



Nordic Bird Strike Advisory Group (NBSAG) 1.-2.6.2016 Trondheim, Norway

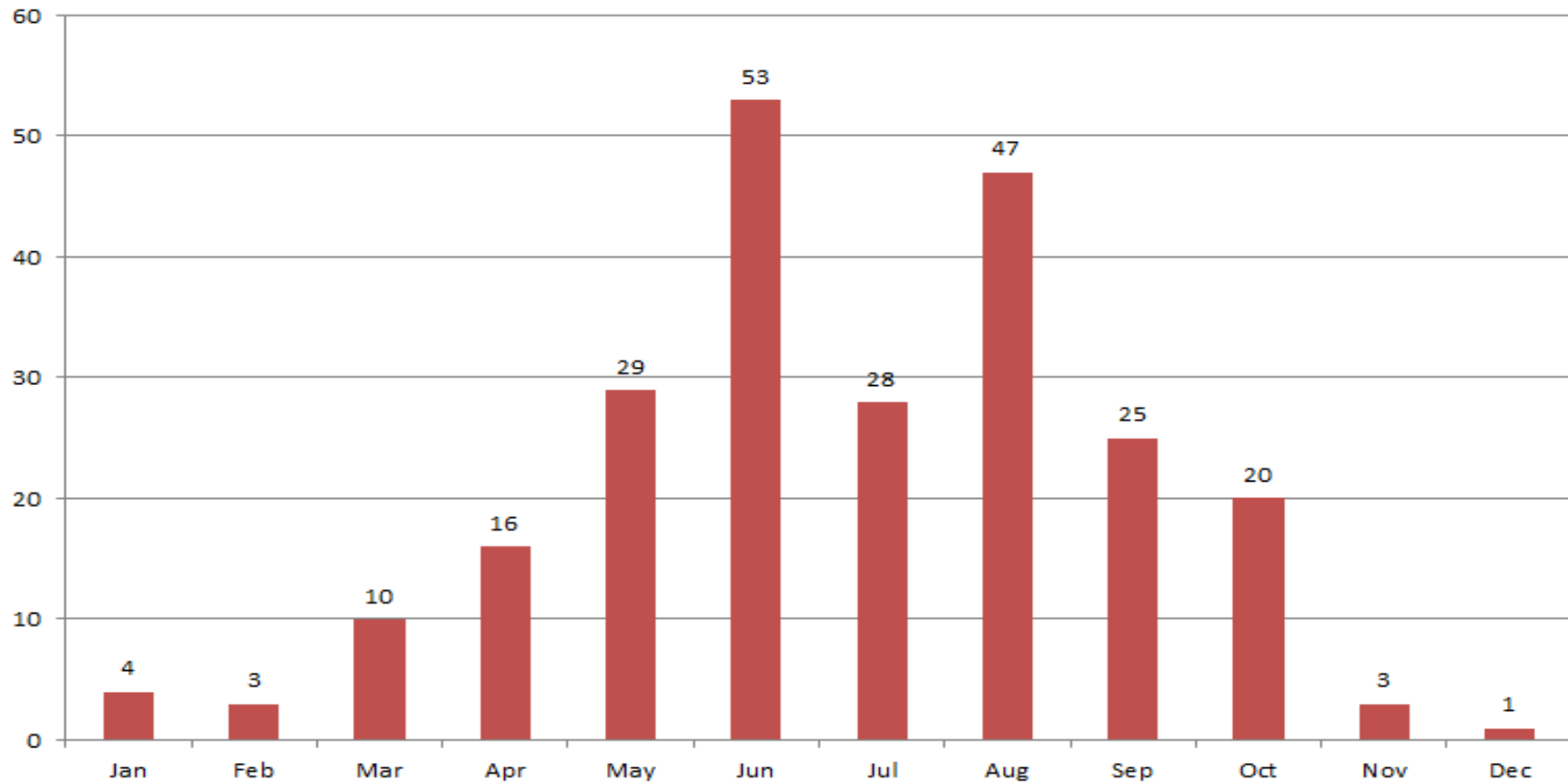
Jukka-Pekka Nikolajeff
Finnish Transport Safety Agency (Trafi)

*Responsible traffic.
Courage and co-operation.*

Last Year in a Nutshell...



All together 239 occurrences and 253 BS reports



Year 2015



Bird Size

| | |
|----------------|------------|
| S | 152 |
| M | 51 |
| L | 5 |
| Unknown | 31 |

Reported by

| | |
|--------------------|------------|
| Pilot | 190 |
| ATCO | 40 |
| Maintenance | 14 |
| Other | 1 |

Phase of Flight

| | |
|----------------------|-----------|
| Standing | 9 |
| Taxi | 3 |
| T/O run | 29 |
| Initial Climb | 50 |
| En route | 3 |
| Decending | 6 |
| Approach | 54 |
| LDG roll | 52 |
| Unknown | 42 |

