A RECORD EARLY SEASON FOR MARSH-BREEDING BIRDS IN SOUTHWESTERN MANITOBA

TODD W. ARNOLD and MICHAEL D. SORENSON, Delta Waterfowl and Wetlands Research Station, R.R. 1, Portage la Prairie, Manitoba. R1N 3A1

The mild spring of 1987 produced many record early arrivals of migrant birds in prairie Canada. Birds arriving early on the breeding grounds may have a head start on territory establishment and nest initiation. However, if weather conditions deteriorate, early arrival can also result in weather-related mortality risks, or it can force birds to use energy reserves that would normally be used to produce eggs. Birds often respond to severe spring weather by reversing their migration direction, a seemingly wasteful expenditure of time and energy. Therefore, most birds are faced with two conflicting

problems: they must arrive on the breeding grounds early in order to claim a territory and breed successfully, but they must not arrive on the breeding grounds so early that their lives are endangered by severe weather. During 1987, mild early spring weather was followed by amenable weather conditions during late spring, and early migrating birds in the Minnedosa, Manitoba, area responded with record early nest initiations.

Waterfowl biologists have been conducting nesting studies in the Minnedosa area since the 1940s, so there is a wealth



Canvasback pair

F.W. Lahrman

of data on nesting chronology for this area. From 1963 through 1972 Jerry Stoudt kept detailed field notes on the nesting chronology of Minnedosa's wetland birds. Stoudt's research on Canvasback nesting ecology was continued by Jerry Serie and Michael Anderson, and is ongoing today. With Stoudt's data, up to 10 years of breeding phenology records are available for the Minnedosa area, and through Anderson's efforts, an additional 4 years of information on Canvasback and Redhead nest initiation dates are available.

The 1987 observations of 22 April for the first Canvasback egg and 27 April for the first Redhead egg represent the earliest *known* nest initiations by these two species during the last 25 years at Minnedosa. Of the 14 phenological events that were recorded in 1987, 11 events occurred earlier than the earliest observation

reported by Stoudt, 2 events occurred on the same date, and only one event (first Sora egg) occurred at a later date (see – Table 1). The observation of 15 May for the first Sora egg was tied with the second earliest date in Stoudt's 10-year study.

The data show that early arrival on the breeding grounds can lead to record early nest initiations. Early nest initiation can be important for breeding productivity because early hatching offspring can have a higher chance of surviving through the coming winter, and because early nesting birds can have more time to renest if their first nests are destroyed.¹

We appreciate the help of Michael Anderson, Bob Emery, and the entire crew at the Minnedosa Substation of the Delta Waterfowl and Wetlands Research Station.



Courting Redheads

F.W. Lahrman

Table 1. MIGRATIONAL AND BREEDING PHENOLOGY OF MARSH-NESTING BIRDS AT MINNEDOSA, MANITOBA, 1987 AND 1963-72

Event	1987	Average 1963-72	Earliest (year) 1963-72
Heavy migration of ducks First Mallard egg First Canvasback egg First American Coot egg First Blue-winged Teal egg	15 April	01 May	20 April (1964)
	15 April	25 April	20 April (1969)
	22 April	02 May	26 April (1971)
	30 April	11 May	07 May (1971,72)
	06 May	15 May	11 May (1966,71)
First Redhead egg First Yellow-headed Blackbird egg First Black Tern arrival First Red-winged Blackbird egg First Sora egg	27 April	13 May	29 April (1971)
	10 May	17 May	10 May (1969)
	11 May	18 May	14 May (1969)
	10 May	21 May	14 May (1972)
	15 May	23 May	10 May (1969)
First Ruddy Duck egg First American Coot hatching First Killdeer young First hen Canvasback flocking	16 May	31 May	22 May (1963)
	26 May	10 June	06 June (1965)
	08 June	16 June	08 June (1965)
	08 June	24 June	12 June (1964)

- ¹ COOKE, F., C.S. FINDLAY and R.F. ROCK-WELL 1984. Recruitment and the timing of reproduction in Lesser Snow Geese (*Chen caerulescens caerulescens*). *Auk* 101(3): 451-458.
- ² COWARDIN, L.M., D.S. GILMER and C.W. SHAIFFER 1985. Mallard recruitment in the agricultural environment of North Dakota. Wild. Monograph No. 92.
- ³ DAVIES, J.C. and F. COOKE 1983. Annual nesting productivity in Snow Geese: prairie droughts and arctic springs. *J. Wildl. Mgmt.* 47(2):291-296.
- ⁴ FREDRICKSON, L.H. 1969. Mortality of coots during severe spring weather. *Wilson Bull*. 81(4):450-453.
- ⁵ GOLLOP, J.B. 1987. The spring migration, March 1 May 31, 1987. Prairie Provinces Region. *Am. Birds* 41(3):448-450.
- ⁶ STOUDT, J.H. 1982. Habitat use and productivity of Canvasbacks in southwestern Manitoba, 1961-72. U.S. Fish & Wild. Serv., Special Scientific Report Wildl. No. 248.
- ⁷ WEIR, R.D. 1987. The spring migration, March 1 May 31, 1987. Ontario Region. *Am. Birds* 41(3):422-428.



Young Yellow-headed Blackbird
Gary W. Seib