## Population distribution of Ural owl Strix uralensis Pall. in Latvia

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Ural owl *Strix uralensis* Pall. breeds in extensive area from Japan and Korea in east to the Scandinavia in the west and is mentioned as a typical boreal forest owl in various sources of literature. Species have some relict populations in the Central European Mountains while the regular distribution follows the southern delimitation of taiga.

In Latvia Ural owl is poorly studied, although it is possible to discuss on species occurrence using data collected during several projects of breeding bird atlases (national atlases in 1980-1984 and 2000-2004 and European breeding bird atlas in 1986-1989), when territory of Latvia was surveyed (Priednieks, Strazds *et. al.* 1989, Hagemeijer, Blair 1997, unpublished materials of LOB). Further, data on owl studies are available from field notes of ornithologists and birwatchers (accidental data) and from owl study sample areas. It is known that breeding area has expanded during the last decades of 20<sup>th</sup> century but the actual expanding pace is unknown.

The aim of this research is to summarize the historical data on the distribution of Ural owl in Latvia, using all the recently available information, including winter observations and accidental data. For this, all available data on records were included in the ArcGis database (software version 9.3) and records were visualised on the distribution maps. If precise coordinates of sites were unknown, systematic approach was used, e.g. coordinates of centre of forest compartments were used in cases when only the compartment number was known. To assess the historical changes in the distribution, all the known observations (761 in total) were pooled in three respective decades: 1980-1989, 1990-1999 and 2000-2009.

Comparing maps with digitalized observations, expanding of species distribution in Latvia can be seen. Comparing of pooled data from first and second decades shows no dispersion and that could be explained by low ornithological activity (127 observations from whole Latvia and 121 observation mainly from sample areas). Picture is changed by adding of third decade (with high activity of ornithologists) and dispersion to west by 51 km and by 63 km to south can be seen, covering Eastern Latvia (513 observations in third decade).

Data used for comparisons are not complete due to the fact that they represent both actual distribution of this owl species and the intensity of ornithological field works in different time periods. This work will be continued by adding additional information on observation records that were not available to date.

## References

Priednieks, J. Strazds, M. Petriņš, A. Strazds, A. 1989. Latvijas ligzdojošo putnu atlants 1980 – 1984. Rīga, Zinātne. 394 lpp.

Hagemeijer, E. J. M. Blair, M. J. 1997. The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. T & AD Poyser, London. 412 – 413 p.