

An In-Depth Analysis of Bird Strikes in Aviation (2000-2011)

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This dashboard provides insights into bird strikes from 2000 to 2011.



Introduction:

This dashboard provides insights into bird strikes from 2000 to 2011. Bird strikes are a significant aviation safety concern, especially during critical flight phases like takeoff, landing, and approach. By analyzing data on bird strikes, including the species involved, the aircraft affected, and the costs incurred, we aim to uncover trends and develop strategies to mitigate the risks of these incidents.

Total Records

25K

Average Altitude (Feet)

9.65K

Average Cost per Strike

74.96K

Average Wildlife Struck

34.08

Injuries per Incident

0.01

Data Overview

The dataset includes **25,429 records** with the following key columns:

Record ID: Unique identifier for each incident.

Aircraft Type: Type of the aircraft involved in the strike.

Wildlife Number Struck: The total number of wildlife involved in the incident.

Cost Total \$: The total cost incurred due to the strike.

Feet above ground: The altitude (in feet) where the bird strike occurred.

Number of people injured: Number of injuries resulting from the strike.

Year: Year in which the bird strike occurred.

Key Insights

25,429 incidents of bird strikes reported from 2000-2011.

Average cost per strike: \$5,566.

The **peak year for bird strikes** was 2008.

Most strikes occurred during **take-off** and **landing** phases.

0.0008 injuries per incident (very rare).

Significant **economic impact** due to damage and delays.

With the advancement of **technology**, their **impact can be minimized**.

Key Recommendations:

Improve **wildlife management** at airports to reduce strikes.

Invest in **AI-based bird detection** systems for early warnings.

Enhance **pilot training** to better manage bird strike risks.

→ **Yearly Analysis & Bird Strikes in the US'**

Bird Strikes by Flight Phase

Risk Mitigation & Further Insights

Created By

AVINASH RAI



Data Source:

Source: Federal Aviation Administration (FAA)

Period: 2000-2011

Records: 25,429 bird strike incidents

focuses on analyzing the bird strikes over the years, understanding trends, costs, and flight phases.

Yearly Analysis of Bird Strikes (2000-2011)

