SOME OBSERVATIONS ON ROOSTING BIRDS

BY

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Between January, 1938 and March, 1939 we were able to make a study of the roosting habits of a number of common birds and the following notes are on the most interesting species observed.

The observations were made within an area of about 100 acres of park and farm-land in Reading. The park is bordered by a narrow stretch of woodland on one side and rough waste land on the other. It is terminated by a garden at each end and contains a small number of Wellingtonias amongst many other species of trees. The Wellingtonias consist of four *Sequoia gigantea* and three *Sequoia sempervirens*.

The main points we tried to record or discover for each species were as follows:

(a) The roosting place chosen;
(b) The manner of roosting;
(c) The height of the roost;
(d) The wakefulness and liveliness of the birds, and
(e) The reactions of the birds to the prevailing weather conditions.

**STARLING (Sturnus vulgaris.)**

Our observations on Starlings were chiefly confined to a single pair which habitually roosted in the loft of a large building, but a few visits were made to neighbouring Starling roosts and other individuals and pairs were observed. The pair occupying the roost in the loft were first observed in November, 1938. The roosting place was on a small water-overflow pipe running over a last years' Starlings' nest and out through the eaves of the roof. In the following January, one of the birds was seen to make a short visit to the roost, leaving it at 3.5 p.m. Ten minutes later it arrived again, followed by a second bird. Photographs were taken of both individuals which temporarily frightened them away, but at 3.30 p.m. both reappeared. For the next 25 minutes they could be heard preening and scratching at odd intervals and finally they settled down. They were again photographed, but the results only showed one bird with its head sunk between its shoulders and bill pointing forwards — evidently not yet asleep. Again, at the end of January, another attempt was made at photographing the birds asleep. They arrived at the roosting place a few minutes past four o'clock,
after making a short preliminary visit as before. This time, however, they changed their roosting place and came across the nest to a recess in the roof formed by the wooden beams. The roosting place above the nest had become very dirty by this time and it seems possible that the change was made as a result. Again we failed to secure photographs of either bird asleep, but those obtained show the smaller covert feathers and scapulars much fluffed up in spite of the birds having been alarmed by some slight noise prior to the taking of the photographs. We think the reason for this fluffing out of the feathers is for the purpose of assisting in conservation of heat during the night.

**House-Sparrow (Passer domesticus).**

We have found Sparrows roosting gregariously in two different types of place namely, in ivy covering walls of buildings and in the smaller bushes surrounding a large Starling roost. In the former case the birds are not near enough to each other to cause a mass disturbance when an intruder approaches the roost, but in the latter case, on approaching the occupied bushes, the birds fly up in scores long before the roost is reached. Generally speaking, House-Sparrows are not lively when roosting singly or in pairs, and though they may be woken by slight noise or even by the beam of a torch on them, they usually remain on their perch until it is actually touched and shaken.

Sites chosen for roosting are usually in dry, well sheltered places which may be occupied under almost any weather conditions. We found a male Sparrow roosting regularly in a well sheltered cavity about three or four inches deep in the side of a haystack. This side of the stack was itself well sheltered by trees, so that few winds could drive into the roost. Irregularly, from January onwards, a female accompanied this bird and on many other occasions we found apparently paired-off birds roosting together. The chief places chosen for roosting, besides those already mentioned, have been in ivy covering trees of various species, in yews and on the foundations or remains of nests of Sparrows. The average height chosen has been about 7 ft. from the ground, but in the case of those roosting in yews, a higher place is often occupied. This may be 12 or 13 ft. up.

The manner of roosting is much the same as that of most other passerines observed, namely the body-feathers are fluffed out to a comparatively small extent, the bird squats more or less horizontally on the perch and the head is tucked
into the scapulars. In this way, the foremost half of the head is hidden and only the crown and nape are visible. On one occasion, however, we found a male Sparrow asleep, but with the bill pointing forwards. The head was hunched in between the shoulders and the body-feathers were fluffed up in the usual manner.

