

CALGARY BLUEBIRD TRAIL — 1978

HAROLD W. PINEL, 1017 - 19 Avenue N.W., Calgary, Alberta and JOHN R. RIDDELL, 3033 - 1 street S.W., Calgary, Alberta.

During March of 1978, the 400 nesting boxes were again cleaned out, sprayed with a 10% creolin solution, and repaired or replaced, as required, in preparation for the upcoming nesting season. Each box was checked and the contents recorded three times between third week in May to third week in July.

Of the 400 houses, 39 were vandalized before nesting began, and 11 were unoccupied on all visits, leaving 350 boxes used by birds. Excluding the 39 houses vandalized before nesting commenced, 96.9% of the available nesting boxes were occupied. There were 392 bird nests, 1 Red Squirrel nest, and 4 Deer Mouse nests in the 350 occupied boxes.

Table 1 analyzes the nesting success and losses for 1978. The average clutch size for Mountain Bluebirds was 5.26, and for Tree Swallows 5.46. In 26 nest boxes,

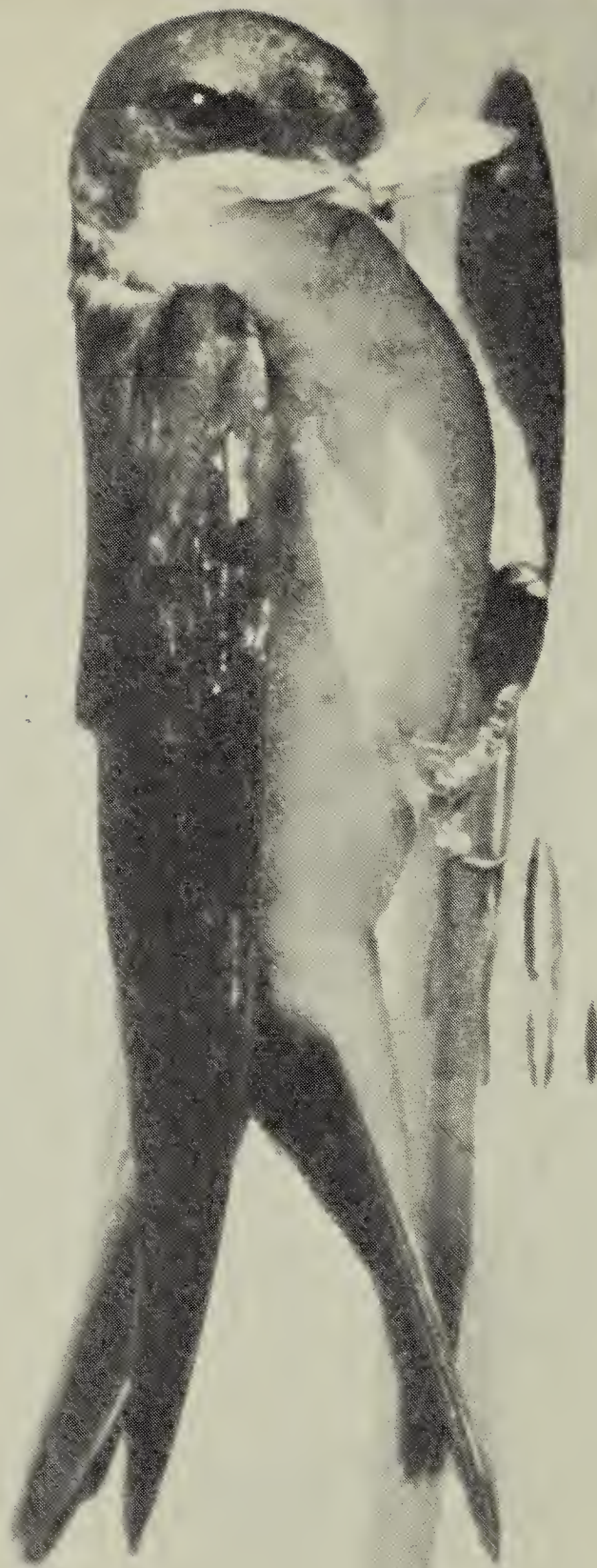
there were two or more broods by the same species — 20 were House Sparrows, and 6 were Mountain Bluebirds. Different species nested in the same box 16 times, as follows: sparrow then swallow, 7; sparrow then bluebird, 1; bluebird then swallow, 8.

The total losses for all species from egg-laying to young leaving the nest were 460 (22.5%) of which 287 (14%) were House Sparrow losses due to destruction by the authors. These figures show a drastic reduction in losses as compared to 1977, where losses from the egg-laying stage to young leaving the nest totalled 930 (46.7%). Two major factors contributing to the high productivity of 1978 as compared to 1977 are less vandalism and less interspecific competition, as illustrated by the following points: (1) The number of boxes vandalized before nesting

Table 1. SUMMARY OF NESTING SUCCESS BY SPECIES, CALGARY BLUEBIRD TRAIL — 1978. (Numbers in parentheses are losses from the previous stage).

| Species | Nests | Eggs laid | Eggs hatched | Young fledged | % of eggs producing fledged young |
|-------------------|-------|-----------|--------------|---------------|-----------------------------------|
| Mountain Bluebird | 84 | 442 | 414(28) | 410(4) | 92.8% |
| Tree Swallow | 241 | 1317 | 1189(128) | 1176(13) | 89.3% |
| House Sparrow | 65 | 287 | 54(233)* | 0(54)* | — |
| House Wren | 2 | 0 | 0(0) | 0(0) | — |
| TOTALS | 392 | 2046 | 1657(389) | 1586(71) | 77.5% |

* Destroyed by authors.



Tree Swallow at nesting box.

John Lane

began was reduced from 43 to 39; (2) The number of boxes vandalized after nesting began decreased from 15 to 0; (3) The number of House Sparrow nests decreased by 51 (44%) in 1978; (4) The 65 House

Sparrow nests were concentrated in 45 boxes; and (5) The number of boxes used by more than one species during the nesting season decreased from 60 to 16.