Airshare XYZ

Monthly update September-October 2018

Status update:

Airlines



airlines actively participating in the project.

































Airshare XYZ project goal:



Actions - map the mitigating actions used in the participating airports.



Effect - assess the effect of the mitigating actions with the airports.



Enabling - the best possible wildlife control and reduction.

Meet us at WBA Conference 2018



Meet us at the World Birdstrike Association Conference 2018 (November 19-23 in Warsaw), where during the "Data & Oversight" workshop" based on the knowledge of worldwide experts attending the conference we will be drafting a questionnaire for the second phase of the AirshareXYZ project. The focus of the second phase of the project is on gathering the experiences on the use of mitigating measures, efficiency, species, etc. The vision is to give airports access to experience and knowledge from peers at other airports, as well as actively communicating with airlines where and how the risk can be reduced. Help us crowdsource the best possible wildlife control and reduction practices!

Remember to sign up here



Share the knowledge



This month we are inviting you to join us in the knowledge sharing process at the World Birdstrike Association Conference 2018.

Airport Managers, are you making decisions based on incorrect data?

We make decisions based on facts and data, but what if the data we collected was flawed in the first place?

Airports around the world base their safety management systems on data and measurements. This constitutes the foundation of the decision-making process. Making the right decisions requires correct and valid data, whereas flawed data leads to more problems or waste your energy and resources for nothing.

ICAO and other entities are setting forth standards for data capture in many areas, among others – data collected by airport bird control staff. These standards are important and valid guidelines that benefit aviation safety. One example is the International Birdstrike Committee (IBSC) standard 5 confirms that "Airport bird/wildlife controllers should record the following at least every 30 minutes:

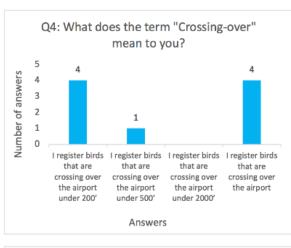
- areas of the airport patrolled,
- numbers, location and species of birds/wildlife seen,
- action taken to disperse birds/wildlife,
- results of the action."

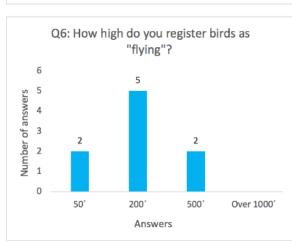
The data in this standard is gathered by most airports globally either as an ongoing bird control effort or before every start and landing. When looking at the requirements above, it seems pretty straightforward. All airports we work with are collecting the data. However, the data is collected by many different people and as it turns out the understanding of the before mentioned bullet points differs. As a consequence, any analysis and a subsequent decision is potentially flawed.

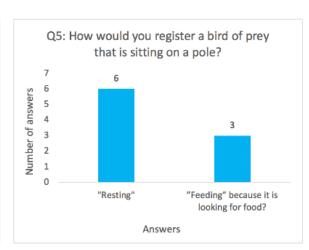
In the following example we will look at the results of a "first step" standardization survey that we created. The survey was administrated at 4 of the airports using our digital Wildlife Registration service.

You can view the survey here.

The results of the survey revealed that there are significant inconsistencies in the data already in the capture phase. This is not, in any case, a sign of airport staff not doing a good job – they surely did. The reason is that the staff did not have the same understanding of how and what data should be collected, to illustrate you can see 4 answers out of 17 questions below.









In conclusion, the bird controllers are all collecting data in accordance with IBSC standards. However, they are collecting substantially different data. The Airport's response to this new information was to immediately create an action plan with the following items:

- 1. Education of bird controllers focusing on:
 - Species recognition;
 - Assessing the number of individuals in a flock;
 - Standardised use of the Wildlife Registration solution, for:
 - Crossing birds;
 - Registration of birds crossing based on the altitude;
 - If no birds are observed a "no activity" option is entered minimum every 30 minutes:
- 2. Continuous performance monitoring:
 - This will be done with "Data quality reports" (as described below);
 - Bi-annual surveys to identify inconsistencies;

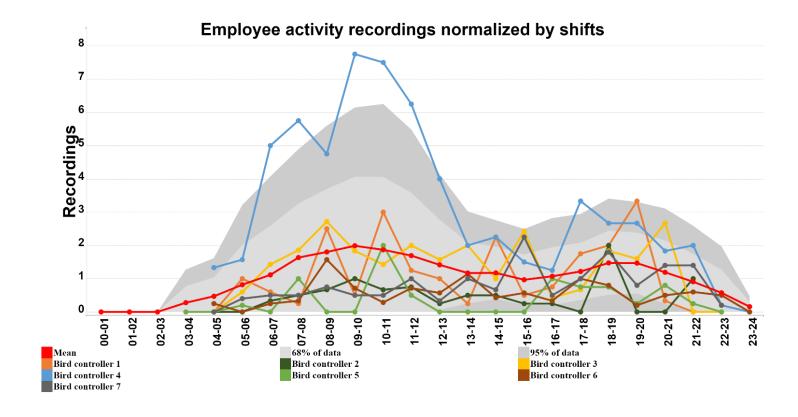
Data quality reports

While talking about data, can we spot inconsistencies by looking at how the data is collected? The quick answer is yes - it looks like it. The bird controllers are using our digital recording service, which means we are receiving the data in real-time when the recordings are made.

