The practical use of bird strike risk assessments in Copenhagen Airport

NBSAG, 22nd May 2014

CPH Birdstrike Risk Assessment

Risk **=** bird strike **frequency   x   severity**

Frequency:

average number of bird strikes per year during the last five years. Only identified birds from pilot-reported strikes and unreported strikes are considered.

Severity:

% of bird strikes involving the species which lead to damage to aircraft. Severity=0,014 **x** standard weight of the species.

CPH Birdstrike Risk Assessment

Defenitions of frequency and severity.

A Probability/Frequency

Mean number of birdstrikes per year	0 - 0,2	0,3 - 0,9	1 - 2,9	3 - 10	>10
Category of frequency	**Very low**	**Low**	**Moderate**	**High**	**Very high**

B Severity

Percent of birdstrikes leading to damage to aircraft	0 - 1,9%	2 - 5,9%	6 - 9,9%	10 - 20%	>20%
Category of severity	**Very low**	**Low**	**Moderate**	**High**	**Very high**

Risk levels

Probability/Frequency

| Severity	Very High	High	Moderate	Low	Very Low
Very High	4	4	4	4	3
High	4	4	4	3	2
Moderate	4	3	2	1	1
Low	3	2	1	1	1
Very Low	2	1	1	1	1

CPH Birdstrike Risk Assessment

Level 1   [green box]   No further action required beyond the risk management

measures currently in place.

Level 2   [yellow box]   Current risk management for this species should
be reviewed and additional steps taken if
appropriate.

Level 3 (High risk)   [orange box]   Additional management actions should be implemented
for this species as soon as possible if appropriate.

Level 4 (High risk)   [red box]   Additional management actions should be implemented

for this species as soon as possible.

CPH Birdstrike Risk Assessment 2014

Probability

| Severity	>10 Very high	3-10 High	1-2,9 Moderate	0,3-0,9 Low	0-0,2 Very low
>20% Very high				Barnacle Goose Black-b. Gull	Mute Swan White-t. Eagle Greylag Goose Grey Heron Osprey
10-20% High		Herring Gull Buzzard	R-l. Buzzard	Mallard	Brent Goose Phesant Shelduck R-b. Merganser L.Black-b. Gull
6-9,9% Moderate		Wood Pigeon	Crow	Marsh Harrier Oystercatcher Rook	Tufted Duck Hen Harrier
2-5,9% Low	Kestrel	Common Gull Short-e. Owl Black-h. Gull	Long-e. Owl Feral Dove Magpie Merlin	Sparrowhawk Golden Plover	
0-1,9% Very low	Swift	Starling Skylark Swallow	Meadow Pipit House Martin Wheatear	Ringed Plover Song Thrush White Wagtail Linnet	Blackbird Redwing Snow Bunting Chaffinch Redpoll

