

# Birds at Såtenäs Airport



# **Bird Strike, JAS 39 Gripen. (c:a 900 km/tim.)**



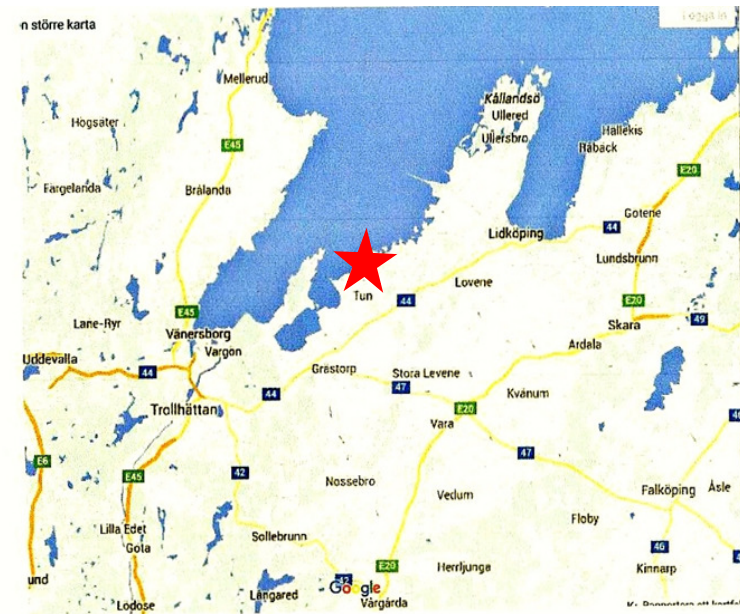
**Såtenäs airport have had big problems with bird strikes, at both low and higher elevations around the airport**

# The location of the airport



# Natural conditions

- **Winds**
  - Mainly southwestern wind
- **Rainfall**
  - Large amount around the lakes
  - Places great demands on the drains
- **Various soil on the fastening surface**
  - different requirements
- **Natural bird environment**
  - Both nesting and migratory birds





# Rainfall

**With the bad grass, and the poor drainage proves to be good conditions for all kinds of bird food.**

**The birds eat insects and larvae in both the grass and the creeping up on the tarmac.**



# Agricultural landscape

**With modern farming culture, there are less places left for the birds to be on**



# Old surface

**Old grass, sown 1950, poor nutrition, good environment for insects and larvae and other bird food.**



# The airport action

- **Started in the 1990s,**
  - **We hired an ornithologist who surveyed the bird activity and why they did what they did. He worked in total in a year.**
- **Tests and experiments**
- **Action plan investigations 2001 – 2010**
- **Small steps**
- **Major Action Plan 2011 – 2015, is still in operation.**



# The ground

**Old grass, sown 1950, poor nutrition, good environment for insects and larvae and other bird food.**

**We started here!**



# Processed

We rented a farm unit to process the surface without leaving black soil that could attract birds.



# Provide proper nutrition and PH levels

After we conducted a soil analysis we added nutrients needed.

**Provides nutrients**



**The addition of lime**





# The result

**A grass that is healthy and wholesome,**



**And that is easy to manage and unwelcome environment for birds.**



# Air



**Fright Measures (deterrents)**

**Fright Measures (manually)**



**Hunting**

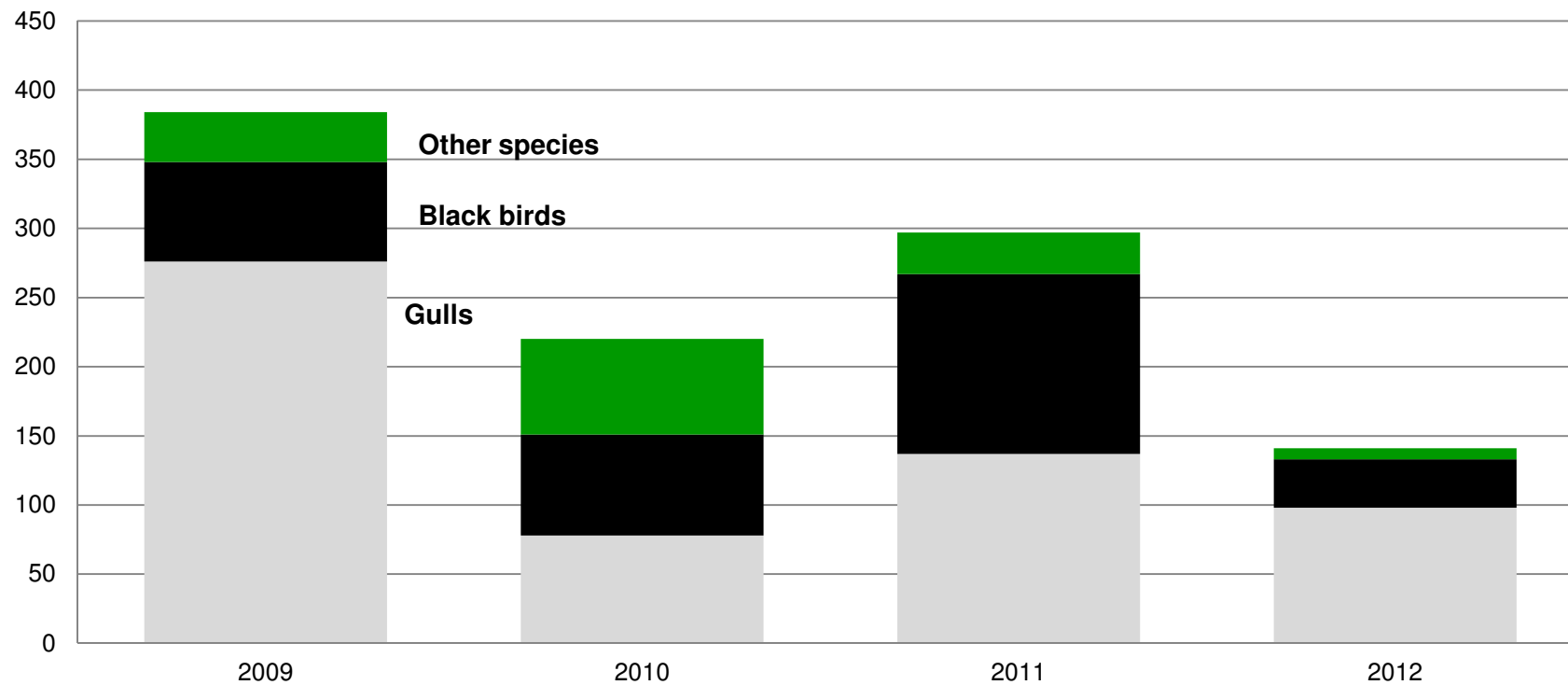
**Change the box office around the airport  
(eliminate problem)**

# Operational Adaptation

- **Customize startup procedure – Bird Tak Off**  
**(Start and gain altitude as quickly as possible)**
- **Landing Procedure**  
**(Do a flyover at a safe altitude to scare the birds)**
- **Customize the times flying**
  - **Time of day**
  - **The time of year**

# Hunting result

## Number of shot birds at the airport



# The results so far

- **Minor disruptions in air traffic.**
- **Less number of birds that rest here today at the airport.**
- **Less number of birds nesting on or around the airport.**





**The work is still ongoing,,,,,,**

