



Understanding the trends of wildlife strikes

Yong Wang

Chief, Airport Operations and
Infrastructure, ANB/ICAO

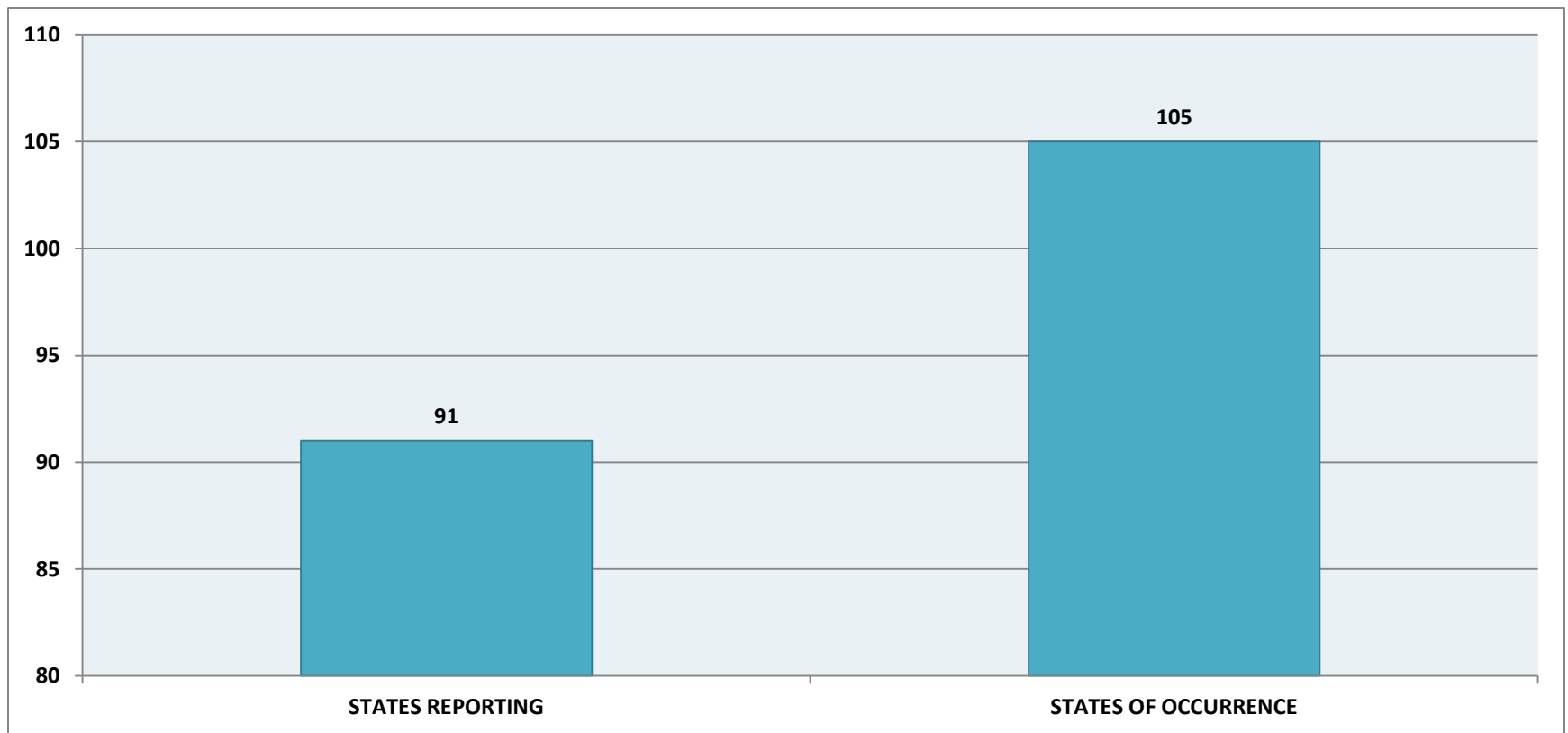


Flight Plan

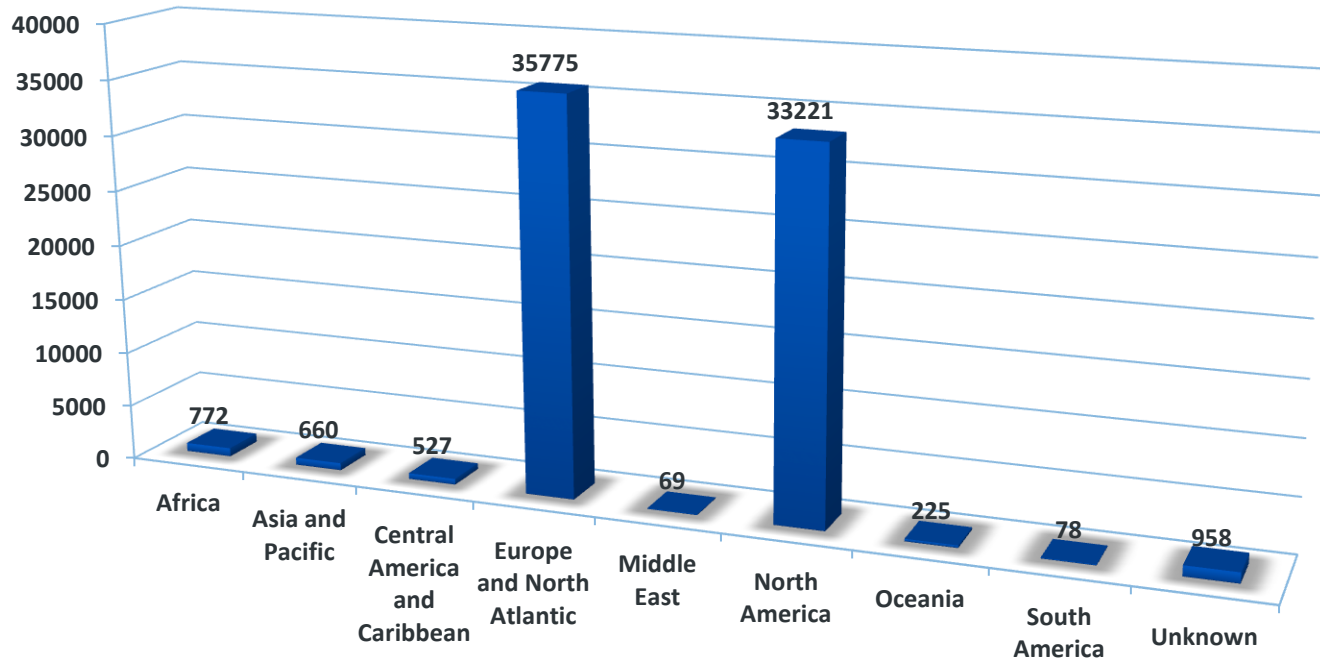
- ICAO wildlife strikes analysis (IBIS)
