Franklin's Gull

Leucophaeus pipixcan

REGULATORY STATUS

USFWS: Migratory Bird
USFS R2: No special status
USFS R4: No special status
Wyoming BLM: No special status
State of Wyoming: Protected Bird

CONSERVATION RANKS

USFWS: No special status
WGFD: NSSU (U), Tier II
WYNDD: G4G5, S1
Wyoming Contribution: LOW
IUCN: Least Concern
PIF Continental Concern Score: Not ranked

STATUS AND RANK COMMENTS

Franklin's Gull (*Leucophaeus pipixcan*) has no additional regulatory status or conservation rank considerations beyond those listed above.

NATURAL HISTORY

Taxonomy:

Following the reclassification of the genus *Larus* in 2008, Franklin's Gull (formerly *Larus pipixcan*) was moved to the genus *Leucophaeus* [1]. There are currently no recognized subspecies of Franklin's Gull [2, 3].

Description:

Identification of Franklin's Gull is possible in the field. It is a small gull; adults weigh between 250–325 g, range in length from 33–36 cm, and have wingspans of 85–95 cm [2]. The sexes are similar in size and appearance [2]. In the breeding season, Franklin's Gull has a solid black head, thick white arcs above and below the eyes, dark gray back and wings, black primaries with white tips, white underbody that may be tinted pink, black eyes, dark red bill, and dark red to reddish-black legs and feet [2, 4]. The distinct white eye arcs remain in the non-breeding season, but the black head fades to a partial hood, and the bill, legs, and feet darken to mostly black [2, 4]. Two other species of gull are classified as summer residents in Wyoming and are known to breed in the state: Ring-billed Gull (*Larus delawarensis*) and California Gull (*Larus californicus*) [5, 6]. Franklin's Gull can easily be distinguished from both Ring-billed Gull and California Gull in the breeding season by its black head [4].

Distribution & Range:

The core breeding distribution of Franklin's Gull is in the Prairie Potholes Region (PPR) of Canada and the United States, extending through parts of Alberta, Saskatchewan, and the Northwest Territories and south to northern Montana and northeastern South Dakota [2]. Wyoming

lies well south of the PPR, but the western edge of the state borders several of the small peripheral Franklin's Gull breeding areas scattered throughout the northwestern United States [2]. Franklin's Gull migrates through Wyoming in the spring and fall and is a summer resident [5, 6]. This species has been observed at waterbodies across the state; however, confirmed or suspected breeding has been documented in just 3 of the 28 latitude/longitude degree blocks, all in far-western Wyoming [6]. Franklin's Gull winters south of the equator on the western coast of South America [2].

Habitat:
Franklin's Gull breeds in large, inland, freshwater prairie wetlands and marshes with emergent vegetation interspersed with areas of open water [2]. In Wyoming, Franklin's Gull breeds and forages in marshes, wetlands, and lakes below 2,500 m, but will also forage in agricultural fields [5-7]. Both sexes participate in the construction and daily maintenance of the nest, which is typically a floating platform of wet vegetation positioned within sparse emergent vegetation. New plant material is added to the nest every day throughout the breeding season to ensure it stays above the surface of the water [2, 7]. This species most commonly winters in marine coastal habitat, from the littoral zone to as far as 50 km offshore, and in bays and estuaries [2].

Phenology:
In Wyoming, spring arrival of migrating and breeding Franklin's Gulls starts in early April and peaks in the middle of May [5], but very little is known about the specific nesting and breeding habits of this species in the state. Franklin's Gull nests in colonies, and males solicit females from established territories [2]. Clutches of approximately 3 eggs are initiated about a week after the start of nest construction, and eggs likely hatch between late May and early or mid-June [2]. Franklin's Gull is a single-brood species [2]. In Wyoming, fall migration to wintering grounds peaks in early September, with most migrants and residents leaving the state by early October [5].

Diet:
Franklin's Gull is a year-round generalist, feeding on a variety of terrestrial and aquatic foods depending on season and availability, including insects, earthworms, larvae, seeds, plant matter, rodents, fish, crabs, snails, other invertebrates, and refuse from garbage dumps and fisheries [2, 7].

