

Observation

1. Unknown small birds accounted for the highest number of strikes (52,005). This suggests that small bird species, while difficult to identify during incidents, pose a significant risk due to their sheer frequency.
2. 2010 saw the highest birdstrikes with 7,657 incidents, potentially due to increased air traffic, better reporting practices, or growing wildlife populations near airports while 2004 recorded the lowest birdstrikes during the decade, indicating possible lower air traffic, effective wildlife management, or less reporting during that year.
3. Virginia recorded 1,818 birdstrikes, the highest among the top 5 states, likely due to proximity to major migratory bird routes or the presence of natural habitats or open spaces attracting birds near airports.
4. Dallas-Fort Worth International Airport accounted for 32.09% of birdstrikes among the top 5 airports, making it the most affected this may be due to high air traffic volume as one of the busiest airports in the United States and also the presence of large open areas or water bodies near the airport that attract birds.
5. The approach phase recorded the highest number of birdstrikes, with 24,558 incidents, accounting for a significant proportion of strikes which might be due to lower altitudes during approach, which overlaps with bird flight zones, and the lesser number for the parked phase might be due to the limited interactions between wildlife and aircraft when cruising.
6. Most birdstrikes (61,720 incidents) occurred under "none" weather conditions, i.e., clear skies or no precipitation which makes it clear because birds are more active in clear weather conditions for feeding and migration.

Recommendation

1. Invest in advanced radar and tracking systems to better identify and monitor small birds around airports, especially during migrations.
2. With air traffic growth likely contributing to the upward trend, airports should increase resources for wildlife management, particularly in areas with rising birdstrike incidents.
3. Habitat modifications around airports to make them less attractive to birds (e.g., reducing open water and tall grass areas).
4. Study what other airports do which makes it relatively safer compared to Dallas-Fort Worth International Airport and explore whether similar measures could be applied to other high-strike airports.
5. Using auditory or visual deterrents may aid in keeping birds away from active flight paths during the plane approach and takeoff stage.
6. Pilots can emphasize on birdstrike risk awareness during clear weather, especially during migratory seasons.