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Birds of the Great Plains: Family Pelecanidae (Pelicans)

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FAMILY PELECANIDAE (PELICANS)

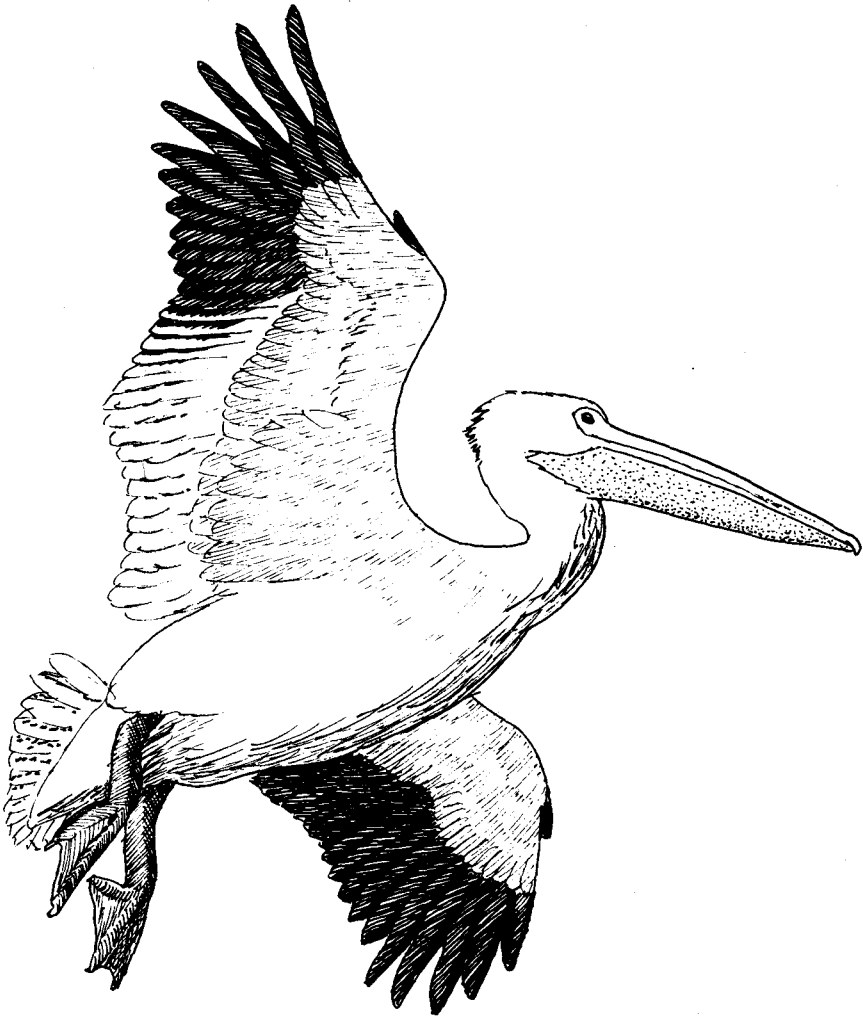White Pelican

White Pelican (American White Pelican)
Pelecanus erythrorhynchos

Breeding Status: Breeds in colonies in North Dakota (Chase Lake) and South Dakota (Waubay, Sand Lake, and Lacreek N.W.R.). At least periodically through 1972, pelicans also have bred in Minnesota (Marsh Lake, Lac qui Parle County, and Heron Lake, Jackson County). The only breeding colony in Colorado (Riverside Reservoir, Weld County) is slightly to the west of the region under consideration here. Nonbreeding birds are frequent during summer throughout most of the region, especially on large lakes or reservoirs.
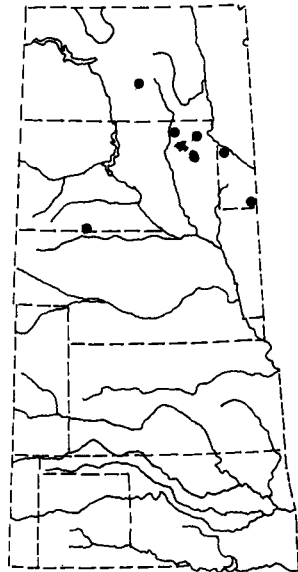
Breeding Habitat: Breeding typically occurs on isolated and sparsely vegetated islands in lakes or reservoirs. For nesting, birds prefer islands that are nearly flat or have only gentle slopes, that lack obstructions that might interfere with taking flight, and that have loose earth easily worked into nest mounds.

Nest Location: Unlike some other pelican species, the white pelican nests only on the ground. A variety of nest materials have reportedly been used in nest construction, including shells, vegetation, dirt, sand, and stones. At Chase Lake the nests are simply depressions in the ground lined with weeds and are often less than 10 feet apart. On the Molly Islands of Yellowstone Lake the birds build mounds in sandy areas that have shallow depressions by simply reaching out from the nest site and pulling in materials with the side or tip of the bill.

Clutch Size and Incubation Period: From 1 to 4 eggs (212 nests on the Molly Islands averaged 1.67); usually 2. Eggs are dull white, with a coarse texture. Incubation period is about a month (up to 36 days reported); incubation is by both sexes.

Time of Breeding: Extreme egg dates for North Dakota are June 1 to June 30; dates of dependent young range from June 1 to July 28. Since the fledging period is about 70 days, it is apparent that many birds must remain dependent through August.

Breeding Biology: Pelicans are at least seasonally monogamous, and little display activity occurs on the nesting areas. Territorial defense is limited to the area immediately around the nest site, and most described displays occur at or near the nest. These include a "head-up" display with inflated or expanded gular pouch, which may serve as a greeting display to the mate and threat toward others, a "bow," with the bill pointed toward the feet and waved from side to side, and a "strutting walk" with the male following the female. Copulation occurs on land and is preceded by wing-quivering and squatting by the female. Both sexes incubate and share in feeding the young, but they feed only their own chicks. At the age of 50-60 days the young of the colony form a large "pod," and they fledge at about 10-11 weeks.

Suggested Reading: Palmer 1962; Schaller 1964.