STATE THREATENED



Upland Sandpiper (Bartramia longicauda)

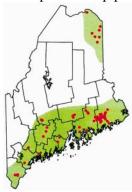
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Description

Upland sandpipers (or "uppies" to birders) provide an added dimension to grasslands. Their musical call, stirring courtship flights, and habit of perching on fenceposts enliven the rural landscape. Upland sandpipers are among the rarest and most appealing of grassland birds in the Northeast. They are large shorebirds (12 inches high, 26inch wingspan) identified by a small head, long neck, long tail, black rump, overall buffy plumage with intricate brown markings, and yellow legs. Feathers on the back are olive-buff and strongly barred dark brown with pale buff fringes. The dark streaking on the buff-colored breast contrasts with prominent dark chevrons along the white flanks. The wings are long and pointed. In flight, the undersides of the wings are white and strongly barred dark brown. The tops of the wings are blackish at the tip and brown next to the body. The upland sandpiper has a prominent dark eye and crown stripe. Its short bill is curved slightly downward. When alighting, the species momentarily holds its wings straight up. Its call is a liquid, mellow ch-wut, and in flight it whistles a strong qui-di-didu.

Range and Habitat

The upland sandpiper breeds across North America from



Alaska, the prairie Provinces, Midwestern states, and northern tier states to Maine and into the Maritimes. The highest nesting densities are in the northern prairie states and provinces. In Maine, upland sandpipers breed in large grasslands and barrens along the coast and eastern Aroostook County. Most of the state's population nests in the Downeast blueberry barrens. Wintering areas are in South America, with the largest concentrations in Argentina.

Upland sandpipers require large fields (preferably greater than 150 acres), with open shortgrass areas such as blueberry barrens, meadows, pastures, hayfields, fallow agricultural fields, and airports. They occasionally breed in bogs and open peatlands. They prefer a mix of short and tall (less than 24-inch) grass interspersed with patches of bare ground. Fence posts, if available, are used for singing perches. The birds avoid fields with uniform coverage of dense grass and legumes, or a thick layer of dead vegetation. They will use fields dominated by bunchgrasses or lowbush blueberry.

Life History and Ecology

Upland sandpipers first breed at one year of age. Adults arrive on breeding grounds in Maine from late April to early May. Males call while they circle high above their territories. Upland sandpipers are monogamous, and are thought to arrive on their breeding areas already paired. After elaborate courtship displays, they select a nest site. They nest in extensive, open tracts of short grassland cover types. They are loosely colonial, and several nesting territories are usually grouped in fields. While nest sites are defended, nearby loafing and feeding sites are shared communally. The nest is a shallow scrape in the ground lined with dry grass, with overhanging vegetation for concealment. A clutch of four eggs is incubated for 21-27 days. Within a day of hatching, chicks leave the nest. At least one parent guards the chicks until fledging occurs at 30-34 days of age. Feeding and brood-rearing occur in open, short, grassy cover types. Prey items are primarily insects and include grasshoppers, crickets, and other small invertebrates.

Threats

Upland sandpipers were more common in Maine in the 1800s when a higher percentage of the state was in farmland. Maine agricultural lands diminished from 33 percent of the landscape to 6 percent, as grasslands have reverted to forests or have been fragmented by residential and commercial development. As grasslands disappeared from the landscape, so did upland sandpipers. In the past 100 years, populations have probably stabilized or slightly increased. In the Northeast, hayfields were traditionally harvested in late summer and provided good habitat throughout the breeding season. Today most hayfields are mowed earlier and more frequently, or planted to crops. Pastures can be suitable habitat unless they are subject to heavy grazing. Extensive row crops or fields uniformly covered with mat-forming grasses are not suitable. Some agricultural pesticides negatively affect grassland birds or their insect food.

Conservation and Management

The upland sandpiper was listed as threatened in Maine in 1997 because of small populations, regional population declines, and diminishing habitat in the Northeast. It is also listed as a Migratory Bird Species of Management Concern in the Northeast by the U.S. Fish & Wildlife Service. Historically, upland sandpipers were common summer residents in Maine and were distributed among 13 counties. At the peak of agricultural development in the late 1800s, upland sandpipers were considered common.

After 1950, declining agriculture and increasing reforestation resulted in widespread loss of potential breeding habitat. Since 1989, upland sandpipers have been reported at over 75 sites in 11 counties. Current breeding habitat is limited to blueberry barrens and the few remaining large grasslands in the state. Continued existence of this species depends on maintaining these habitats. Maine has the largest upland sandpiper population in the Northeast (nearly 200 pairs), and as such will play an important role in conservation of the species in the region. Additional research is needed to document the species' nesting ecology, populations, productivity, survival of chicks, and other potential limiting factors. Habitat protection, enhancement, and management are key to the species' recovery. Nests, eggs, and fledglings of upland sandpipers are protected from take by the Maine Endangered Species Act.

The upland sandpiper shares its habitat with many other rare or uncommon species such as the grasshopper sparrow (endangered), short-eared owl, vesper sparrow, horned lark, bobolink, meadowlark, and northern harrier. All these species rely on grasslands, and many are declining in the Northeast. Conservation of the upland sandpiper depends on maintaining the remaining grassland areas of the state, particularly fields greater than 150 acres.

Recommendations:

- Prior to land development or managing grasslands and barrens (particularly in Washington County), consult with a biologist from MDIFW to assist with planning.
- Municipalities should strive to maintain important grasslands and barrens identified by MDIFW as open space, identify these areas in comprehensive plans, and conserve accordingly.
- Use voluntary agreements, conservation easements, conservation tax abatements and incentives, and acquisition to protect important habitat for threatened and endangered species.
- Maintain known nesting areas in native grasses, such as little bluestem, or low-growing shrubs like lowbush blueberry and do not develop or convert them to other land uses; enlarge these whenever possible.
- When managing grasslands, employ best management practices using guidelines in Massachusetts Audubon Society's Conserving Grassland Birds publications (www.massaudubon.org).
- Avoid mowing nesting areas for brush control between May 1 and August 5. If mowing is necessary prior to early August, mark nest sites or locations of young birds and leave patches of unmowed grass or low-growing shrubs. Raise the mower to greater than six inches to prevent destruction of nests and young birds.
- ♦ Keep grazing animals off known nesting fields during the critical nesting period (May 1 to August 5).
- Maintain approximately 40 percent of the vegetation cover at a height of 8-12 inches, with minimal litter and grass cover. Maintain some patches of bare ground, scattered tall forbs (8-25 inches), and short shrubs for song perches.
- Manage multiple, contiguous fields to provide a mosaic of grassland types by mowing, burning, or late-season grazing. Mow every 2-5 years (not annually) to inhibit establishment of shrubs and trees.
- ♦ Burn fields every 5-10 years after September 1 or before May 1. Do not burn more than 50 percent of a grassland within a year.
- Avoid or minimize herbicide and pesticide applications, or employ integrated pest management techniques.
- Limit commercial gravel and sand mining in grasslands and blueberry barrens. Restore old gravel pits and agricultural fields to grasslands and low shrubs