**Tree-Creeper (Certhia f. britannica).**

Only three out of the seven Wellingtonias in the park contained roosts that were ever seen to be occupied by Tree-Creepers. One of these was a *Sequoia sempervirens* and a single Tree-Creeper was once observed roosting about 10 ft. up its trunk. A *Sequoia gigantea*, at the southern end of the park, contained four roosts that were occupied frequently until October, 1938 and then apparently abandoned. One of these roosts, situated about 12 ft. up the trunk, was occupied on one night only in January, 1938 and a second cavity, on the other side of the trunk and at about the same height was occupied on three consecutive nights in February. The weather conditions were similar on all these nights; namely, there was little or no wind, a clear sky and a minimum temperature of just over 30°F. A third and much lower roost (6 ft. 6 inches from the ground) was occupied on one night in March, and the weather conditions were similar to those of the previous occasions. On October 5th and 6th, the fourth and last cavity was found occupied and this was about 10 ft. up the trunk. The weather conditions were again similar to those of previous occasions.

During February, 1939 a single roost, about 5 ft. 6 inches up the trunk of another *Sequoia gigantea*, was occupied on many occasions. It is interesting to note that the weather conditions on all these nights were almost exactly similar to those encountered in 1938 when the Tree-Creeper was observed.

The manner of roosting appears to be a little obscure as far as the position of the head is concerned, but otherwise it seems fairly plain: the bird rests in a more or less vertical position in the roosting cavity, the tail usually being pressed against the bark below it to act as a support and the wings hanging loosely down by the sides. The feathers of the rump, back, mantle and scapulars are considerably fluffed up so that they completely hide the head and wing-coverts from view. The following observations seem to show that the head is neither buried in front of the bird, as described in this magazine by P. G. Kennedy (vol. xxx, p. 5), nor under the wing, as described by M. N. and D. H. Rankin (vol. xxxiv,
p. 56). On February 2nd, 1939, a Tree-Creeper was observed roosting with the head tucked well into the scapulars of one

Tree-Creeper. Showing the head tucked into the scapulars of the left hand side. (Photographed by C. C. Doncaster.)
side, so that the crown and nape could clearly be seen from above. Later in the evening the same bird was re-visited and it was at first thought that it had changed the position of the head, but by studying the bird at close quarters and again from above, it appeared that the head was still in the same position, though buried deeper in the raised scapulars. Each subsequent time that this roost was occupied, it was possible to see the bird's head and a photograph was taken showing the position fairly clearly. It seems possible, therefore, that those individuals observed previously may have been roosting in a similar manner, the head not showing owing to the roosting cavity being more exactly the size and shape of the occupant. This might well be the case as the head would then be covered by the roof of the cavity and hidden by the raised scapulars. Tree-Creepers are very sound sleepers and only on two occasions have they woken and flown from the roost. On the first occasion an attempt was made to climb the tree in which an occupied roost was situated. This evidently disturbed the bird and without turning to see what was happening, it leapt from the roosting cavity and disappeared. On the second occasion, the occupied roost was approached quietly and without touching the particular tree. As a light was shone on to the bird it disappeared in like manner to the first. This may have been due to the bird changing the position of the head at the time of the approach. Evidence of such a change was obtained when a Tree-Creeper was found roosting with the head tucked into the scapulars of the right hand side of the body and later, when re-visited, the head was seen to be on the opposite side.

**Blue Tit (Parus c. obscurus).**

The roosting places which appeared to be most favoured by Blue Tits were shallow holes in trees caused by the rotting away of a branch.

The holes that we have seen occupied were about 2 inches in depth and about 1½ inches in diameter, and these were occupied quite frequently, though not on many consecutive nights. They have varied in height from about 8 ft. to 15 ft. up the trunk. On other occasions, Blue Tits have been found roosting in ivy covering trees, also at a height of about 8 ft., and the manner of roosting has been very similar to that of House-Sparrows: the birds were seen squatting on the thicker ivy stems with the head tucked into the scapulars. The body-feathers, however, were fluffed up to a great extent so that those of the flank and breast very nearly covered the
back and head. One bird roosting in this manner was woken either by the light of a torch or slight noise, but it did not attempt to fly. The wakefulness and liveliness seems to vary somewhat: a few individuals were roused after two or three flashlight photographs had been taken of them, but most were not disturbed by this procedure. Those that were woken, eventually flew from their roosting place after being dazzled by the light of a torch for several minutes.

