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Birds of the Great Plains: Family Columbidae (Pigeons and Doves)

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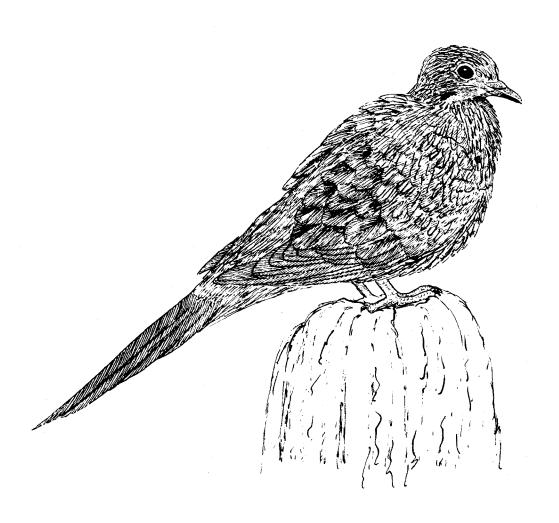


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FAMILY COLUMBIDAE (PIGEONS AND DOVES)



Rock Dove (Domestic Pigeon) Columba livia

Breeding Status: Introduced; now pandemic throughout the region.

Breeding Habitat: The original habitat consisted of cliffs, but in North America this species primarily frequents cities and farms, rarely straying far from human habitation. In North Dakota and Oklahoma feral birds have been found nesting in narrow, steepwalled canyons, cliffs, and similar natural habitats.

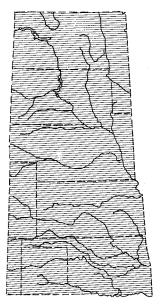
Nest Location: Buildings that provide narrow ledges similar to cliff ledges are the preferred nesting sites of this species. The nest is a flimsy platform of twigs, sticks, and grasses.

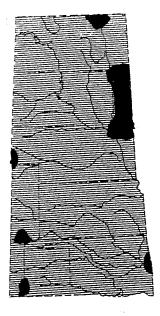
Clutch Size and Incubation Period: Normally 2 eggs, sometimes 1. The eggs are white with a smooth, glossy surface. The incubation period is 17-19 days. Multiple-brooded.

Time of Breeding: At least as far north as Kansas, eggs are laid every month of the year. In Kansas there is a spring peak of breeding, with early April being the period of maximum egglaying. Probably much the same applies elsewhere in the region.

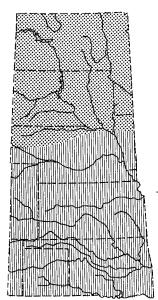
Breeding Biology: Because of the prolonged period of laying activity, pair-bonding is probably relatively permanent, but a period of sexual display precedes each nesting cycle. The most common display is bowing, which occurs in sexual, assertive, and defensive situations. When displaying sexually the male usually flies toward the female or leaps upward, clapping his wings sharply together, and begins cooing while inflating the neck. Tailspreading is also a usual part of the sexual phase of this display. Males also perform an extended display flight, marked by loud wing-clapping and gliding with the wing held above the horizontal plane and the tail somewhat spread. Pigeons typically need from 8 to 14 days to complete their pairing and preincubation behavior. Both sexes help gather nesting materials, which is often scanty. Incubation requires an average of 171/2 days, with the male usually roosting well apart from his sitting mate but helping to feed the nestlings as soon as they hatch. They are initially fed only on pigeon milk and are tended for an average of about 31/2 weeks. They fledge when 35-37 days of age, but by the time the young are about 3 weeks old the pair begins a new nesting cycle. The first brood is tolerated in the territory until the second brood hatches, then is attacked and driven away by the parents. By overlapping successive breeding cycles, a pair might potentially rear as many as 10 or even 12 broods during a 12-month period.

Suggested Reading: Goodwin 1967; Murton and Clarke 1968.





Mourning Dove Zenaida macroura (Zenaidura macroura)



Breeding Status: Pandemic, breeding throughout the entire region. Occurs abundantly in virtually all areas.

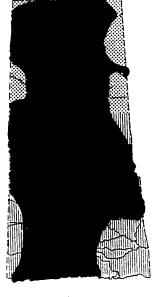
Breeding Habitat: The most typical habitat is probably open woods and edge areas between woods and prairie or cropland, but the birds also breed in cities, on grasslands far from trees, and in cultivated fields.

Nest Location: Nests are most often in trees, at heights from about 4 to 20 feet and averaging 5 and 7 feet in two North Dakota samples. Of 55 North Dakota nests, 25 were on the ground; ground nests are more common in relatively treeless areas. A wide variety of trees are used, but when stiff-branched conifers are present they seem to be preferred over deciduous species. The nest is a frail platform of twigs with little or no lining.

Clutch Size and Incubation Period: Normally 2 eggs, sometimes 1 or 3. The eggs are white with a glossy surface. The incubation period is 13-15 days. Multiple-brooded, with up to four broods being raised in the southern parts of this region.

Time of Breeding: North Dakota egg dates range from April 16 to September 6, with a peak in May and June, and dependent young have been seen from May 8 to October 2. Kansas egg records are from April 1 to September 10, with a peak in mid-May. Egg records in Texas extend from January through December, but there is a breeding peak from March to September.

Breeding Biology: Mourning doves begin to form pairs at the onset of the breeding season, when males that are dominant in winter flocks mate with high-ranking females; such pairs are the first to establish territories and appear to be the most successful in their reproductive efforts. The availability of choice nesting materials (twigs) is important in determining territorial boundaries in captive birds, whereas food and water sites are not defended. The two eggs are usually laid at about 24-hour intervals, and incubation is by both sexes, the male normally incubating during the day and the female at night. Typically the eggs hatch on successive days, so that one chick tends to be larger and more aggressive in food-begging than the other. By the time the young are 12 days old they are ready to leave the nest, and they normally fledge when they are 13-15 days old. By that time the adults have generally begun a second clutch in a new nest. In subsequent nesting the two nests may be used alternately; in Texas as many as six nesting cycles have been reported by a single pair, using three different nest sites.



Suggested Reading: Hanson and Kossack 1963; Goforth and Baskett 1971.