Spring Arrival of Birds at Woodworth, North Dakota

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Annual differences in spring arrival dates of migrating birds are a common phenomenon of the northern prairie region. Prediction of a species arrival during a future spring can be assisted by information on dates of bird arrivals from several past years. Our paper presents range and median dates for first sightings of 48 bird species during spring on the Missouri Coteau in east-central North Dakota (Fig. 1).

Records of species arrivals were made during 1965-1980. First sightings of some bird species were not noted every year. Our arrival records were collected either on or within a 8 km (5 mi) radius of the Woodworth Station, a field station of the Northern Prairie Wildlife Research Center, in northwestern Stutsman County, North Dakota. The station headquarters is 5 km (3 mi) east of the city of Woodworth in the NW ¼ section 12, T142N, R68W, latitude 47° 8' N, longitude 99° 15' W. Elevation at the station is 572 m (1877 ft) above sea level. A more detailed description ot the station area is provided by Kirsch and Higgins (1976).

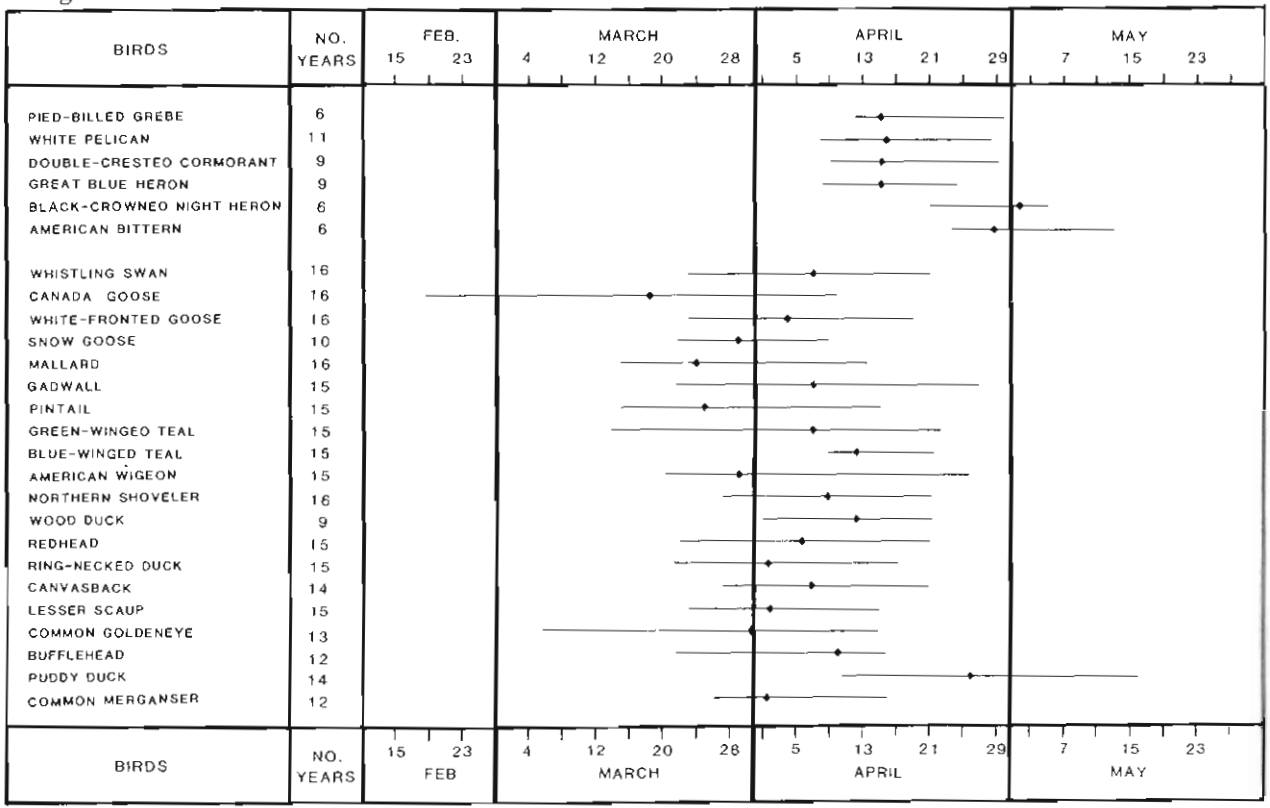
Spring arrival dates vary with location and in a specific location may vary from year to year. However, arrival dates for bird species can be used in many ways. These data can be used to indicate last dates for habitat manipulations before species arrive in spring. They can be helpful in planning schedules for visitor use such as school or tour groups, birders, general public usage, or in biological studies. The association of special climatological or phenological events with these data may be useful to birders, land managers, or professional resource personnel.