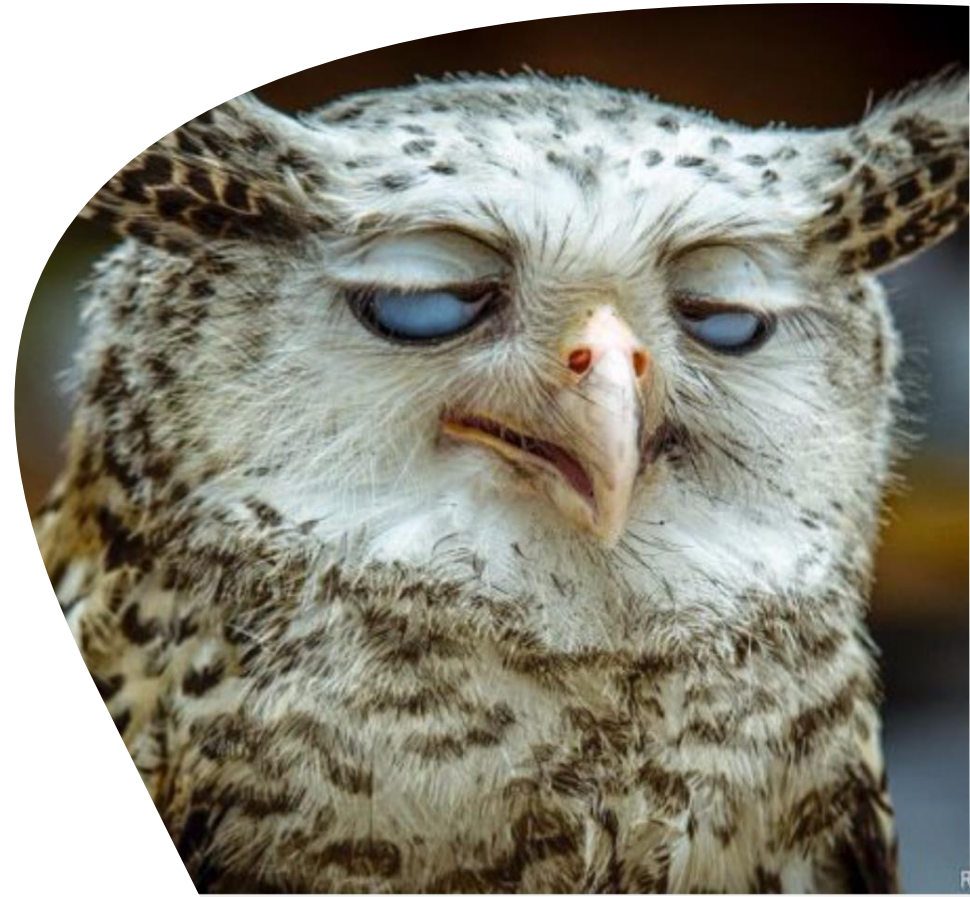
Year 2015

Was Pilot Warned About Birds

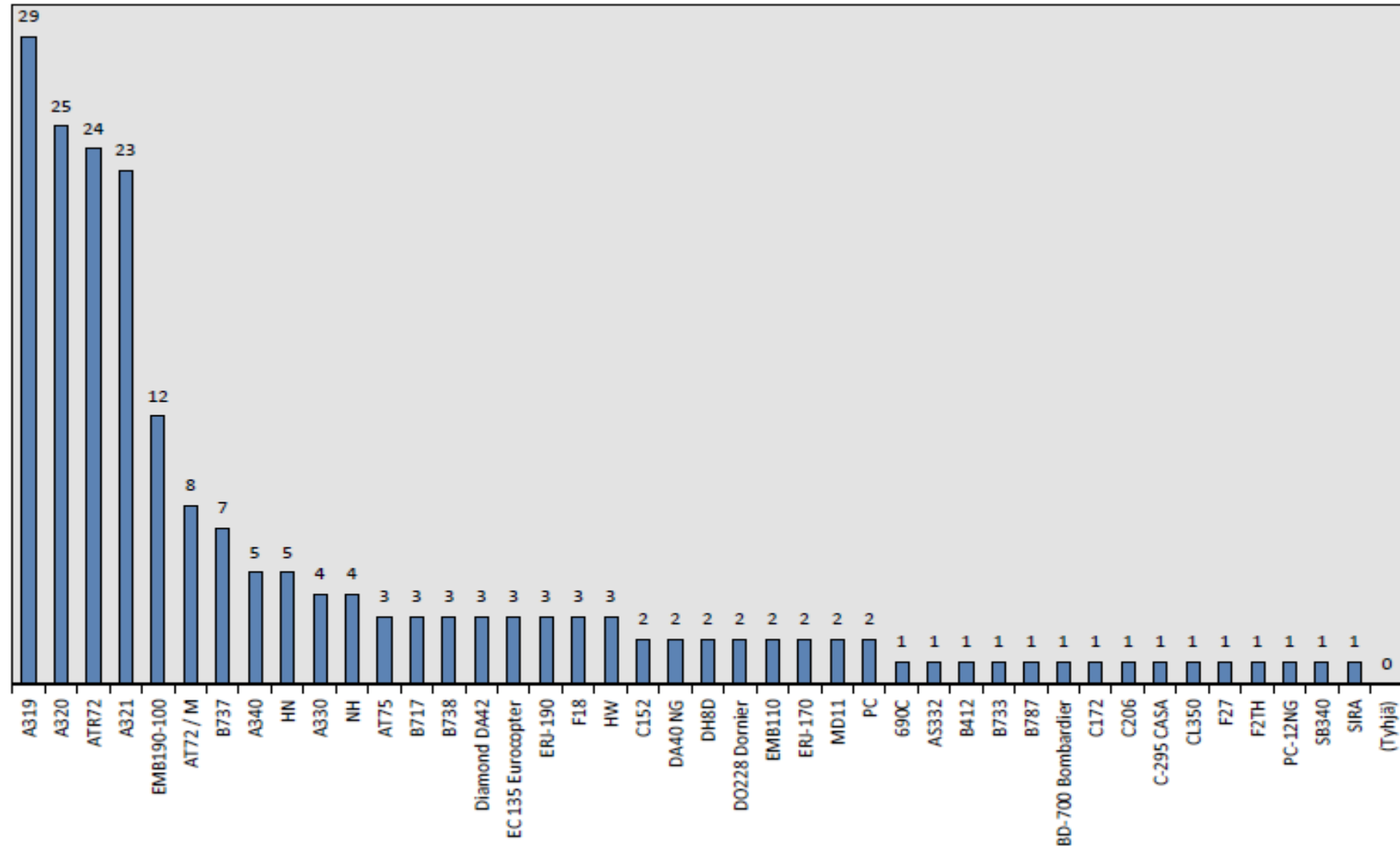
| | |
|------------|------------|
| Yes | 21 |
| No | 174 |

