

WANDERING TATTLER

TAXONOMY

Scientific name: *Heteroscelus incanus* (Gmelin, 1789)

Common name: Wandering Tattler

Family: Scolopaeidae

Taxonomic comments:

Ecological and morphological distinctness of *H. incanus* and *H. brevipes* (Gray-tailed Tattler) as species is debated (AOU 1983, Gill et al. 2002).

Originally described as *Scolopax incana* (Gmelin, 1789). Previously placed in genera *Totanus*, *Heteractitis*, and *Actitis*. Currently placed in genus *Heteroscelus*, derived from Greek, meaning “different leg,” which refers to the species’ tarsal leg scales which are unique to this species. Species name sometimes *incanum*, but changed to *incanus* per gender agreement between generic and specific names (Gill et al. 2002).



DESCRIPTION

Basic description: A medium-sized shorebird.

General description:

A medium-sized sandpiper with long wings and tail, relatively short but thick legs, and medium-length straight bill. Uniform gray above, with whitish eyebrow, dark rump and tail, and greenish-yellow legs. Breeding birds have heavily barred underparts. Nonbreeding birds whitish below, with a gray wash on sides and flanks (Gill et al. 2002).

Length (cm): 28

Weight (g): 116

Reproduction:

Arrival and pairing on northern breeding grounds occurs from mid-May to early June, with males generally preceding females in arrival (Gill et al. 2002). Single clutch laid per season (no evidence of second broods although replacement clutch likely if initial clutch is lost early in incubation), usually 4 eggs laid in late May-early June; incubated by both sexes for 23–25 days (Weeden 1965). Hatching recorded in Alaska from June 24-July 11 (1999); precocial nestlings are tended by both parents (Gill et al. 2002).

Ecology:

This tame shorebird breeds above timberline in Alaska, and much is still unknown about its breeding behavior (first nest was discovered in 1922). This species is better known on its coastal wintering grounds, where it was discovered more than two centuries ago.

Wandering Tattlers are basically solitary throughout their annual cycle. Associated with mountain streams and gravel bars within their breeding range, they bob and teeter while feeding and probe the water surface for insect prey, especially aquatic invertebrates (Johnsgard 1981). The Wandering Tattler's primary call is a series of clear, rippling whistles, all on one pitch (Gill et al. 2002).

In Alaska, possible predators to adult birds include Rough-legged Hawks (*Buteo lagopus*) and Peregrine Falcons (*Falco peregrinus*), and arctic ground squirrels (*Spermophilus parryii*) are known egg/nestling predators to co-occurring Surfbirds (*Aphorize vibrata*) (Gill et al. 2002). Observed responses to predators include alarm calls and "freezing" in one place where coloration makes birds difficult to distinguish from background; young chicks may crouch motionless or flee intruders to the brood vicinity (Gill et al. 2002).

Food:

Eats polychaete worms, mollusks, crustaceans, insects, amphipods, and fish (Gill et al. 2002). During breeding season feeds along edges of rocky, gravelly mountain streams; apparently specializes in capturing larvae of caddisflies and aquatic dipterans (Bent 1929 and Stout 1967 in Johnsgard 1981). May wade into belly-deep water and completely submerge head while foraging. Probes in sand, mud, silt, rocky and arboreal crevices, among detritus, between and beneath submerged rocks, and among sessile invertebrates (Gill et al. 2002). During migration and non-breeding season, follows receding waves in rocky and sandy intertidal habitats. Observed catching and swallowing a 65- to 80-mm-long sculpin (Cottidae) (Gill et al. 2002).

Migration:

Adults migrate northward from non-breeding grounds through Oceania and along U.S. Pacific coast from March–early June; subadults remain in non-breeding range through 2nd and likely 3rd year (Gill et al. 2002). Spring migrants arrive almost simultaneously along the entire Pacific coastline of Alaska in late April or early May (Kessel and Gibson 1978). Those with breeding grounds near the Bering Sea do not arrive until mid-May or later. Southward migration occurs July–October with most birds moving from Alaska, Yukon Territory and Russian Far East across the Pacific to the Hawaiian Islands, throughout Polynesia, New Zealand, eastern Australia and eastern Micronesia, and some birds moving down the Pacific coast of the Americas and the Galapagos Islands (Gill et al. 2002).

Habitat:

Breeding: Mostly restricted to the alpine zone, usually breeds along rocky or scrubby vegetated edges of mountain streams and lakes; frequents rapidly-flowing streams and tundra habitats, wet meadows, moraine deposits, scree slopes, braided rivers, sometimes found in forest clearings away from water. Often nests on the ground in a rocky or gravelly site. In Prince William Sound, Alaska, known to nest above tide line on gravel areas of the immediate coast, and also commonly observed nesting on/near sparsely vegetated tailing piles in areas of old placer mining activity (Weeden

1965, Johnsgard 1981, Weeden 1959 in Gill et al. 2002). Nests also observed in dwarf shrub tundra near streams or lakes (Spindler et al. 1980, Gill et al. 2002).