- SARPs in Annex 14, Volume I
- Airport Services Manual, Part 3 – Wildlife Control and Reduction
- Ongoing work at ICAO



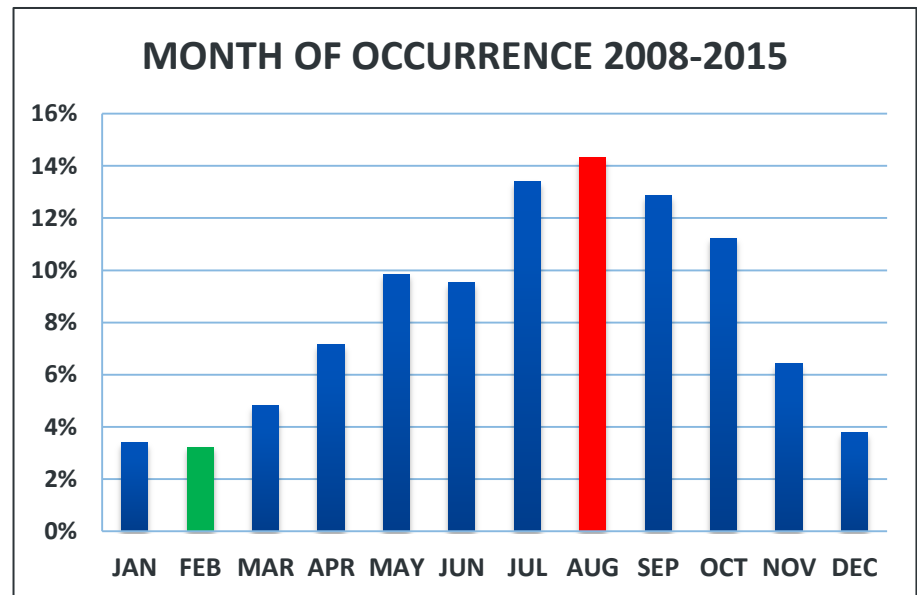
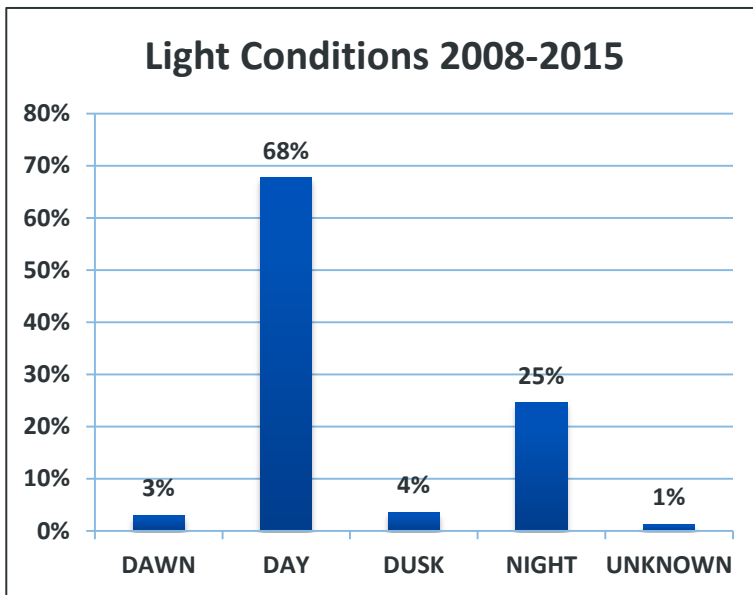
ICAO Wildlife Strike Analysis (IBIS)