Time of Day

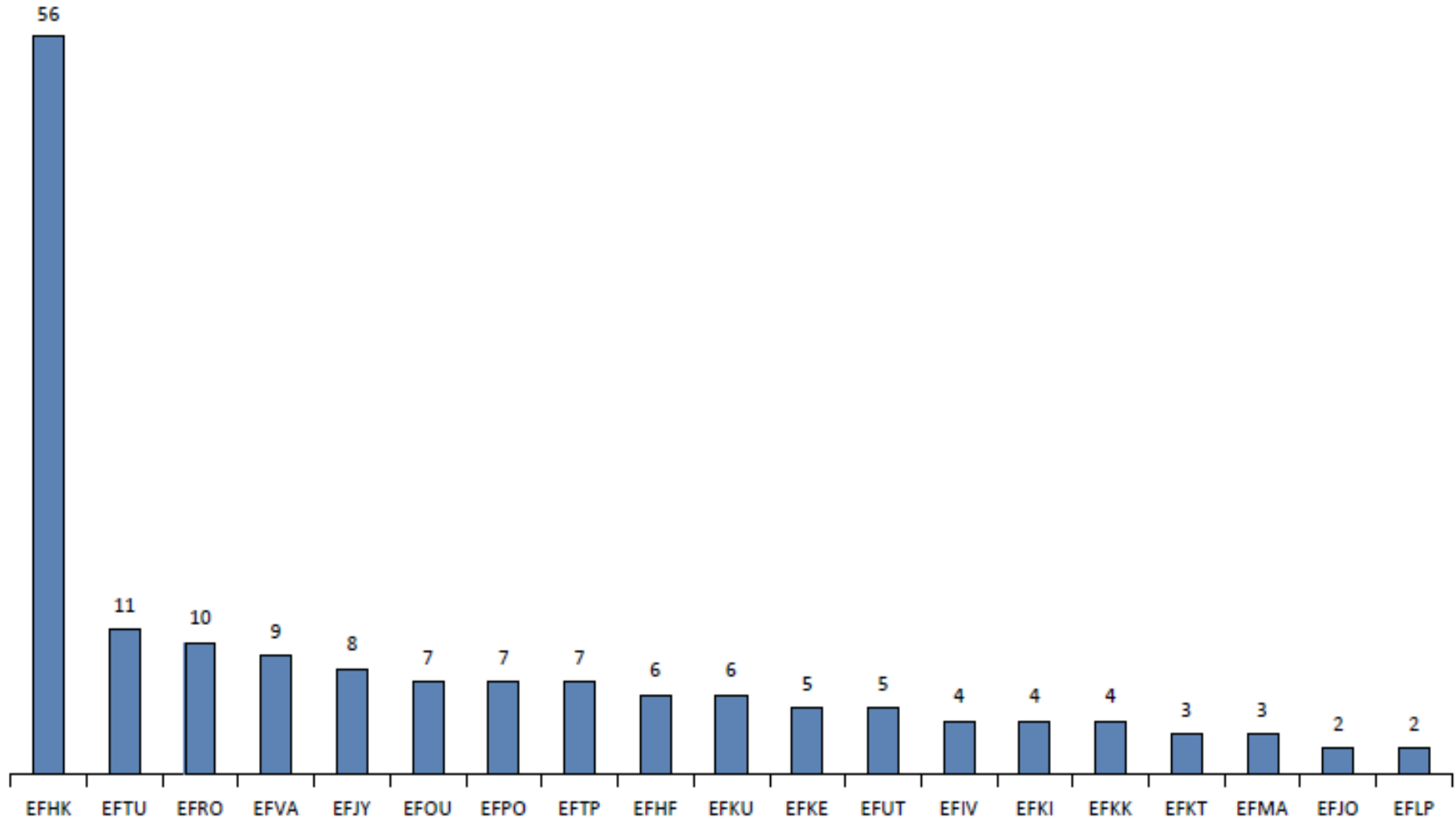
| | |
|----------------|------------|
| Night | 24 |
| Daytime | 126 |
| Dusk | 15 |
| Dawn | 9 |
| Unknown | 65 |



