

SNAIL SHELLS IN TREE SWALLOW NEST BOXES INTEREST THREE GENERATIONS OF BIRDERS

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My grandparents live on a property in the boreal transition zone on the north side of the Thickwood Hills, SK. The land has mixed forests as well as wetlands and hay fields. To supplement the natural habitat, 13 nest boxes have been installed, which have often been used by House Wrens (*Troglodytes aedon*) and Tree Swallows (*Tachycineta bicolor*). These nest boxes have been maintained and monitored for more than a decade. The authors are familiar with the stick nests of the House Wrens, as well as the grass and feather nests of the Tree Swallows. However, an unusual item was observed when cleaning out the nest boxes in November 2021. One of the Tree Swallow nests (Figure 1) included a number of snail shells, which were both spiral and planospiral in shape (Figure 2).

This was the first time that snail shells were observed in any of the nest boxes on the property. However, the Cornell Lab of Ornithology notes that Tree Swallows eat high-calcium items like fish bones, crayfish exoskeletons, clamshells, and eggshells during the breeding season.¹ Snail shells, being made of calcium carbonate, contain high levels of calcium.² There are seasonal wetlands approximately 200 m and 400 m from the nest box site. The water levels in these wetlands were much lower in 2021 than in past years and were mostly dry, save for a few puddles in the low spots. Although snails are not usually part of the Tree Swallow diet, we suggest that the low water levels in nearby wetlands presented an opportunity for these birds to collect the snails.



FIGURE 1: Tree Swallow nest removed from nest box. Photo credit: Jennifer Froese.



FIGURE 2: Snail shells retrieved from Tree Swallow nest. Dimple in paper towel is 2 mm. Photo credit: Jennifer Froese.

1. Cornell Lab of Ornithology. All About Birds, Tree Swallow. https://www.allaboutbirds.org/guide/Tree_Swallow/lifehistory. Accessed November 15, 2021.

2. Toronto Public Library. Why do snails have shells? <https://kids.tpl.ca/wonders/1297>. Accessed December 28, 2021. 🐌