
ENR 5.6 BIRD MIGRATION AND AREAS WITH SENSITIVE FAUNA

1. BIRD MIGRATION

Migration routes cover almost the entire Earth, but naturally, due to the different number of birds, their significance is different. From the point of view of Hungarian bird species, the most important migration route is the Palearctic-African migration system. The territories within the Carpathian Basin traditionally serve as stopover, fat-accumulating areas for many species, the individuals of which originate from many different areas of Eurasia. Bird migration occurs during the whole year but culminates in the periods between March and May (spring migration) and between August and November (autumn migration). When on actual migration, most birds make long flights often at high levels in contrast to their flying at relatively low altitudes during their stay in the concentration areas.

1.1 Spring migration

The spring migration is more dispersed and less spectacular than the autumn one, the most active part is in April and May. The principal direction over Hungary is towards north and north-east. The most important factors inducing heavy migration are a rise in temperature, light and southerly winds.

1.2 Autumn migration

The autumn migration lasts for more than three months. The first flight movements can already be seen from the end of July, while the last movements of any significance are completed by the end of November. They have a typical stream of movement with periods of relative calm interspersed with periods of very intense migration. Between mid-August and mid-November migratory birds are particularly active. The movement takes place mostly in south and south-east direction, the birds usually move towards the Balkan Peninsula or the Bosphorus. The most important factor inducing heavy migration is a fall in temperature and northerly winds.

1.3 Number of birds

There is no information about the quantity of migratory bird individuals. Smaller passerines are dominating (but they are not dangerous to aircraft), and several species occur in great densities and/or are large, resulting in being very hazardous to aircraft, e.g.: ducks, geese, storks, waders, birds of prey, pigeons, starlings, crows.

1.4 Information on densities

Concentrations of birds typically occur at wetlands. Most hotspots for birds are covered in Hungary by restricted areas established for environmental protection (usually from ground level to 450 m above ground level), where flying with motorised vehicles requires special authorisation (see relevant legislation below).

1.5 Reporting of bird strike

- All pilots on flights during take-off or landing within Budapest FIR shall report to the competent aerodrome ATS unit all cases of bird strike or incidents where a risk of bird strike has been present.
- In the case of landing, a report shall be made in writing by completing a Bird Strike Reporting Form (hereinafter referred to as BSRF), preferably immediately after landing.
- If the incident occurs on a flight during take-off and the pilot does not consider it necessary to interrupt the flight, (s)he shall notify the competent aerodrome ATS unit by radio and then complete the BSRF at the aerodrome of destination. The aircraft operator shall ensure that the completed BSRF is transmitted to the departure airport operator.
- If the aircraft collides with a bird en route, the incident shall be reported to the competent aerodrome ATS unit at the airport of destination, indicating the location of the collision.

2. AREAS WITH SENSITIVE FAUNA

In Hungary especially inland waters attract flocks of birds for breeding, roosting and feeding at various times of the year. According to the 26/2007. (III. 1.) GKM-HM-KvVM joint decree (1995) on aviation determines the restricted area established for environmental protection. The designation of the restricted areas established for environmental protection has been made in order to shelter the protected and strictly protected bird

species, and bird species of Community interest. The designated areas are the most important wader migratory wetland areas.

