

Franklin's Gull (*Leucophaeus pipixcan*)

Conservation Status Rank Summary

December 9, 2024

For details on assessment and ranking methodology, see: [Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species](#)

Rarity and Trends

Rank Factor	Date Assessed	Value	Score	Data Source	Comments
Rarity					
Range Extent	2024-12-09	S: 203937.8 km ²	4.710	MTNHP Range Maps	None
Area of Occupancy	2024-12-09	1434 4km ² cells	4.130	MTNHP Modeling	None
Number of Occurrences	2024-12-09	9	1.380	MTNHP Databases	None
Population Size			-		Factor not used in ranking.
# of Occurrences in Good Condition	2024-12-09		2.200		None
% of Area Occupied in Good Condition			-		Factor not used in ranking.
Environmental Specificity	2009-01-26	Very narrow	-	MTNHP Species Rank Data Table	Factor not used in ranking. Species is dependent on large wetland complexes with floating vegetation for nesting. Methodology: NS (2003) Original Score: A
Rarity is calculated by averaging weighted factor scores: $((4.71 \times 1) + (4.13 \times 2) + (1.38 \times 1) + (2.20 \times 2)) / 6 = 3.13$					
Trends					
Short-term Trend	2023-12-20	13.6%	0.070	IMBCR	IMBCR trend in population estimates for Montana. "-Point Estimate"
Long-term Trend	2009-01-26		0.000	MTNHP Species Rank Data Table	Species underwent declines early in the 20th century, but have since recovered and overall long term trend since European arrival is probably stable within +/- 25% Methodology: NS (2003) Original Score: E
Trends score is calculated by summing weighted short and long-term trend scores: $((0.07 \times 2) + (0.00 \times 1)) = 0.14$					

Threats

Rank Factor	Date Assessed	Value	Score	Data Source	Comments
Threats					
Overall Threat Impact		High	1.830		Altered hydrology, nest site disturbance, climate change.
Intrinsic Vulnerability	2009-01-26	Moderately vulnerable	-	MTNHP Species Rank Data Table	Factor not used in ranking. Methodology: NS (2003) Original Score: B
Threat score is calculated from Overall Threat Impact when available or Intrinsic Vulnerability if not: (1.83) = 1.83					

Individual Threats Data

Threat Category	Date Assessed	Impact Score	Scope	Severity	Immediacy	Comments
Natural System Modifications	2026-03-19	Medium	Pervasive	Moderate	High	Altered hydrology through wetland drainage and wetland loss. Loss and/or degradation of wetlands, both for breeding and migration stopover, remain the greatest threat to conservation. Nests colonially in prairie marsh. Wetland loss from agriculture and other land uses remains the greatest threat.
Climate Change & Severe Weather	2024-12-09	High	Pervasive	Serious	Moderate	Audubon's Survival by Degrees project predicts a drastic reduction in species breeding habitat across the northern US.
Threat Tally: 0 - Very High, 1 - High, 1 - Medium, 0 - Low Overall Threat Impact* = High						

*See [Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species](#) for calculation of Overall Threat Impact based on the number and impact of individual threats.

Conservation Status Rank Calculation

Raw score

Rarity: $(3.13 \times 70\%)$ + Threats: $(1.83 \times 30\%)$ + Trends: $(0.14) = 2.88$

Calculated Rank: S3

Accepted Rank	S3B
Date Approved	1994-03-01
Approval Authority	Montana Species of Concern Committee
Rank Justification	Species breeds at a handful of locations across northern Montana and on the Red Rock National Wildlife Refuge. Populations appear stable and the species faces threats from habitat loss due to climate change.

Supplementary Information

Montana Natural Heritage Program. 2021. Conservation Status Assessment Definitions, Process, Rank Factors, and Calculation of State Ranks for Montana Species. 18 p.

https://mtnhp.mt.gov/docs/Montana_State_Rank_Criteria_20211201.pdf

Montana Field Guide Species Account:

<https://fieldguide.mt.gov/speciesDetail.aspx?elcode=ABNNM03020>

Predicted Suitable Habitat Model:

<https://mtnhp.mt.gov/resources/models/?elcode=ABNNM03020>

Information Needs

Information needs are assessed by considering the availability of factors used to assess species status as well as the quality of these assessments. Current information availability and quality to inform Conservation Status Rank for this species are highlighted.

