ferent from the male's but gave no details about the vocalization. A systematic survey of female songs (or their general absence) in wrens appears to be an interesting possibility for research.

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An Incident of Female-Female Aggression in the House Wren

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ABSTRACT.—In this paper we describe one example of female-female aggression in the House Wren (*Troglodytes aedon*). An intruding female usurped the resident female and paired with the resident male. House Wrens are known for committing infanticide as well as puncturing and removing eggs of conspecifics and other species. These behaviors have been mainly attributed to resident and floating males, but we suggest that females may also be responsible. *Received 22 July 1998, accepted 3 Nov. 1998.*

In many passerine bird species, males establish breeding territories in the spring, which they defend against intruders. This form of sexual competition among males has been recognized as one of the driving forces behind mating patterns and parental care (Davies 1991, Andersson 1994). Aggression among females has received much less attention, although it has recently been shown to be more common among birds than initially assumed (Lenington 1980, Leffelaar and Robertson 1985, Searcy 1986, Martin et al. 1990, Slagsvold 1993, Hansson et al. 1997, Liker

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and Székely 1997). Female-female aggression may affect several aspects of mating systems and parental care, for example, maintaining monogamy (Slagsvold 1993) or reducing harem size (Hurly and Robertson 1985). Female-female aggression in Red-winged Blackbirds (*Agelaius phoeniceus*; Beletsky 1996) as well as Lapwings (*Vanellus vanellus*; Liker and Székely 1997) is strongest early in the breeding season when females first settle on the territories. One evolutionary force behind female-female aggression in polygynous mating systems is the conflict between females for the male's parental investment (Slagsvold and Lifjeld 1994). However, female-female aggression is not limited to polygynous mating systems (Slagsvold 1993). Here we report an incident of female-female aggression in the House Wren (*Troglodytes aedon*).

We have been studying a population of House Wrens on the E. N. Huyck Preserve and Biological Research Station in Rensselaerville, New York since 1992 and have color banded all individuals since 1995. On 17 May 1997, 07:15 EST we observed a fight between two females that lasted for 30 minutes. Female A, who had been paired to the resident male of the territory since 12 May was chased in circles both in the air and on the ground by female B. Female B had been the resident female of the same territory in 1996 but was paired with a different male. The 1996 male was not seen in 1997. The fight included chases by female B with occasional aggressive interactions that included bodily contact and pecking. Neither female vocalized during the encounter. The resident male was perched and visible during the whole fight; he sang but did not participate in the fight. Female B eventually usurped the territory from female A, paired with the resident male, and took over the nest that was close to completion. Female A was not seen again during the 1997 breeding season. We suggest that female B was probably fighting for the territory rather than for the resident male. One of the most successful males in our study population, who was polygynous in 1996 and 1997, occupied the adjacent territory and was at that time unpaired. Female B did not pair with this unmated male but returned to the territory with which she was familiar.

Many researchers strongly suspect that resident birds and probably non-resident floaters as well (Johnson and Kermott 1993) routinely enter territories not their own and kill and/or remove eggs or young from nests (Belles-Isles and Picman 1986, 1987; Quinn and Holroyd 1989; Kermott et al. 1991). Until recently these birds have been assumed to be male (Quinn and Holroyd 1989, Kermott et al. 1991), but it now appears that residents need to be concerned about intruding females as well. This and other observations of female-female aggression (Freed 1986, Johnson and Searcy 1996) demonstrate that female House Wrens may play an equally important role as the males in the selection of nest sites, territorial defense, and intraspecific aggression.

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Nest Reuse by Wood Thrushes and Rose-breasted Grosbeaks

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ABSTRACT.—We report on two instances of nest reuse by Wood Thrushes (*Hylocichla mustelina*) within the same breeding season, and three cases of nest reuse in successive years, two by Wood Thrushes and one by Rose-breasted Grosbeaks (*Pheucticus ludovicianus*). In each of the five cases of nest reuse, host young were successfully fledged in the original nesting episode and in the second nesting episode. Although occasional nest reuse within a single breeding season has been reported before, our study is the first to document reuse of the same nest in successive years by Wood Thrushes and Rose-breasted Grosbeaks. *Received 29 April 1998, accepted 4 Oct. 1998.*

Open nesting passerines, with the possible exception of tyrannid flycatchers (Curson et al. 1996), seldom reuse nests within and between breeding seasons (Briskie and Sealy 1988). Earlier authorities (Weaver 1949, Brackbill 1958) were unaware of nest reuse by Wood Thrushes (*Hylocichla mustelina*). Roth and coworkers (1996) documented occasional nest reuse by Wood Thrushes during the same breeding season (three cases out of 389 first nests). However, they did not report any nest reuse between years, describing such an event as unlikely because nests usually disintegrate after the nesting season. We report on two cases of nest reuse by Wood Thrushes within a breeding season and three cases of nest reuse in successive years, two by Wood Thrushes and one by Rose-breasted Grosbeaks (*Pheucticus ludovicianus*).

Data presented in this study were gathered in the course of a larger study of the nesting success of Wood Thrushes and Rose-breasted Grosbeaks conducted in 1996 and 1997 in Waterloo Region, a fragmented agricultural landscape located in southwestern Ontario (see Friesen et al., in press for a description of the landscape). In these two years, 154 Wood Thrush nests and 63 Rose-breasted Grosbeak nests were found and regularly monitored to determine their outcome.

Two Wood Thrush nests (one each year) were reused during the same breeding season, with young successfully fledging in all four nesting attempts (see Wyatt 1997 for a de-

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