Identification / Name, Lateral limits	Vertical limits	Time Reason for restriction
LHB01 / ÓCSA 471843N 0191007E - 471740N 0191339E - 471451N 0191910E - 471250N 0191626E - 471843N 0191007E	1000 FT AGL / GND	H24 Sensitive fauna
LHB02 / TÓSZEG 470818N 0200133E - 470625N 0200713E - 470241N 0200428E - 470154N 0200920E - 465802N 0200304E - 470304N 0195208E - 470818N 0200133E	1000 FT AGL / GND	H24 Sensitive fauna
LHB03 / AGGTELEK 483427N 0205016E - 482446N 0204350E - 482555N 0202607E along border HUNGARY_SLOVAKREPUBLIC - 483427N 0205016E	1000 FT AGL / GND	H24 Sensitive fauna
LHB04 / ZEMPLÉNI-HG. A circle radius 13 KM centered on 482530N 0212451E	1000 FT AGL / GND	H24 Sensitive fauna
LHB05 / HEVESI FÜVES PUSZTÁK I. (TISZA-TÓ) 474156N 0204928E - 473325N 0204342E - 473531N 0203543E - 474155N 0204322E - 474156N 0204928E	1500 FT AGL / GND	H24 Sensitive fauna
LHB06A / HEVESI FÜVES PUSZTÁK II. 474826N 0210041E - 474158N 0205911E - 472841N 0203520E - 472648N 0202534E - 472723N 0201344E - 474430N 0201528E - 474504N 0203314E - 475318N 0204737E - 474826N 0210041E	1500 FT AGL / GND	01 MAR - 31 JUL Sensitive fauna
LHB06B / HEVESI FÜVES PUSZTÁK II. 474826N 0210041E - 474158N 0205911E - 472841N 0203520E - 472648N 0202534E - 472723N 0201344E - 474430N 0201528E - 474504N 0203314E - 475318N 0204737E - 474826N 0210041E	1000 FT AGL / GND	01 AUG - 01 MAR Sensitive fauna
LHB07 / HORTOBÁGY 474718N 0210751E - 474200N 0212540E - 471839N 0210656E - 472500N 0204402E - 474718N 0210751E	1500 FT AGL / GND	H24 Sensitive fauna
LHB08 / BIHARI-SÍK I. 471154N 0212611E - 471037N 0214022E - 471827N 0213052E - 471831N 0212135E - 471154N 0212611E	1000 FT AGL / GND	H24 Sensitive fauna
LHB09 / BIHARI-SÍK II 470119N 0211405E - 471834N 0211342E - 471831N 0212135E - 471154N 0212611E - 471037N 0214022E - 470533N 0213720E - 470410N 0213809E - 470043N 0213135E - 470119N 0211405E	1500 FT AGL / GND	H24 Sensitive fauna
LHB10 / ALSÓ-TISZA-VÖLGY 464459N 0195832E - 464131N 0201302E - 462310N 0201739E - 462338N 0195959E - 463723N 0195943E - 463254N 0195304E - 463547N 0195107E - 464459N 0195832E	1500 FT AGL / GND	H24 Sensitive fauna
LHB11 / CSANÁDI PUSZTÁK A circle radius 2 KM centered on 462043N 0203820E	1500 FT AGL / GND	H24 Sensitive fauna
LHB12 / KARDOSKÚT A circle radius 4 KM centered on 462824N 0203744E	1500 FT AGL / GND	H24 Sensitive fauna
LHB13 / GEMENC 462317N 0184615E - 462015N 0185620E - 461526N 0185503E - 460945N 0185637E - 460205N 0184456E - 460316N 0184306E - 461854N 0185033E - 462202N 0184439E - 462317N 0184615E	1500 FT AGL / GND	H24 Sensitive fauna

AIP HUNGARY

Identification / Name, Lateral limits	Vertical limits	Time Reason for restriction
LHB14 / TAPOLCAI-MEDENCE A circle radius 1.5 KM centered on 464853N 0172410E	1500 FT AGL / GND	H24 Sensitive fauna
LHB15 / TIHANY 465530N 0175103E - 465546N 0175218E - 465521N 0175341E - 465418N 0175421E - 465337N 0175236E - 465425N 0175132E - 465530N 0175103E	1500 FT AGL / GND	H24 Sensitive fauna
LHB16 / ŐRSÉG 465825N 0161637E - 465952N 0163907E - 464323N 0163210E - 464252N 0162223E along border HUNGARY_SLOVENIA - 465208.62N 0160649.92E along border AUSTRIA_HUNGARY - 465825N 0161637E	1500 FT AGL / GND	H24 Sensitive fauna
LHB17 / SÁRVÍZ-VÖLGYE 470149N 0183222E - 464813N 0184116E - 464653N 0183553E - 470059N 0182606E - 470149N 0183222E	1500 FT AGL / GND	H24 Sensitive fauna
LHB18 / FERTŐ along border AUSTRIA_HUNGARY then a clockwise arc radius centered on 7.6 KM 474052N 0164600E	1500 FT AGL / GND	H24 Sensitive fauna
LHB19A / GERECSÉ 474419N 0181530E - 474338N 0181731E - 474358N 0183115E - 473415N 0183129E - 473409N 0182237E - 474000N 0181920E - 474000N 0181703E - 474146N 0181530E - 474419N 0181530E	1500 FT AGL / GND	H24 Sensitive fauna
LHB19B / TATAI ÖREG-TÓ 473647N 0182109E - 473727N 0181857E - 474000N 0181703E - 474000N 0181920E - 473647N 0182109E	1500 FT AGL / GND	FM OCT 01 - TIL MAR 31 H24 Sensitive fauna
LHB20 / DÉL-HANSÁG 474235N 0170529E - 474235N 0170530E - 474307N 0171343E - 474210N 0171342E - 474006N 0170952E - 473933N 0170818E - 473847N 0170555E - 473849N 0170149E - 474204N 0170112E - 474216N 0170226E - 474230N 0170535E - 474235N 0170529E	1500 FT AGL / GND	H24 Sensitive fauna
LHB21 / FEHÉR-TÓ, BARBACSI-TÓ 474300N 0172019E - 474221N 0172425E - 473624N 0172149E - 473730N 0171641E - 474300N 0172019E	1500 FT AGL / GND	H24 Sensitive fauna
LHB22 / KŐSZEGI-HG. 472433N 0163140E then a clockwise arc radius 6 KM centered on 472154N 0162856E - 471840N 0162829E along border AUSTRIA_HUNGARY - 472433N 0163140E	1500 FT AGL / GND	H24 Sensitive fauna
LHB23 / KIS-BALATON 464303N 0171326E - 464236N 0171748E - 463820N 0171503E - 464034N 0171335E - 464303N 0171326E	1000 FT AGL / GND	H24 Sensitive fauna
LHB24 / VELENCEI-TÓ, DINNYÉS 471340N 0183522E - 470704N 0183623E - 470723N 0183139E - 470948N 0183228E - 471049N 0183137E - 471308N 0183139E - 471340N 0183522E	1500 FT AGL / GND	H24 Sensitive fauna
LHB25 / VÉRTES 472942N 0183126E - 472042N 0183044E - 471840N 0181458E - 472435N 0181329E - 472907N 0182201E - 472942N 0183126E	1500 FT AGL / GND	H24 Sensitive fauna

