STATE ENDANGERED

Sedge Wren

(Cistothorus platensis)

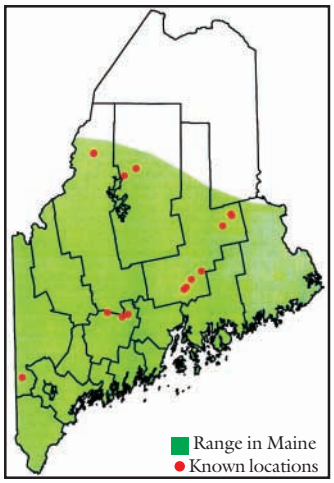
Mark McCollough

Description

The sedge wren is a small, brownish bird, roughly 3¾ inches long. The back and crown are brown with fine streaks of dark brown and tan. The breast, flanks, and underside of the tail are buff-colored. The wings and tail are brown with black barring. The chin, throat, and belly are white. The sedge wren has an indistinct whitish eyebrow and a short, thin bill. Although secretive and difficult to observe, the sedge wren is readily identified by its sharp, staccato trill *(chip chip chrrrrrr)*, which is given by the male wren while perched among tall grasses or sedges. Like other wrens, it tends to hold its short tail at an upward angle. The sedge wren is differentiated from the more common marsh wren by the buff color under the tail (the marsh wren's is white) and a streaked crown (the marsh wren's is uniformly brown).

Range and Habitat

The sedge wren is a will-of-the-wisp, sporadically breeding at only a handful of sites in Maine. It once bred here with greater regularity and even nested in "colonies" at some sites. The sedge wren is primarily a midwestern bird, found most commonly in the prairie states and provinces, and attains its greatest abundance in Minnesota, Wisconsin, North Dakota, and Manitoba. Lower densities occur west to Saskatchewan and parts of British Columbia, and south to northern Missouri. The species is less common in the eastern states and provinces. It is a rare breeder east to the Atlantic coast from New Jersey north to Maine. It also breeds in southern Ontario and Michigan, and is a rare species along the St. Lawrence River in Quebec. This species winters in the southeastern United States.



The northeastern limit of the sedge wren's range is in Maine. It can occur almost statewide, but it is rare and distributed patchily throughout the state. In recent years, sedge wrens have been found in the towns of Smithfield, Winslow, Benton, Bangor, Old Town, Milford, Lee, Webster Plantation, and T5R18 WELS. However, these occurrences have not been consistent from year to year.

Sedge wrens breed in freshwater meadows dominated by grasses and sedges, and in grassy, upland borders of freshwater marshes dominated by sedges. Dense, tall growth forms of grasses and sedges (average 3½ feet high), scattered shrubs 3-6½ feet high, and absence of standing water are often features associated with nesting habitat. Habitat patches can be fairly small, often less than 20 acres. Suitable nesting sites may be found in a small patch of wet sedge located in the midst of a large hayfield. Sedge wrens are somewhat fickle in selecting breeding sites, and a site that is used one year may not be used the next. They are very dependent on the water level at the nest site, preferring little if any standing water. Thus, amount of rainfall may determine whether a site will be suitable in a given year. Sedge wrens may be observed singing at a site in the spring, but will abandon the site later in the summer in favor of another breeding area.

Life History and Ecology

Sedge wrens have a unique, nomadic nesting chronology. In the spring, the population migrates into the interior U.S. and Canada for a first period of nesting in May and June. A second more widespread nesting occurs later in the summer (July-September). Nesting in the Northeast begins in June and can occur throughout late summer. The male establishes a territory of approximately ½ acre for courtship, nesting, and foraging. Territories may change in size and location throughout the season. Within a territory, the male constructs several nests, some of which are not used. Nests are built close to the ground, concealed amid vegetation, and attached to growing grass or sedge. Each nest is a hollow ball of grasses woven together with an opening on the side. The female adds a lining of grass, sedge, and feathers to the nest. Some male sedge wrens are monogamous, and others have more than one mate. When there are multiple females present, there is usually one "primary" female who lays her eggs earlier. She usually has better success fledging young than the other females. The typical clutch is seven eggs, which the female incubates for 12-14 days. The female provides most of the food and care of the young. Nestlings fly from the nest in 12-14 days. Feeding occurs primarily on the ground, and prey items are primarily insects. Fall migration begins in September or October.

