



# PRESENTATION TO AAWHG FORUM

MELBOURNE ZOO, AUSTRALIA

30-31 JULY 2014

**SCARECROW**  
BIO-ACOUSTIC SYSTEMS

KEEPING BIRDS AT BAY

# PRESENTATION CONTENTS

- ☪ Who We Are
- ☪ What are Bio-Acoustics
- ☪ Existing Customers
- ☪ Bird Strike Data
- ☪ B.I.R.D Tab

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# SCARECROW.....

- ⌘ 30 Years of Trading
- ⌘ Global Sales – c100 Countries Worldwide
- ⌘ Why Are Scarecrow Different....

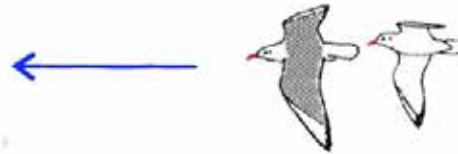
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# WHAT IS A BIO-ACOUSTIC SOUND.....

- ⌘ Audible Sound
- ⌘ Alarm Call V Distress Call
- ⌘ Unique to each Specie
- ⌘ Bird Reactions



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# Scarecrow Philosophy for Airports....

- ⌘ Broadcast from vehicle mounted speakers
- ⌘ **Not** Fixed speaker system



V



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# Identifying the Problem

Birds and Aircraft sharing the same place



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## COSTS OF BIRD STRIKE.....

- A study showed that at large International Airports the average frequency of Bird Strike was 2.1 per 10,000 movements.
- The same study revealed that the “Average Cost of Bird Strike” was US\$67,000.
- This means that the cost of Bird Strike per 10,000 movements, based on this study, is cUS\$135-140,000

## Air Malta – Dec 2004

- December 2004 Air Malta aircraft involved in bird strike on take off.
- Air Malta and Insurers claimed against Malta International Airport on basis of failing to comply with ICAO recommendations.
- Judge found in favour of Air Malta as the airport were deemed to be lacking in their methods for gathering information, and dealing with the presence of birds.
- The need to record accurate data, and to then analyse that data, is now set as precedent.



# A SAMPLE OF SOME EXISTING CLIENTS



Dubai Airports



## LONDON, GATWICK SAY.....

### How has Ultima data been used to reduce the risk of Bird Strike?

- Used data to fully understand species observed.
- Used data to evaluate what techniques are most successful in dispersing the birds.
- Points us to look as to what the attractant is in the first place in the various locations around the airport where the birds are seen.

