## TWO ENCOUNTERS OF ROUGH-LEGGED HAWKS **BANDED IN THE PERRY RIVER REGION, NUNAVUT, 1965**

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In North America, Rough-legged Hawks (Buteo lagopus) breed across western and northern Alaska and northern Canada<sup>1</sup>, including the Perry River region of Nunavut.<sup>2,3</sup> Between 8 July and 12 August 1965, I assisted John P. Ryder with a Canadian Wildlife Service survey of nesting colonies of Ross's Goose (Anser rossii) and with banding in the vicinity of the Perry River.4 During our travels, I banded 43 nestling Rough-legged Hawks at 17 nests constructed on cliffs and outcrops along the Perry River and Laine Creek, and along the Ekalukpik River to the east.<sup>2,4</sup> Information on clutch size and brood size was published previously.<sup>5</sup> Details of two individuals banded as nestlings in 1965 are noteworthy, the first of which corrects a recent transcription error, whereas the second documents the return of a banded individual to the vicinity of its natal site.

## **Banding records**

On 11 August 1965, I banded the only nestling (band no. 587-30959) in the last nest visited (Figure 1) before we left the region two days later. This nest was constructed on a ledge of an outcrop near Laine Creek (67°30'N 102°00'W), a tributary of the Perry River. On 12 November 1965, the hatchyear bird was probably still moving southward in migration when it was shot west of Swift Current (50°10"N 107°40"W), Saskatchewan, and 1,955 km south and slightly west of its breeding area. Details of this



FIGURE 1. Nestling Rough-legged Hawk banded along the Perry River, Nunavut, on 11 August 1965. This individual was recovered three months later near Swift Current, Saskatchewan, on 12 November 1965. Photo credit: S.G. Sealy.

encounter were correctly transcribed in a summary of banded raptors recovered in Canada<sup>6</sup>, whereas in Birds of Saskatchewan, the year of banding and recovery was given as 1985, instead of 1965.7 This is the only Rough-legged Hawk banded as a nestling and recovered in Saskatchewan. The month of the recovery is consistent with the timing of this species' presence in southern Saskatchewan during fall migration.<sup>7</sup>

This was the only nest that contained a brood of one nestling at the time of banding in 1965. The original clutch of two eggs was the smallest of the 17 clutches inspected (mean, 3.3 eggs; range, 2-5 eggs); the mean brood size was 2.8 young.<sup>5</sup> The fate of the missing egg or nestling was not determined, as neither egg nor nestling was found at the base of the cliff on which the nest was placed, and there was no fledgling nearby, only adults. Unhatched eggs tended to remain in the nests and, as others have shown, fledglings usually remain

in the vicinity of the nest until fall departure.<sup>1,8</sup> Previous reports of clutch size of Rough-legged Hawk in the Perry River region were 2-4 eggs  $(1937-41)^9$ , 3-5 eggs (n = 3 clutches,  $(1949)^2$ , and 5 and 6 eggs (n = 2 clutches, 1963).10

The first recovery of a Roughlegged Hawk in Saskatchewan was of one banded (498-05994) as a migrant or on its winter home range near St. Cloud, Minnesota, on 19 November 1964. It was shot near Esterhazy (50°30"N 102°20"W), Saskatchewan, about five months later, on 31 May 1965.7 Coincidentally, both rough-legs recovered in Saskatchewan were from the same year, one in spring, the other in the fall, about six months apart.

On 22 July 1968, a Rough-legged Hawk (587-30956) was shot by an Inuit hunter near the mouth of the Perry River where it empties into Queen Maud Gulf. The recovery site was about 3 km from the bird's original nest along Perry River where



**FIGURE 2.** One of these nestling Rough-legged Hawks, which was banded along the Perry River, Nunavut, on 10 August 1965, was recovered within 3 km of this nest site, three years later, on 22 July 1968. Photo credit: S.G. Sealy.

it and two siblings (Figure 2) were banded on 10 August 1965, nearly three years earlier. The band turned over to goose bander J.P. Ryder confirms that this bird had returned to its natal area, although its actual nesting had not been proven.

## **Discussion**

Fidelity to the breeding site by adult Rough-legged Hawks has been suggested by the re-occupation of nest sites year after year.<sup>8,11,12</sup> An early report of a nest at Perry River noted it "consisted of over ten layers of willow twigs representing about as many successive nesting attempts, perhaps by the same pair".<sup>2</sup> Confirmation of re-use of this nest by one or more of the same individuals would have required re-encounters with such a bird in subsequent years.

Re-use of nests by marked individuals has been confirmed in other areas<sup>12</sup>, but the propensity of individuals to return to breed at their natal (birth) sites or to another site is less well known. The distance between birth and first breeding sites in this species has been reported to average 1,955 km in Russia, but this

distance varied widely.<sup>13</sup> Recovery of the Rough-legged Hawk at Perry River offers a single piece of evidence for return to the vicinity of the natal site. Fidelity to the winter home range has been confirmed through re-encounters with banded birds in the same or adjacent areas in subsequent years.<sup>1,14</sup> Complicating the picture is the propensity of Rough-legged Hawks to respond to fluctuations in numbers of its predominantly rodent prey by moving to areas where food is more abundant in a particular year.<sup>1,8</sup>

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