We normalised the data by looking at the numbers of bird recordings, no activity recordings and bird controller movements (measured as device position in 25-meter intervals) in hourly intervals divided by the number of shifts. A shift is defined as the number of different days when recordings have occurred in the given time interval. The average is calculated as a smoothed average by including the hour before and after to avoid spikes in the data.

Based on this it becomes evident that there are inconsistencies in the number of recordings (graph 1) performed by the individual members of the bird control unit over a 30-day period. The data is divided into one-hour intervals over a 24H period. From this, we can see that bird controller 2 in making way more recordings than bird controller 6. We see similar tendencies in recordings of no activities as well as movements.

This information is consistent with the result of the survey.



Conclusion

Gathering data in accordance with IBSC standards is commendable, but it requires training and education. The training should be based on continuous performance monitoring. The airport should focus on developing bird control staff skills based on the inconsistencies in the data. This can be done by surveying and analysing the way data is collected - as in the example above.

A standard for what to collect is not enough in itself. We need to describe and standardize how data is being recorded - not just write data in a protocol or capture it in a digital service. When seeking to gather actually valuable data this is essential.

What is the bigger picture here? If we want to be able to compare data across airports the standardization becomes even more important. This is a natural process, as digital data capture and analysis is moving into the industry we can enable management and staff to make well-founded decisions - if we focus on data quality. To support the data quality, analysis reports will be available to all our customers (see example here).

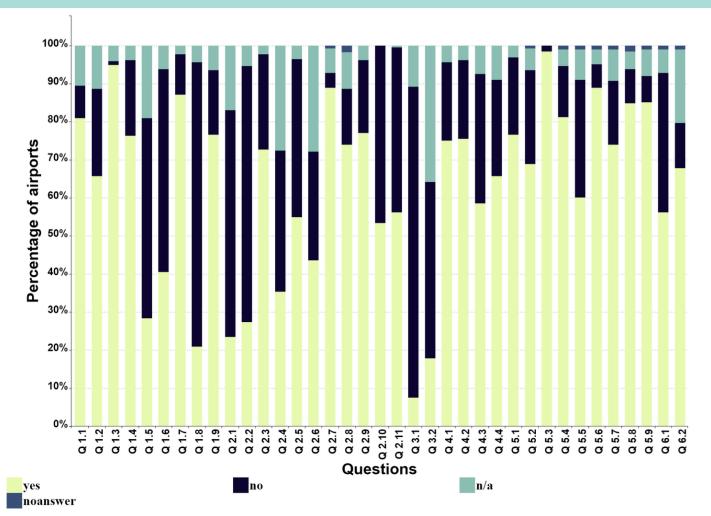
So, are you making the right decisions based on flawed data?



Implementation rates:

Here you can see the average implementation rates from participating airports in September 2018.

We would like to underline the fact that even though a mitigation action is mentioned in a question, it does not mean that the airport necessarily must implement it.



Active management

- 1.1 Is bird control in place prior to every aircraft operation?
- 1.2 Are bird control and bird surveillance recorded at least every 30 minutes?
- 1.3 Are training and brush-up being performed?
- 1.4 Is distress call playback used in the field?
- 1.5 Do you trap raptors for a distant release?
- 1.6 Are laser pointers used?
- 1.7 Are pyrotechnics used?
- 1.8 Do you use dog assistance?
- 1.9 Is shooting high-risk birds used as a mean of immediate control?

Passive management

- 2.1 Do you reseed with endophyte infested grass seeds?
- 2.2 Do you use fertilizer to improve grass quality?
- 2.3 Do you have a long grass policy in place?
- 2.4 Do you use netting of the ditches and water retention ponds?
- 2.5 Do you remove grass clippings after lawn mowing?
- 2.6 Do you replace ditches with buried drain pipes?
- 2.7 Do you remove self-sown trees and shrubs?
- 2.8 Do you eliminate temporary surface water?
- 2.9 Do you actively manage weed control?
- 2.10 Is your airfield used for agricultural crops?
- 2.11 Is there any food waste exposed to birds in your airport?

On and off airport surveillance by radar

- 3.1 Do you use radar detection of birds?
- 3.2 Do you perform historical analysis and risk assessment of recorded radar data?

Off airport (13 km) risk assessment

- 4.1 Are all bird attracting sites registered in the 13km zone?
- 4.2 Are hazardous birds recorded at sites that attract birds?
- 4.3 Do you record hazardous bird flight routes crossing aircraft flightpaths?
- 4.4 Do you perform a risk assessment of the 13km zone?

Data recording, analysis, risk assessment, review, and reporting

- 5.1 Do you have a Local bird strike committee in place?
- 5.2 Is DNA or feather analysis of unidentifiable bird strike victims performed?
- 5.3 Is a complete bird strike recording and reporting system established at your airport?
- 5.4 Is the Bird Strike Risk Assessment matrix updated?
- 5.5 Is a monthly review of Bird Strike Risk Assessment performed?
- 5.6 Are immediate actions taken to counter bird species entering the high-risk category?
- 5.7 Have you improved written procedures to counter bird species entering the medium risk category?
- 5.8 Are bird recordings from bird controller (BC) logs analysed?
- 5.9 Are bird control procedures based on BC logs revised annually?

Annual standard check

- 6.1 Does your airport have an annual standard check performed by external qualified wildlife supervisor?
- 6.2 Are annual standard check recommendations fulfilled?



Best wishes from the AirshareXYZ team!





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