

# ATTEMPTED DOUBLE-BROODING BY THE RED-BREASTED NUTHATCH

**Dale G. Hjertaas**  
15 Olson Place  
Regina, SK S4S 2J6

Double-brooding has rarely been recorded in the Red-breasted Nuthatch (*Sitta canadensis*), with one reported case of a second nest attempt in the wild and one in captivity.<sup>1</sup> Here I report an attempt at double-brooding by a pair of Red-breasted Nuthatches at Regina, Saskatchewan.

In 2024, Red-breasted Nuthatches nested in a birdhouse I had hung in the spruce tree in our front yard at 15 Olson Place, Regina. This was a plywood nest box constructed for House Wrens (*Troglodytes aedon*). The nest box had been used successfully by House Wrens in 2022 and by a pair of Black-capped Chickadees (*Poecile atricapillus*) in 2023.

I became aware that the nuthatches were using the nest box at 07:40 h on 22 April when I observed a male nuthatch feeding the female at the entrance to the nest box. I attempted to inspect nest box contents using a fibre optic device at 08:50 h on 5 May, but I could see only the female sitting tightly on the nest contents. I therefore did not determine the size of the first clutch.

At 16:30 h on 8 May I observed adults carrying food to the nest, indicating hatching occurred between nest inspections on 5 May and 8 May. Adults were feeding large young at the nest box entrance on 26 May. On 30 May I observed at least two young in the spruce tree near the nest box, indicating successful fledging. Young Red-breasted Nuthatches typically leave the nest when they are between 18 and 21 days old.<sup>1</sup> If the young began to hatch on 8 May, they would have been about 22 days old on 30 May when I observed fledged young.

On 5 June I was surprised to observe the male nuthatch feeding what I first assumed was a chick at the nest box. Later that day I saw the male again bringing food to the nest box. I was confused, wondering why young would be returning

to the nest box after fledging, but on 6 June when I observed the male bringing food to the bird house, I realized it was feeding the female, which had laid a second clutch. On 7 June at 14:30 h, I used my fibre optic device to confirm a second clutch, counting seven eggs.

Female Red-breasted Nuthatches typically lay one egg per day.<sup>1</sup> A clutch of seven eggs observed on 7 June indicates she initiated the second clutch no later than 1 June, only two days after I first observed fledged young. While the adults were not marked, the very rapid initiation of the second clutch is strong evidence this was the same male and female that raised the first brood.

Paule Hjertaas and I continued to observe the nuthatches regularly and their second attempt appeared to be proceeding successfully until 06:30 h on 13 June when we noticed that both nuthatches were active around the nest box. We thought they were putting more spruce sap around the nest entrance (Figure 1). Placement of conifer sap around the nest entrance is thought to deter predators and competitors from entering the nest cavity.<sup>1</sup> McCowan described a pair of nesting Red-breasted Nuthatches at Brandon, Manitoba

making repeated trips to a pine tree for resin that was placed on the bark around the nest hole.<sup>2</sup>

Then we noticed a House Wren (*Troglodytes aedon*) singing in shrubs adjacent to the spruce tree, directly facing and about 1.2 m from the nest box. The male nuthatch frequently perched between the wren and the nest box on a slightly higher branch. It attacked the wren several times, sometimes knocking it off its perch as both fell out of my view. Although the nuthatch defended vigorously, after each attack it appeared more disheveled with feathers out of place. My impression was that the wren was getting the better of these battles. We did not observe the female nuthatch take part in these battles but observed her watching the nest while the battle proceeded. Paule photographed the female nuthatch at 06:36 h (Figure 2).

