

slowed down overnight practically to the edge of death to keep the birds from starving while they slept. He found, as Webb found, that they reverted to normal at daybreak when the flowers open and their nectar is again available. Some such physiological change would apparently account for the resistance of the young swifts.

The birds of these two orders (swifts, hummingbirds, goatsuckers and mousebirds) are thought to be fairly primitive as birds go, and they do have a tenacity for life which is remarkable. It is thought that birds evolved comparatively recently from lizard-like reptiles: perhaps the evolutionary adaptations from survival mentioned above are actually atavisms or holdovers from reptilian ancestors, as we know that reptiles can

survive low temperatures and famine for long periods. These characteristics add some weight to the belief that these birds are quite primitive.

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## Bird Notes from a Farm Shelterbelt

By Margaret Belcher, Regina

Thirty years ago a shelterbelt was planted on our farm at Dilke, with Manitoba maple, ash and Russian poplar spaced four feet apart and bordered with caragana. The ash and poplar have almost all died out, leaving the maples and caraganas. In this shelterbelt in the past thirty years a characteristic birdlife has established itself.

The pattern of birdlife here could be duplicated in practically any shelterbelt in south central Saskatchewan. It is not its novelty that is its attraction—with almost predictable regularity the same birds return each year to build their nests and raise their young. Yet, because the farm shelterbelt is so compact a unit of a particular type of habitat, and because the "edge" of the belt of trees is so well suited to birds and to watching them, the shelterbelt has surprising possibilities for a study of bird behaviour. Even if one is not engaged in a seriously conducted study, it is endlessly interesting to watch the birds each day when working in the garden or going about farm chores in the yard.

This year the shelterbelt has had the following resident birds, presumed nesting: Yellow-shafted Flicker (one pair); Eastern Kingbird (probably two pairs); Western Kingbird (two pairs); Least Flycatcher (one pair); Brown Thrasher (probably two pairs); Robin (one pair); Loggerhead Shrike (one pair); Warbling Vireo (probably two pairs); Yellow Warbler (one or two pairs); House Sparrow; Redwinged Blackbird; Baltimore Oriole (one pair); Common Grackle (two pairs); Brown-headed Cowbird; American Goldfinch; Chipping Sparrow (one pair); Clay-colored Sparrow.

The Yellow-shafted Flicker probably did not nest in the shelterbelt, but in a nearby aspen bluff. The male flicker drummed on the combine in the spring; on July 15 five flickers were observed at one time and following that the young were heard often in the shelterbelt calling for food.

The Chipping Sparrow in the shelterbelt was also something of a surprise. After the spring migration of sparrows, I heard the song only once or twice; the other day (July 15), however, I saw the "Chippie" with



its characteristic red cap. It surprises one to find a Chipping Sparrow nesting so unobtrusively when one knows them as common and very much in evidence on lawns in cities like Saskatoon and Edmonton. The House Wren, on the other hand, is probably not nesting here this year, although it too has been heard on several occasions. Usually a wren nests in the cattle sheds, and when it does its stuttering song can be heard daily in the shelterbelt.

Only one pair of Baltimore Orioles nested in the shelterbelt this year, and only one pair in 1957; we used to have at least two pairs. A female Oriole found dead in the yard on May 31 may have accounted for the failure of a second pair to nest this year. Recently (July 8) a second dead Oriole was discovered, a male bird brought into the barn at noon by a cat. Had it been killed the day before, we should have thought that the absence of the parent bird explained the plaintive turkey-like "peeps" of two young Orioles which called continuously throughout the day of July 7. The young Orioles certainly sounded as if they had been deserted, and no adult birds were in evidence. However, a female was observed feeding two young on July 8, and we recalled then that we had heard the same plaintive peeps last year from young Orioles only just out of the nest. Mrs. Keith Paton, telling of the birds in their shelterbelt at Oxbow, also comments on the "racket" young Orioles make calling to their parents.

Predators in the shelterbelt are rare. Crows do not nest, apparently preferring the bluffs in the fields and pastures. A Magpie attempted to nest this year, but its bulky nest was torn down, and since then it has not even hunted in the shelterbelt as a pair did daily last year.

Why have Redwinged Blackbirds returned to nest in the shelterbelt this year? For years there have been only Brewer's, although I can remember as a child hearing the chorus of Redwings in the trees on early summer mornings. Later, the Redwings must have withdrawn to the more typical habitat of willow-fringed sloughs in the fields. This year they are back. Have they driven away the Brewer's Blackbirds, or simply come in to fill a vacuum left when the

Brewer's, for some reason, stopped nesting here? Some weight is given to the latter explanation by a comment in my 1957 notes that Brewer's Blackbirds "seem not common this year."