CPH Birdstrike Risk Assessment 2013 vs. 2014
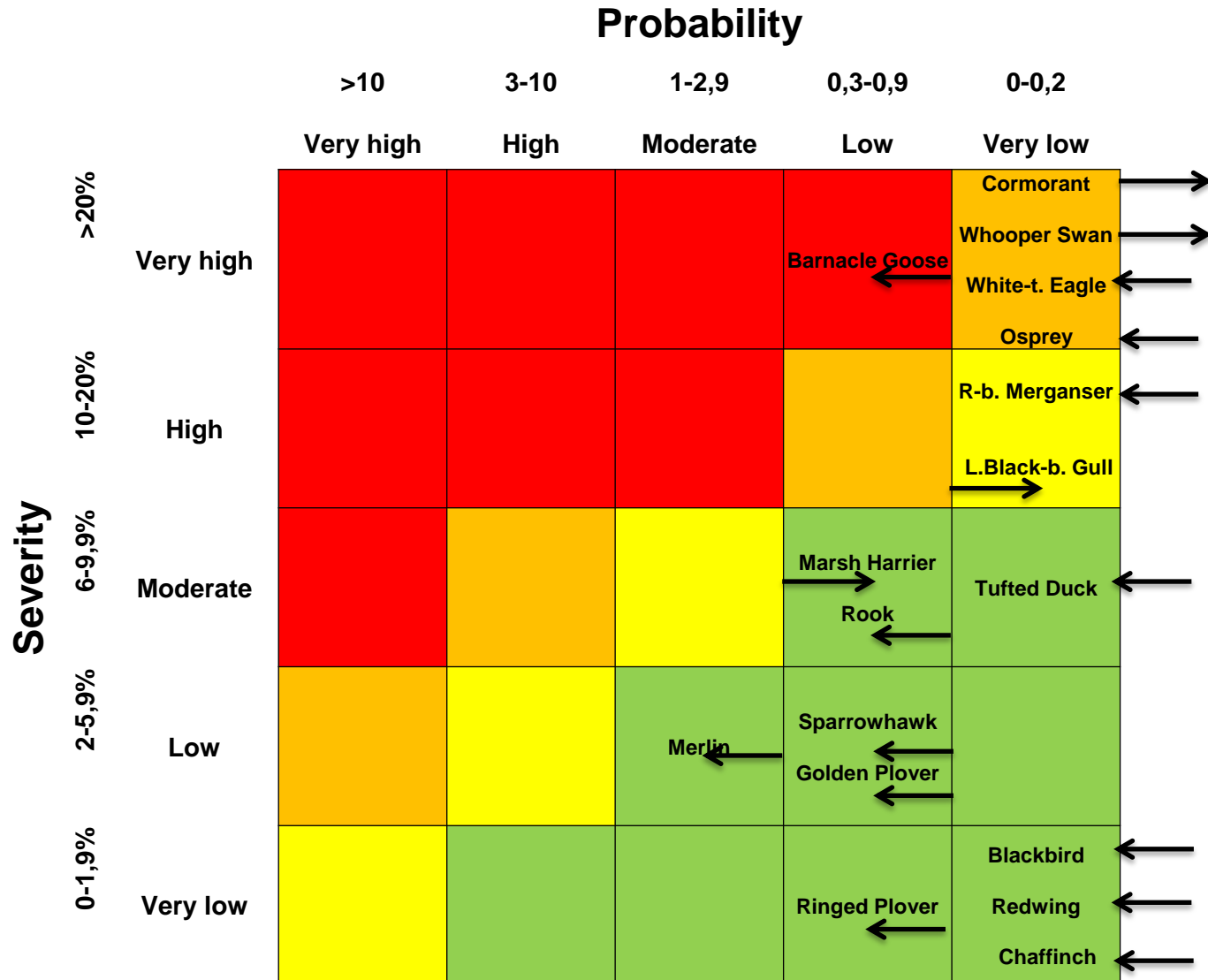
Using data for monthly risk assessments
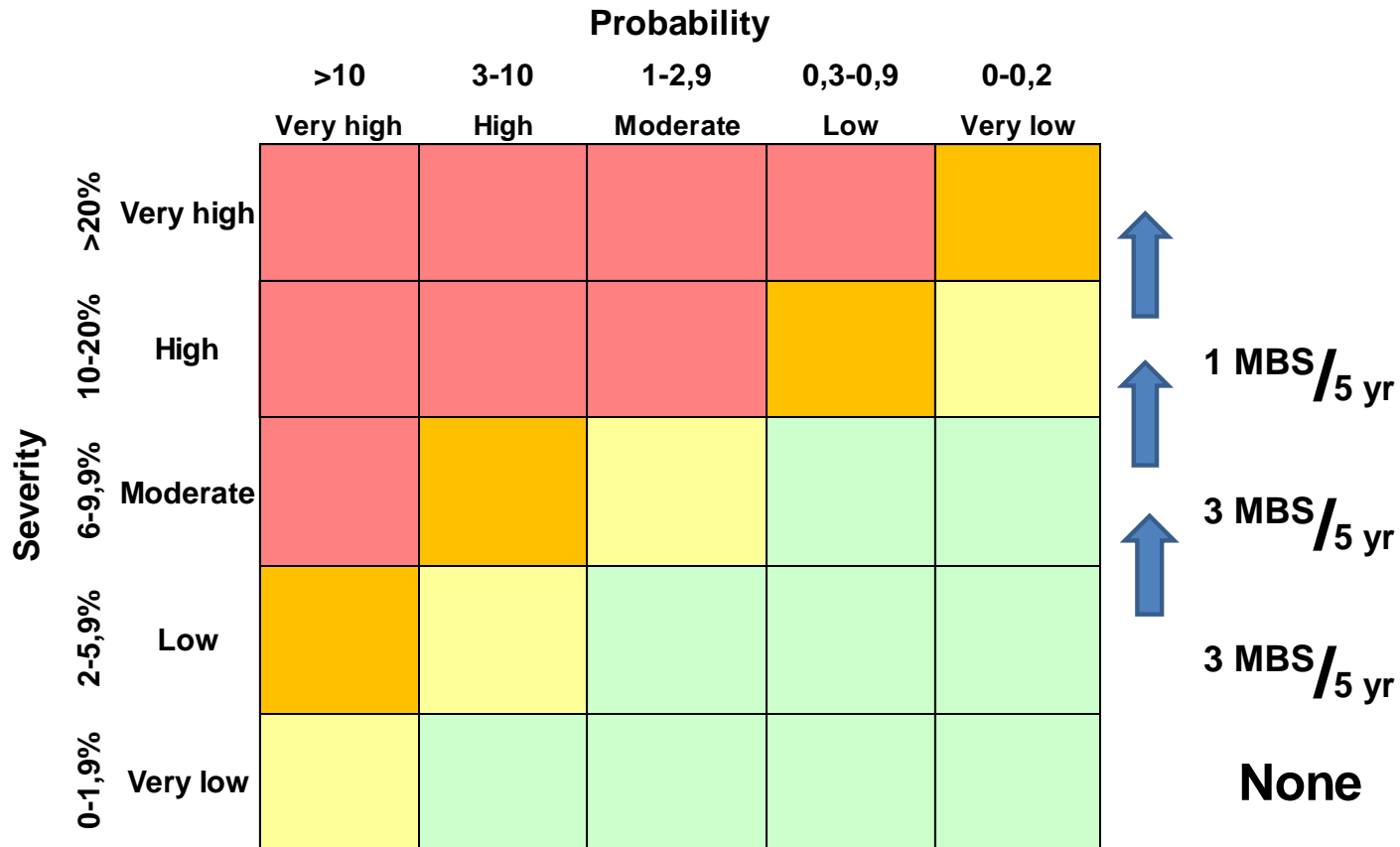

