# Franklin's Gull (Leucophaeus pipixcan) Conservation Status Rank Summary

December 9, 2024

For details on assessment and ranking methodology, see: <u>Conservation Status Assessment Definitions, Process,</u>
<u>Rank Factors, and Calculation of State Ranks for Montana Species</u>

# **Rarity and Trends**

Rank Factor	Date Val		Score	Data Source	Comments
Rarity					
Range Extent	2024-12-09	S: 203937.8 km²	4.710	MTNHP Range Maps	None
Area of Occupancy	2024-12-09	1434   4km² 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
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, 0 - Medium, 0 - Low						

<sup>\*</sup>See <u>Conservation Status Assessment Definitions</u>, <u>Process</u>, <u>Rank Factors</u>, <u>and Calculation of State Ranks for Montana Species</u> for calculation of Overall Threat Impact based on the number and impact of individual threats.

Overall Threat Impact\* = High

#### **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	Assessment		Criteria				
Factor	Category	Value					
General	General Status Quality		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)				
Status	Status Quality	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)				
	Dongo Ovolitv	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)				
	Range Quality	Marginal	Range polygon defined, but may include or exclude notable areas where the species may or may not occur on the landscape				
Rarity		Poor	Range polygon not defined				
		Adequate	Species-habitat relationship is well-defined (e.g. relevant literature or robust habitat model available)				
	Habitat Quality	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				
		Adequate	Threat Impact is a single value (including "Unthreatened")				
Threats	Throat Quality	Marginal	Threat Impact assessed at more than one value (e.g. "High - Medium")				
inreats	Threat Quality	Poor	Threat Impact is Unknown but Intrinsic Vulnerability is assessed				
		Unknown	Threat Impact is Unknown and Intrinsic Vulnerability is not assessed				
		Current	Short-term Trend assessment date less than 10 years old				
	Recency	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				
Trends		Not Available	Short-term Trend data are not available				
		Sufficient	Short-term Trend assessed at a single value or multiple values with a minimum trend greater than -10% (stable or increasing)				
	Trend Quality	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	Imme- diacy	Comments
Climate Change & Severe Weather - 11.1 - Habitat Shifting & Alteration	2024-12-09	Dan Bachen	Audubon Survival by Degrees project	Pervasiv e	Serious	Moderat e	Audubon's Survival by Degrees project predicts a drastic reduction in species breeding habitat across the northern US.