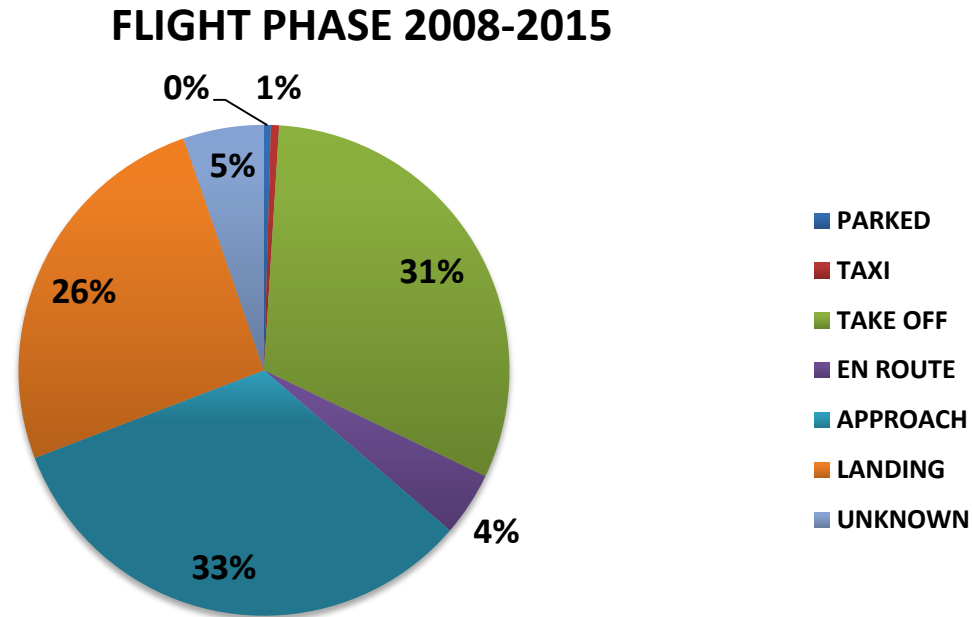
Reported strikes distributed by Region in which they occurred



