



The Work of the Birdstrike Avoidance Team

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Introduction

- The Central Science Laboratory (CSL) is the main research lab of the UK Ministry of Agriculture, Fisheries and Food.
- It includes the Birdstrike Avoidance Team (BAT) - a world authority on birdstrike research, prevention and advice.
- Individual expertise in a wide range of bird hazard arenas.



BAT Services

- Bird Hazard audits and standards checks
- Advice on Specific Bird Problems
- Bird Remains Identification (including DNA)
- Advice on airport design and planning
- Safeguarding of Aerodromes
- Research for engine and airframe manufacturers
- Research to develop novel solutions
- Evaluation of Birdstrike Records
- Ornithological Research in support of the aviation industry



Bird Hazard Audits

- Ensure contractors offer current best practice
- Ensure compliance with contract
- Review habitat management and airfield bird attractions
- Recommend improvements as needed



Aerodrome Safeguarding

- Evaluation of any planning application within 8 miles of an airfield that may attract birds

Desk top GIS database developed of known bird hazards (roosts, landfills, breeding colonies etc.) in the UK.

Ground confirmation by professional ornithologists can predict flightlines of birds and hence risk to aircraft



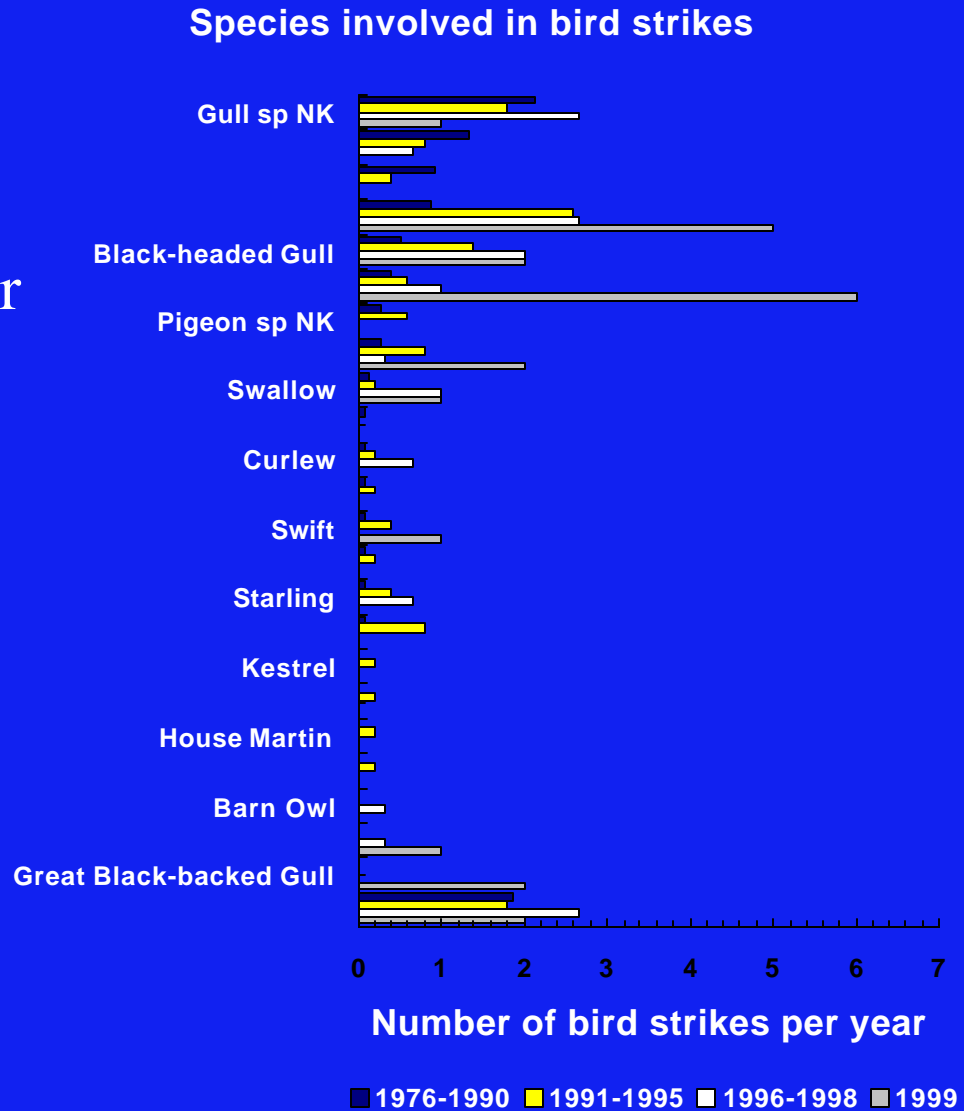
Birdstrike Remains Identification

- Whole remains using collection of comparison skins
- Fragmentary remains using microscopic techniques
- Blood smear and tissue remains using DNA analysis



Evaluation of Birdstrike Record

- Look at trends in key indicator species
- Disregards total number of strikes
- Allows cost benefit analysis of BCU's, airfield staff and other companies to be made
- Can identify potential problems before they become serious



Airport Design and Planning

- CSL has advised on reducing airport birdstrike risk throughout the world
- This recently included Chek Lap Kok, the new airport in Hong Kong

4 year project to review existing bird problems, provide management plans and develop bird control measures for the site.



Research for airframe and engine manufacturers

- Research for “IBRG” The International Birdstrike Research Group including Rolls-Royce Aerospace Engines plc, BAE systems, Civil Aviation Authority, GE Aerospace, GTRE and DERA



Bird Body Density's



Advice & Research on Specific Bird Problems

- Control of Birds at Landfill sites
- Determining compromise between airport safeguarding and bird attractive developments

CSL can collect and evaluate specific distress calls



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Ornithological Surveys and Census

- A Boeing 767 struck 25 Canada Geese on Landing at Heathrow airport, London
- Our surveys show there are between 2,000 and 3,000 in the area
- CSL are researching the movements of Geese to look at ways of reducing the risk to flight safety.



Summary

- Expertise in BAT is underpinned by scientists at the Government's Central Science Laboratory
- BAT offer confidential, impartial and independent advice on bird hazard problems
- BAT offer a full service of aerodrome inspections, data analysis and bird remains identification
- BAT offer training programmes in airfield bird control
- BAT provide safeguarding services and field research to assess the effect of new developments on the birdstrike risk at an airport.



