

Red-breasted Nuthatch Nest Destroyed by Northwestern Crows

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Red-breasted Nuthatch (*Sitta canadensis*; Figure 1) is one of about 85 species of North American birds that use tree cavities for nesting (Scott et al. 1977). Predation is considered to be the major cause of nest failure in birds (Ricklefs 1969, Martin 1993) but cavity-nesting species are considered to be less vulnerable to predation than birds nesting in open sites (von Hartman 1957, Martin and Li 1992). Also, nesting success is higher in cavity-nesting species

(Nice 1957).

Witnessing successful predation of a holenesting species is an unusual event. In April, 2012, in a residential region of Victoria, British Columbia, a pair of Red-breasted Nuthatches was observed and heard excavating a nest hole about five meters from the ground in a rotten, mature Garry Oak (*Quercus garryana*) limb. The hole was about five centimetres from the end of a rotting branch about 20 cm in



Figure 1. Red-breasted Nuthatch is present year-round on southern Vancouver Island. It prefers to breed in mixed mature coniferous forests but also nests in treed urban and suburban habitats. *Photo by Mark Nyhof, Victoria, BC, 8 November 2000.*

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diameter. On 1 May, a Northwestern Crow (*Corvus caurinus*) was noticed probing, like a woodpecker, into the nest branch about 15 cm below, and on the reverse side, of the nest-hole. Three crows seemed to be taking turns at digging or perhaps the "working" crow was driven off by the next in line. Finally, a crow on the nest limb broke through to the nest cavity and began removing nesting material (Figure 2). It brought out a small egg (Figure 3) and after a moment, swallowed it. I saw the crow remove and swallow three eggs (Figure 4). The nuthatches, called in the vicinity, but did not harass the crows.

Red-breasted Nuthatch is considered a weak excavator and in British Columbia it nests in both natural sites and cavities excavated by other species of birds, usually in a dead tree or the dead top of a live tree (Harestad and Keisker 1989, Campbell et al. 1997). Known predators of Red-breasted Nuthatch

eggs and nestlings in North America include Steller's Jay (Cynaocitta stelleri), House Wren (Troglodytes aedon), Red Squirrel (Tamiasciurus hudsonicus), Gray-necked Chipmunk (Eutamias cinereicollis), weasels (Mustela spp.), and mice of the genus Peromyscus (Ghalambor and Martin 1999).

Northwestern Crow, also present year-round on southern Vancouver Island, is an omnivore that eats a wide variety of dead and live plant and animal food. It is known to take the eggs and nestlings of many nonpasserine and passerine birds but has not previously been recorded feeding on a cavitynesting species (Verbeek and Butler 1999). The Redbreasted Nuthatch nest in Victoria was vulnerable and accessible to predation because the soft, decaying tree limb in which it was built, facilitated the opportunistic feeding by the Northwestern Crows.



Figure 2. Northwestern Crow with nesting material extracted from an active Red-breasted Nuthatch nest cavity in a rotten Garry Oak limb. *Photo by David Stirling, Victoria, BC, 1 May 2012.* BC Photo No. 3935a (see Campbell and Stirling 1971).

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Figure 3. Northwestern Crow extracting egg from Red-breasted Nuthatch nest. *Photo by David Stirling, Victoria, BC, 1 May 2012.* BC Photo No. 3935b.



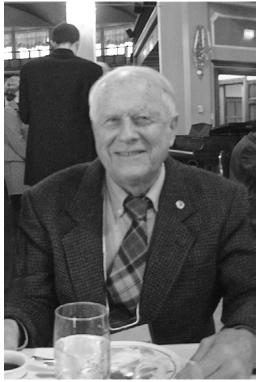
Figure 4. Northwestern Crow holding a Red-breasted Nuthatch egg before swallowing it. *Photo by David Stirling, Victoria, BC, 1 May 2012.* BC Photo No. 3935c.

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About the Author

At 92 years old, Dave remains an active field naturalist and still enjoys world travel. In 1959, he was hired by Yorke Edwards, who started the first nature interpretation program in British Columbia parks. Dave co-ordinated field programs for the Parks Branch, including hiring seasonal staff. Many of his protégés went on to excel in careers that included a strong natural history component. After 25 years as a civil servant, Dave retired to organize and lead wildlife tours around the world.



David Stirling, Victoria, BC, circa 2003.