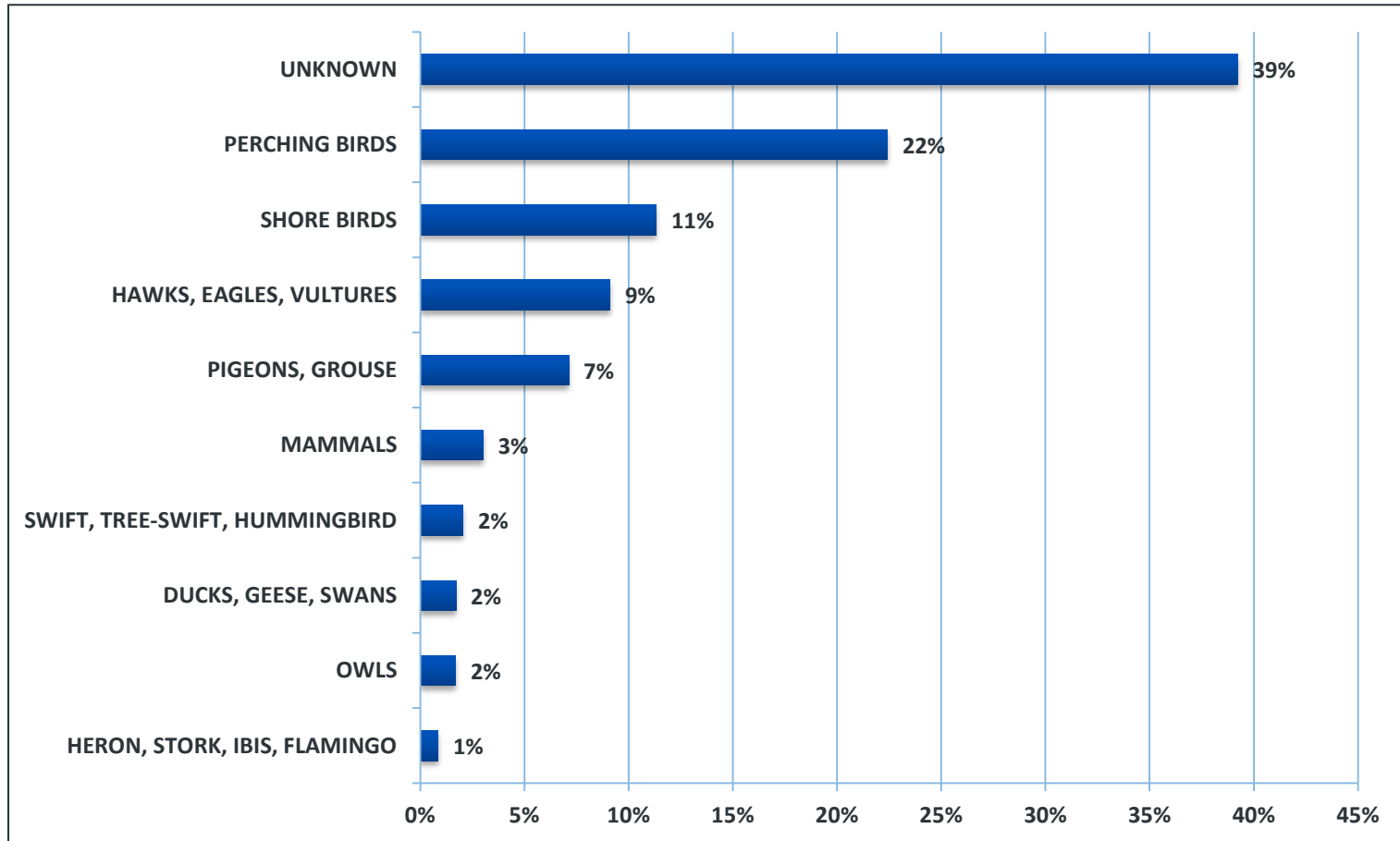
When and Where the Wildlife Strikes Occurred