Non-breeding: Mainly rocky shores and islands, also sandy island beaches along coast, sometimes on mudflats and along rocky streams. Occasionally found on freshwater impoundments near coast and on estuarine substrates (Gill et al. 2002).

STATUS

Global rank: G5 (1996-11-25)

State rank: S3S4B (2004-08-11)

State rank reasons:

About 50% of global population (5,000-12,000 birds) breeds in or migrates through Alaska. Widespread distribution but occurs at low densities in alpine areas; population trend unknown. Protected throughout much of breeding range. Placer mining in western and interior Alaska may both positively and negatively affect species habitat.

DISTRIBUTION AND ABUNDANCE

Range:

Global range:

Breeding: In western, central and south-coastal Alaska, central and southern Yukon, northwestern British Columbia, and in northeastern Siberia and Chukotka. The majority (>90%) breed in North America (Gill et al. 2002).

Non-breeding: Main nonbreeding area is Oceania from the Hawaiian Islands south through east and central Polynesia, also in Micronesia. Present but not common in south Melanesia west to New Guinea, Australia, New Zealand and Japan (Gill et al. 2002). Also winters along the Pacific coast mainly from southern California south to Revillagigedo Islands and coastal Mexico, and locally to Honduras, Costa Rica, Panama, Colombia, Peru, the Galapagos Island and Ecuador. A significant portion of the population remains on the nonbreeding grounds for at least one year.

State range:

Breeding: Sparsely distributed in suitable habitat throughout mostly montane areas of Alaska (probably everywhere north of about 58 degrees N; Gill et al. 2002). Confirmed breeder in south coastal Alaska in Prince William Sound (Montague I., Bay of Isles) and Chugach Mountains (Thompson Pass) (Isleib and Kessel 1973, Gill et al. 2002). Also breeds in southwest Alaska from southern Alaska Range to base of Alaska Peninsula; throughout central Alaska, particularly in Talkeetna Mountains; in western Alaska Range (e.g. Denali National Park); Ray and White Mountains; Tanana Yukon Highlands; and southern Brooks Range (Gill et al. 2002). Distribution is poorly known in eastern Alaska Range and Wrangell Mountains. Occurs regularly throughout western Alaska (Ahklun, Kilbuck, Bendeleben, Kigluuaik, Baird, and DeLong mountains and Seward Peninsula uplands); in northern Alaska, nests in eastern Brooks Range to Alaska-Yukon border (Kessel and Gibson 1978, Kessel 1989, Gill et al. 2002). Breeding status uncertain in Askinuk Mountains and on north Bering Sea islands. Presumed breeder in Nulato Hills and western

Brooks Range. Breeding not confirmed but highly probably at north end of Alexander Archipelago in Southeast Alaska, Kodiak Island, and on Alaska Peninsula (Gill et al. 2002).

Non-breeding: Fairly common coastal migrant in southeastern, southcoastal (also Kodiak Island), and southwestern Alaska, and on Bering Sea islands in western Alaska (Kessel and Gibson 1978). Uncommon migrant on Aleutian Islands (Byrd et al. 1974, Gibson 1981) and on the mainland coast of western Alaska (Cape Pierce, Yukon/Kuskokwim River Delta, eastern Norton Sound); most spring migrants apparently move inland directly after crossing the Bering Sea. Casual migrant in northern Alaska north of the Brooks Range foothills (Byrd et al. 1974, Kessel and Gibson 1978, Gibson 1981).

Abundance:

Global abundance:

Global population estimate between 10,000-25,000, with 90% breeding in North America (Morrison et al. 2000, Gill et al. 2002). Morrison (1993/1994) estimated the population in Canada at about 5000 individuals.

State abundance:

Global population estimate between 10,000 - 25,000, of which > 50% occur in Alaska as either migrants or breeders (Alaska Shorebird Working Group 2000, 2004). Overall, size of the breeding population in Alaska is unknown, but probably small (under 10,000 individuals; Alaska Shorebird Working Group 2000).

A fairly common to locally common breeder throughout the major mountain systems of southcoastal, central, and western Alaska; perhaps somewhat less numerous in the Tanana-Yukon Highlands (Kessel and Gibson, 1978). A common migrant and locally common breeder along the north Gulf Coast and in Prince William Sound (Isleib and Kessel 1973). On the Seward Peninsula, abundant in the southern uplands, rare in the northern uplands (Kessel 1989).

Nesting densities relatively low and variable throughout breeding range (Gill et al. 2002).

Surveys conducted during early nesting period (mid- to late May) along 540 km of riparian stream in the Kilbuck Mountains found densities of 0.01 birds/km; 46% were found along Quicksilver Creek (4% of surveyed habitat) where density was 1.04 birds/km (Gill et al. 2002). Along the Tuluksuk River in the Kilbuck Mountains, densities of 0.6–2.5 broods/km were reported from riparian mine tailings and 0.6 broods/km along undisturbed river shingle (Peterson et al. 1991 in Gill et al. 2002). At Turquoise Lake, seven pairs were found nesting over an 85-square-km area (Gill et al. 2002). On Seward Peninsula, along a 10-km stretch of the East Fork of the Solomon River, one pair of tattlers was found every 0.8 km and along Glacier Road a pair was resident on almost every tributary system flowing toward the Snake River that crossed the road in 1967 (Kessel 1989). Significantly fewer birds were noted in these areas in 1977, possibly due to flash floods that may have destroyed nests during the preceding breeding season (Kessel 1989).