We have never systematically hunted the shelterbelt for nests, feeling that unless "birdnesting" is engaged in for some scientific purpose breeding birds should be disturbed little as possible. There are other ways, of course, of recognizing the presence of breeding birds. The day we planted potatoes this spring we watched a pair of Grackles carrying nesting materials from the edge of a nearby slough. The female brought slough grass in her beak on each trip and the male followed her to the slough and back without seeming to bring any nesting material. We later wondered whether the male carried mud unnoticed in his beak. Another curious thing that we have noticed about the Grackles is the fact that the two pairs are almost always flying about together, although the nests are in quite different parts of the shelterbelt.

Seasonal singing, of course, also indicates the presence of breeding birds. We suppose, for example, that two pairs of Warbling Vireos have nested this year because we have heard two Vireos singing all summer.

When the young birds begin to appear in the last weeks of June we have the final evidence of successful nesting. On June 28, young Grackles and Shrikes appeared, with all the fuss attending their first venture into the world. Young Orioles and Thrashers were seen July 7, young Western Kingbirds July 17. On July 12 the alarm calls of male and female Redwings drew my attention to young blackbirds in the chokecherries. Not less than four adult males had assembled to join in the warning cries. These must have been birds of rather late hatch, for the first group of flocking Redwings was seen in the yard only four days later.

The most interesting nest record for the year was that of a House Sparrow with an apartment in a Western Kingbird's home. One pair of Western Kingbirds had a bulky nest at least four times the size of the other pair's nest, and we realized that



They had tenants when we saw a male House Sparrow flying into the tree with food.

A farm shelterbelt would lend itself well to the study and recording of bird song. In addition to the easily recognized "songs" of the familiar species of birds, there are a great variety of notes, varying with the season and the purpose of the call. The spring "okalee" of the Redwing is rarely heard now, whereas the harsh "chee" is given repeatedly throughout the day—to use just one example. The Brown Thrasher is another bird with many notes besides the repeated phrases described in field guides and reminding one of Browning's thrush that "sings each song twice over."

We are always interested in the Thrasher's second round of song, lasting for a week or ten days later in the season. He began his second period of animated singing this year on June 28 and continued to July 7; last year we heard it also in the last week in June. Other birds seem to do the same thing. After a period of little song, the Robin was noticed singing spiritedly on July 8 and he continued to sing for almost a week. On July 9 I heard the first Yellow Warbler's song that I had noticed for some time and it has been heard for several days. By contrast, the Warbling Vireo never stops singing. It is the most constant singer in the shelterbelt, persisting in song throughout the day and throughout the season. I wish I had kept records of its song this year; I cannot remember a day since the arrival of the first Vireo this spring when I have not heard the song. It is so free a singer that the male was noticed to continue its warbling song as it flew in pursuit of the female shortly after their arrival in May.

Our shelterbelt has no winter residents, only occasional winter visitants — Black-capped Chickadee, Downy and Hairy Woodpeckers, Northern Shrike and Pine Grosbeak. Sometimes in severe winters Gray Partridge and Sharp-tailed Grouse shelter there and come to the oat stacks for feed. A Great Horned Owl which breeds elsewhere on the farm) is occasionally seen sniping from the tallest trees, and in December, 1956, during what my brother called the "Killer Blizzard" a Golden

Eagle unexpectedly sheltered there. The most interesting winter visitor was a tiny Boreal Owl (Jan. 2, 1956).

In spring and fall there are migrant thrushes (Swainson's, Gray-cheeked), migrant sparrows (Slate-colored Junco, Tree, Chipping, Harris', White-crowned, White-throated, Lincoln's) and migrant warblers (chiefly Tennessee, Orange-crowned, Myrtle, Blackpoll, Palm). Less commonly we see the American Redstart, and we have one record of the Bay-breasted (May 22, 1954) and one of a Mourning Warbler caught by a cat (Sept. 1, 1952); other warblers passing through are missed by not being seen or correctly identified. Of the Kinglets, only the Ruby-crowned has been seen. Pine Siskins are noted as migrants and also as erratic summer visitants.

As summer visitants there come to the shelterbelt Cedar Waxwings, Rose-breasted Grosbeaks (one seen July 30, 1952), and Black-billed Cuckoos. Summer visitants to farm shelterbelts may sometimes provide a real thrill. George Ledingham tells of a **SCARLET TANAGER** seen at the farm six miles west of Moose Jaw, May 19, 1951, and of a **MOCKINGBIRD** seen there this year (July 16, 1958). Mrs. Keith Paton, Oxbow, has reported to the *Blue Jay* a **MOCKINGBIRD** found dead last summer in the Patons' shelterbelt. Mrs. Paton described it as a greyish bird answering to the description of a Mockingbird in her field guide. She wonders whether a Mockingbird might have nested there recently. "Several years ago," she says, "I found an untidy large nest containing several bluish eggs, in a low bush. At the time, I thought the bird nearby was a Mockingbird but not being so 'bird-minded' then as now, I did not bother to get positive proof."