Wildlife Strikes Reported According to Flight Phases

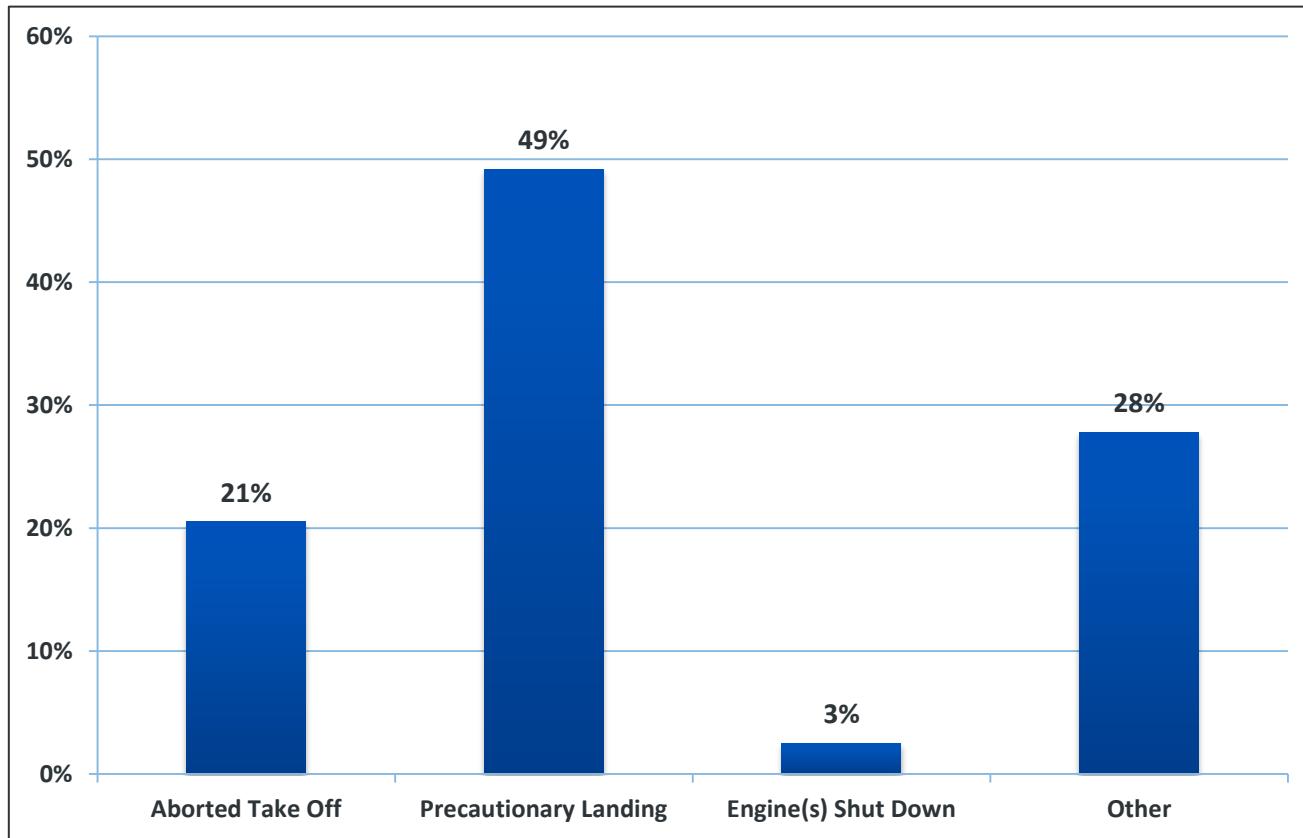


Wildlife Types Frequently Struck





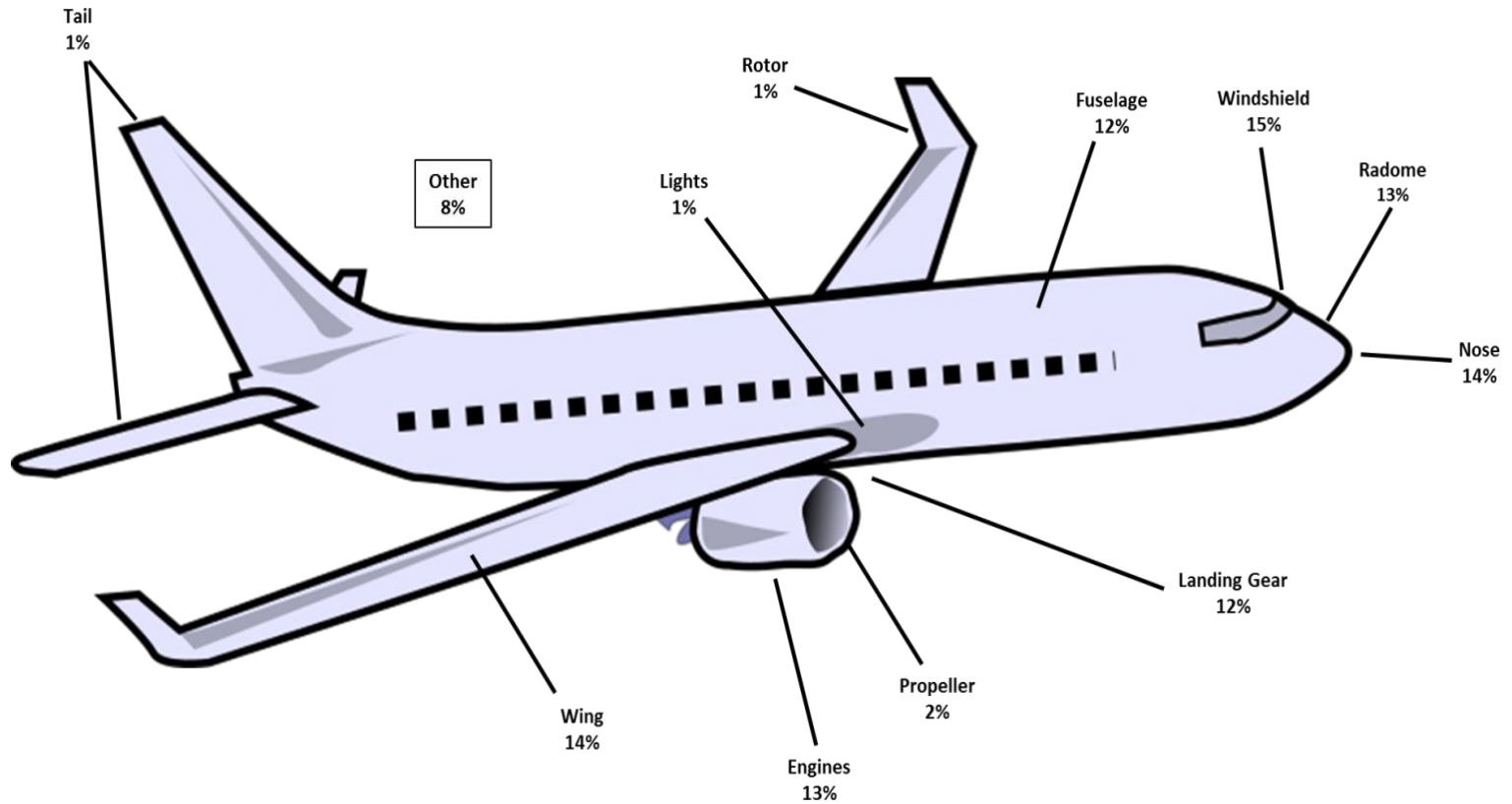
Effects on Flight



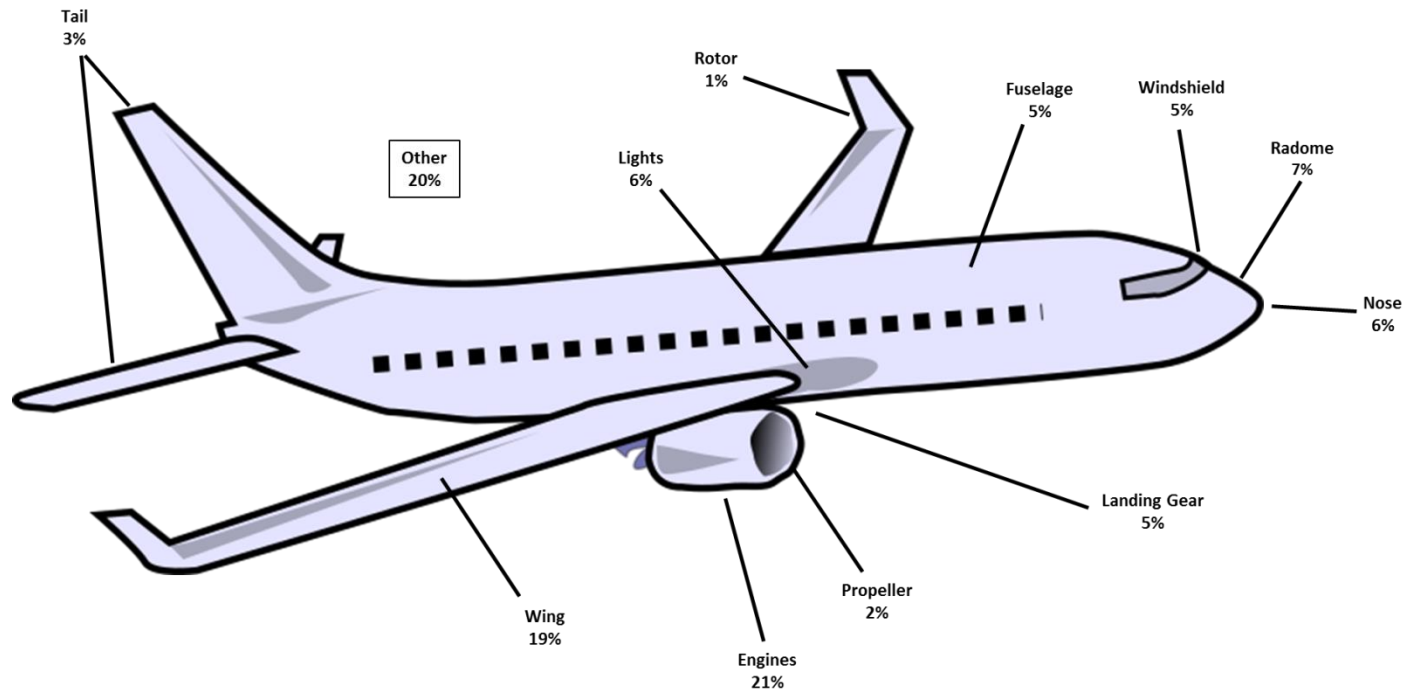
Damage to the Aircraft

- The extent of damage to the aircraft was coded for 33 376 wildlife strikes, which is approximately 34 per cent of the total number of strikes reported
- Of the wildlife strikes for which the damage was coded, seventeen aircraft were destroyed, 600 strikes caused substantial damage to the aircraft, and 1 874 strikes caused minor damage