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## SCARECROW B.I.R.D. TAB

# BIRD INTEGRATED REPORTING AND DISPERSAL (FORMERLY KNOWN AS “ULTIMA”)



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# Scarecrow B.I.R.D Tab

## Bird Integrated Reporting and Dispersal System

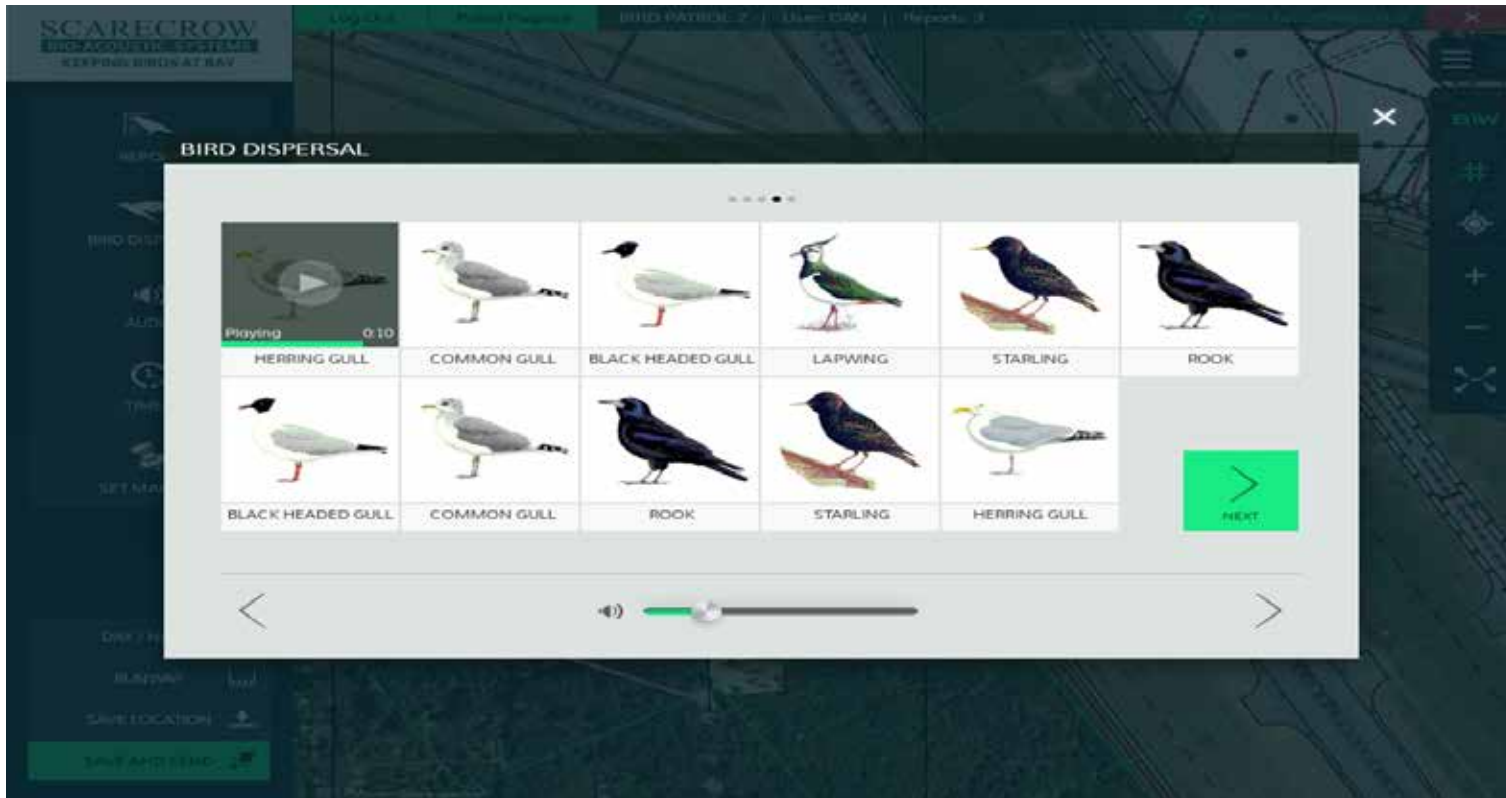


Picture shows Scarecrow B.I.R.D. Tab screenshot

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Up to 20 specie Distress Calls can be programmed into the Scarecrow B.I.R.D. Tab system