Number of Bird Strikes by Year



Year	Airport: Name	Origin State
All	All	All

Total Cost Incurred Due to Bird Strikes

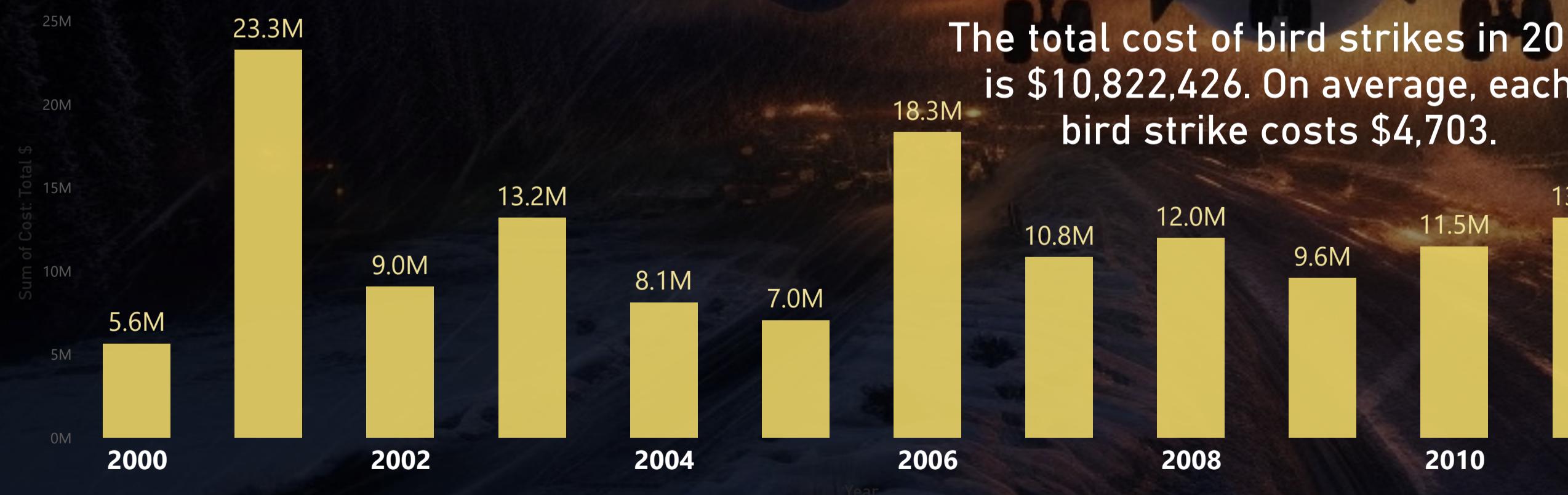
142M

Total Bird Strikes

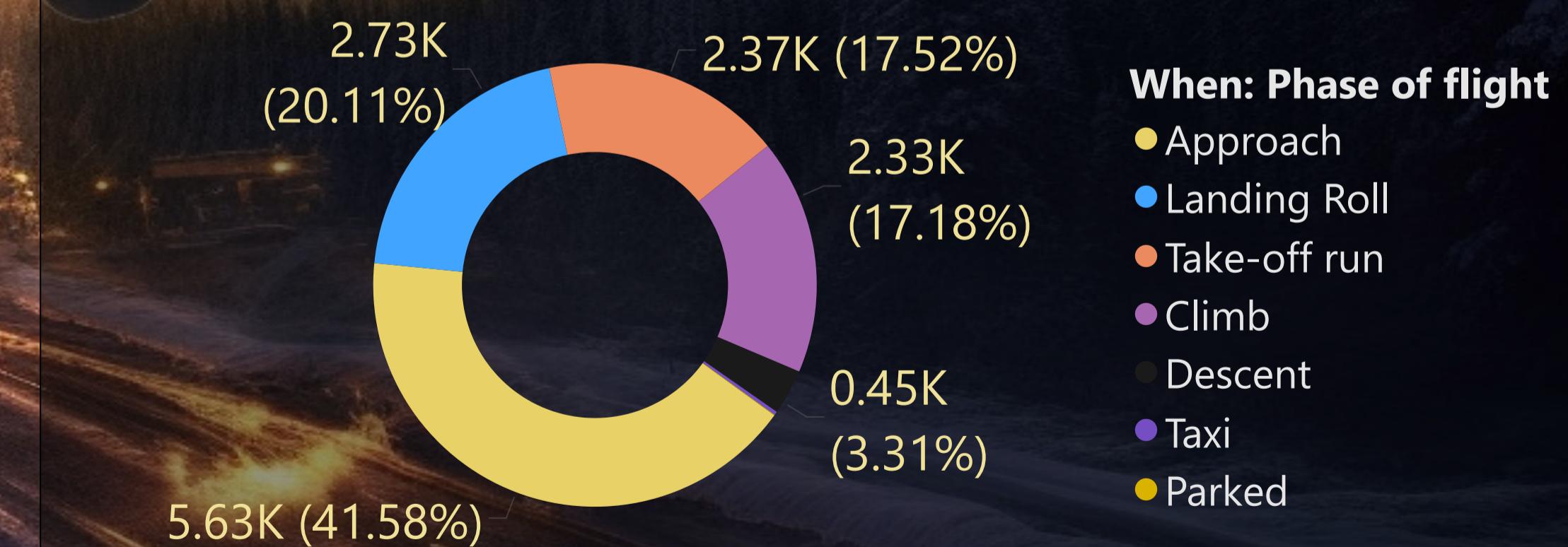
25.43K

In the year 2009, there were 3,247 bird strikes recorded. This represents 12.77% of the total bird strikes. This year had the highest number of bird strikes recorded, with a total of 25,429 strikes. This year is significant in aviation safety history due ...

Yearly Cost Incurred Due to Bird Strikes



Bird Strikes by Flight Phase



In the selected flight phase (Take-off), there were bird strikes. This phase accounts for % of all bird strikes.