Rank Factor	Assessment Category	Value	Criteria
General Status	Status Quality	Adequate	Calculated rank has low uncertainty and is represented by a single rank (e.g. S3); accepted rank may be adjusted to a range rank (e.g. S2S3)
		Poor	Rank assessed as SU or calculated rank has notable uncertainty and corresponds to a range rank with 2 or more values (e.g. S2?, S1S3, or S4S5)
Rarity	Range Quality	Adequate	Range polygon adequately represents area of probable occupancy and does not include substantial unoccupied areas; range may be adequately defined and still include areas of unsuitable habitat (e.g. mountain ranges for plains species)
		Marginal	Range polygon defined, but may include or exclude notable areas where the species may or may not occur on the landscape
		Poor	Range polygon not defined
	Habitat Quality	Adequate	Species-habitat relationship is well-defined (e.g. relevant literature or robust habitat model available)
		Marginal	Understanding of species-habitat relationship is adequate among some but not all habitats (e.g. literature covers similar habitats outside of Montana or habitat model performance is only somewhat adequate)
		Poor	Species-habitat relationship is not well understood
Threats	Threat Quality	Adequate	Threat Impact is a single value (including "Unthreatened")
		Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")
		Poor	Threat Impact is Unknown but Intrinsic Vulnerability is assessed
		Unknown	Threat Impact is Unknown and Intrinsic Vulnerability is not assessed
Trends	Recency	Current	Short-term Trend assessment date less than 10 years old
		Out of Date but Adequate	Short-term Trend assessment date is more than 10 years old or Unknown, but species is Unthreatened
		Out of Date	Short-term Trend assessment date more than 10 years old
		Not Available	Short-term Trend data are not available
	Trend Quality	Sufficient	Short-term Trend assessed at a single value or multiple values with a minimum trend greater than -10% (stable or increasing)
		Unknown but Sufficient	Short-term Trend is Unknown, but species is Unthreatened
		Poor	Short-term Trend is less than -10% (in decline) with two or more values selected
		Unknown	Short-term Trend is Unknown

Summary of Information Availability

Data to assess species status are generally available.

Summary of Information Needs

No additional data are needed at this time, but given the high level of threats for this species, monitoring should continue.

Additional Threat Details

The table below contains the complete threats assessment for this species. While the Conservation Status Rank Calculation is based on cumulative, broadly categorized (Level 1) threats data, threats are assessed and tracked for more specifically categorized (Level 2) threats when available.

Threat Category	Date Assessed	Assessed By	Data Source	Scope	Severity	Immediacy	Comments
Human Intrusions & Disturbance - 6.3 - Work & Other Activities	2026-03-19	Dan Bachen	SWAP Assessment	Unknown	Unknown	High	Human disturbance near nesting colonies: may include agriculture, but could include recreation. Franklin's gull are sensitive to human disturbance in the breeding cycle and will desert a colony with excessive exposure to humans. Particularly vulnerable in pre-nest period and again in chick phase.
Natural System Modifications - 7.2 - Dams & Water Management/Use	2026-03-19	Dan Bachen	SWAP Assessment	Pervasive	Moderate	High	Altered hydrology through wetland drainage and wetland loss. Loss and/or degradation of wetlands, both for breeding and migration stopover, remain the greatest threat to conservation. Nests colonially in prairie marsh. Wetland loss from agriculture and other land uses remains the greatest threat.
Pollution - 9.3 - Agricultural & Forestry Effluents	2026-03-19	Dan Bachen	SWAP Assessment	Unknown	Unknown	High	Wetland eutrophication & pollution. Environmental contaminants (organochlorines, heavy metal, selenium) may accumulate resulting in decreased reproductive success. Metal levels varied significantly among adults nesting in four different colonies (Minnesota, S. Dakota, N. Dakota, Montana; Burger 1996)), but these were feathers formed on the wintering ground. Fledgling gulls had lower levels of all metals except selenium in their feathers. Mercury levels in eggs were positively correlated with those in breast feathers of females.
Climate Change & Severe Weather - 11.1 - Habitat Shifting & Alteration	2024-12-09	Dan Bachen	Audubon Survival by Degrees project	Pervasive	Serious	Moderate	Audubon's Survival by Degrees project predicts a drastic reduction in species breeding habitat across the northern US.