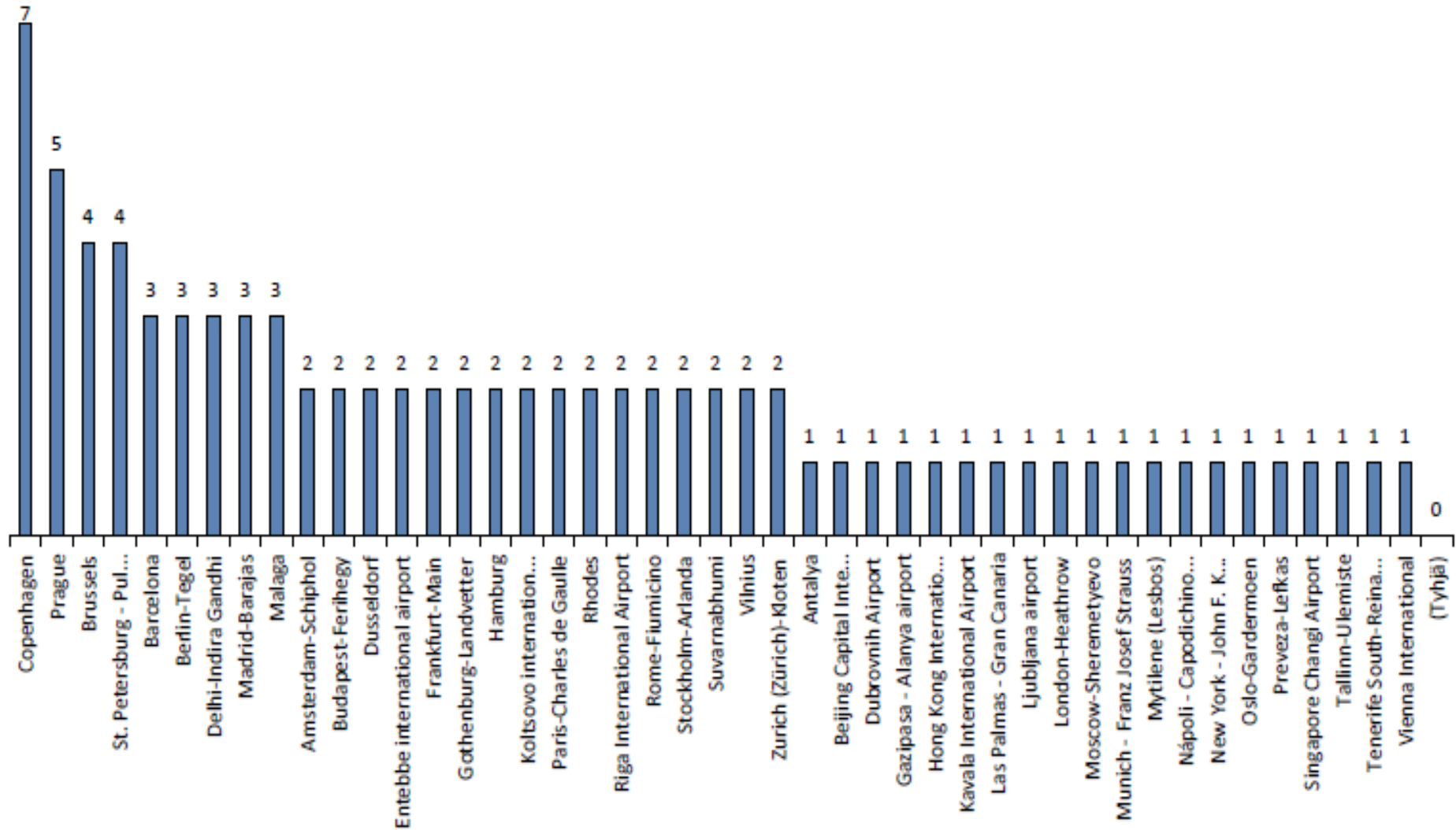
Aircraft Type Involved in Bird Strike



Number of the Reports in Finnish Aerodromes



Aerodromes Where Bird Strikes Occurred (Abroad)



Analysis of the Bird Strike Reports Received by the Finnish Transport Safety Agency Between the Years 2000 and 2015

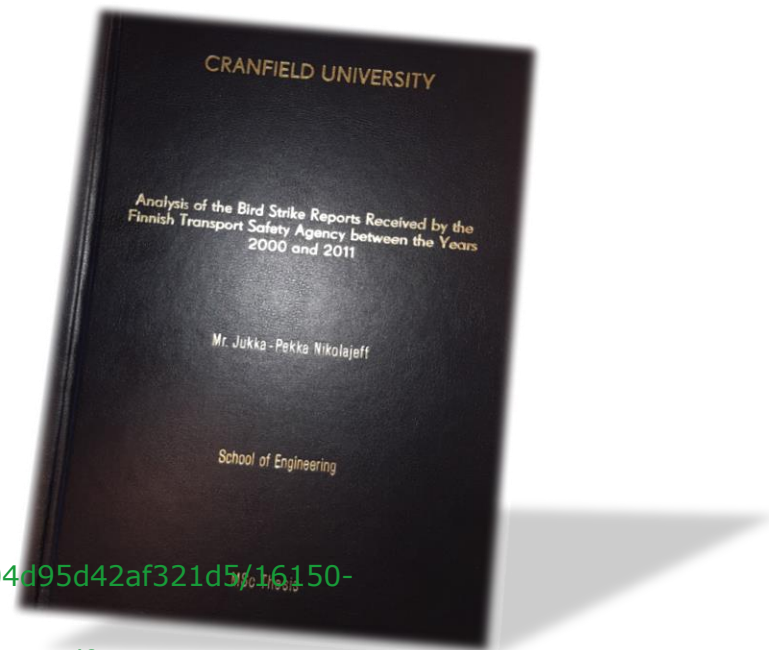


Reporting History in Trafi

*In Finland, FCAA has been collecting bird strike reports since 1970, but no previous analysis has been done.

*Reporting activity is increasing, but at the same time the quality of the reports is decreasing.

*MSc Thesis¹ made 2013 to gain a better understanding the importance of good bird strike reporting and what kind of safety benefits we could have. Deeper look to years 2000, 2006 and 2011.



¹ http://www.trafi.fi/filebank/a/1415198541/d363a19f66f872efb04d95d42af321d5/16150-MSc_Thesis

