

## Blackwater Valley Bat Boxes

Following the article in the previous newsletter, “Recording Bats at Rowhill”, Steve Bailey was inspired to write about his bat box scheme in the Blackwater Valley.

In 1990 before I knew anything about bats I started putting bat boxes up on sites the Blackwater Valley Countryside Partnership looks after. With help and advice from Bernard Baverstock and Pat Smith, and funding from the Surrey Bat Group and The Blackwater Valley Countryside Trust, we now have boxes up at 18 sites, so when Covid restrictions eased we did a full round of checks. So what have we learnt in the last 30 years?

Initially boxes were homemade of the standard design of a wooden “bird box” with slot entrance at bottom rear. We have experimented with various homemade and bought designs. Experience has improved our choice of location and design, so this is not a scientific study with controls but does give some useful pointers if you are considering erecting boxes.



*Water bats in a 2F-dfp (double front panel) box, photo Bernard Baverstock*

As of Autumn 2022 we have 13 box schemes (another two have stopped due to access difficulties) and five sites we look after have had boxes erected by others for development mitigation. We check and maintain our major schemes each September but due to Covid no checks were possible in 2020 and 2021. In 2022 we inspected 248 boxes and added or repaired 13 more.

I now have data for 3,134 inspections, finding 1,065 bats in 484 boxes of 25 designs. Our sites are mostly young (50-100 years old) deciduous woodland often associated with water bodies and this may impact results. Most use is by soprano pipistrelles (227 records); very few common pipistrelles are found. Other species found are water bats (53 records) and brown long-eared (17 records), with just two records of single Natterer’s (in same box, probably same bat).

In the first few years around 5-10% of boxes were used. At our established sites with improved locations and better boxes it is now over 50%, but at the development mitigation sites it remains at 5%.

For pipistrelles recommended boxes with over 40% chance of use are Schwegler 1FD, 2F-dfp, 3FN; of the larger “colony” boxes 2FS and 3FS are short on data but looking promising. The homemade wooden long slot and vertical slot (similar to standard but with a baffled side entrance) are also well used. All types are used throughout the year including for mating groups in autumn.

For water bats Schwegler 1FD, 2F-dfp, and 1FS seem best. Water bats are twice as likely to be found in autumn than spring but small groups are found throughout the year. We have too few records of long-eared to indicate preference but they have been found more than once in Schwegler 1FF, 1FS, and 2FN. Long eared are four times less likely to be found in the autumn than spring which will have reduced our counts.

Tree species and height seem to make little difference. The sopranos seem to prefer north- or east- facing boxes, and the water bats west, although the latter “statistic” may reflect the repeated use of a low number of boxes.

Steve Bailey