The manner of roosting of those birds found in holes in trees has not been possible to decide, but presumably much the same posture is assumed as those found in ivy. Photographs show the feathers fluffed up to a considerable extent and the head evidently near the back of the hole. The tail projects straight out of the hole at a distance of not more than an inch.

The birds evidently disliked wind, rain and excessive light, and only on one occasion was a Blue Tit seen roosting in a hole in a tree that was open to the light of the moon. On windy or rainy nights, more sheltered roosts were apparently chosen.

**COAL-TIT (Parus a. britannicus).**

Three Coal-Tits were found roosting singly on the upper sides of the lower horizontal branches in an avenue of cedars. Each was about 6 ft. from the ground and very well protected above by a thick mat of foliage. Their heads were tucked into the scapulars of either side and the body-feathers, especially those of the flanks and breast, were fluffed up to a considerable extent. These birds were particularly heavy sleepers and even though the branches on which they were roosting were lightly shaken, no disturbance was caused. On a number of other occasions Coal-Tits were found in old and dilapidated nests of uncertain origin and these birds were generally more wakeful and lively. One nest situated in one of the cedars, about 8 ft. from the ground, possessed a cavity in its base and in this a Coal-Tit was found roosting on several occasions. Presumably the bird had excavated the cavity itself, as the nest was probably a Blackbirds' originally. This particular Coal-Tit was both wakeful and lively, and whenever the occupied nest was touched, the bird woke and eventually flew out. Occasionally it flew immediately it was woken and several times it was woken even by slight noise or by the light of a torch on it. All the individuals roosting in the cedar avenue were observed between October and November of 1938, but there was an apparent absence of them after this date.

In the following February a Coal-Tit was observed roosting in a particularly open place: it was in an old nest with one of
the walls slightly overhanging the hollow. The nest was situated about 5 ft. from the ground in a small and sparcely foliaged bush. There was, on this occasion, very little wind, however, and the night was fine but frosty.

**Blackbird** (*Turdus m. merula*).

The most common sites chosen by Blackbirds for roosting were found to be thick, dense bushes or trees. The roosts were usually between 3 and 8 ft. from the ground. Little can be said regarding the manner of roosting, but it is assumed that the birds took up much the same attitude as House-Sparrows or other passerines roosting on a definite perch. The wakefulness of the species was very marked and not once were we able to approach a Blackbird without it waking. Hence, we were unable to note the manner of roosting. The liveliness of the woken birds varied considerably, however, some allowing us to shine a bright torch on to them at close quarters and make a considerable noise, while others flew from their roosts at the sound of our approach. The choice of roosting place appeared to be influenced chiefly by rain. Most roosts were so well sheltered that little wind could penetrate them in any case, but during wet weather situations such as the interior of a box bush were particularly favoured. On two nights during heavy, steady rain, a female Blackbird was found in the centre of a box bush. She was quite untouched by the rain on both these occasions. An exceptional roosting place occupied by a male Blackbird in October, 1938, was an old nest of its own species. It was in a comparatively open position, being near the top of a hedge about 3 ft. from the ground. The weather conditions however, were good; there was little wind and no rain.

On several occasions in March, pairs were found roosting within a few feet of one another, but in most cases they were found singly. An exceptional case of Blackbirds roosting gregariously with Starlings was in a reed-bed with a number of rhododendrons.

**Robin** (*Erithacus r. melophilus*).

Robins appear to prefer fairly dense cover in which to roost; most individuals observed have been in thick yews or laurel bushes and a fairly large number have been found in ivy covering trees or stumps. The height usually chosen for roosting varied between about 4 ft. and 8 ft. from the ground.

