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American Bittern Depredates Sora

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AMERICAN BITTERN DEPREDATES SORA – The American bittern (*Botaurus lentiginosus*) is an opportunistic predator that forages on a wide variety of foods, primarily insects, amphibians, fishes, snakes, and small mammals (reviewed in Gibbs et al. 1992). To our knowledge, there are no published reports documenting American bittern depredation on birds. We report observations of an American bittern attempting to consume a sora (*Porzana carolina*).

On 9 May 1994, while conducting waterfowl surveys near Hosmer in McPherson County, South Dakota, we observed an American bittern attempting to swallow an adult sora. The bittern was first observed at 0920 hr CDT within 20 m of the roadside in the emergent vegetation of a seasonal wetland. The vegetation was approximately 0.2 to 0.3 m high, which allowed us to clearly observe the American bittern and its prey. When first observed, the American bittern had positioned the sora head first in its bill, had its head tilted back, and was attempting to swallow the bird whole. The sora's legs thrashed for approximately one to two minutes before becoming still. The American bittern continued to tilt its head back for three to four minutes and repeatedly attempted to swallow the sora. The American bittern then became alerted to our presence, relinquished its apparently dead prey, and flew off.

Hérons, egrets, and bitterns (Family Ardeidae) generally are opportunistic foragers with diverse diets that vary seasonally and regionally (Hancock and Kushlan 1984). Some species of Ardeidae that are similar in size to or larger than the American bittern (66 cm in height) occasionally prey on small birds, but usually avian prey are limited to nestlings or immature birds (Collins 1970, Wolford and Boag 1971, Hancock and Kushlan 1984). For example, black-crowned night-herons (*Nycticorax nycticorax*; 38 to 65 cm in height; Hancock and Kushlan 1984) have been observed depredating the young of Franklin's gulls (*Larus pipixcan*), American coots (*Fulica americana*), black-crowned night-herons, red-winged blackbirds (*Agelaius phoeniceus*), and yellow-headed blackbirds (*Xanthocephalus xanthocephalus*) (Wolford and Boag 1971). In North Dakota, H. A. Kantrud (Northern Prairie Wildlife Research Center, Jamestown, ND, pers. comm.) observed American bitterns depredating ducklings. Predation on adult birds seems to be limited to larger herons (Hancock and Kushlan 1984), but it likely is rare (Bayer 1979). Three of the largest (greater than 90 cm in height) heron species (great blue heron [*Ardea herodias*], great egret [*Ardea alba*], and gray heron [*Ardea cinerea*]) have been observed consuming adult rails (Murphy 1976, Campbell and Wolf 1977, Evens and Page 1986, Willey 1986). Herons and bitterns may occasionally capture prey too large to be ingested (Bayer 1979, Vaniman and Luna 1998). Judging from our observations, adult soras likely are at or above the upper size limit for consumption by the American bittern.

Observations of interactions between American bitterns and soras are likely limited by their secretive behavior and by visibility in the tall, dense emergent vegetation that they commonly occupy (Gibbs et al. 1992, Melvin and Gibbs 1996). Furthermore, depredation of soras or other prey are more likely to be observed where vegetative cover is limited. For example, depredation of rails by great egrets and great

blue herons was observed during high tides when flooded marshes resulted in minimal vegetative cover (Evens and Page 1986). Similar conditions may have existed in McPherson County in May 1994 because wetland water levels were rising rapidly during an extremely wet spring (Austin, unpubl. data). Stands of residual emergent vegetation were inundated and emergent vegetative cover was limited to narrow fringes along wetland edges. Given similarities in range and habitat preferences, it is probable that American bitterns would encounter and may attempt to take rails under such conditions.

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