

in the nest.) Since there was still only the one Oven-bird egg in the nest, I supposed that the nest had been deserted; but six days later, on May 30, I found the Oven-bird incubating four Oven-bird eggs and four Cowbird eggs. This was the largest number of eggs I had ever found in one Oven-bird nest. The time of the Oven-bird's laying and the beginning of incubation were, of course, uncertain, but in all probability the second egg was laid on the morning of May 24 (the day of my second visit to the nest) and was taken by a Cowbird before I arrived. If the regular pattern of laying and incubation was then followed, the remaining eggs were laid May 25, 26, and 27, and incubation was started on May 26. In the afternoon of June 8, the eight eggs were still present, and none was pipped. On the morning of June 11, two Cowbirds had hatched; one was about two days old, the other scarcely one day. The larger Cowbird had probably hatched on June 9, and the smaller late on June 10. If incubation began on schedule, the incubation period for these Cowbirds was about 14 and 15 days instead of the average 11.6 days. It is possible, however, that the regular habit of beginning incubation on the day before the laying of the last egg was disturbed by the presence of Cowbird eggs so that incubation was delayed for one or two days. During my later observations, however, the Oven-bird was very attentive and was on the nest three out of four times when I arrived.

On June 15, when the Cowbirds were presumably five and six days old, I took the unhatched eggs to the laboratory. Calculations by water displacement, checked by the volume formula used by Worth (1940. *Auk*, 57:44), showed that the four Oven-bird eggs and four Cowbird eggs had a volume about 1.8 times that of the regular 5-egg clutch of the Oven-bird. Upon opening the eggs, I found that the two Cowbird eggs and one Oven-bird egg had developed well toward the hatching stage, but the remaining three Oven-bird eggs had not gone beyond the early stages of development.

The position of the eight eggs in the nest is important in this connection. The Oven-bird eggs, on May 30, were in the bottom of the nest, and the Cowbird eggs around the edge, above the Oven-bird eggs. On June 8 the arrangement was similar except that one Cowbird egg was at the edge of the bottom layer and an Oven-bird egg was on the edge above. The Cowbird egg that was in the bottom layer was the one with the larger spots and was one of those that failed to hatch.

It is a well-known fact that any very appreciable reduction in the amount of heat delivered to the eggs during incubation, especially during the early stages, lengthens the time required for hatching or is fatal to the embryos (Baldwin and Kendeigh, 1932, *Physiology of the temperature of birds*, *Sci. Publ. Cleveland Mus. Nat. Hist.*, 3:143-144). The largest number of eggs incubated hitherto by an Oven-bird under my observation was four Oven-bird and two Cowbird eggs. These all hatched, and the young lived to leave the nest, but the incubation period was unknown, since the nest was not found until after incubation had started. The volume of these six eggs that hatched successfully I estimated to be about 1.3 times that of the normal clutch, as compared with the present group of eggs, with 1.8 times the normal volume, which hatched only two Cowbirds. It is probable that the limit of egg volume that an Oven-bird is able to hatch is between 1.3 and 1.8 times the volume of the normal 5-egg clutch, and doubtless is much nearer 1.3 than 1.8. Probably also the eggs must lie in a single layer in the bottom of the nest.

On June 18, the nest had been torn out by a predator, and undoubtedly the two Cowbirds were destroyed.—HARRY W. HANN, *Department of Zoology, University of Michigan, Ann Arbor.*

Flight speeds of some south Texas birds.—In the course of field work in south Texas in 1945, I recorded the following flight speeds (taken at Alice and Bentonville, Jim Wells County, and at Bishop, Nueces County). All records were made by automobile.

	MPH	Date 1945	Distance (yards)	Remarks
Bob-white <i>Colinus virginianus</i>	28	June 2	200	Into slight wind
Ground Dove <i>Columbigallina passerina</i>	26	June 2	100	Into slight wind
	28	June 2		No wind
	32	June 20	100	No wind (Bentonville ¹)
Inca Dove <i>Scardafella inca</i>	28	June 2		No wind
Texas Nighthawk <i>Chordeiles acutipennis</i>	20	June 2		No wind
	35	July 5	100	Against slight wind
Hairy Woodpecker <i>Dryobates villosus</i>	20	July 16	200	No wind
Scissor-tailed Flycatcher <i>Muscivora forficata</i>	22	June 2		No wind
	25	June 20	250	No wind (Bentonville)
Mockingbird <i>Mimus polyglottos</i>	22	June 2	100	Across and into wind
Sennett's Thrasher <i>Toxostoma longirostre</i>	23	June 2		No wind
	29	July 16	400	No wind
Shrike <i>Lanius ludovicianus</i>	39	Sept. 18	100	No wind
English Sparrow <i>Passer domesticus</i>	20	June 2		No wind
Meadowlark <i>Sturnella</i> sp.	25	June 2		No wind
Great-tailed Grackle <i>Cassidix mexicanus</i>	32	May 23	100	No wind
	27	June 2	300	No wind
	34	June 20	300	No wind (Bishop)
	39	Aug. 21	440	No wind; flock of 40 (Bishop)
Cardinal <i>Richmondia cardinalis</i>	26	June 21	50	No wind
Pyrrhuloxia <i>Pyrrhuloxia sinuata</i>	20	June 2	300	No wind
	22	June 21		No wind
Varied Bunting <i>Passerina versicolor</i>	28	June 18		No wind
Dickcissel <i>Spiza americana</i>	25	June 2	100	Into slight wind
Lark Sparrow <i>Chondestes grammacus</i>	27	June 2		No wind
	21-28	June 2		No wind

¹ All records were made at Alice, Texas, except as otherwise indicated in this column.

—CLARENCE A. SOOTER, 1336 North 40, Lincoln, Nebraska.

Brewer's Blackbird breeding in Ontario.—During the summer of 1943, one of us (A. E. Allin) observed a small male blackbird with straw-coloured eyes in an unsettled portion of the city of Port Arthur, Ontario. Since Brewer's Blackbird (*Euphagus cyanocephalus*) was not known to occur in the Province, this bird was thought to be a Rusty Blackbird (*E. carolinus*), which is a regular spring and fall migrant locally although there does not appear to be any recent record of its occurrence during the summer months. Circumstances did