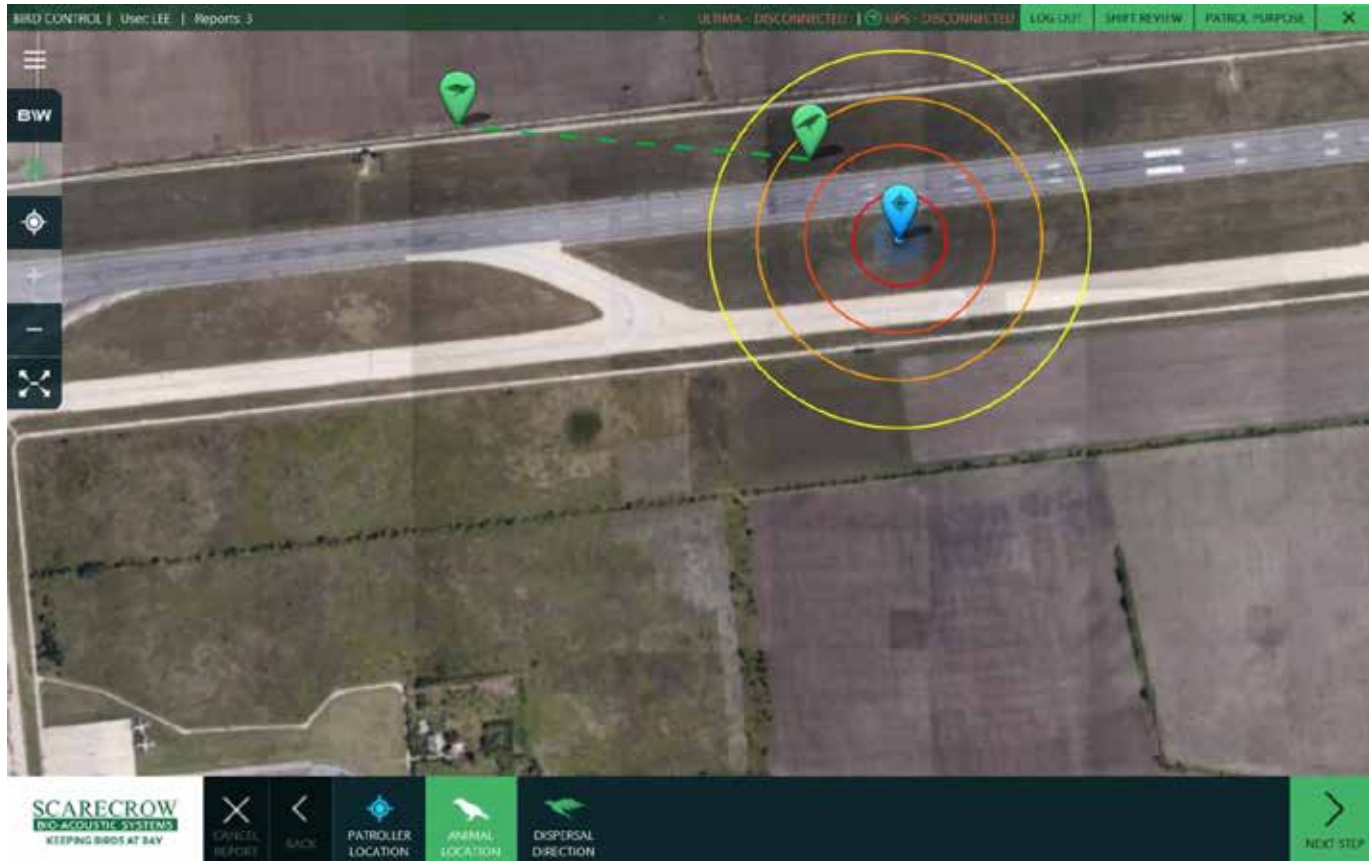


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# Scarecrow B.I.R.D. Tab - The ability to log includes:

