2.5. Some Statements and Some Questions to the Bird-Problem at Zürich Airport.

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SOME STATEMENTS AND SOME QUESTIONS TO THE BIRD-PROBLEM AT ZURICH AIRPORT

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1. Analysis of bird strikes at Zurich airport

1.1 Species involved

Collecting bird-cadavres on runways and taxiways after collisions during the years 1963-66 and, with more intensity, during the years 1967-71 led to a list indicating the percentage of incidents with different bird groups. Small species are omitted, because normally they are not found.

Bird group	Number of incidents	percentage	Number of individuals involved per incident
Buzzards	39	36,1	1,o
Black-Headed Gulls	26	24,1	7,7
Crows	1o	9,3	1,2
Owls	8	7,4	1,o
Pheasants	7	6,5	1,1
Falcons	6	5,5	1,o
Ducks	5	4,6	2,o
Lapwings	3	2,8	6,7
Herons	3	2,8	1,7
Jackdaws	1	o,9	15.o

It is evident that Buzzards and Gulls are the most hazardous groups of birds. The following questions arise:
- at which season and at what time of day can we observe most concentrations of these birds?
- what are the birds doing at the airport?
- do the times of heaviest concentrations coincide with the periodes of most incidents; or can we discern individuals which are more or less habituated to air traffic and so more or less affected by collisions?
- what can we do against these birds?

1.2 Seasonal distribution of incidents with Buzzards and Gulls

Incidents with Buzzards cumulate in July and August, beginning in June and declining in September. A small peak occures in March. It seems that unexperienced young birds dispersing from the nesting areas concentrate on the airfield and are mainly affected by collisions. Less, but anyway noticeable influence arises from resting birds during migration. A remarkable number of Buzzards wintering on the airfield seems to be habituated to air traffic, so that strikes occure only rarely.
Black-headed Gulls are involved in bird strikes during their migration periode. There is a peak in March resulting from the birds on their way back to the breeding grounds in northern Europe and a second peak in October and November resulting from the immigration of winter-guests and from resting birds on their way through Switzerland. The wintering population of gulls seems not to have a big influence on the strike rate. Large roosting flights crossing the region of the airfield every day in winter have, as far, not been involved in strikes.

This small amount of data indicates some features which are not known to me from litterature. It seems worth investigating at other airports if there is a similar distribution of strikes, perhaps also in other species.

- Could it be that simply the high number of the birds present (at the end of the breeding period or during the migration period respectively) is responsible for the high strike rate; or is it a difference in behaviour of young birds or recentliy arrived migrants which leads to a rise of the strike rate?
- If the Buzzard-strikes are caused by dispersing young birds, trapping and deportation seems a very effective method (although the procedure must be repeated every year). In the case of migrants there is nothing to do, because they go away after a few days and are replaced by other individuals.
- Is it correct thinking that recently arrived gulls can be scared away more successfully with distress calls than resident populations?

2. Field observations of birds at Zurich airport

Continuous observations by hobby-ornithologists among the personal of the airport are available only since November 1971. Observations by a collaborator of Swissair during some days in April and July give us some indications about the summer-population. The preliminary results are summed up in maps for the most important species, expecting some advices for further measures to take.
Censuses are continuing, leading to a survey over the whole year.

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