# **ENR 5.6 BIRD MIGRATION AND BIRD CONCENTRATION IN DENMARK**

#### 1. BIRD MIGRATION

Bird migration occurs during the whole year, but culminates in the periods end of March to Mid-May (spring migration) and beginning of September to Mid-November (autumn migration).

#### 2. SPRING MIGRATION

Spring migration culminates in the period end of March to Mid-May, and peak numbers for most species occur in April. The most important factors inducing heavy migration are a rise in temperature over Central and Western Europe, light winds and southerly winds.

At night migration is generally in broad outline covering the entire country and its surrounding waters, with mean direction north-Northeast. Most birds come from Central and Western Europe. In day-light migration tends to concentrate along guiding coasts. The most important points of concentration area:

- 1. Skagen, 5745N 01035E.
- 2 Fornæs, 5625N 01055E.
- 3. NE Fyn, 5520N 01045E.
- 4 N & E Sjælland, the area from 5600N 01140E to 5520N 01230E.

Generally the altitude of migration at night is higher than by day. At night the average altitude is about 3.000-5.000FT, by day 1.000-3.000FT.

#### 3. AUTUMN MIGRATION

Autumn migration culminates during the period beginning of September to mid-November, and peak numbers for most species occur in October. The most important factor inducing heavy migration is fall in temperature over Central and Northern Scandinavia. High intensities coincide also with winds from N-NE, light winds, little cloud-over and high atmospheric pressure.

At night migration is in broad outline covering the entire country and its surrounding waters with mean direction south. Most birds come from South Norway and South Sweden. By day migration tends to concentrate in the eastern part of Denmark and along guiding coasts. The most important points of concentration are:

 1.
 Falsterbo (S Sweden) and Stevns
 5525N 01250E - 5520N 01230E

 2.
 Gedser - Rødby
 5435N 01155E - 5440N 01120E

Skælskør
 Southern Langeland
 Blåvand
 5515N 01118E
 5445N 01040E
 5535N 00805E

Generally the altitude of night migration is higher than by day.

At night the average altitude is about 3.000-5.000FT, by day about 1.000-3.000FT.

#### 4. NUMBERS OF BIRDS

At least 100 million birds passes over Denmark and its surrounding waters during autumn. Smaller passerines are dominating, several species occur in great numbers and are most hazardous to aircraft: starlings, thrushes and finches. Very numerous and hazardous are also crow-birds, ducks, gulls, waders, pigeons and birds of prey, occurring from tens of thousands to several millions.

### 5. PERMANENT BIRD CONCENTRATION AREAS

The permanent bird concentration areas are shown on page ENR 5.6-3 which primarily indicate concentration areas for breeding and resting waterbirds (swans, geese, ducks, coot, waders and gulls). Denmark and its surrounding waters contain some of the largest concentrations of these species in Europe. If avoiding low flying over the areas indicated, a large proportion of the bird-strike risk is eliminated.

## **BIRD CONCENTRATION AREAS:**