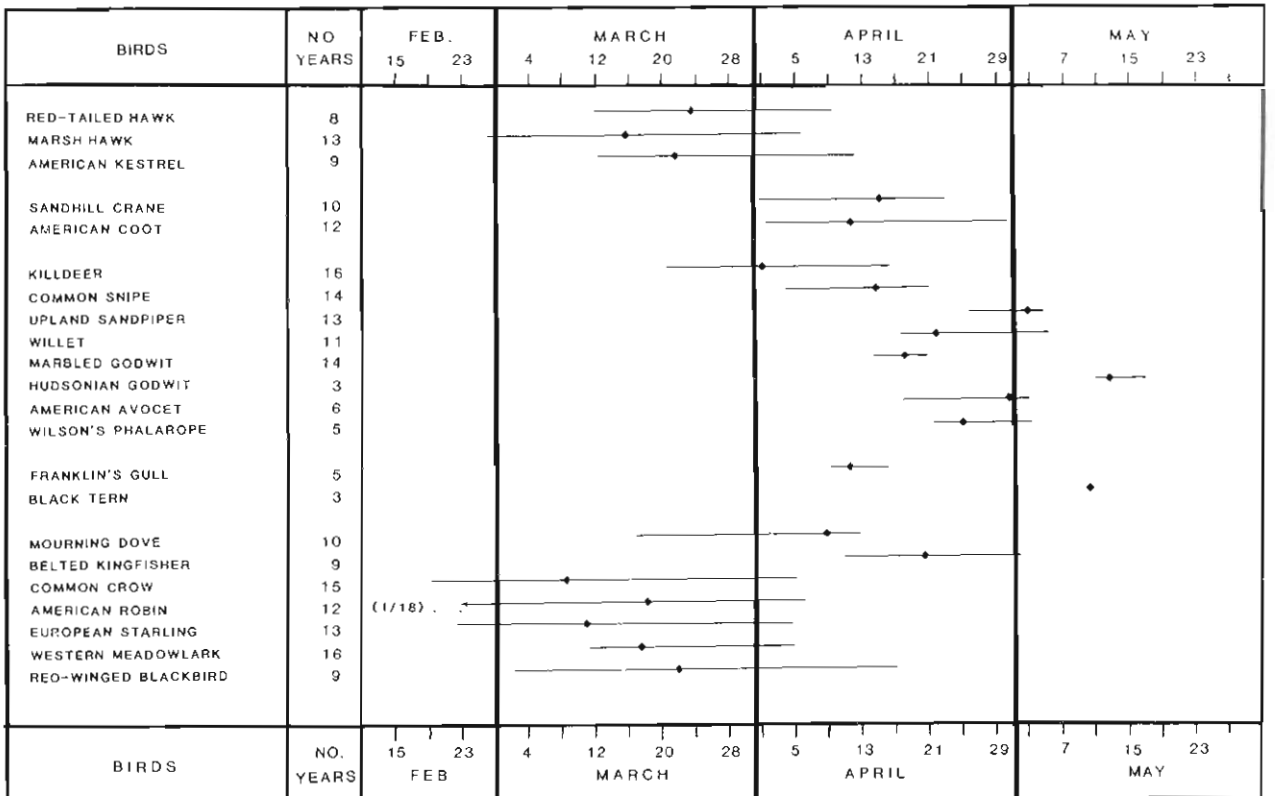
Sometimes opposite and extreme arrival dates occurred for different species in the same year. For example, the spring of 1979 was considered cold and late at Woodworth. However, during that spring we witnessed record early arrival dates for upland sandpiper and mourning dove and record late arrival dates for Canada goose, mallard, pintail, green-winged teal, and Franklin's gull. This represents only one example of how the data in Fig. 1 may be used and associated to special climatological or phenological events.

LITERATURE CITED

Kirsch, L. M. and K. F. Higgins. 1976. Upland sandpiper nesting and management in North Dakota. Wildl. Soc. Bull. 4:16-20.

Figure 1. Range and median dates of earliest spring sightings of 48 species of birds at Woodworth, North Dakota. during 1965-1980.




BIRDS
NO YEARS
FEB.
15 23
MARCH
4 12 20 28
APRIL
5 13 21 29
MAY
7 15 23
RED-TAILED HAWK 8
MARSH HAWK 13
AMERICAN KESTREL 9
SANDHILL CRANE 10
AMERICAN COOT 12
KILLDEER 16
COMMON SNIPE 14
UPLAND SANDPIPER 13
WILLET 11
MARBLED GODWIT 14
HUDSONIAN GODWIT 3
AMERICAN AVOCET 6
WILSON'S PHALAROPE 5
FRANKLIN'S GULL 5
BLACK TERN 3
MOURNING DOVE 10
BELTED KINGFISHER 9
COMMON CROW 15
AMERICAN ROBIN 12
(1/18)
EUROPEAN STARLING 13
WESTERN MEADOWLARK 16
RED-WINGED BLACKBIRD 9
BIRDS
NO. YEARS
15 23
FEB
4 12 20 28
MARCH
5 13 21 29
APRIL
7 15 23
MAY