CONSERVATION CONCERNS

Abundance:
Continental: WIDESPREAD
Wyoming: VERY RARE
There are no robust estimates of abundance available for Franklin's Gull in Wyoming. The species has a statewide abundance rank of VERY RARE but appears to be common within suitable environments in the occupied area [6]. Colonial nesting waterbird surveys conducted from 2002–2006 by the Wyoming Game and Fish Department (WGFD) recorded a range of 0 to 5 individuals annually across all surveyed sites [8-12]. From 1968–2015, annual Wyoming Breeding Bird Survey (BBS) detections of Franklin's Gull ranged from 0 to 136, with none recorded in most years [13]. Only 1 Franklin's Gull was detected during surveys for the Integrated Monitoring in Bird Conservation Regions (IMBCR) program between 2009–2015 [14]. While surveys conducted as part of the BBS and IMBCR programs may occasional detect this species, neither is specifically designed to capture gull observations.

Population Trends:
Historic: LARGE DECLINE
Recent: UNKNOWN
Robust population trends are not available for Franklin's Gull in Wyoming because the species is infrequently detected during monitoring efforts. The species has faced large historic declines across its continental distribution. Survey-wide trend data from the North American BBS indicate that Franklin's Gull numbers experienced a statistically significant annual decline of 3.96% from 1966–2013 and a non-significant annual decline of 0.87% from 2003–2013 [15]. In the PPR, Franklin's Gull numbers declined annually by 1.49% from 1966–2013 and increased annually by 1.01% from 2003–2013; however, neither trend estimate was statistically significant [15].

Intrinsic Vulnerability:
HIGH VULNERABILITY
Franklin's Gull has high intrinsic vulnerability in Wyoming due to low abundance, a narrow range of breeding habitat requirements, and colonial nesting and nest-building behaviors that potentially leave the species susceptible to disturbance. The distribution of Franklin's Gull is limited by a preference for productive wetlands and marshes, which are relatively uncommon in the state [7, 16]. Natural or anthropogenic disturbance to Forster's Tern breeding colonies can potentially affect large numbers of nesting individuals and negatively impact local populations. In addition, the floating nests of this species are vulnerable to damage or loss from surface disturbance and fluctuating water levels, which commonly occur on water bodies in Wyoming [2].

Extrinsic Stressors:
MODERATELY STRESSED
Franklin's Gull is moderately stressed by extrinsic stressors in Wyoming, where already limited natural wetland habitat is potentially vulnerable to climate change and drought, invasive plant species, and development for infrastructure, energy, and agriculture [7, 16, 17]. Drought can render previously productive migration, breeding, and foraging sites unsuitable through the contraction or complete loss of wetland habitat and changes to the structure and availability of emergent aquatic vegetation [18, 19]. Early in the breeding season, anthropogenic disturbance can cause Franklin's Gull to abandon nests or even entire colonies [7]. The species may experience bioaccumulation of some environmental contaminants from feeding on fish and aquatic invertebrates in polluted habitats [2, 7].

KEY ACTIVITIES IN WYOMING

Franklin's Gull is classified as a Species of Greatest Conservation Need (SGCN) by the WGFD, and as a Level I Priority Bird Species requiring conservation action in the Wyoming Bird Conservation Plan [7]. Current statewide bird monitoring programs are designed for monitoring breeding songbird populations and are unlikely to provide useful information on Franklin's Gull. These monitoring programs include the BBS program conducted on 108 established routes since 1968 [15], and the multi-agency IMBCR program initiated in 2009 [14]. Since 1984, WGFD has conducted annual or periodic monitoring at the most important and productive sites for colonial waterbird SGCN to determine species presence and distribution, and to estimate number of nesting pairs. The most recent effort was the culmination of a multi-year cooperative agreement between the WGFD and the United States Fish and Wildlife Service to conduct an intensive survey of all historic, known, potential, and new colonial waterbird breeding sites statewide as part of a western range-wide effort to track population size, trends, and locations of breeding

colonial waterbirds in the western United States [20, 21]. In 2014, an online Atlas of western colonial waterbird nesting sites was produced with data collected and submitted by participating states [22]. Every three to five years, WGFD personnel visit known colonial waterbird nesting sites outside of Yellowstone National Park to evaluate water level conditions, determine species present at each site, and estimate the number of nesting pairs of colonial waterbirds. There are currently no research projects designed specifically for Franklin's Gull in Wyoming.