Birdstrikes on CPH. Status April 2012 - April 2014.
Distribution of risk groups.
Identified birds species wich are found on the airport
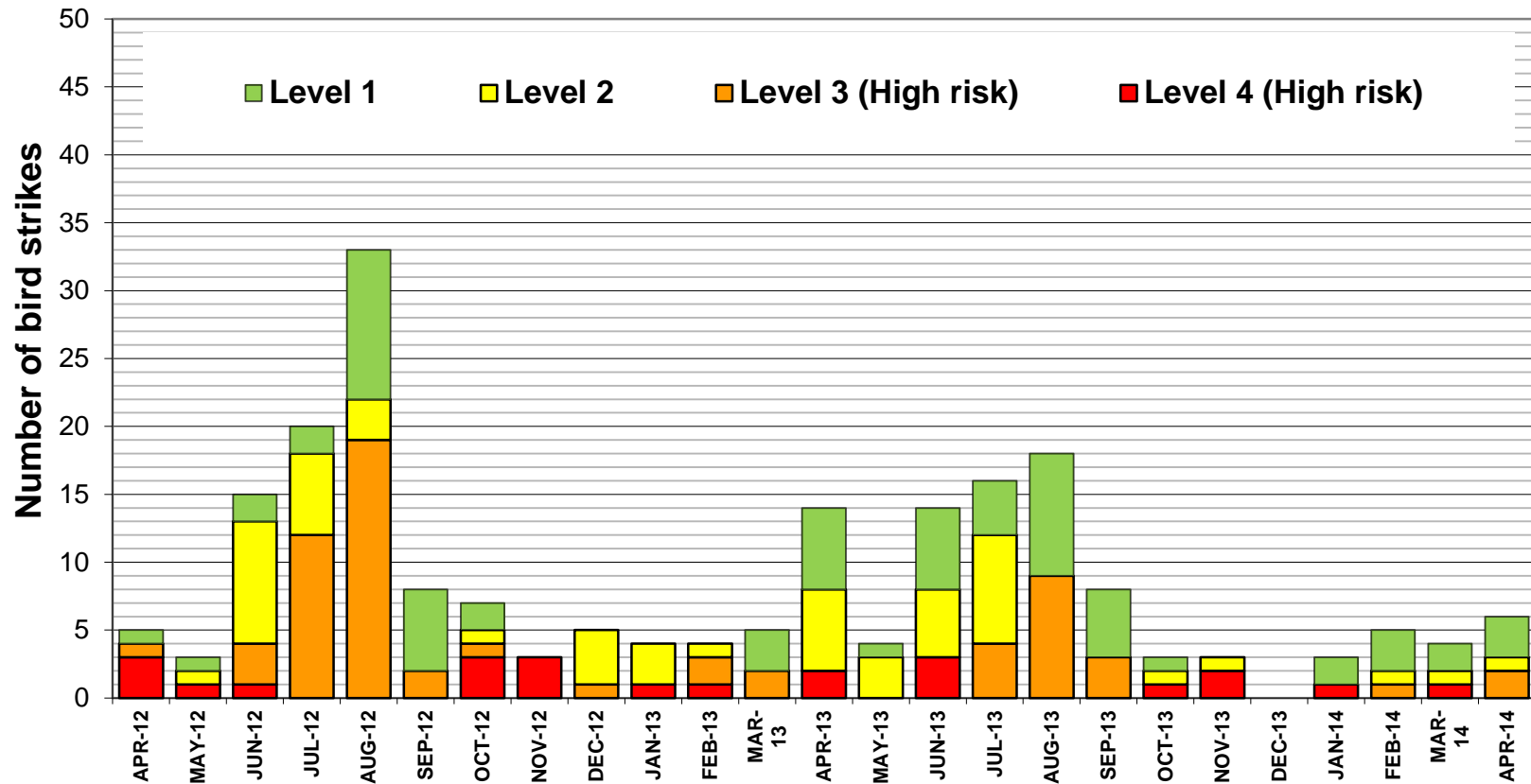
Implementation of multiple bird strikes (MBS) in the risk assessment.

Increase of severity by multiple bird strikes (MBS)

Source: Andy Baxter/unpublished data from UK.