LETTERS

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TWO RECORDS OF FEMALE COOPER’S HAWKS COURTING TWO DIFFERENT MALES IN NEIGHBORING URBAN TERRITORIES

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The preincubation behavior of the Cooper’s Hawk (Accipiter cooperii) has been well described (e.g., Rosenfield et al. 1991, Rosenfield and Bielefeldt 1991a, 1991b, Curtis et al. 2006). During the preincubation period, telemetry studies discovered that some females will visit several males’ territories (Millis et al. 2013, Boggie et al. 2015). The reason for these visits may be to allow females to evaluate the quality of nearby territories and males (Millis et al. 2013). Although these studies did not report observed interactions between paired females and neighboring males, Boal (2001) noted that both sexes were hostile to same-sex intruders. Recently, Driscoll and Rosenfield (2015) referred to unpublished data on observed extra-pair copulations in long-term urban studies. Moreover, urban nesting Cooper’s Hawks in Wisconsin have a high frequency of extra-pair paternity (19.3% of individuals, 34.1% of nests; Rosenfield et al. 2015). Based on our long-term study (2004--present) of urban-nesting Cooper’s Hawks in Seattle, Washington, we present observations that suggest one mechanism of extra-pair paternity.

In 2011, we observed nesting activity of Cooper’s Hawks in two Seattle city parks located 1.95 km apart, Volunteer Park and Arboretum Oaks. On 11 March 2011, at Arboretum Oaks, we observed a prey delivery from an unbanded adult male to a 2-yr-old banded adult female (alphanumeric colored aluminum band “Red 94-A”). This was quickly followed by a copulation and nest-building activity. This female was banded as a nestling approximately 116 km away, on 5 July 2009, in Victoria, British Columbia, Canada (A. Stewart pers. comm.). We again saw Red 94-A at the Arboretum Oaks site on 20 March and observed a copulation with an unbanded male as well as nest building activity. On 21 March, we observed Red 94-A at the Volunteer Park nest site and saw a copulation followed by nest-building with the resident male at that site (“Blue E-C”). We then began nearly daily simultaneous morning observations at both sites. On 25 March, we observed Red 94-A at both sites. We saw her leave Volunteer Park at approximately 0755 H and she arrived at Arboretum Oaks 5 min later at approximately 0800 H. This was the shortest interval between sightings at the two sites.

We continued daily observations until Red 94-A began incubating at the Volunteer Park nest on 25 April. In the intervening 34 d, we made observations at both sites on 27 d. On 22 of those days, we saw Red 94-A at both sites and on 15 d she copulated at each site with both of the respective resident males. We last saw a copulation with the male at Arboretum Oaks on 24 April, one day before she began full-time incubation at the Volunteer Park nest site. She later fledged one young at this nest.

At the other nest site (Arboretum Oaks), the unbanded male attracted a 1-yr-old unbanded female on 25 April, one day after Red 94-A last visited that site. We first observed a copulation, presumably involving the same new female, on 2 May. This 1-yr-old female began incubating on 18 May. The pair later fledged two young. We have not observed Red 94-A at any of the known Seattle nesting territories since the 2011 season.

Our next observation of extra-pair activity was in March 2015 and involved birds at adjacent nesting territories that we identify as Elshin and 100th Street. We observed a color-banded 2-yr-old female (“Orange 2-A”) courting an unbanded adult male in the Elshin territory, where she had successfully nested as a 1-yr-old in 2014. On 26 March 2015, we observed the pair copulating and nest-building in the Elshin territory 110 m north of her 2014 nest. Later that day we saw Orange 2-A near another unbanded adult male, this one building a nest in the 100th Street nesting territory. She was perched 2 m from the nest, making the “whaa” vocalization incessantly (Rosenfield and Bielefeldt 1991a). This nest was 1.02 km southeast of her Elshin nest. Such close proximity of neighboring nesting territories is not unusual in Seattle. We have documented successful nesting pairs as close as 330 m.

Female Orange 2-A remained in the same Elshin territory where she had successfully fledged three young in 2014. We again confirmed her identity on 26 April 2015.