Figure 11. Reported bird strikes by month in years 2000, 2006 and 2011

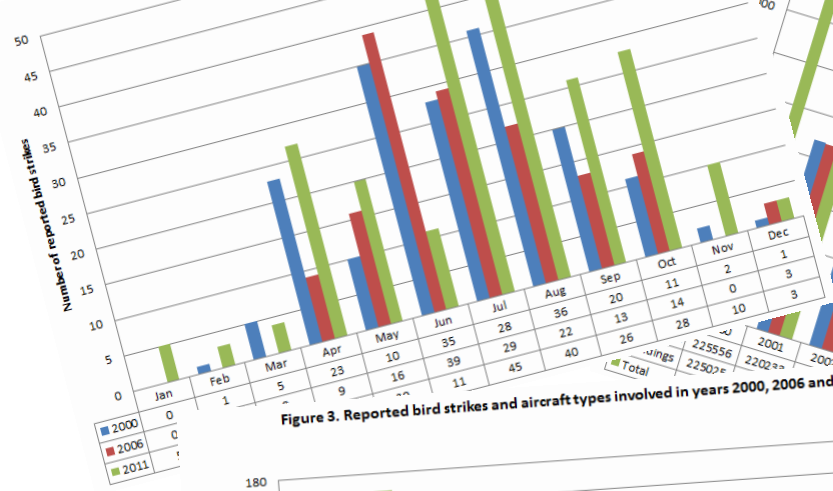


Figure 2. All aircraft movements at Finnish airports between 2000 and 2011



Figure 1. Bird strike reports received by the Finnish Transport Safety Agency

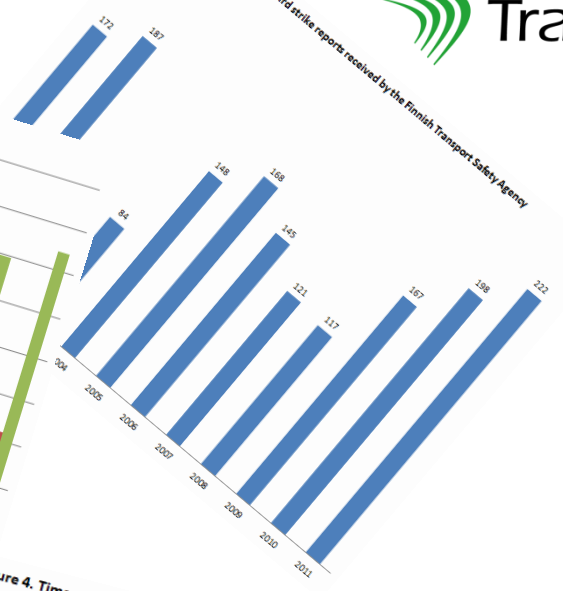


Figure 3. Reported bird strikes and aircraft types involved in years 2000, 2006 and 2011

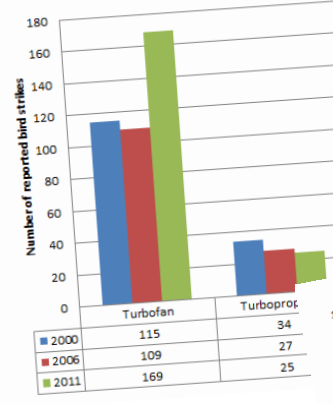


Figure 13. Where bird strikes happened in years 2000, 2006 and 2011

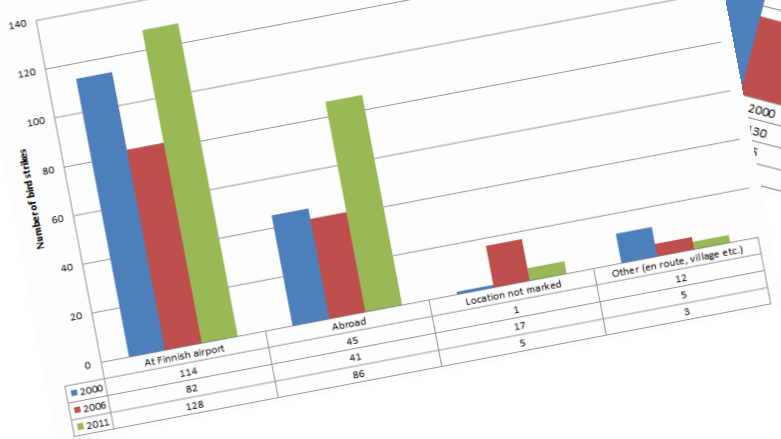
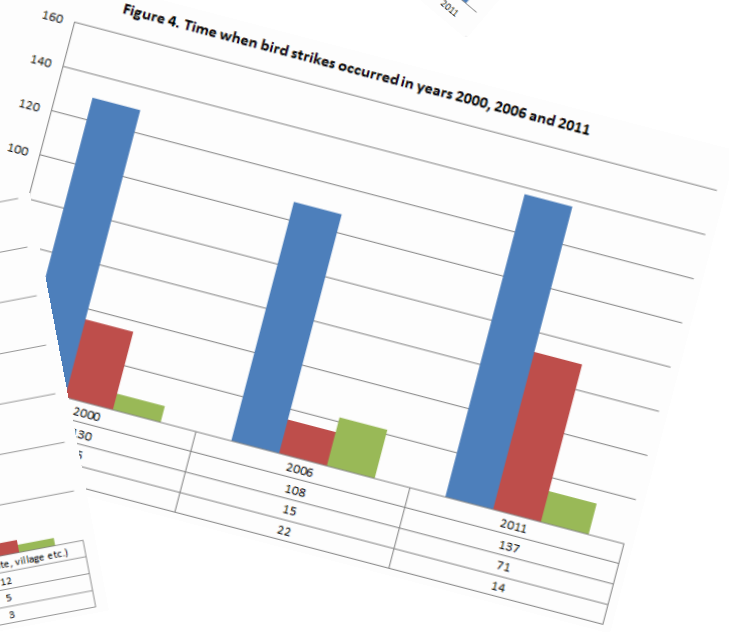