Mrs. Paton went on in her letter to tell about the birdlife in her shelterbelt: this summer they have Catbirds, Brown Thrashers, Eastern Kingbirds, Western Kingbirds (three pairs), Brewer's Blackbirds (which have lost two nests because of Grackles), Wrens, Goldfinches, Yellow Warblers, Baltimore Orioles, Robins (now nesting a second time), Least Flycatchers, and a Black-billed Cuckoo "here as usual, although we've never found a nest." Mrs. Paton's observations and my own illustrate the kind of obser-



vation that any interested person can make of the birds in a farm shelter-belt. Much more could be done by someone making an intensive life history or behaviour study. The unit of study is so restricted that it may seem entirely insignificant; but it is to be remembered that observations in a limited local area produced Malcolm MacDonald's *Birds of Brewery Creek* and Gilbert White's *Natural History of Selborne*.

### NEST RECORD CARDS

Please send your nest records in immediately so that a summary of this year's information may be prepared for the December issue of the **Blue Jay**. Cards should be sent to the Saskatchewan Museum of Natural History, Regina.

## PROTECTIVE COLORATION OF THE WESTERN MEADOWLARK

By Ono F. Lick, Davidson, Sask.

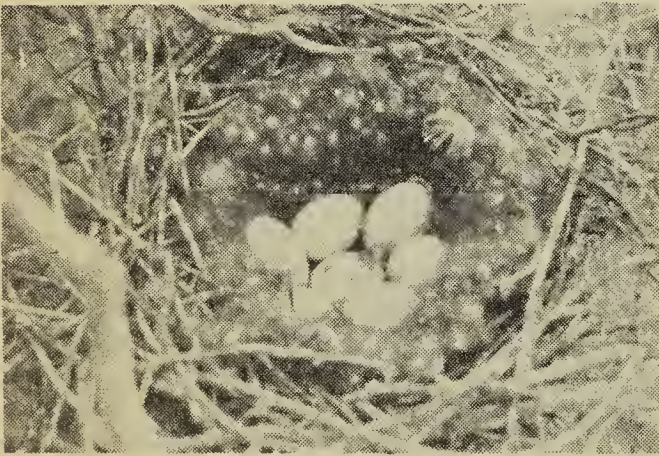
Yesterday, as I sat facing an old window overlooking a shaggy piece of sod, I saw a bird flying downward as if going to alight. By its size, its streaked brownish back and white outer tail feathers, I took it to be a meadowlark. My mind became conscious of cats, so I looked more closely, ready to alert the bird by tapping on the window pane. The sod (I cannot give it the dignified name of lawn) looked very ruffled and tousled, with clumps of old, brown crested wheat grass, fresh green grass underneath and a big patch of prairie beans. I could see no meadowlark. The breeze kept the yellow blossoms of the beans moving. The

longer I watched, the more determined I became to spot the yellow-breasted bird. After watching for five minutes, I became bolder and pulled the window curtain aside. Only then did the bird display itself by flying up. It was an example of remarkable protective coloring, the brown of the bird resembling the tufts of dead crested wheat grass and the yellow blossoms of the beans.

I have observed this protective coloring on many occasions. A few years ago I was watching a swarm of fritillary butterflies amid a patch of dandelions. Walking around among the nodding dandelion heads, scarcely noticeable, was a meadowlark, grabbing off the fritillaries.

## MALLARD NESTS IN ABANDONED CROW'S NEST IN ASPEN TREE

By Frank Roy, Saskatoon



On June 8, 1958, Mr. Bob Darcy, 1340 Colony Street, Saskatoon, reported to me that he had discovered a duck nesting in an abandoned crow's nest in an aspen tree about two miles east of the city on Eighth Street. The crow's nest, situated about 16 feet up in a 24-foot aspen,

was well preserved and amply lined with down. When I observed the nest on June 8, it contained 7 eggs. Yolks on several of the eggs indicated that there had been at least one more egg in the original clutch.

The female Mallard flew off when we approached the edge of the aspen grove. Three days later, June 11, she refused to leave the nest until we shook the tree. In each instance she disappeared through the dense foliage and flew at ground-level until she was well out of sight. We did not see her return to the nest and wondered whether she landed directly on the nest from above, or whether she landed at the base of the tree and then flew up to the nest edge. Has anyone ever watched a tree-nesting Mallard return to her nest? It would be an interesting observation.