- ↳ Dispersals

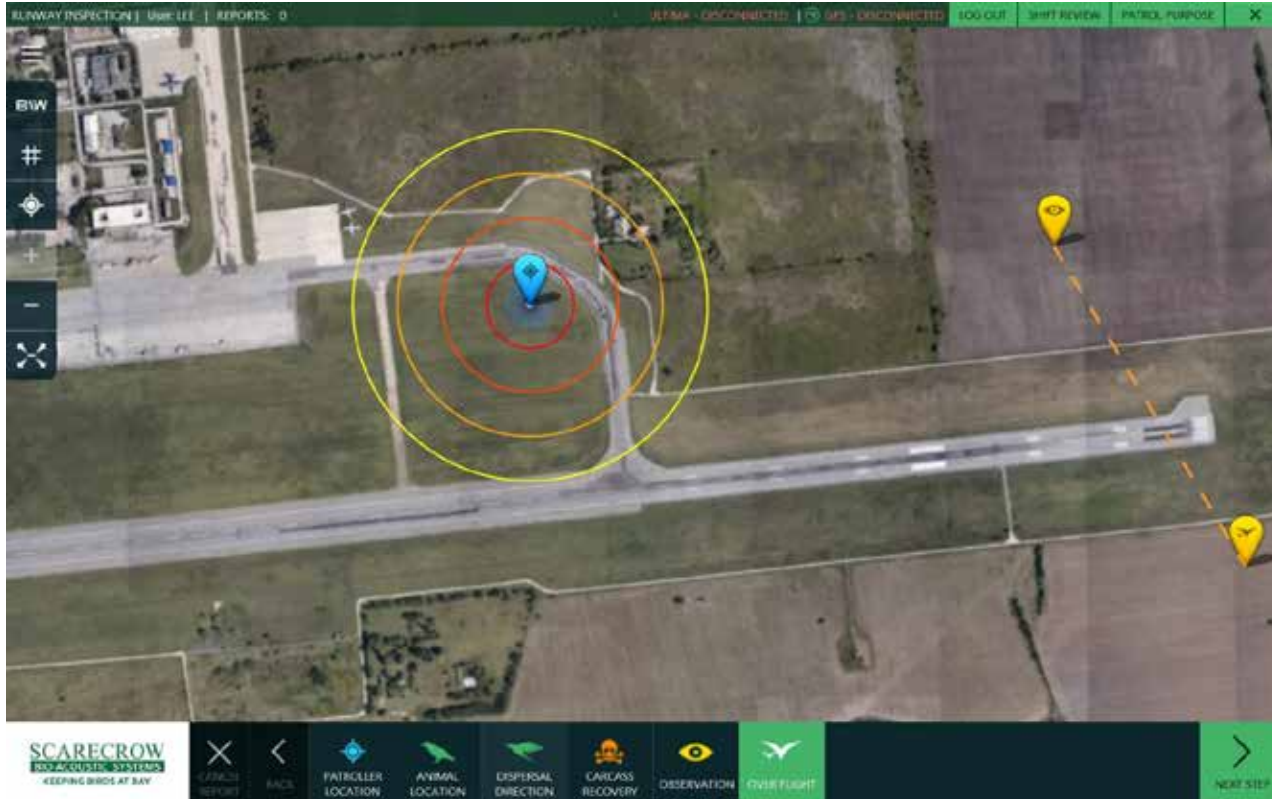


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# Scarecrow B.I.R.D. Tab - The ability to log includes:

- 📍 Over-flights

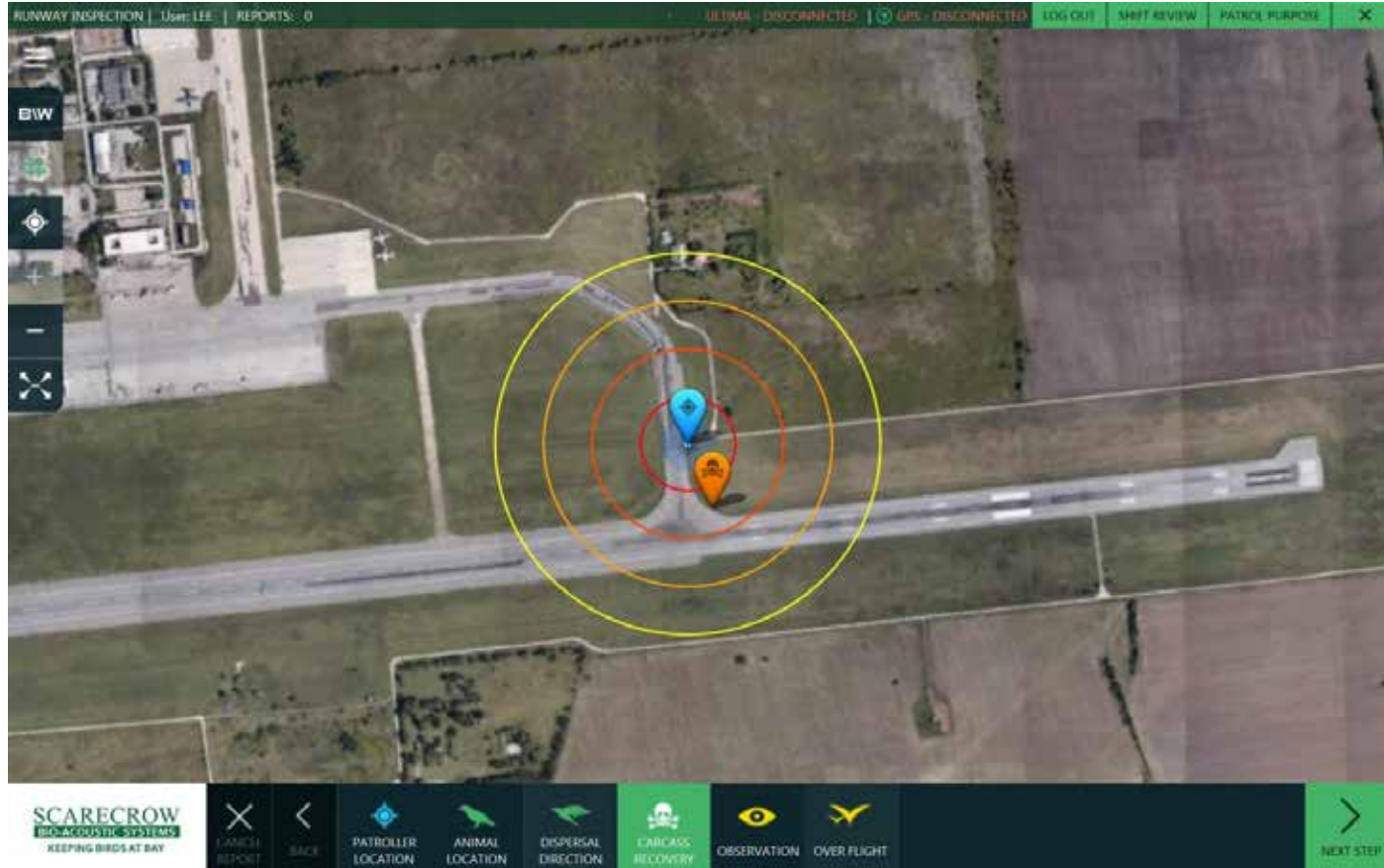


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# Scarecrow B.I.R.D. Tab - The ability to log includes:

- 📍 Carcass Recoveries



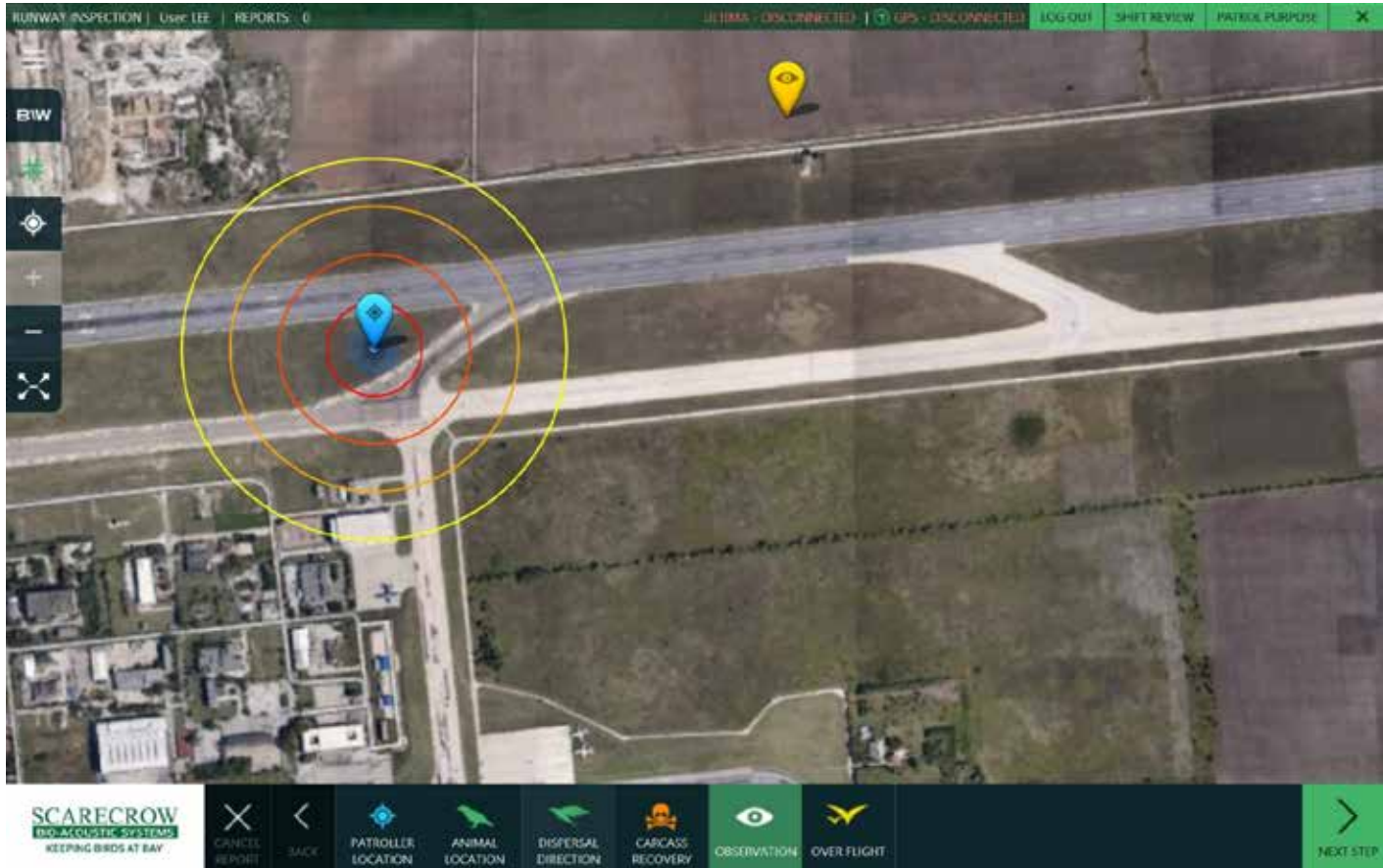
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# Scarecrow B.I.R.D. Tab - The ability to log includes:

- 📍 Observations



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# Scarecrow B.I.R.D. Tab - The ability to log includes:

- ☛ Set Markers and No Birds

**REPORT MARKERS**

SELECT MARKER

ANIMAL TRAP    MARKER POINT 2    SECURITY GATE MARKER

NOTES  
3 Rabbits

BACK    DONE

**REPORT NO BIRDS**

NOTES

BACK    DONE

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# Scarecrow B.I.R.D. Tab: new features include.....

- Threat Analysis

THREAT REPORT

Day (By Hour) Week (By Day) Year (By Week) Year (By Month)

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
<input checked="" type="checkbox"/> High																								
awvy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Birds Of Prey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
<input checked="" type="checkbox"/> Low																								
Black collared starling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Black headed gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blackbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada Goose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrion Crow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crested Myna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Female Red winged blackbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Female White Ibis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feral pigeon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
House sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sum of EventCount  
Value: 1  
Row: Low - Black collared starling#28  
Column: 17

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## Scarecrow B.I.R.D. Tab: new features include.....

- Trending – ability to project forward based on past activity.
- Improved Due Diligence - inclusion of photographic evidence against logged events.
- Aircraft Movements – comparison of wildlife seen v volume of movements.

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## Scarecrow B.I.R.D. Tab – Planned Additional Features.....

- New 13km Zone Module - Analyse all data within one Reporting System
- Scarecrow are happy to listen to any ideas from any airports for other possible new modules that would aide Wildlife Control activity.

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WORKING TOGETHER.....

# SCARECROW

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☪ Bird Dispersal and Data Logging



☪ Bird Detection



☪ First Line Local Support

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## Data collected can be used to:

- ¢ Mitigate Risk – In the event of Bird Strike, B.I.R.D.Tab provides an independent, validated record of activity to provide a defence against any claims made.
  
- ¢ Manage Risk – the data logged, when analysed can highlight:
  - Specie causing greatest problems
  - Times of day/week/month of greatest issue
  - Locations on Airport with largest bird volume/problem.
  - Key Attractants
  - Any adverse trends

# THANK YOU FOR LISTENING

## CONTACT DETAILS:

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