Figure 4. Time when bird strikes occurred in years 2000, 2006 and 2011

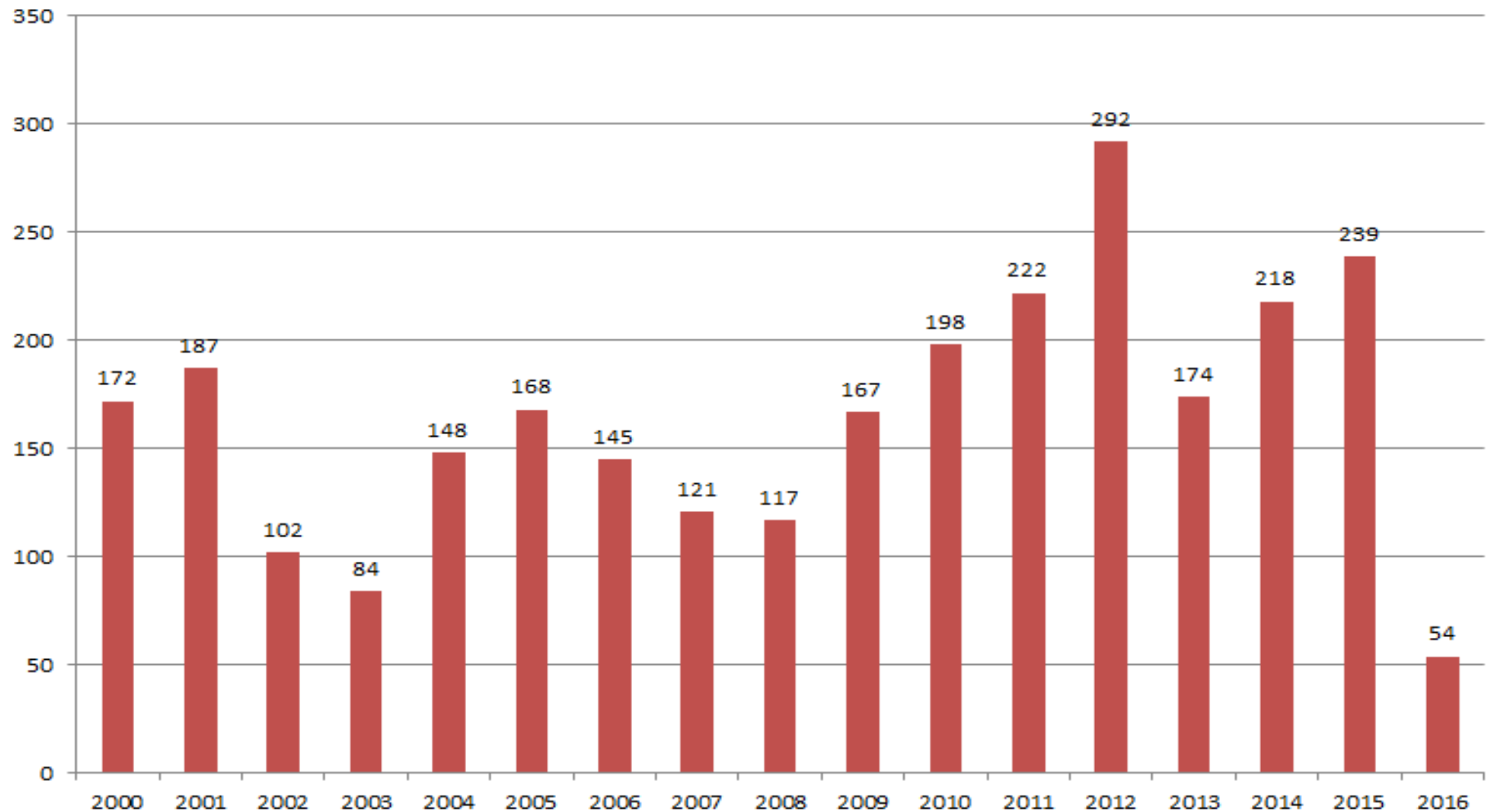


Operations in Finland 2000 – 2015

(Landings, Take offs, Touch and Go's x 2, Low Approach's x 2)



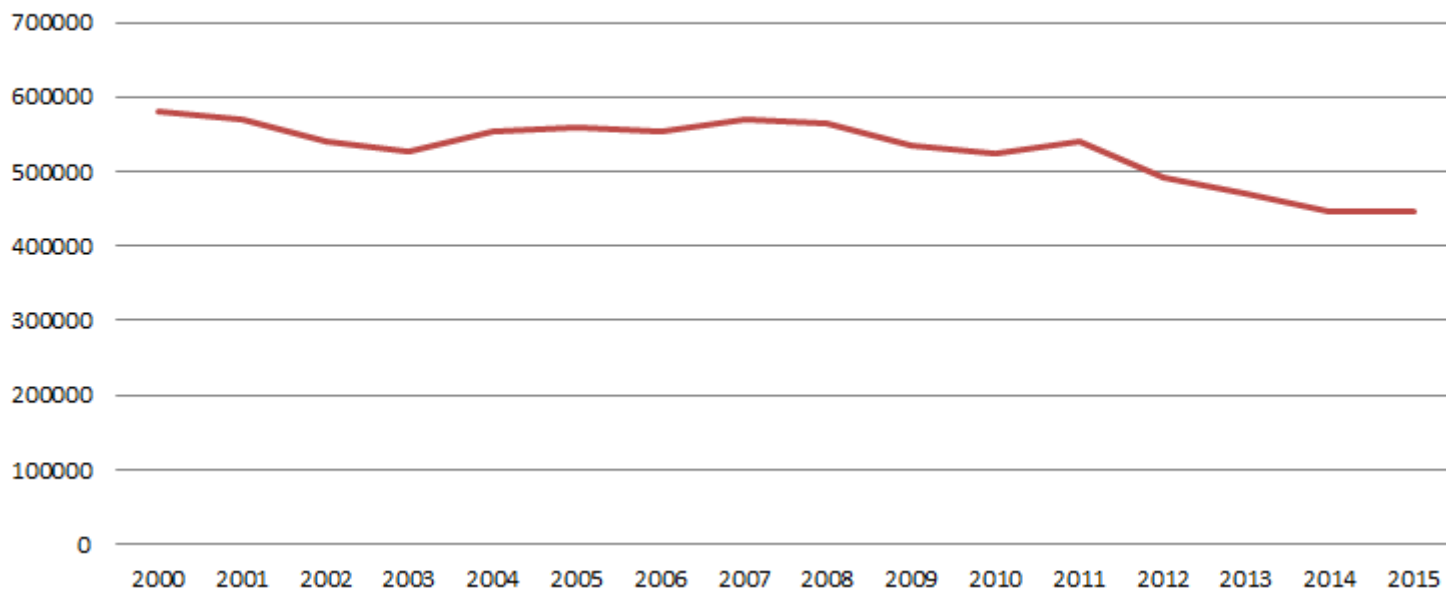
Bird Strike Reports Received by the Finnish Transport Safety Agency 2000 – Now