Safety and Impact Analysis (2000-2011)

Year
All

Airport: Name
All

Origin State
All

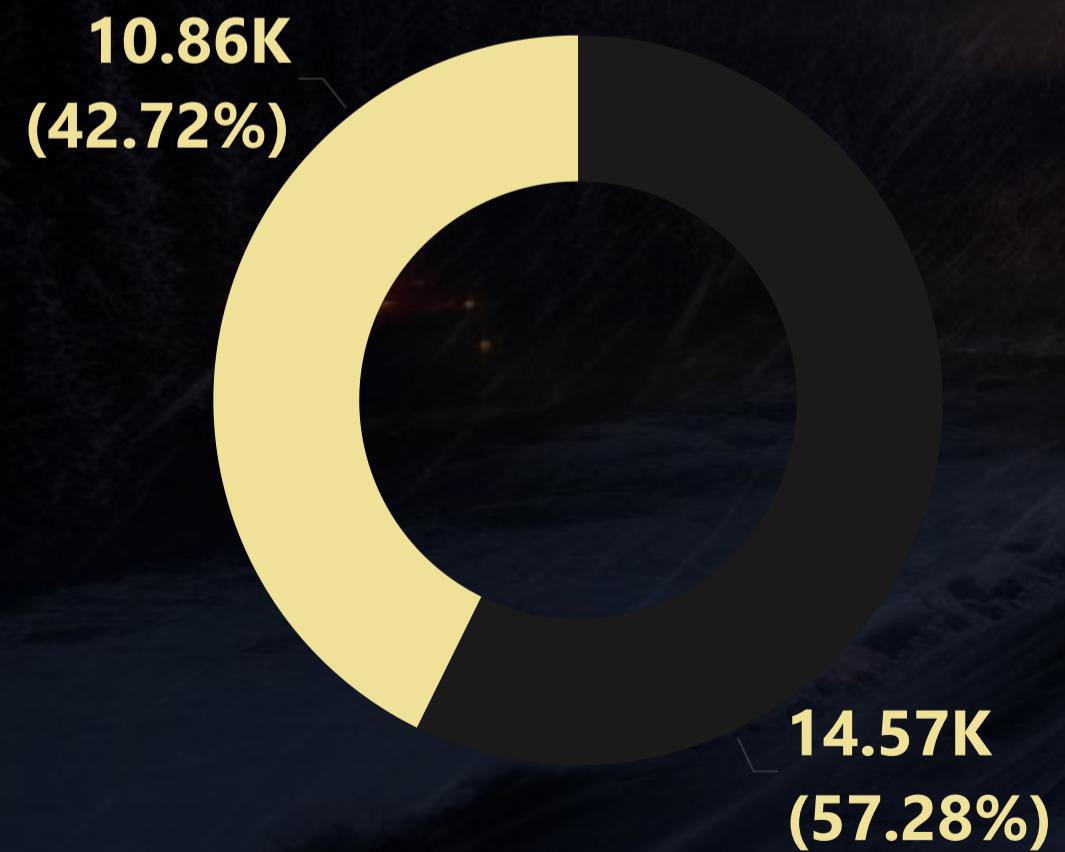
Number of People Injured by Bird Strikes



Average Altitude of Aircraft During Strikes



Impact of Bird Strikes with or without Pilot Warning



Top 10 Severity of Bird Strikes by Airline/Operator



Average Altitude of Aircraft During Bird Strikes

799.03

Total No. of People Injured by Bird Strikes

21

Bird Strikes with Pilot Warning

10.86K

Risk Mitigation & Further Insights (2000-2011)