By 06:37 h, the House Wren had advanced and was singing from the tip of a dead spruce branch approximately 1 m from the nest box (Figure 3), a significant advance toward the nest box from its previously more hidden location in the shrub. At 07:03 h, the wren sang from a position about 0.3 m in front of the nest box. The nuthatch male watched from



**FIGURE 1.** Male Red-breasted Nuthatch at nest-box entrance. Note spruce sap spread on walls of nest box around the entrance. Photo credit: Paule Hjertaas.

above but no longer attacked. We could no longer see the female, which may have been in the nest box or may have moved out of sight. At that point we had not seen the wren attempt to enter the nest box. The wren then dropped down, out of our field of view. At 07:14 h, the nuthatch male was perched again in front of the box, calling loudly. We did not see the House Wren or the female nuthatch.

We were away for most of the day and next checked on the nest box at 18:50 h. The male nuthatch was perched near the nest box, leading me to believe the box was still in its possession.

The next day, 14 June, I did not see any activity near the nest box all morning. I inspected the nest, and it appeared empty. However, at 12:40 h, the male nuthatch perched in the spruce tree near the nest box and scolded.

On the morning of 15 June I observed no sign of the nuthatch near the nest box. At 17:50 h, the House Wren exited the nest box. Upon opening the box, I confirmed there were no longer any eggs in the nest, but several broken eggshells were on the ground below the nest. I concluded the wren had ejected the nuthatch eggs from the nest box.

Bird houses and natural cavities are an attractive but limited resource for cavity-nesting birds. One of the challenges for any cavity-nesting bird is defending the cavity from other birds. The House Wren cannot excavate its own cavity so is totally dependent on securing an existing cavity. The female House Wren appears to focus primarily on quality of the nest cavity when selecting a mate, so possession of nest cavities is of crucial importance to a male House Wren when establishing its territory and seeking to attract a mate.<sup>3</sup> House Wren usurpation of nest sites of other species, sometimes accompanied by destruction of eggs or young, has been documented many times.<sup>3</sup> Indeed, loss of nest cavities to House Wrens has been reported to be a primary source of nest failure for several cavity nesting species, including Prothonotary Warbler (*Protonotaria citrea*), Tree Swallow (*Tachycineta bicolor*) and chickadees.<sup>3</sup> Brewer, in a study of

Black-capped and Carolina Chickadees (*Poecile carolinensis*) noted “House Wrens are probably the most constant and successful competitors for nest sites of both species of chickadees over much of their ranges”.<sup>4</sup>

Brewer reported the crucial point in an attempt by a House Wren to usurp the nest is the wren entering the nest and throwing out the nest and contents.<sup>4</sup> I did not think to look for ejected eggs and did not notice the eggshells until June 15, but the lack of activity around the nest box on the morning of 14 June suggests the wren ejected the eggs sometime on 13 June, the day I first noticed the conflict.

Interestingly, after gaining control of the nest box in our yard, the House Wren did not nest in it. Subsequent observation showed it placed several twigs in the nest (Figure 4) as male House Wrens do after claiming a cavity.<sup>3</sup>

Failure to follow up usurpation of the nest with actual nesting suggests the wren did not attract a female.

1. Ghalambor CK, Martin TE (2020) Red-breasted Nuthatch (*Sitta canadensis*), version 1.0. In *Birds of the World* (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.rebnut.01>

2. McCowan N (1988) Red-breasted Nuthatches nest at Brandon, Manitoba. *Blue Jay* 46(3):157-8 <https://bluejayjournal.ca/index.php/bluejay/article/view/5038>

3. Johnson LS (2024) Northern House Wren (*Troglodytes aedon*), version 1.1. In *Birds of the World* (B. K. Keeney, A. F. Poole, M. G. Smith, and S. M. Billerman, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.houwre.01.1>

4. Brewer R (1963) Ecological and reproductive relationships of Black-capped and Carolina Chickadees. *Auk* 80:0-47. 🐦



**FIGURE 2.** Female Red-breasted Nuthatch watching nest box as House Wren attempts to claim it. Photo credit: Paule Hjertaas.



**FIGURE 3.** House Wren on dead spruce branch in front of nest box. Photo credit: Paule Hjertaas.



**FIGURE 4.** Interior of nest box after House Wren usurpation, showing wren has added twigs, but no nest was constructed. Photo credit: Dale Hjertaas.