records of birds observed here: thus a pair was recorded from Hadnall in 1900, a nest was found at Grinshill, and a pair noticed at the Clive in 1902, while in 1905 others were reported from Wem. On the west side it has been met with at least three times at Kinnerley, on the Welsh border, and on the east side, in 1908, about ten miles from Wolverhampton (*Zool.*, 1909, p. 74); while two pairs nested two miles nearer Wolverhampton in 1907 and 1909 (A. H. Duncalfe). In the southern part of the county a pair or two apparently find their way up the Teme valley, as Mr. O. R. Owen records a pair having reared young at Ludlow in 1906, and Mr. Forrest mentions another pair at Onibury in 1905.

STAFFORDSHIRE.—At first sight, judging from its geographical position, one might expect the Nightingale to be a regular and widely distributed summer-visitor to Staffordshire; but a study of the contours of the county reveals the fact that

the greater part of its area lies somewhat high for this valley-loving species. This is more especially the case in the north-east of the county, from the Weaver Hills northward, where most of the ground is over 1,000 feet above the sea. But even in the south the only really low-lying parts are the Trent valley, that of its tributary the Tame, and along the Derbyshire boundary in the Dove valley from below Burton to Ashburne, while along the Shropshire boundary the ground falls away again. Between the Trent valley and the Black Country rise the moorlands of Cannock Chase, a great part of which is from 600 to 700 feet high. An analysis of the records of this species from the county, shows that almost all of them are from the valleys referred to or their immediate neighbourhood.

Beginning from the Birmingham district in the south, although the bird certainly breeds on the Warwickshire side, the occasional notices in local papers of its occurrence to the north of the city seem to require substantiation. To the Trent valley it is, however, an occasional visitor. Dickenson, in 1798, wrote that it was sometimes, though very rarely, heard at Weston, but Garner described it as unknown in the Trent valley north of Lichfield. In 1892 the Rev. T. W. Daltry reported its occurrence at Moddershall, but with some reserve, as the locality seemed unsuitable. At Eccleshall, about five miles from the Trent, Dr. McAl dowie says, in 1895, that it was heard for a whole season "a few years ago," while at Sandon Mr. Wells Bladen records it as singing in 1883, and also states that it has been heard for two seasons past near Rugeley. Still lower down the valley it bred in Hamstall Ridgware in 1897 (*Zool.*, 1909, p. 75), and in the Burton district, according to Mr. E. Brown, it occurred in considerable numbers about 1853, when the song was to be heard in every grove in the neighbourhood. This is confirmed by Sir O. Mosley, who states that it is neither frequent nor numerous near Tutbury, but that in some years it occurs, occasionally in considerable numbers. When not disturbed, they have been known to return to the same locality for several seasons, and a definite instance of breeding at Rolleston in 1841 is recorded. Higher up the Dove valley it is of somewhat irregular and uncertain occurrence, but a cock sang at Claymills in 1904, and in the same year at Stramshall, near Uttoxeter, while it is said to have been heard also at Calwich, though most of the records from the upper Dove valley come from the Derbyshire side. On the Shropshire side it has been recorded within a mile of the border, but not as breeding on the Staffordshire side, and an isolated occurrence is reported by Mr. Daltry from Leycett in 1889, which seems to require substantiation.

CHESHIRE.—As Mr. T. A. Coward points out in his recently published *Fauna of Cheshire*, the northern limits of the Nightingale's range in the west of England are formed by the wooded lowlands of this county, while even in these districts it only occurs as an occasional visitor. Almost every year, he says, the local newspapers report occurrences of the Nightingale in various parts of the county, but the majority prove, on investigation, to be of some other species. He further points out that neither nestlings nor eggs have been actually found in the county, but that there is presumptive evidence that the birds nested in most of the cases where their occurrence is beyond doubt. An examination of these last, as enumerated by Mr. Coward, indicates that the Nightingale has never been proved to occur anywhere in the south-east of the county, and that the lowland wooded districts above referred to are practically the lower parts of the valleys of the Dee, Weaver, and Mersey, or one of the latter's tributary-streams, with the Wirral, which lies between the Dee and Mersey estuaries. It seems evident, therefore, that the hills of Derbyshire and Staffordshire, and their outlying portions in east Cheshire, form an effective barrier to the spread of this bird into the latter county from the east, and the evidence rather points to the Cheshire birds being stragglers across the north Shropshire plain, where the Nightingale is also an occasional visitor.