Year

All

Airport: Name

All

Origin State

All

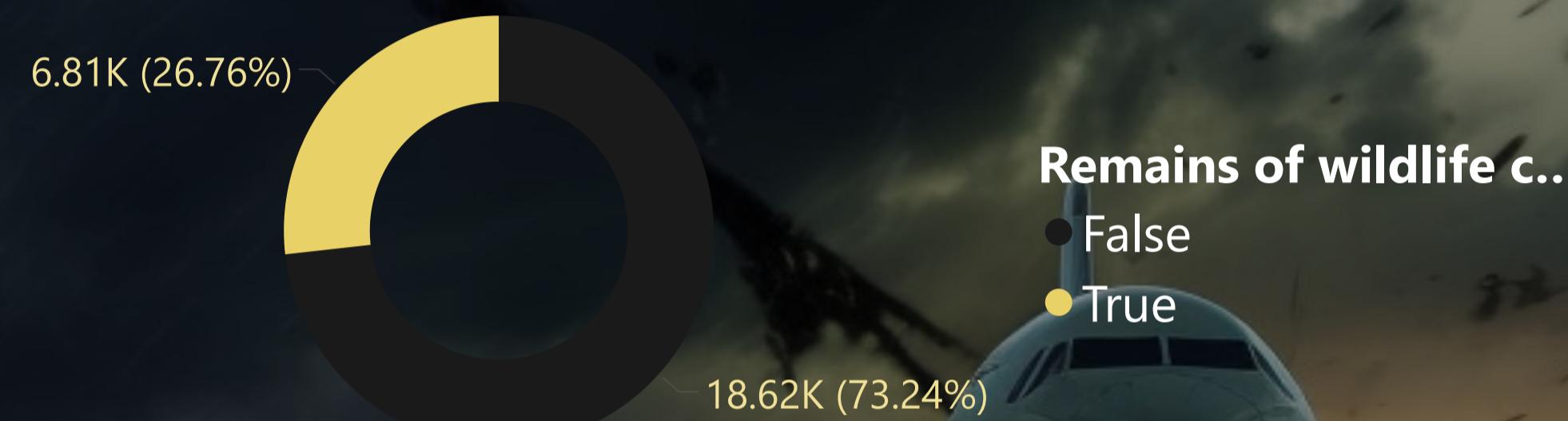
Total wildlife remains collected

6806

Bird Strikes Involving Large Aircraft

8402

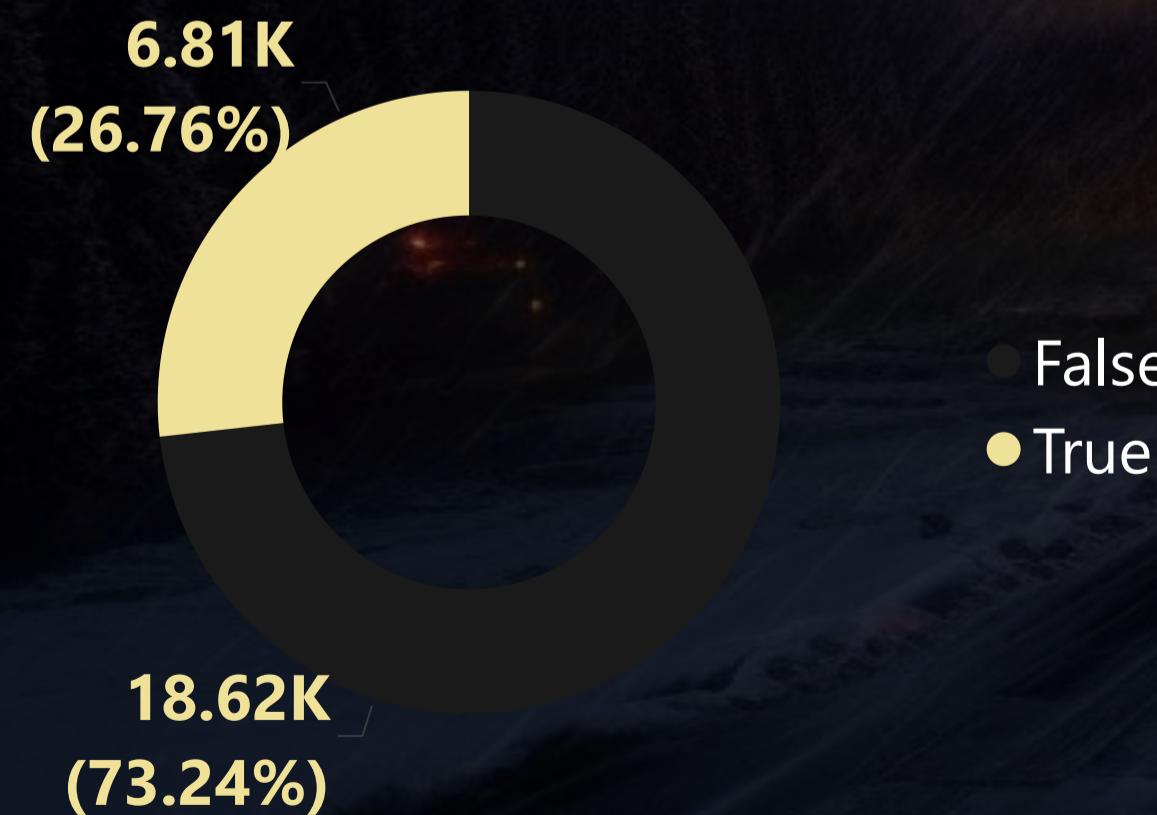
Effectiveness of Wildlife Remains Collection



