the 13 species within the 4 compiled samples in Table 1. At the beginning of the breeding season, the weight of male Little Owls decreases 5.8% between March and April ($P < 0.07$), and that of females increases 11.4% ($P < 0.001$), producing a change in RSD from 0.977 to 0.924. The considerable differences in RSD between geographic regions, plus the seasonal differences in weights, can easily result in biased estimates of RSD.

Weights are subject to greater bias than wing measurements because they can vary with the season as well as tending to show greater geographical variation. Many of the samples in Table 1 are compilations from several sources; these sources often are used in more than one sample. All of the four samples in Table 1 for some species may be biased. We need more data on all aspects of the biology of owls before we can attempt to resolve the question of the evolution of RSD.

Acknowledgments.—I thank N. S. Mueller for independent rankings of flight displays and C. Marti, M. Green, and N. S. Mueller for comments on previous drafts of the manuscript.

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Wilson Bull., 101(3), 1989, pp. 491–493

Incidental "egg dumping" by the House Wren in a Yellow Warbler nest.—Incidental deposition of eggs in the nests of other species has been recorded occasionally in several species of birds (e.g., Bailey 1887; Wiens 1965, 1971; Holcomb 1967; Gustafson 1975; Carter 1987). Here I describe an instance of "egg dumping" by the House Wren (*Troglodytes aedon*) in a nest of the Yellow Warbler (*Dendroica petechia*). In addition, I introduced House Wren eggs into active Yellow Warbler nests to reveal the extent to which these eggs are tolerated and the likelihood that wrens will hatch and be reared by warblers.

On 31 May 1982, while studying the nesting biology of the Yellow Warbler in the dune-ridge forest, Delta Marsh, Manitoba (study area described in MacKenzie 1982), I discovered a lined, empty warbler nest about 1.5 m high in a sand-bar willow (*Salix interior*). Single Yellow Warbler eggs were laid in the nest each day from 1 through 3 June; three eggs were present on 4 June, but on 5 and 6 June the nest was empty. Single Yellow Warbler eggs

were then laid daily in this nest by the same color-banded female from 7 through 11 June. A House Wren egg was added to the 5-egg clutch on 14 or 15 June, and all six eggs were incubated until the nest failed on 20 June. The wren did not remove or damage any of the warbler eggs when it laid in the nest.

Several explanations exist for finding the egg of one species in another species' nest: (1) Brood parasitism. I could not find any records in the literature of interspecific brood parasitism in the House Wren, although evidence for intraspecific brood parasitism has been reported recently (Picman and Belles-Isles 1988). (2) Nest usurpation. I have 17 records, between 1974 and 1987, of House Wrens using non-cavity nests of other species in the ridge forest (two of the Northern Oriole [*Icterus galbula*] and 15 of the Barn Swallow [*Hirundo rustica*]). However, the oriole nests were used after the young orioles had departed earlier in the season, and the swallow nests had been built in previous years. (3) Egg dumping. Wiens (1971) presented three hypotheses to explain the incidental laying of eggs in other species' nests, a phenomenon he termed "egg-dumping." Hypothesis I stated that egg dumping was possibly a consequence of nest destruction during or immediately prior to egg laying; II, accidental placement of eggs (see also Hamilton and Orians 1965); or III, the inappropriate synchronization of nest building and egg laying. Wiens' (1971) first and third hypotheses predict egg dumping in this context to be adaptive responses to situations that would otherwise preclude any successful reproduction. If at least some young are raised by the "host," then it will always be advantageous for a female to lay eggs in another nest if its own is incomplete or has been destroyed. At the same time it should be disadvantageous to the "host" to accept the dumped egg. Wiens' second hypothesis suggests that the bird made a mistake and "intended" to do something else.

I find accidental placement of the House Wren egg in the Yellow Warbler nest to be the most plausible of the alternatives, in view of the overlapping periods of egg laying in the two species, laying of the wren egg after the warbler clutch was complete, the juxtaposition of the nests of the two species in the ridge forest, and the rarity of the event. The present observation of egg dumping by the House Wren is the only one obtained on the study area from 1974 through 1987 during monitoring of 599 active nests of 10 nonpasserine species, 1885 Yellow Warbler nests (0.05%), and 1248 nests of 25 other passerine species.

As part of a broader study of the egg recognition capabilities of Yellow Warblers, I confirmed experimentally in 1987 and 1988 that Yellow Warblers generally accepted House Wren eggs added to their clutches but that they apparently cannot hatch them. Yellow Warbler and House Wren eggs are nonmimetic but about the same size ($\bar{x}$ = 1.52 g, N = 36 YW eggs; $\bar{x}$ = 1.49 g, N = 30 HW eggs). I introduced single wren eggs into 28 warbler nests at the following stages: unlined (N = 3), lined but empty (N = 6), egg laying (N = 14), and incubation (N = 5), i.e., clutches of 4 or 5 eggs completed. The 13 wren eggs introduced into warbler nests prior to egg laying and during early egg laying, i.e., 1- or 2-egg stages, were viable; all of the eggs were number 2–4 in the wrens' laying cycles. All three wren eggs introduced into unlined nests were buried, apparently because the warblers simply continued building their nests (Emlen 1941, Hobson and Sealy 1987). Thus, wren eggs added to unlined nests were buried more often than when added to nests that were lined or contained eggs (χ^2 = 15.63, df = 1, $P < 0.0001$). Of the remaining 25 introduced wren eggs, 20 were accepted: one wren egg was rejected through burial, and four nests failed before responses could be recorded, i.e., before six days had elapsed. None of the 13 viable wren eggs hatched; three disappeared during hatching, eight contained dead embryos in advanced stages of development, and two eggs were addled with undeveloped embryos. The warbler's incubation period is shorter than the wren's: 11–12 days in the Yellow Warbler ($\bar{x}$ = 11.2 days, N = 22 clutches, Goossen 1978), 12–15 days in the House Wren ($\bar{x}$ = 14.0 days, N = 33 clutches, Kendeigh 1952).

The known tendency of House Wrens to destroy eggs of their own and other species (Belles-Isles and Picman 1986) seems to be inconsistent with the present observation of egg dumping. However, Belles-Isles and Picman (1986) reported that female House Wrens ceased pecking eggs when they started laying.

Acknowledgments.—These observations were made during studies of riparian forest birds funded by the Natural Sciences and Engineering Research Council of Canada (grant A9556). The Portage Country Club permitted me to make some of these observations on their property. G. C. Biermann provided the weights of the Yellow Warbler eggs. B. A. Granthum, D. W. Kinnear, and W. A. Manchur provided excellent field assistance. I thank J. V. Briskie, K. A. Hobson, J. Picman, and the reviewers, S. I. Rothstein and J. R. Walters, for constructive criticism of the manuscript. This paper is contribution number 171 of the Univ. Manitoba Field Station (Delta Marsh).

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Received 29 July 1988, accepted 3 Jan. 1989.