Reports of large numbers or concentrations from non-breeding areas are limited: in Prince William Sound, migration of a few to probably several thousand birds; on Middleton Island, north Gulf of Alaska, lineal density of 26 birds/km of shoreline (total count 397) in late July; on Laysan Island total count of 450 in November 1984 and 170 in October 1985 (R. Pyle unpubl. in Gill et al. 2002).

Latter numbers are not typical and may be related to weather-delayed migration in those years (Gill et al. 2002).

Trends:

Global trend:

Morrison (1993/1994) categorized the population trend in Canada as "stable?" Based on Christmas Bird Count data, 1974-1993, a significant downward trend (linear) noted at Point Reyes, south Marin County, California, but on adjacent Farallon Islands no significant trend detected (Gill et al. 2002). Tattler numbers declined at Suva Point, Fiji, from surveys conducted in 1961–1962 and 1969–1970 to later surveys in 1981–1982 (Gill et al. 2002).

State trend:

Unknown. Small boat surveys in Prince William Sound recorded 408 Wandering Tattlers in 1972; when surveys were repeated 1989 through 2000, greatest number of birds detected was 96 in 1996; no Wandering Tattlers were recorded during the 1993 survey (Stephensen et al. 2001).

EXISTING PROTECTION

Global protection:

Protected in the U.S. and in Canada under the Migratory Bird Treaty Act. Also protected throughout most of its non-breeding range by various global conventions (Gill et al. 2002).

State protection:

Protected in the U.S. and in Canada under the Migratory Bird Treaty Act. Also protected throughout most of its non-breeding range by various global conventions (Gill et al. 2002). Habitat protected where it occurs in Noatak, Kobuk Valley, Lake Clark, and Denali National Parks.

CHALLENGES

Global challenges:

See State challenges.

State challenges:

Breeding and foraging habitat in western and interior Alaska is susceptible to disturbance from mining activities (Alaska Shorebird Working Group 2004). Placer mining for gold makes up much of the region's small-scale mining activity. Such activity can affect watersheds by direct physical modification of the river channel and bank and may also affect biological components of the system through contamination by fuels, heavy metals, and acids. Alternatively, physical modification of watersheds has been shown to benefit some populations. For example, some riparian corridors that were heavily disturbed by placer mining in the early part of last century currently support some of the highest known nesting densities of Wandering Tattlers in the state (Weeden 1965, Alaska Shorebird Working Group 2004). Coastal oil spills threaten breeding habitat in Prince William Sound and migrating/foraging habitat throughout coastal Alaska in this species' range.

Predation by raptors is known but not quantified (Gill et al. 2002). Rough-legged Hawk and Peregrine Falcon are suspected predators; arctic ground squirrels are potential predators of eggs and

young (Gill et al. 2002). Introduced mammalian predators on non-breeding grounds are another possible threat.

RESEARCH AND INVENTORY NEEDS

Global research needs:

Most aspects of breeding ecology need study including annual or lifetime breeding success, age of first breeding, annual survival from fledgling to maturity, adult survival, recruitment, and longevity (Gill et al. 2002). Breeding and non-breeding habitat requirements should be explored, and the effects of placer mining on habitat availability and quality studied.

State Research Needs:

Breeding ecology needs study. Research needed to determine effects of placer mining on breeding habitat. Breeding habitat requirements should be explored, and the effects of placer mining on habitat availability and quality studied.

Global inventory needs:

Determine size and trend of global population.

State inventory needs:

An accurate inventory of state population is needed. Long-term monitoring to assess population trend is suggested.

CONSERVATION AND MANAGEMENT NEEDS

Global conservation and management needs:

Evaluate the suitability of islands and atolls in the South Pacific for restoration to Tattler non-breeding protected areas; assessment should include research on bird abundance, distribution, and habitat use, and on the effects of introduced mammals on birds and their habitats. Such research is particularly important for islands and atolls with high conservation potential, including U.S protected areas (Tibbitts et al. 2003).

State conservation and management needs:

A priority should be habitat protection in areas of high breeding importance, such as those identified in Western Alaska and the NW Forest Bird Conservation Regions (Alaska Shorebird Working Group 2004). Encourage research into breeding and non-breeding habitat requirements throughout range. Overall, species is protected throughout the majority of its range in the state.

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Life history and Global level information were obtained from the on-line database, NatureServe Explorer (www.natureserve.org/explorer). In many cases, life history and Global information were updated for this species account by Alaska Natural Heritage Program zoologist, Tracey Gotthardt. All Global level modifications will be sent to NatureServe to update the on-line version.

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Global Element Ecology & Life History Author(s): G. Hammerson
