Wilson Bull., 96(2), 1984, pp. 302–303

El Niño and a brumal breeding record of an insular Savannah Sparrow.—Breeding by birds in temperate latitudes is usually confined to the spring and summer months. Aseasonal breeding may occur in a few individuals in areas with mild climates (review in Orians, Auk 77:379–398, 1960; Wells and Baptista, Western Birds 10, 83–85, 1979). Observations by ornithologists visiting the San Benito Islands, Baja California, suggest that breeding by the endemic subspecies of Savannah Sparrow (*Passerculus sandwichensis sanctorum*) is relatively synchronized and seasonal (Anthony, Auk 23:150, 1906; Thayer and Bangs, Condor 9:81, 1907; Boswall, Bristol Ornith. 11:29, 1978).

I visited West San Benito Island on 8 February 1983. Singing was sporadic among the abundant local population of Savannah Sparrows, and no obvious signs of breeding activity were noted. However, loud begging calls were heard when a Savannah Sparrow with insects in its bill disappeared into a bush. Two fledgling Savannah Sparrows were flushed from the bush, and one was caught and later released. Its distress calls attracted an adult Savannah Sparrow which alarm-called incessantly. The fledgling had a short tail, was hardly able to fly and must have recently left the nest.

J. Rising (in litt.) visited the San Benito Islands on 12 February 1983. He also noted that the Savannah Sparrows were not singing vigorously and saw one individual of a pair carrying food. Their behavior suggested that they had a nest in boxthorn-cholla thicket, although neither a nest nor fledged young could be found.

Incubation times reported for the Savannah Sparrow are 12 days for Maine (Palmer, Maine birds, Bull. Mus. Comp. Zool. 102, 1949), 12.2 days for Nova Scotia (Dixon, Auk 95:235–46, 1978), and 12 days for Michigan (Potter, Jack-Pine Warbler 52:50–63, 1974). Nestling life is reported to last 14 days in Maine, 9 days in Nova Scotia, and 8 days in Michigan (see refs. above). Assuming that the fledgling I found was about 8 days old, the clutch must have been completed about 19 January. The Mexican check-list (1957) gives one laying record for 6 February, apparently based on data from ovaries on two specimens from West San Benito Island deposited in the Museum of Vertebrate Zoology, Univ. California, Berkeley, by J. R. Hendrickson (MVZ 120279 and MVZ 120283). The specimens were taken on 6 February 1950. The labels indicated that one female had a 5-mm ovum and a second female had a 4-mm ovum. A third specimen had very small ova inscribed on the specimen label. These data suggest that although two of the females were ready to lay, laying may not have taken place yet, and should not be considered as reliable laying records.

Evidently most of the breeding activity takes place between March and June (see above). Dates were examined on 77 sets of Savannah Sparrow eggs in the collection of the Western Foundation of Vertebrate Zoology, Los Angeles, California. The earliest date for 46 sets of eggs from Mexican mainland populations (*P. s. anulus, P. s. guttatus, P. s. rostratus*) was 7 April. The earliest date on 31 sets of eggs of the insular *P. s. sanctorum* was 31 March. These data suggest that the breeding record for January reported herein is an exception and not the rule.

Nineteen eighty-three was an "El Niño" year bringing warm waters off the Baja California coast and much rain in January. The island vegetation which may be characterized as scrub-desert was quite green with herbaceous vegetation at the time of our visit. Dr. T. Walker, a frequent visitor on the island who accompanied me, informed me that the lush vegetation was unusual for that time of the year. Perhaps the brumal breeding record(s) of the Savannah Sparrow reported herein may be another consequence of the Niño.

Acknowledgments.—I thank Ann Jaccoberger for providing specimen data from the Museum of Verbetrate Zoology, Berkeley, and Lloyd Kiff, Richard Knapton, and James Rising

for helpful comments on an earlier draft of this manuscript and Kiff for data on egg sets from the Western Foundation of Vertebrate Zoology, Los Angeles, California.—Luis F. Baptista, *Dept. Ornithology/Mammalogy, California Academy of Sciences, San Francisco, California 94118. Accepted 11 Nov. 1983.*

Wilson Bull., 96(2), 1984, pp. 303–305

Age and reproductive success in Northern Orioles.—Rising (Syst. Zool. 19:315–351, 1970) reported breeding by first-year male Northern Orioles (*Icterus galbula*) but did not compare reproductive success of first-year and older males. I recently investigated various aspects of the breeding of first-year and older males in west-central Kansas (Labedz, M.S. thesis, Fort Hays State Univ., Hays, Kansas, 1982). Data concerning clutch-size, fledging success, and range of fledging dates are reported herein.

Methods.—Clutch-size, fledging success, and fledging dates were recorded from a 120-ha study area near Hays, Ellis Co., Kansas in 1981 and 1982. The age of the male associated with each nest, clutch-size, fledging success, and the date on which the first chick fledged were determined by regular observations of the nest. First-year males were determined to be present at a nest when two female-plumaged orioles were observed at or near the nest and both individuals were observed feeding chicks in that nest. Nestlings surviving to banding age were assumed to survive until fledging unless otherwise noted. Fledging was defined as the departure of any chick from the nest without human interference.

Results.—Thirty-four of 61 active Northern Oriole nests were accessible for data collection in 1981 and 1982. In 1981 three nests associated with first-year males had significantly smaller clutches ($t = 7.75$, df = 12, $P < 0.01$) and four nests had significantly lower fledging success ($t = 3.93$, df = 11, $P < 0.01$) than nests associated with older males. Nests with first-year males had a mean clutch-size of 2.3 ± 0.58 eggs while 5.1 ± 0.54 eggs were recorded from nests of older males. Nests with first-year males fledged a mean of 0.8 ± 0.96 chicks while 3.9 ± 1.54 chicks fledged from nests of older males.

In 1982 three nests associated with first-year males had significantly smaller clutches ($t = 5.95$, df = 12, $P < 0.01$) and four nests had significantly lower fledging success ($t = 2.17$, df = 15, $P < 0.05$) than nests associated with older males. Nests with first-year males had a mean of 3.0 ± 0.00 eggs while 4.9 ± 0.54 eggs were recorded from nests of older males. Nests with first-year males fledged a mean of 2.5 ± 1.00 chicks while 3.6 ± 0.87 chicks fledged from nests of older males.

Combining the 1981 and 1982 data, six nests associated with first-year males had significantly smaller clutches ($t = 9.51$, df = 26, $P < 0.01$) and eight nests had significantly lower fledging success ($t = 4.25$, df = 28, $P < 0.01$) than nests associated with older males. Nests with first-year males had a mean clutch-size of 2.7 ± 0.52 eggs while 5.0 ± 0.53 eggs were recorded from nests of older males. Nests with first-year males fledged a mean of 1.6 ± 1.30 chicks while 3.7 ± 1.16 chicks fledged from nests of older birds.

The period of fledging covered 19 days in 1981 and 27 days in 1982 (Fig. 1). In both 1981 and 1982 the earliest fledging from a nest associated with a first-year male was after more than half of the nests of older males had fledged (Fig. 1), indicating that nests of first-year males were initiated later than those of older males. Renesting after a nest had been destroyed was suspected twice in 1982 with nests of older males, but a second nest or second brood was not observed.

Discussion.—Johnsgard (Birds of the Great Plains: Breeding Species and their Distribution, Univ. Nebraska Press, Lincoln, Nebraska, 1979), using data on 57 oriole nests in Kansas,