ECOLOGICAL INFORMATION NEEDS

In Wyoming, Franklin's Gull would benefit from research to determine its detailed distribution, the location and habitat characteristics of current breeding colonies, and the annual abundance of migrating and breeding adults. Beyond approximate arrival and departure dates, very little is known about migratory pathways, or the specific breeding habits of local breeders in Wyoming. Nothing is known about nest success or fledgling survival at the few known breeding locations in the state. Due to the scarcity and inherent vulnerability of Wyoming's wetland and marsh habitats, it would be valuable to identify current and future anthropogenic and natural stressors to ensure the persistence of breeding habitat for Franklin's Gull.

MANAGEMENT IN WYOMING

This section authored solely by WGFD; Zachary J. Walker. Franklin's Gull is classified as a SGCN in Wyoming due to varying annual availability and suitability of breeding sites and sensitivity to human disturbance during the nesting period. Colonial water bird surveys are conducted within the state, but existing data are not robust enough to support estimates of occupancy, density, or population trend. Targeted, species-specific survey methods may be warranted. Best management practices or key management recommendations to benefit Franklin's Gull include protection of suitable wetland complexes, protection of all Franklin's Gull breeding colonies, avoidance of disturbing nest sites from April through August, and maintenance of stable water levels throughout the nesting season at breeding locations [7, 16].

CONTRIBUTORS

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Figure 1: Adult Franklin's Gull in breeding plumage in Corpus Christi, Texas. (Photo courtesy of Bill Schmoker)

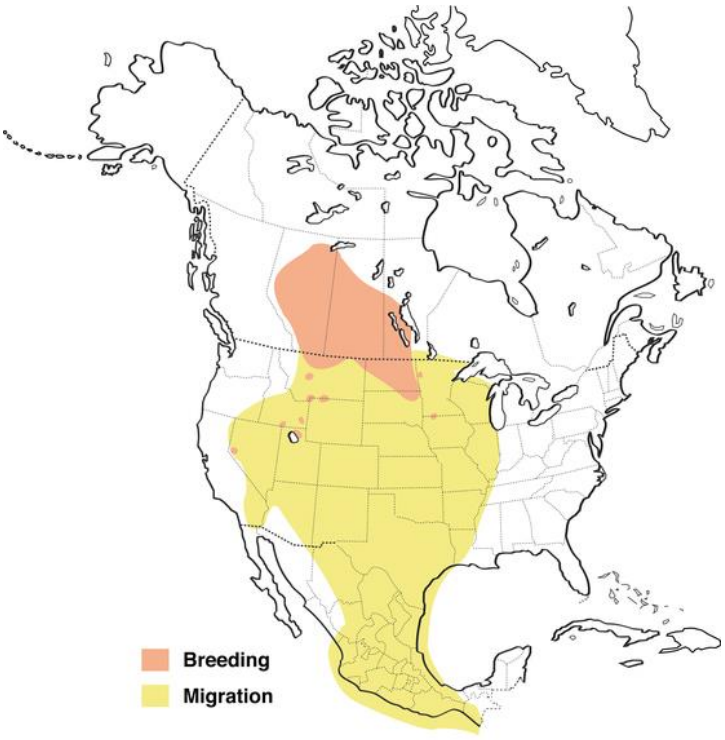

Figure 2: North American range of *Leucophaeus pipixcan*. (Map courtesy of Birds of North America, http://bna.birds.cornell.edu/bna, maintained by the Cornell Lab of Ornithology)