Identification / Name, Lateral limits	Vertical limits	Time Reason for restriction
LHB26 / DUNAZUG-HG., BÖRZSÖNY 480401N 0190608E - 474833N 0190657E - 473858N 0190406E - 474036N 0184353E - 474723N 0185152E - 474937N 0185122E along border HUNGARY_SLOVAKREPUBLIC - 480401N 0190608E	1500 FT AGL / GND	H24 Sensitive fauna Over the river of Danube from 1st November to 30th June, and out of the line of Danube from 1st March to 1st November
LHB27 / KISKUNSÁG - ÉSZAK I. 471155N 0190402E - 471135N 0190402E - 471022N 0190536E - 470928N 0190739E - 470616N 0190231E - 470403N 0191630E - 470354N 0192224E - 471150N 0192150E - 471155N 0190402E	1000 FT AGL / GND	H24 Sensitive fauna
LHB28 / KISKUNSÁG - ÉSZAK II. 470616N 0190231E - 465519N 0190144E - 465604N 0192257E - 470354N 0192224E - 470403N 0191630E - 470616N 0190231E	1500 FT AGL / GND	H24 Sensitive fauna
LHB29 / KISKUNSÁG - DÉL 465342N 0190808E - 465004N 0192716E - 463639N 0191858E - 464022N 0191351E - 463334N 0191413E - 463435N 0185817E - 465342N 0190808E	1500 FT AGL / GND	H24 Sensitive fauna
LHB30 / KELET-CSERHÁT 480336N 0194155E - 475943N 0194848E - 475132N 0193516E - 475540N 0192835E - 480336N 0194155E	1500 FT AGL / GND	H24 Sensitive fauna
LHB31 / TARNAVIDÉK A circle radius 9 KM centered on 480713N 0200833E	1500 FT AGL / GND	H24 Sensitive fauna
LHB32 / BÜKK 481629N 0202402E - 480608N 0204702E - 475325N 0204119E - 475631N 0201651E - 481629N 0202402E	1500 FT AGL / GND	H24 Sensitive fauna
LHB33 / KESZNYÉTEN A circle radius 7 KM centered on 475953N 0210601E	1500 FT AGL / GND	H24 Sensitive fauna
LHB34 / KECSKERI-PUSZTÁK A circle radius 10 KM centered on 471606N 0205122E	1500 FT AGL / GND	H24 Sensitive fauna
LHB35A / BÉDA-KARAPANCSA 460316N 0184306E - 460144N 0184055E - 455444N 0183957E along border CROATIA_HUNGARY - 455515.00N 0185324.00E along border HUNGARY_SERBIA - 455606N 0185427E - 460945N 0185637E - 460205N 0184456E - 460316N 0184306E	1500 FT AGL / GND	02 MAR - 30 JUN Sensitive fauna
LHB35B / BÉDA-KARAPANCSA 460316N 0184306E - 460144N 0184055E - 455444N 0183957E along border CROATIA_HUNGARY - 455515.00N 0185324.00E along border HUNGARY_SERBIA - 455606N 0185427E - 460945N 0185637E - 460205N 0184456E - 460316N 0184306E	1000 FT AGL / GND	01 JUL - 01 MAR Sensitive fauna

2.1 Bird Migration Index Chart

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