THE NORTH AMERICAN NEST RECORD CARD PROGRAM

DAVID B. PEAKALL

Beginning this year the Laboratory of Ornithology at Cornell University will operate a nest record card program on a continent-wide basis. To be successful such a program needs the widespread support of competent observers. The purpose of this article is to explain the operation of such a program, give some idea of the data that can be obtained, and ask support for the program.

Essentially it is a cooperative program to collect, store, and analyze data on the breeding biology of birds. Even for an observer with time it would be difficult to find the hundreds of nests per season that are needed to obtain significant data. The nest record card program aims to solve this difficulty by collection of information from a large number of observers. Normally this information would either go unrecorded or, at best, be virtually lost in personal files.

Basically the program is very simple. Each observer fills out a card recording the data noted for every active nest found. The form of the card is shown in Figure 1. Separate cards are used for each nest, but subsequent visits to the

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SPECIES: Red-winged Blackbird
NAME OF OBSERVER: J.C.Miller
IN COLUMN B, CHECK IF NEST UNDER CONSTRUCTION OR GIVE NUMBER OF EGGS OR YOUNG AT VISIT.

DATE	B	EGGS	YOUNG	COMMENTS
14 May		2		
31 May		1	2	
7 June			3	

RETURN TO LABORATORY OF ORNITHOLOGY, CORNELL UNIVERSITY, ITHACA, NEW YORK 14850

YEAR: 1964
LOCALITY: Tinicum Wildlife
COUNTY: Refuge
STATE: Pa.
SITE: Marsh mallow bushes
HEIGHT ABOVE GROUND (IN FEET): 3
HABITAT: Large marsh
(ADDITIONAL REMARKS ON OTHER SIDE)

Fig. 1. A completed nest record card. Size is 4 x 6 inches.

same nest are recorded on the same card. Several visits to the same nest increase the value of the card. The completed cards are sent to the Laboratory of Ornithology at the end of the season. The collected data will be put onto punched cards, and analysis of at least part of the data will be made by

computer. The data stored in this way will be freely available to any serious worker.

The first nest record card program was started in 1939 by the British Trust for Ornithology. This program has been highly successful. In 1962 nearly 15,000 cards were received, and their total collection is about 150,000 cards. At the present time no collection of this size is available in North America. Many essentially similar programs have been started on this continent, the first being that by the Detroit Audubon Society in 1945. A full list of the North American nest record card programs has been given in *Audubon Field Notes* (18:35-8 (1964). It is hoped that the program being launched at Cornell will be able to coordinate the existing programs as well as provide a nest record card program for those areas which do not now have one. The Cornell program was started in a small way in 1963 when 1100 cards were received. In 1964 over 400 cards were received, including nearly 500 from John C. Miller of Philadelphia.

Information can be obtained from the cards on many facets of breeding biology of a species. These include:

1. The extent of, and peaks in, the breeding season
2. Influence of various factors on clutch size
3. Breeding success
4. Nest site and habitat

Naturally these factors are interrelated with each other, as, for example, the effect of nest site on breeding success and the variation of clutch size with breeding season. The variation of these several factors can be studied from year to year and from place to place.

Information obtained from the British Trust for Ornithology program is used to illustrate the type of data that can be collected. The variation of

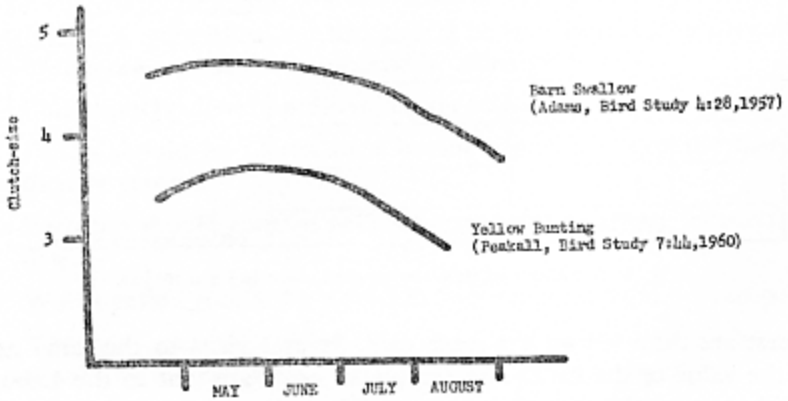

Fig. 2. Variation of clutch-size with breeding season of the Barn Swallow and Yellow Bunting in England.

clutch size with breeding season is one example. The information obtained for the Barn Swallow (*Hirundo rustica*) and the Yellow Bunting (*Emberiza citrinella*) is presented in Figure 2. Both species show a mid-season peak which has been commonly observed. There are, however, exceptions. The Chaffinch (*Fringilla coelebs*), one of the commonest finches in Great Britain, has an almost uniform clutch size (4.4) throughout the season. The British program has been so successful that it is unusual for a major work on breeding biology of birds not to use data from the program for at least part of the study. With a central organization and mechanical analysis it should be possible for the North American nest record card program to be equally successful.

Care should be taken not to disturb the nests and their surroundings more than necessary. Observers should be particularly careful with colonial nesting species and all nests containing large young which might leave the nest prematurely. Studies have shown that careful daily visits do not significantly increase the rate of predation. Obviously anything that leads predators to nests is to be deplored both for the sake of the birds and for the errors that would be introduced into the analysis of cards.

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(Editor's Note — Dr. David B. Peakall, a member of the Laboratory of Ornithology at Cornell University, has been instrumental in the nest record card program since its inception. Cards for this program may be obtained at the D.V.O.C. meetings or upon request from the Secretary.)