

JUVENILE GRAY JAY PREYS UPON MAGNOLIA WARBLER

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Abstract.—A juvenile Gray Jay (*Perisoreus canadensis*) was observed to capture, kill, and eat a healthy juvenile Magnolia Warbler (*Dendroica magnolia*), demonstrating that Gray Jays depredate free-flying birds in addition to nestlings and dead adults. Predation of birds, which was manifested in a recently independent bird, may be a regular feature of Gray Jay biology.

JUVENIL DE *PERISOREUS CANADENSIS* DEPREDA UN *DENDROICA MAGNOLIA*

Sinopsis.—Se observó a un juvenil de *Perisoreus canadensis* capturar, matar y alimentarse de un juvenil saludable de *Dendroica magnolia*, demostrando que los individuos de *Perisoreus canadensis* depredan aves que vuelan libremente además de pichones y adultos muertos. La depredación de aves, manifestada independientemente en otra ave recientemente, parece entonces ser una característica consistente de la biología de *Perisoreus canadensis*.

The Gray Jay (*Perisoreus canadensis*) is characteristic of the boreal and sub-alpine forests of North America, but many aspects of its behavior and ecology remain poorly understood. This report represents the first full account of a Gray Jay seen capturing a flying bird and eating it. The fact that the Gray Jay involved was a juvenile suggests that avian predation might be a more important aspect of its biology than previously thought.

On 18 Jul. 1990 at Moose Bog, Essex County, Vermont (44°46'N, 71°45'W), I encountered a single juvenile Gray Jay alternately sitting quietly on low branches and making 2–5 m flights between perches. The bird was observed at close range (4–5 m). Field notes indicate that the bird's head was midway between juvenal and first basic plumage. No adult Gray Jays were seen before, during, or after the incident. The Gray Jay continued to move about in an area that enabled me to keep the bird under observation at distances of 3–30 m. While I watched, the Gray Jay left a perch, intercepted a Magnolia Warbler (*Dendroica magnolia*) in flight, and knocked it to the ground. The Gray Jay followed the bird to the ground and proceeded to jump up and down several times on the bird while repeatedly striking the bird with its beak. During the latter part of this activity, however, the birds became partially obscured by ferns.

After approximately 2 min, I moved toward the two birds and saw the Gray Jay eating the warbler. My approach caused the Gray Jay to carry a portion of its prey in its beak into a low tree, where it held the remains on a limb and continued to eat. I recovered what was left of the Magnolia Warbler and identified it as a juvenile.

In the brief time the warbler was being pursued and was attempting to evade the Gray Jay, it did not exhibit the weak flight typical of a newly fledged bird. Distress calls from the Magnolia Warbler before it was killed elicited a mobbing reaction that attracted a number of bird species. The

absence of other Magnolia Warblers prior to the event and during the subsequent mobbing activities, as well as the size of the rectrices and remiges, and its strong flight, suggest that the Warbler was an independent juvenile.

The food habits of the Gray Jay have been most recently reviewed and summarized by Strickland and Ouellet (1993). Its role as a scavenger on both mammalian and avian carcasses is well documented. Although adult Gray Jays are known to capture and kill small mammals, there is no mention of the Gray Jay successfully capturing and feeding on anything other than nestlings (Ouellet 1970) or netted birds (Pike 1978, Rutter 1969), although Strickland and Ouellet (1993) report Gray Jays seen vigorously chasing Boreal Chickadees (*Parus hudsonicus*) and Common Redpolls (*Carduelis flammea*). Ouellet (1970) suggested that the Gray Jay might be more predaceous than previously imagined.

This observation is notable, therefore, because it represents the first evidence that the Gray Jay can capture, kill, and eat a seemingly healthy juvenile passerine. In addition, this observation confirms previous suspicions (Gill 1974, Ouellet 1970, Rutter 1969) that predation is a regular feature of Gray Jay biology and provides insight into the age at which a complex predatory behavior is first manifested. Additional information is needed to determine whether the behavior is innate or learned.

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