Among the Cheshire records are two from the north-east corner of the county : Strines, close to the Derbyshire border, and Romiley, on the Upper Mersey, in 1896. Assuming the correctness of both (and there is always a possibility of an error in identification, especially in a district where the Nightingale is practically unknown), it might seem possible that these birds had entered Cheshire from the West Riding, but a personal acquaintance on the part of one of the writers with this district enables us to say definitely that we do not believe this to be the case. On the whole, therefore, Cheshire would seem to fall very naturally into line with Denbighshire and Flintshire, in forming part of the western outlying portion of the Nightingale's range.

DERBYSHIRE.—The greater part of this county lies outside the regular breeding-range of this species, and with the exception of the southern lowlands, records of nesting have always been few and far between ; but from the end of the eighteenth century onwards we have a series of isolated instances of nesting, so that it is now possible to define the limits of the range with some accuracy.

By far the greater number of these records come from the

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low lying Trent valley and the flat, well timbered district which extends roughly from Derby in the north to Melbourne and Burton in the south, and from Tutbury on the west side to Trent Junction on the east. In this part of the county it occurs not infrequently, but by no means annually even here. Glover mentions one as heard in Normanton Lane, near Derby, in 1828; Neville Wood, in 1836, wrote that a few pairs usually frequented the Foston and Allesley Woods, and J. J. Briggs, in 1849, stated that it visited the Melbourne district every spring. One bird was shot here in 1848, and a nest was taken and described in the *Zoologist* (1849, p. 2,484). In 1863 Sir O. Mosley and Mr. E. Brown described it as sometimes occurring in considerable numbers, and in other years as altogether absent in the Burton and Tutbury districts. About 1853 there was a great influx of this species, and the song was heard in almost every wood near Burton, but from that time up to 1863 it only occurred rarely. About 1881 and 1882 a pair or two nested near Wellington and Bretley. Several pairs appeared to have bred in the Derby district in 1901, and in this year they were probably general in the south of the county (W. H. Walton). In 1908 the song was again heard near Derby (W. H. Walton), and in 1909 at Chellaston (C. H. Wells). Probably in most seasons a pair or two would be found in the Trent valley if carefully looked for.

Above the junction of the rivers Dove and Trent it does not, as a rule, penetrate to any great distance. It has already been stated that it ranges to Foston and Tutbury, but occasionally it has been known to work its way up much higher. Thus Sir O. Mosley says it has been found as far north as Snelston, near Ashburne. On the borders of Snelston and Clifton, Jourdain heard a male in full song in the spring of 1895, and in 1901 another was reported only a mile or so away (*Victoria History of Derby, I.*, p. 124). In 1910 one was heard near the entrance to Dovedale, at Thorpe, where it is also reported to have occurred for a day or two in former years. These localities, as well as two or three on the Staffordshire border, are all in the Dove valley. In the Derwent valley above Derby the only record deserving credence appears to be that of Messrs. Hall and Statham, who report the song as heard in Matlock Dale for a few days in 1907. It then ceased, but was heard a few days later down the valley at Duffield.* Apparently the males at these outposts failed to attract mates, for both here and at Thorpe the song ceased after a few days, and

* There is also some reason to believe that it has also been heard at Matlock, about 1872.

the birds disappeared. On the eastern border of the county the country is less hilly, but, though the Nightingale undoubtedly occurs in Nottinghamshire, definite records from Derbyshire are wanting, with the exception of Pilkington's statement in 1789, that it is sometimes seen on the north-east borders of the county, particularly in the parish of Creswell, and Whitlock's assertion that certain woods on the outlying portions of Sherwood Forest are occasionally patronised. Recorded occurrences at Winster in 1878 and Bakewell are almost certainly erroneous.

