

water, while the other dove, surfaced, and, turning complete revolutions, raced wildly towards its companion, only to draw up sharply and spread its wings in the other loon's face. The significance of such strange behavior is unclear, but may merely represent youthful exuberance or possibly a tentative exercise in courtship. Newell's last sighting, of a single bird, was on 12 December.

To sum up, three of the world's five loon species have now been documented in Oklahoma and for a fourth, the Red-throated, there are several sight records dating back to 1958 (Sutton 1967; Wood and Schnell *op. cit.*) The Common Loon has long been known as a rare to uncommon migrant and winter visitor to Oklahoma (Sutton, *op. cit.*), but much work remains to be done before the status of the others can be determined with certainty.

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3116 NORTH VIRGINIA, OKLAHOMA CITY, OKLAHOMA 73118. 9 AUGUST 1990.

EASTERN MEADOWLARK PREDATION ON AMERICAN GOLDFINCHES

BY PATRICK M. BELL

Eastern Meadowlark (*Sturnella magna*) predation on American Goldfinches (*Carduelis tristis*) was observed several times in early January 1988 at feeding stations on Earl Brewer's property in Tishomingo, Johnston County, south central Oklahoma. A record 8 inches of snow had fallen on southern Oklahoma on 5 January 1988. Daytime high temperatures remained at or below freezing for five days thereafter.

On 7 January 1988, Brewer watched as a meadowlark stalked, attacked,

then killed a goldfinch. Starvation did not appear to be the motivation for this strange behavior, because several kinds of bird food were available. Since three other goldfinch carcasses had already been found in the yard, Brewer and I decided to make a concerted effort to document meadowlark predation.

Four inches of snow still covered the ground on 10 January when, at 1130, we observed a meadowlark catch and kill another goldfinch. One of several on the ground in the feeding area, this meadowlark would bow its head as if feeding, then steadily but gradually stalk a goldfinch, busily feeding on thistle seeds. On its third attempt, the meadowlark was successful. In a quick motion without warning, the larger bird lunged toward the finch, grasped it with its beak, held it down with both feet, and delivered vicious pecks to its head. Within seconds, the goldfinch's struggling became feeble, then ceased altogether. Several other meadowlarks nearby ran to the scene, causing the rapacious bird to fly off northeast, prey clasped tightly in its bill.

Shortly after 1200 that same day, a similar episode occurred, but this time the meadowlark carried the smaller bird to a nearby pecan tree (*Carya illinoensis*). Upon trying to land on a low branch, however, it dropped the dead finch. Before the meadowlark could retrieve its prey, a Blue Jay (*Cyanocitta cristata*) flew in, picked up the finch, and flew away.

A decision was made to collect the next marauding meadowlark in order to determine if more than one bird was involved. At 1400, the now familiar killing strategy was again successful. The larger bird was shot with a .22 caliber rifle; beside it lay its prey, still warm. Part of the roof of the finch's skull was gone, as was half the brain. At 1430, another meadowlark was discovered pecking a finch-sized object while standing on a frozen pond 65 feet from the feeding station. After this meadowlark was collected, we found that the object of its attention, another goldfinch, had a massive opening in its cranium as well.

The Eastern Meadowlark subsists primarily on insects, seeds and grains (Beal 1895). However, isolated instances of predation on small vertebrates have been reported. Under environmental conditions similar to those reported above, a meadowlark killed and devoured two Tree Sparrows (*Spizella arborea*) in northeastern Oklahoma (Schrick 1979). Between 4 and 8 February 1985, during which as much as eight inches of snow blanketed the ground, Waters (1990) witnessed meadowlarks in her yard in Wynnewood, Garvin County, Oklahoma, dispatch and feed on both American Goldfinches and Pine Siskins (*Carduelis pinus*). Tyler and Choate (1990) reported numerous cases of opportunistic scavenging by meadowlarks on several species of birds and mammals in southwestern Oklahoma following an 11-inch snowfall. During a blizzard in New Mexico on 17 December 1967, Hubbard and Hubbard (1969) noted meadowlarks feeding on road-killed carcasses of several species of birds. A meadowlark in central Oklahoma was observed to kill an eight-inch lined snake (*Tropidoclonion lineatum*) in February, 1975 (Black 1976).

Predatory behavior in meadowlarks has been documented. What is not clear is whether or not it is a result of stressful climatic conditions, or merely opportunistic. The incidents referred to in this paper appear to have been outcomes of severe winter stress. But Creighton and Porter (1974) described

three episodes of nest predation on eggs and young by Western Meadowlarks, when weather and food availability were almost certainly favorable, and Terres (1956) saw an Eastern Meadowlark in New York "pull off and eat bits of flesh" from the carcass of another meadowlark recently killed by a passing vehicle in July, 1939. Perhaps meadowlarks have a greater propensity toward predation and scavenging than is commonly recognized. The picture may become clearer when sufficient data have been published.

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600 E. 24TH ST., P.O. BOX 8, TISHOMINGO, OKLAHOMA 73460, 31 AUGUST 1990.

GENERAL NOTES

First documented occurrence of Clark's Grebe in Oklahoma. — The two color morphs of the Western Grebe (*Aechmophorus occidentalis*) have recently been split into two distinct species (American Ornithologists' Union, 1985, Auk 102: 680-681). The dark morph was retained as *A. occidentalis*, the Western Grebe; the light form was designated as Clark's Grebe (*A. clarkii*), both as originally described by G. N. Lawrence (1858, in Baird, S. F., J. Cassin, and G. N. Lawrence, Reports of Explorations and Surveys . . . for a railroad from the Mississippi River to the Pacific Ocean, Vol. 9, pp. liv, 892, 894-895). Studies by J. T. Ratti (1979, Auk 96:573-586) and G. L. Nuechterlein (1981, Auk 98:335-349) had demonstrated a high degree of assortative mating. The two forms are sympatric, but the Clark's Grebe becomes rare in the more northerly breeding populations. Eastern vagrants appear to be mostly or entirely of *A. occidentalis*, though data are scarce (American Ornithologists' Union, 1985, *loc. cit.*).

The two forms differ in a number of characteristics. The Clark's Grebe is