Reported Bird Strikes

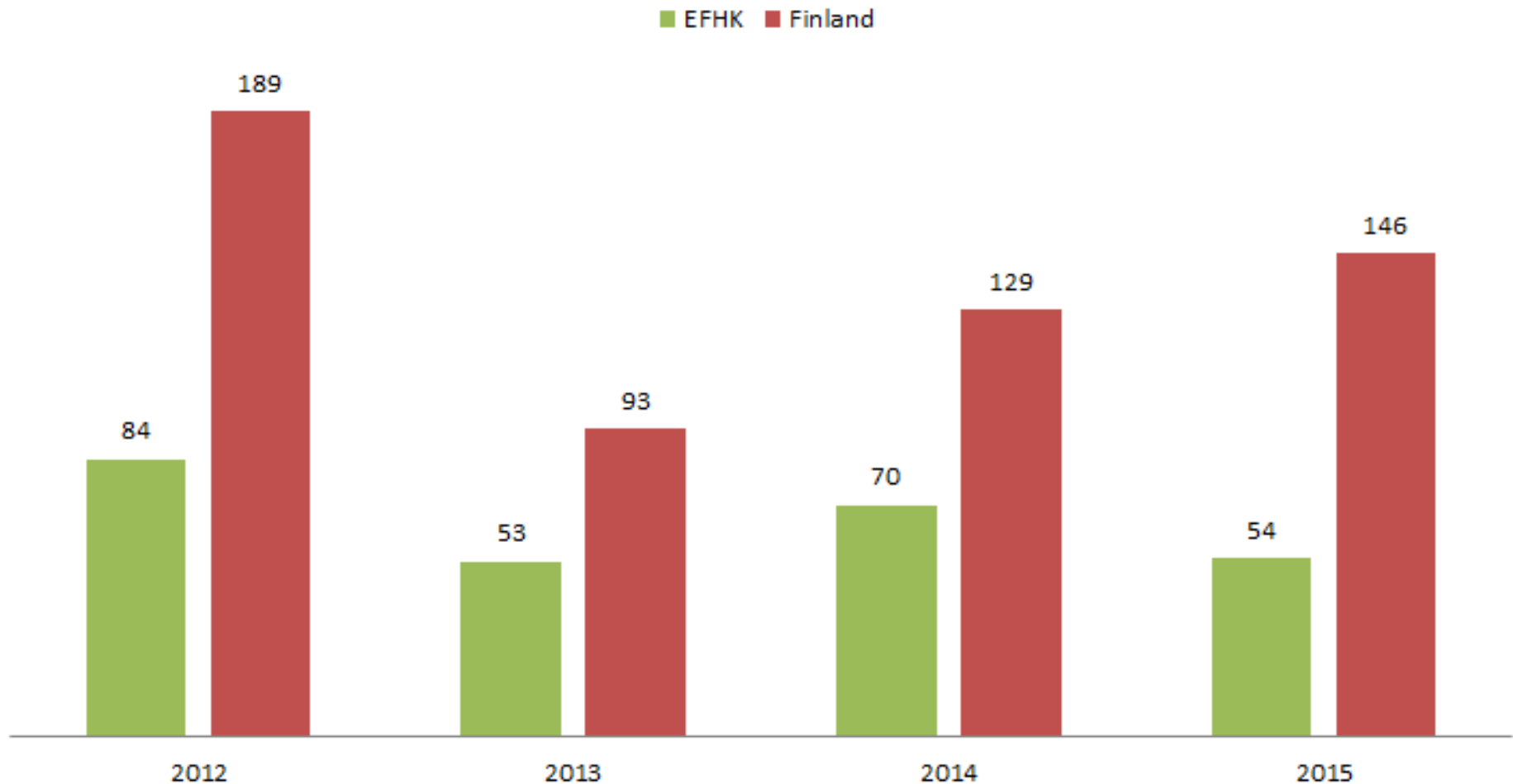


Operations in Finnish Aerodromes

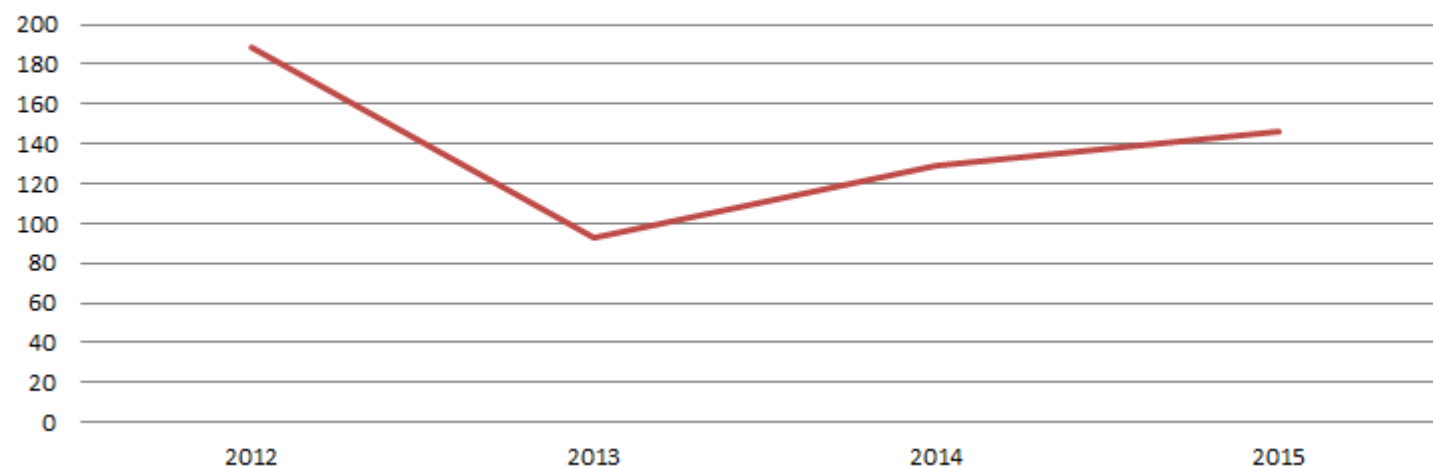


Operations vs. Bird Strikes 2012 – 2015

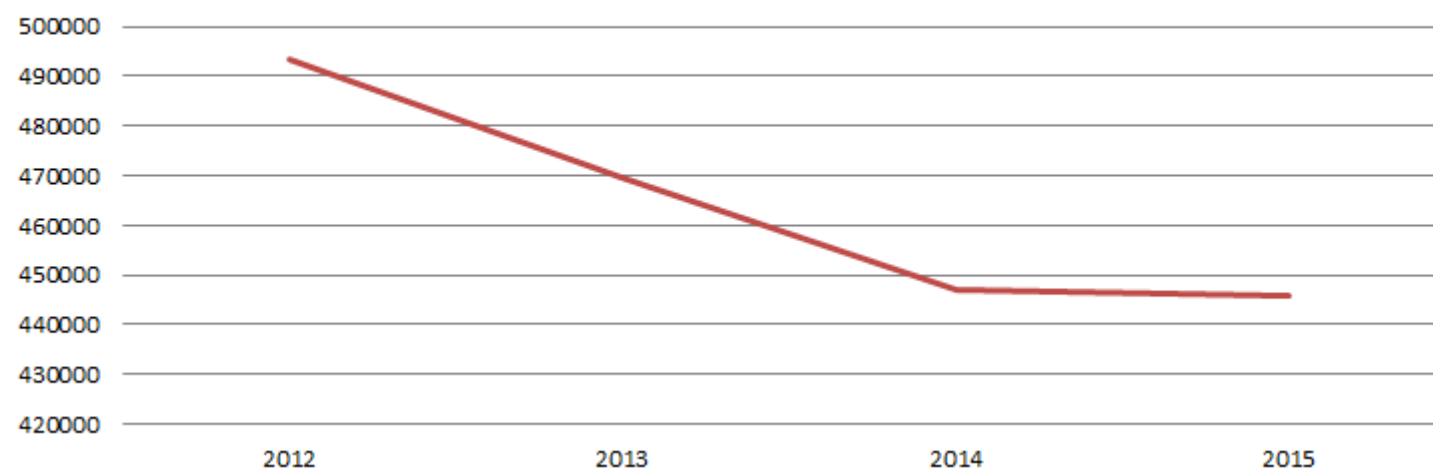
Reported Bird Strikes in EFHK and Finland 2012 - 2015



Reported Bird Strikes in Finland



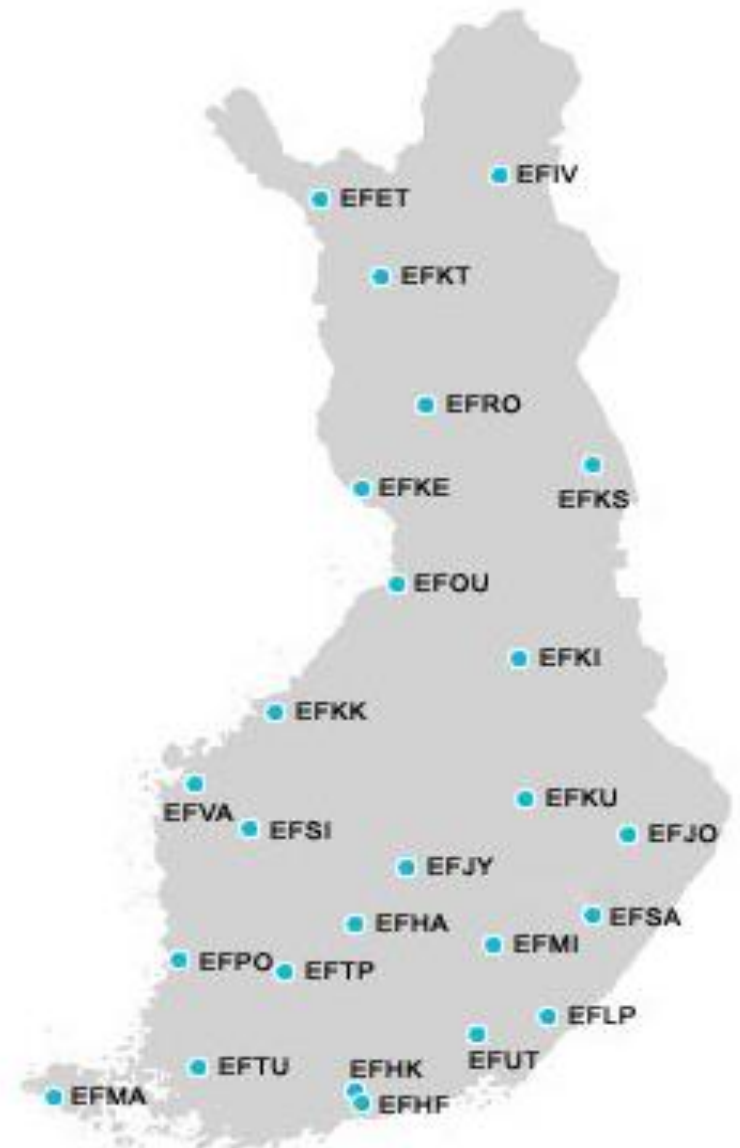
Operations in Finnish Aerodromes



Operations vs. Bird Strikes in Finnish Aerodromes

In Finland the number of the operations is decreasing, but the number of reported bird strikes is increasing.

In EFHK the number of operations remains about the same, but the number of reported bird strikes is slightly decreasing.



Trends and Conclusions



- *Summer is clearly the worst season when bird strikes happen.
- *Most of the bird strikes occurred below 2000 feet. Strong correlation with the phase of flight.
- *Small birds are causing the major part of all bird strikes reported in Finland.
- *Different bird species are poorly identified. No more than 30% are identified.
- *Most of the bird strikes happens to turbofan powered aircraft. Turbopropellers and helicopters have nearly the same probability of bird strikes.
- *Poor quality in bird strike reports makes them often useless.



Trafi

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