Threats

Because nest locations vary each year and the breeding season lasts through the summer, it is extremely difficult to locate breeding sites. Because sedge wrens change sites so frequently, a large number of sites with suitable habitat are needed to ensure continued reproductive success of the species. Wetland loss, particularly of wet meadows, has decreased the amount of available breeding habitat, resulting in a decline in sedge wren populations throughout their range. Sedge and grass meadows, which are the preferred wetland type for sedge wrens, frequently have been drained and filled. In addition to habitat loss, sedge wrens are susceptible to burning, mowing, and grazing of grasses during the nesting season, when nestlings and fledglings may be harmed. During the winter and migration, populations can be greatly reduced by severe winter weather conditions. Grassland habitats have also been lost to vegetative succession and development throughout the Northeast, further decreasing the number of available breeding sites.

Since Colonial times, sedge wren populations have fluctuated dramatically because of human-induced changes in the landscape. Because of wetland loss, reforestation of farmlands, and a shift to high-intensity agriculture, sedge wren populations have declined throughout the region. The sedge wren was formerly a widespread breeder in Maine. Fifty pairs of sedge wrens were observed in Sunkhaze Meadow in Milford in 1934, but there were only seven pairs in 1941. In 1949, sedge wrens were found in breeding aggregations at approximately 21 locations in ten counties. In recent years, only individual singing males have been observed in five counties.

Conservation and Management

The sedge wren is listed as endangered in Maine because of low population size, a declining population trend, and a population distributed at a small number of sites. It is also listed as a species of management concern by the U.S. Fish and Wildlife Service. Conservation of potential breeding habitat is essential to the recovery of this species. Even small wet patches in the middle of hayfields and pastures can provide suitable breeding habitat. These areas should not be disturbed, especially during the breeding season. Protection of sedge meadows associated with streams may also help sedge wren populations, and simultaneously provide habitat for other wetland birds and the threatened Tomah mayfly.

Recommendations:

✔ Prior to land development or managing wetlands or wet pastures, consult with a biologist from MDIFW to assist with planning.

✔ Use voluntary agreements, conservation easements, conservation tax abatements and incentives, and acquisition to protect important habitat for threatened and endangered species.

✔ When projects are proposed within 250 feet of wetlands providing habitat for endangered or threatened species, adhere to forestry Best Management Practices (handbook available from the Maine Forest Service, SHS #22, Augusta, ME 04333) and Maine Erosion and Sediment Control Recommendations (available from the Maine Department of Environmental Protection, SHS #17, Augusta, ME 04333).

✔ Conserve a diversity of grassy wetlands throughout Maine to provide alternative nesting areas for sedge wrens.

✔ Avoid ditching or draining wet meadows. Maintain streams and associated sedge meadows in a natural state. Fluctuating water levels provide a range of breeding habitats.

✔ Avoid disturbing wet areas within hayfields and pastures, and exclude livestock from these areas, particularly during the breeding season (June 1-August 31). Any disturbance that must occur in these areas should be done after the young have successfully fledged and departed in September and October.

✔ Avoid or minimize herbicide and pesticide applications, or employ integrated pest management techniques.

✔ Avoid wetland crossings or use of heavy equipment in wetlands.

✔ Maintain moist grasslands with vegetation at least 8-12 inches high. Do not mow below this level.

✔ Use burning or mowing to prevent woody species from invading moist grasslands. Create a mosaic of burned and unburned areas that will provide nesting and feeding habitat for sedge wrens. Burn or mow only during the non-breeding season, in late fall and winter.