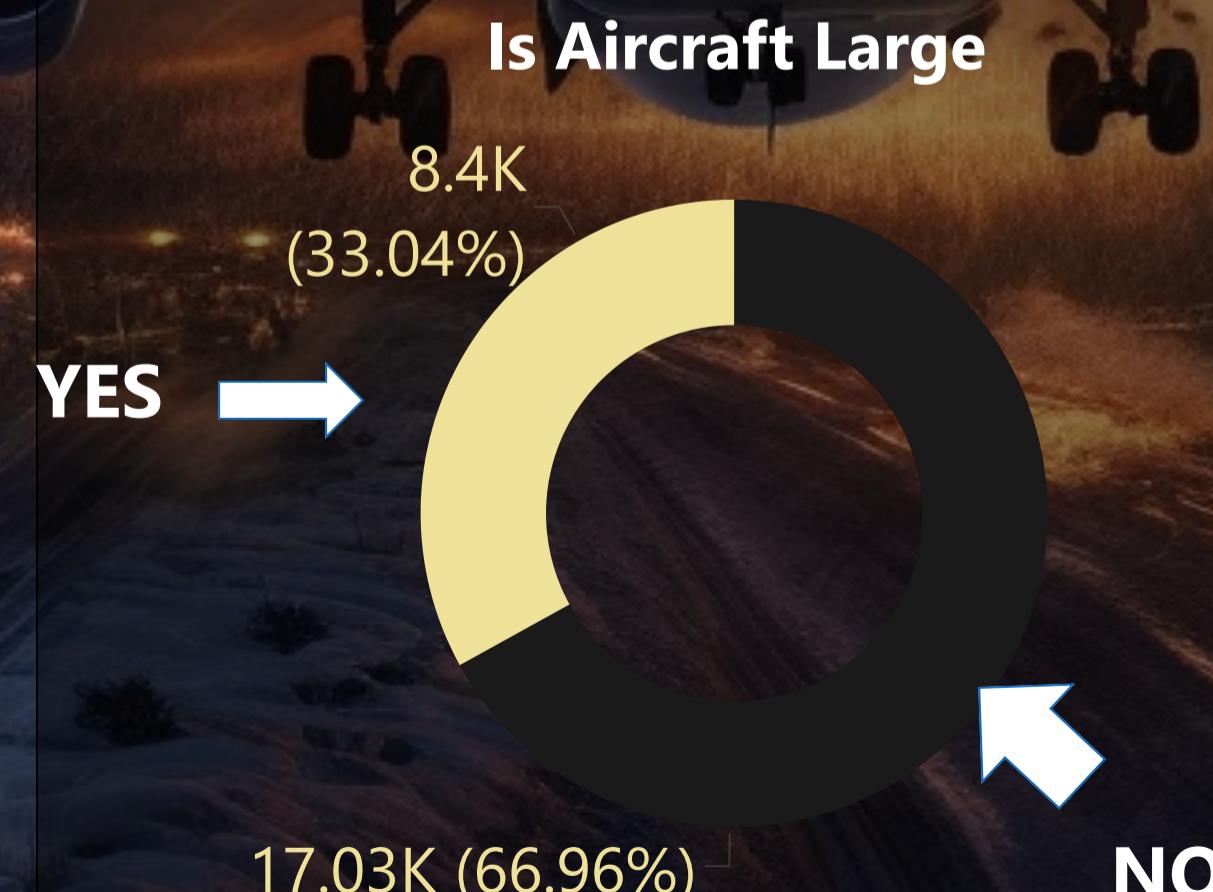
Relationship Between Precipitation and Bird Strikes



Effectiveness of Wildlife Remains Collection



Impact of Bird Strikes by Aircraft Size



Top 10 Bird Strikes Based on Wildlife Species

