

Aggressive interaction between a Sora and Virginia Rail during spring migration

by John G. Palis



Virginia Rails migrate through central Illinois, but do not nest there. An observation of a Virginia Rail being aggressive toward a Sora during migration was made in 2004.

This photo of a Virginia Rail was taken at one of its migratory stopover points, Kennekuk County Park, Vermilion County on 19 April 1997 by John McDaniel.

Due to their secretive nature and preference for heavily-vegetated marshes, Soras (*Porzana carolina*) and Virginia Rails (*Rallus limicola*) are infrequently observed. Although Kaufmann (1983, 1989) described behavior of captive and free-ranging Soras and Virginia Rails during their breeding season, little is known about the behavior of either species during migration. Herein I describe an aggressive interaction between a Sora and a Virginia Rail that I observed during spring migration at The Nature Conservancy's Grassy Slough Preserve near Belknap, Johnson County, Illinois. Soras and Virginia Rails are not known to nest in extreme southern Illinois (Conway 1995, Melvin and Gibbs 1996, Kleen et al. 2004), but both migrate through the area between early April and early May (Robinson 1996).

At 1200 CDST, 13 April 2004, I detected a Virginia Rail partially concealed at the edge of a dense stand of rush (*Juncus sp.*) that bordered a narrow (0.45 m wide) mud flat and a small (ca. 1 m²), shallow (≤ 3 cm deep), turbid-water pool. While examining the bird through binoculars, I watched as it suddenly emerged from the rushes, ran across the mud flat and entered the shallow pool. It immediately returned to the same location at the edge of the

rushes with a small fish in its beak, which it quickly consumed. The fish appeared to be a juvenile sunfish (*Lepomis sp.*).

Shortly thereafter, a Sora appeared from the rushes on the opposite side of the shallow pool. The Sora waded slowly across the pool directly toward the Virginia Rail, stopping approximately 4 cm in front of the Virginia Rail. Facing the Sora, the Virginia Rail repeatedly bobbed its head and anterior portion of its body up and down while flaring its wings downward. The Sora changed direction and returned to the rush patch from which it emerged. Within several minutes, the Sora re-emerged and again moved toward the Virginia Rail. This time, following bobbing and wing flaring, the Virginia Rail ran toward the Sora which responded by fleeing. I then terminated observations.

During the breeding season, Kaufmann (1983, 1989) observed frequent aggressive interactions between Soras and Virginia Rails. The head-body bobbing behavior of the Virginia Rail that I witnessed was not described by Kaufmann (1983). He did, however, describe the drooping wings behavior as "swanning" and the rapid forward rush as "chasing." These behaviors are utilized by both species in the defense of breeding territories (Kaufmann 1983).

Inter-specific aggression during the breeding season implies that Soras and Virginia Rails compete for the same resources. Because the bulk of the diet differs between the two species (Horak 1970), Kaufmann (1989) suggested that Soras and Virginia Rails compete for space, not food, during the breeding season. My observation indicates that inter-specific aggression can occur outside the breeding season and that the Virginia Rail may have been defending a food source (the shallow-water pool) from the Sora. Both species consume a wide variety of invertebrates (Horak 1970, Conway 1995, Melvin and Gibbs 1996). Invertebrates provide an important source of protein to birds migrating to, or already on, breeding grounds (Krapu and Swanson 1975, Landys et al. 2005). Defense of protein-rich food sources by Virginia Rails during spring migration may be an important means of securing enough high-quality resources to support the energy demands of migration and reproduction.

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