LEICESTERSHIRE.—The greater part of this county lies low, the only exception being part of Charnwood Forest, which is over 700 feet above the sea. The Wolds north of Melton Mowbray, and between it and Market Harborough, are decidedly lower, and rarely exceed 600 feet. There is thus no great natural obstacle to the general distribution of the species, but it appears to be somewhat uncertain and irregular in its appearance. Mr. H. S. Davenport says that he never knew of any particular haunt in Leicestershire being frequented for two years in succession. Miss N. Marsh, however, says that they nest annually in Grimston Gorse, and are said to have done so regularly for fifty years or more. This seems, however, to be an exceptional case, and speaking generally, the bird seems to be commonest in the valley of the Soar, along the Nottinghamshire border, where the ground falls away towards the Trent valley and towards the south-east of the county. On the western side records are practically absent. Possibly the fact that so many notes of its appearance come from the Leicester and Loughborough districts may be due to the presence of observers rather than birds, and it is apparently most numerous in the north-east, where it is reported as very common in the Belvoir Woods (Miss Marsh), while Mr. R. C. Seechem finds it plentiful near Croxton Keyrial, and adds that he knows of five places where they nest close to the village. Mr. M. Browne also quotes Mr. Ingram as recording it breeding at Barkstone, the Kennel Woods and Calcraft Bushes in the Belvoir district. In the Soar valley it is not uncommon locally, and Mr. G. Frisby estimates that as a rule there are from twelve to twenty nests within a three or four mile radius of Quorn. Babington recorded it from Leicester, Rothley, Wanlip, etc.; Harley from Loughborough, Whetstone Gorse, as well as Groby, Martinshaw, Braunstone, and Wistow. Mr. G. H. Storer reports it from Leicester, Braunstone, and Kirby Muxloe. In other parts of the county it seems to be decidedly scarce, though Mr. Davenport met with four pairs

nesting near Keythorpe, and one at Skeggington, in 1893, an exceptional year. A nest was taken at Tugby in 1888, and another reported in 1893 (Rev. H. Parry). The only definite record from the west of Charnwood Forest is that of one heard in 1906 at Swannington (Mr. G. Frisby). Finally, in the south-eastern border of the county, Mr. W. J. Horn states that in 1905 no fewer than twenty-five males were in song in the Market Harborough district.

NOTTINGHAMSHIRE.—As compared with the adjoining county of Derbyshire, the distribution of the Nightingale is remarkable in extending far more to the north. But here again, as usual, the lie of the land gives the clue to the problem, for while the only low-lying parts of Derbyshire are the wide vale of the Trent and the lower parts of the Dove and Derwent valleys, all in the extreme south of the county, the greater part of Nottinghamshire is traversed by the Trent, with low-lying meadows on either hand as it flows northward to the Humber, and the only rising ground is in the Mansfield district, while even here only one or two scattered portions exceed 600 feet in height. So that it is not surprising to find that there are few districts in which it has not occasionally bred, while it is quite common in the Trent valley between Nottingham and Newark, as well as on the Leicestershire border near Belvoir. In the Trent valley above Nottingham it is much scarcer, but has bred for three or four years past, at any rate, at Wollaton (Miss M. Russell), while Mr. C. E. Pearson heard it only twice in thirty years at Chilwell. Lower down it is much commoner, and is reported at three places between Nottingham and Lowdham (Mr. C. E. Pearson), at Arnold, Oxton and, Southwell, the two latter regularly (Mr. J. Whitaker), at Bleasby (Miss N. Marsh), while Mr. Poynty Wright has found it plentiful in the Trent valley as far as Newark, and thinks that it shows a tendency to increase. He also considers it fairly well distributed in the south-east corner of the county, and it is common in the Vale of Belvoir, and breeds there (Whatton-in-the-Vale, etc.). In the Sherwood Forest district it is only an occasional visitor, and Mr. Whitaker only records it five times in thirty-four years at Rainworth, but states that it has nested at Ollerton. Still further north we come to the well-wooded and fertile "Dukeries." Here a few pairs have long been known to breed near Worksop, and the Rev. L. C. Barnes heard two in song in May, 1909, at Scofton, while Mr. Whitaker states that it has nested near Retford. From the north-east of the county our information is defective, but it is probable that a few pairs breed there also.