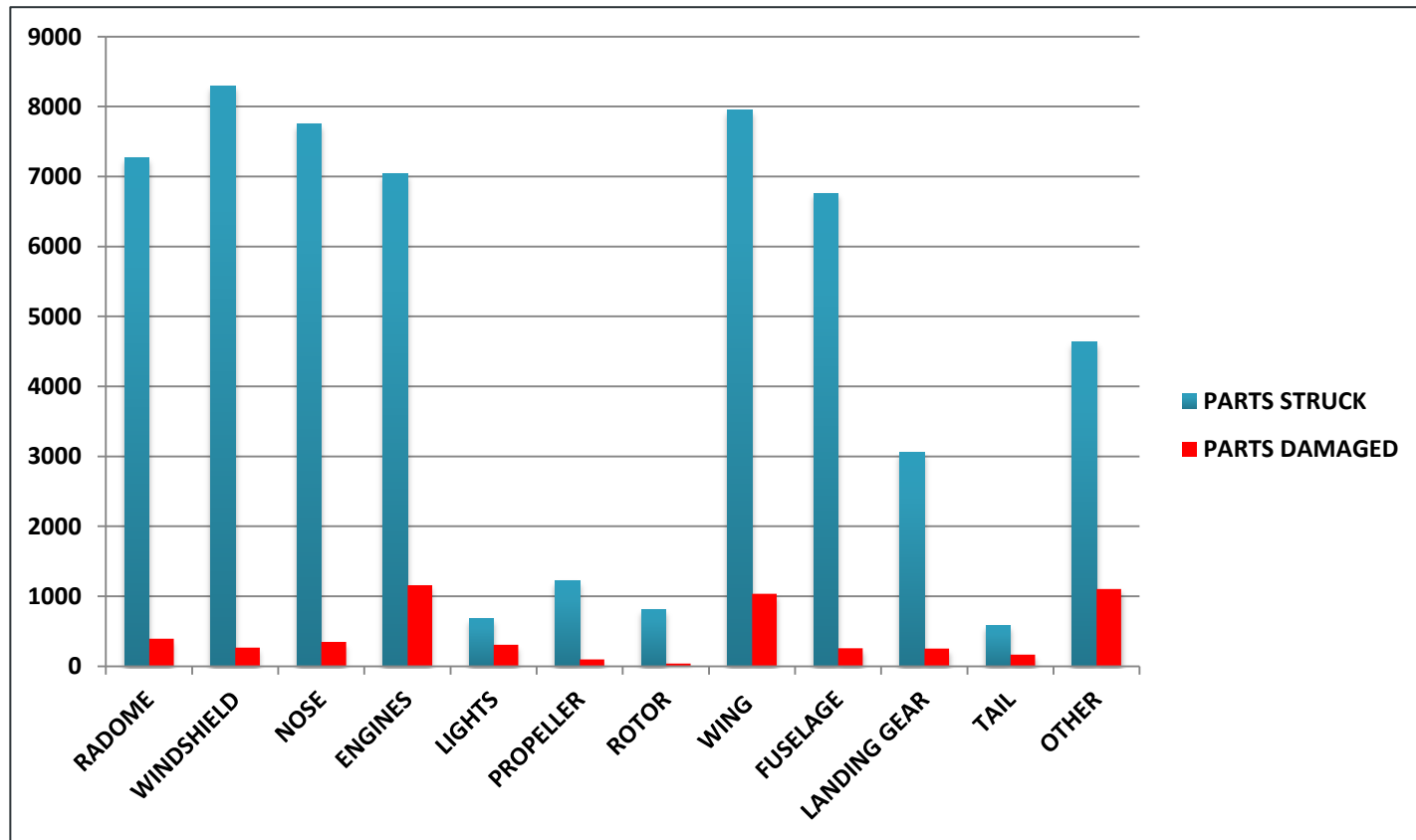
Parts of Aircraft Struck



Parts of Aircraft Damaged



Comparison Between the Parts struck and the Parts Damaged



Global Trend by Data Comparison

Data Comparison 2001-2007 to 2008-2015		
	<i>2001-2007</i>	<i>2008-2015</i>
No. of States Reporting	51	91
No. of States/Territories of Occurrence	145	105
No. of Strikes	42 508	97 751
Day Time Strikes	63%	68%
Night Time Strikes	24%	25%
Peak Month Activity	12% (August)	14% (August)
Strikes during Takeoff	39%	31%
Strikes during Approach	40%	33%
Strikes during Landing	17%	26%



For detailed information about 2008-2015 wildlife strike analyses (IBIS), refer to ICAO EB 2017/25, which is available at:

www.icao.int/IBIS.



Annex 14, Volume I

- The wildlife strike hazard on, or in the vicinity of, an aerodrome shall be assessed through:
 - the establishment of a national procedure for recording and reporting...
 - the collection of information from aircraft operators, aerodrome personnel...on the presence of wildlife...constituting a potential hazard to aircraft operations; and
 - **an ongoing evaluation of the wildlife hazard by competent personnel.**



Annex 14, Volume I (cont'd)

- Action shall be taken to decrease the **risk** to aircraft operations by adopting measures to **minimize the likelihood of collisions between wildlife and aircraft.**



Annex 14, Volume I (cont'd)

- The appropriate authority shall take action to eliminate or to prevent the establishment of garbage disposal... unless an appropriate **wildlife assessment** indicates that they are unlikely.....