Those birds found asleep had the head tucked into the scapulars and the feathers of the breast and flanks fluffed up to a moderate extent; but nothing like so much as in the case of the two species of tits.
The wakefulness and liveliness of the individuals varied somewhat, but in every case when a bird was a sound sleeper it was not lively when woken, while with a light sleeper it was the opposite. On the whole, Robins were found to be light sleepers and every one was eventually woken by the light of a torch or noise made in approaching. About 60% of them were awake when found and these all deserted their roosting places when slightly disturbed.

Unfortunately, no Robins were found in wet weather and, regarding their reactions to weather conditions, we can only say that wind seemed to have little effect upon the choice of a roosting site.

**WREN** (*Troglodytes t. troglodytes*).

A comparatively large number of roosting sites have been found occupied by Wrens, but the type of places most frequently chosen appeared to be shallow holes in haystacks. Other roosts quite commonly occupied were old nests of their own species and disused scrapings of Tree-Creepers. Perhaps the most interesting roosts that were found were a newly started Great Spotted Woodpecker's nesting hole on the underside of a rotten beech branch and the foundations of a Long-tailed Tit's nest still under construction. A Wren was found in the latter on two nights, but on the first it was woken after some time by noise and the light of a torch and on the second it was very wakeful and flew from its roosting place as soon as a light was shone on to it. This degree of wakefulness and liveliness has been the case with almost every individual observed; on the first time of finding they have only been woken after some while by considerable noise or light, but on their return to the same roost they have been easily woken and frightened away.

On many occasions, two or more Wrens have been found roosting together, but from February onwards they were found most frequently in pairs. Consequently, single birds, trios and more were seldom found during this season. However, on one occasion as late as March 7th, three Wrens were found roosting together in an old nest of their own species. During the early winter the number of individuals roosting together varied considerably. In January and early February, the numbers fluctuated between two and four of those found roosting in haystacks, but on February 1st, 1939, nine individuals were found together in an old Song-Thrush's nest. This was situated under the eaves of a low farm building and was about 4 ft. 6 inches from the ground. The gap between the
top of the nest and the roofing tiles was only about an inch, but the outside birds could be seen fairly plainly: they were all roosting with the tails pointing upwards and outwards, but the position of their heads could not be seen. They were all very heavy sleepers and only by inserting a hand into their midst could they be made to fly out. In this way it was possible to count at least nine individuals as they escaped, but there may have been one or two more unnoticed. The weather on this occasion was not particularly cold and the minimum temperature for the night was 31°F.

The manner of roosting varied slightly according to the roost chosen. Those occupying disused scrapings of Tree-Creepers took up very much the same attitude as these
birds, though the tail always tended to stick out rather than be used as a support. Those roosting in nests or holes in haystacks appeared very much more like Blue Tits or Coal-Tits: the head seemed to be tucked into the scapulars lower down the back and the body was in a horizontal position.

Green Woodpecker (*Picus v. pluvius*).

On three consecutive nights in March, 1938, a Green Woodpecker was found roosting in a hole about 15 ft. up the trunk.
of a beech. The hole had been occupied previously by great bats, but these had deserted it some while before: it was a long oval hole, about a foot in length and extending up inside the tree for about the same distance. On the first night, we found the Woodpecker awake in its roost and on shining a light into the hole the bird attempted to climb higher and out of sight. In a few seconds it gave this up and remained more or less motionless. On the second night the bird was found asleep and though two flash-light photographs were taken of it, it did not wake. Its position in the hole was similar to that of the previous occasion. The third time it was visited it was once again found to be awake and on this occasion it flew from its roost and did not return.

The manner of roosting is obscure, as it was not possible to see the position of the head. It does appear, however, that the head is not buried in the scapulars. The feathers of the nape were seen to be raised, as if the head were bent forward and possibly tucked under the wing. Very little fluffing up of the body-feathers was observed.