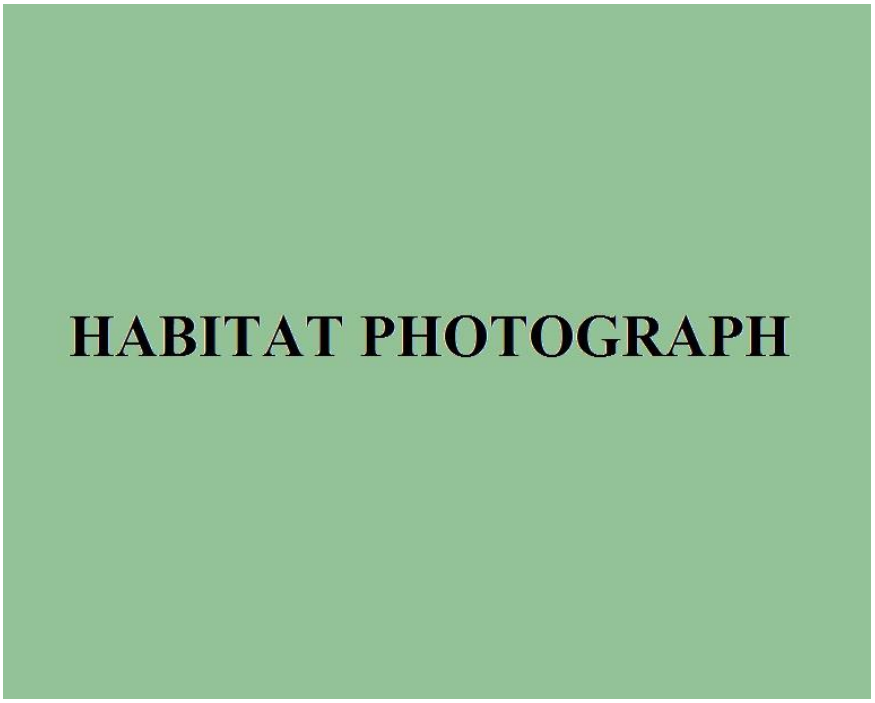

Figure 3: Photo not available.

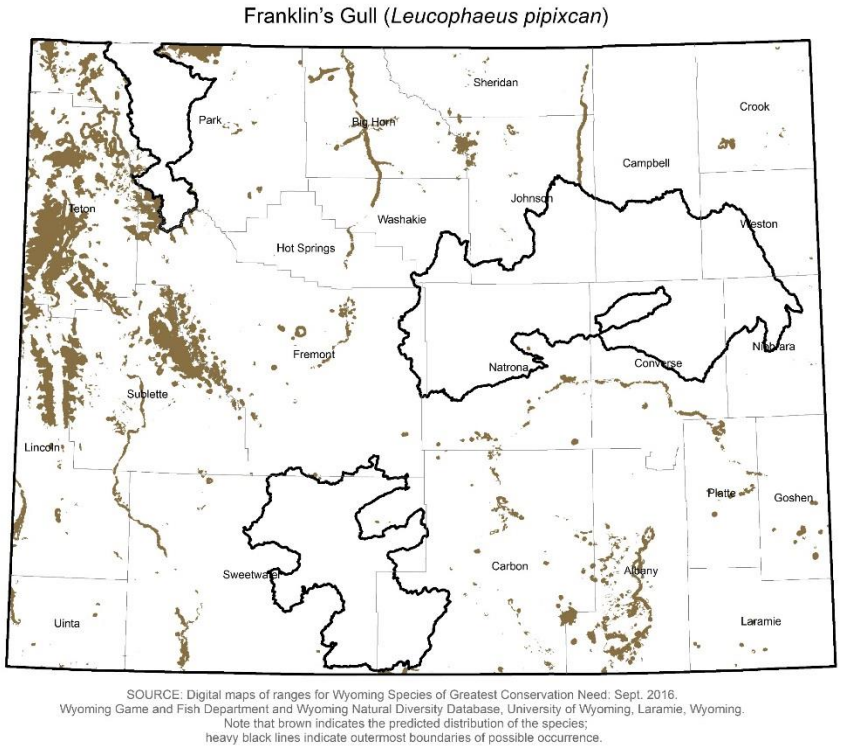

Figure 4: Range and predicted distribution of *Leucophaeus pipixcan* in Wyoming.

Figure 5: A flying Franklin's Gull in Red Rock Lakes National Wildlife Refuge, Montana. (Photo courtesy of Elizabeth Boehm)