Where the elimination of existing sites is not possible, the appropriate authority shall ensure that any risk to aircraft posed by these sites is assessed and reduced to as low as reasonably practicable.



Annex 14, Volume I (cont'd)

- ***States should give due consideration to aviation safety concerns related to land developments in the vicinity of the aerodrome that may attract wildlife.***



ASM, Part 3 – Wildlife Control and Reduction



- Comprehensive guidance on the fundamental elements of an airport bird/wildlife strike control programme, including:
 - Assignment of personnel
 - A process to collect and analyze data, using a risk assessment methodology
 - A process of habit and land management and to expel or remove hazardous birds/wildlife
 - A process to liaise with non-airport agencies and local land owners...

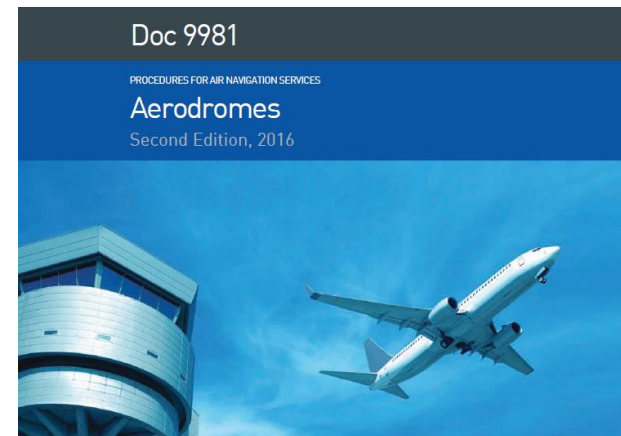


ASM, Part 3 – Wildlife Control and Reduction

- Guidance dealing with wildlife other than birds both on habitat management and repellent techniques
- Examples of modified procedures for aircraft arriving at and departing airports with hazardous birds/wildlife, for aircraft operators
- Detailed guidance on risk assessment of bird/wildlife strikes, taking account of severity and probability
- Summary of best practices for bird/wildlife management programmes on airports
- Emerging technology and communications procedures

Ongoing Work at ICAO

- PANS-Aerodromes (Doc 9981)
 - Dedicated chapter on wildlife hazard management
- Update guidance in Doc 9137 ASM Part 3



This edition supersedes, on 10 November 2016, all previous editions of Doc 9981.

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Thank You