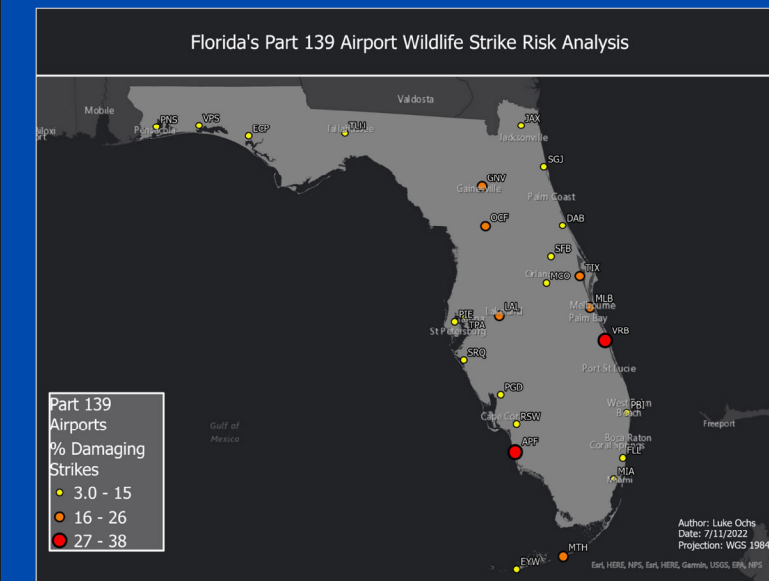


HIGH-RISK WILDLIFE STRIKE REGIONS: AN IN-DEPTH VISUAL REPRESENTATION OF WILDLIFE STRIKES AT AND AROUND PART 139 AIRPORTS IN FLORIDA.

ABSTRACT

Wildlife strikes with aircraft have been and continue to be a problem in the aviation industry costing millions of dollars in both damage and delays. This study used ArcGIS to depict wildlife strikes at Florida's 26 Part 139 Airports from 2012 to 2021. Importing reports from the National Wildlife Strike Database into ArcGIS. Using an interactive map with ArcGIS Online viewers can observe and then select each airport's vector point and view a table containing the important information on that airport's strike data. The map contains data like the number of strikes during the time of the day, strikes per weather conditions, whether the strikes were damaging or not, and more.



HOW TO USE

- Scan Code.
- Find the desired airport based on the identifier code and location.
- Select the airport, within the table you can see data, and at the bottom a pie chart for that airport's damaging, non-damaging, and unknown damaging strikes.

APPLICATION

- Wildlife strike data is used by wildlife managers on airports to try and mitigate strikes and the frequency that they occur.
- Maps like this would assist wildlife managers in determining the risks to their airports and help them analyze the conditions in which strikes occur
- Researchers could use this map to get a better sense of where damaging flights are likely to occur and use the supporting tables to search for correlations.

RESULTS

- Of the 9,618 strikes that occurred in FL's Part 139 airports from 2012-2021 only 464 were damaging.
- Vero beach (37%) & Naples (34%) airports have the highest percentage of damaging strikes out of known strikes. Most strikes occurred during the day and below 500 ft (AGL)