LINCOLNSHIRE.—Lincolnshire has yet no separate history of its fauna, and it has been somewhat difficult to obtain the requisite information on which to base an account of this bird's distribution. To the Rev. F. L. Balthwayt and Mr. R. B. Lodge we are mainly indebted for the information here given.

There seems to be no doubt that the Nightingale has increased considerably in numbers over most of the county during the last thirty years, and even slightly during the last ten, and it seems not unlikely that the latitude of Lincoln would nearly represent its northern limit fifty years ago. In the north-east of the county at any rate a definite extension has taken place in the last forty years. It is not included in a list of birds found at Swinehope, published in the *Naturalist* for 1852, and John Cordeaux, in his *Birds of the Humber District*, puts its arrival in this part of the county at about 1870.

At the present time the Nightingale seems to be scattered sparingly over the greater part of the county, where there are suitable haunts. It is really abundant in the larger woodlands, especially round Lincoln, and in the middle and south-west of the county generally. In the "fen" country of the south-east it is naturally uncommon, as it is also in the marsh country in the north-east between the Wolds and the sea. In the north-west its numbers appear to be smaller than in the centre of the county, but it occurs regularly in the large wooded tract about Brigg in the north. On the Wolds its visits would appear to be irregular, and its haunts more widely scattered, but further information about this district is desirable.

YORKSHIRE.—The distribution of the Nightingale in this important part of its range has been so lately dealt with, and in such an able manner, by Mr. T. H. Nelson in his *Birds of Yorkshire*, that it is hardly necessary to do more here than to give a condensed summary of what he there says. It is only necessary to add that since this book was published nothing has occurred. Mr. Nelson informs us, to lead him to suggest any modification of that account.

Like Mr. D'Urban in Devonshire, at the extreme south-west of the bird's range, Mr. Nelson expresses a decided opinion that here, on the northward fringe, the Nightingale has not extended its range within the time when this could be definitely traced. He points out that, contrary to what was once believed, further research has revealed the fact that over one hundred years ago the bird bred pretty regularly, probably as regularly, at the northern point of its range, as it does to-day. Mr. Nelson also points out that, although it has been known to

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visit occasionally districts still further north, it is quite probable that these exceptional visits were also made in the past, and that these visits are dependent to some extent at any rate on the variations that take place from year to year in its numbers, and its relative abundance in some seasons in its normal area of distribution. Within the area of its regular summer-range it usually occurs in limited numbers only. It is only in the neighbourhood of Doncaster, and on the southern fringe of the county bordering Nottinghamshire, that it can be described as fairly abundant. A line passing north of Rotherham and Barnsley, and east of Wakefield, Leeds, and Harrogate to near Boroughbridge, and then east through Skelton (five miles north of York), and, sweeping round the southern spur of the Wolds up to Beverley, and finally reaching the North Sea about Hornsea, circumscribes the portion of the county within which the Nightingale is an annual summer visitor, while an outer line from Sheffield by Huddersfield, Bradford, Otley, Ripon, and Thirsk to Normanby-in-Cleveland, thence south-east to Scarborough, includes all the localities for which there is satisfactory evidence of the bird ever having bred or occurred.

The whole Yorkshire distribution lies strictly within the lowlands, and nowhere exceeds 250 feet above sea level, except in the single instance of its breeding within the Spa Gardens at Harrogate. Indeed, the foothills of the Pennine Range, of the Cleveland Hills, and even those of the chalk Wolds form fringing borders of the bird's range.

On the fringe of its range it is not at all constant to one particular haunt, and is more abundant generally in some seasons than in others, which may to some extent account for its intermittent appearance in the more northern and outlying districts within its range.

From the counties further north there are a few records, but, in our opinion, further evidence is required before they can be fully accepted. It is quite possible that an occasional male may reach Lancashire, as there is no natural obstacle to prevent its doing so. Howard Saunders only deemed one worthy of attention up to 1892, and Mr. H. O. Forbes states that no authentic nest has ever been taken, though he seems to think that there is evidence of its occurrence in the Irwell valley. The B.O.C. Migration Report for 1907 contains the record "Lancashire, May 19." On investigation this appears to be founded on a report of two at Clitheroe on that date. As recorded by Saunders, Mr. G. Bolam saw and heard a male in the north of Northumberland in 1893.