

International Symposium on Research and Conservation of Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 – Bourgas, Bulgaria, 2017

Dimitar A. Demerdzhiev^{1,2} & *Vanya H. Ratarova-Georgieva*¹

¹ Bulgarian Society for the Protection of Birds, 5 Leonadro da Vinci Street, 4000 Plovdiv, Bulgaria;
E-mail: dimitar.demerdzhev@gmail.com

² National Museum of Natural History, 1 Tsar Osvoboditel Blvd., 1000 Sofia, Bulgaria

The Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 is a long-distance migrant distributed mainly in Eastern and Central Europe as a breeder and wintering in Central and Southern Africa (BIRDLIFE INTERNATIONAL 2018).

During the period 11–14 October 2017, an international conference on the conservation of the Lesser Spotted Eagle organized by the Bulgarian Society for the Protection of Birds, BirdLife/Bulgaria (www.bspb.bg) and the Executive Forest Agency (EFA), took place in Bourgas, Bulgaria. It was attended by more than 60 researchers and representatives of environmental organizations from 17 countries. The conference was organized within the project LIFE12NAT/BG/001218 “Preserve Key Forest Habitats of the Lesser Spotted Eagle (*Aquila pomarina*) in Bulgaria”, implemented by the Executive Forest Agency (EFA) and the Bulgarian Society for the Protection of Birds (BirdLife/Bulgaria). The main goal of the conference was gathering species experts from the range countries in order to share their experience and up-to-date information on the conservation activities implemented in each range state. The latest achievements in the research on the Lesser Spotted Eagle, the state of its population, the major threats to the species as well as the conservation measures applied in most of its range were presented at the conference.

The first session of the conference was dedicated to the species populations and their status and trends. It presented the latest data on the distribution and the status of the Lesser Spotted Eagle in the western part of its range (the Czech Republic and

Hungary), the southern edge (Southeastern Bulgaria and Northern Greece) and the eastern periphery (Russia). Over the past decade, the species has been declining in Hungary, being relatively stable in the southern periphery of its range and colonizing new regions eastward in Russia.

The second session focused on the habitat and food requirements as well as the breeding success. This session presented data related to the requirements of the species in terms of foraging and breeding in Southeastern Bulgaria, Romania and Belarus.

The third session included presentations on migration patterns, behaviour and threats the species faces during migration.

The fourth session presented aspects such as ecology, conservation and general threats to the Lesser Spotted Eagle, discussing issues related to the foraging behaviour of the species, the timing in the annual cycle of the Lesser Spotted Eagle, as well as the conservation efforts and “species friendly practices” in the Baltic Region, Poland and Slovakia.

The event also included a special presentation on the genetic structure of the European population of the Lesser Spotted Eagle.

During the symposium, the participants discussed the major threats to the species within the nest sites, along the migration route, as well as in the wintering grounds. In general, in the breeding territories, the species suffers mainly from loss of breeding and foraging habitats. The loss of breeding habitats is mostly due to forest felling and the related forestry practices, such as roadways, timber removal, etc., resulting in disturbance during the breeding season.



Fig. 1. Participants in the International Symposium on the Research and the Conservation of the Lesser Spotted Eagle – Bourgas, Bulgaria, 2017.

The loss of foraging habitats is becoming increasingly severe, affecting a growing number of countries. There are numerous aspects of the alteration of the foraging habitats, manifested mainly by overgrowing of pastures and meadows and loss of open spaces in forests, plowing and conversion of grasslands into arable land, mechanical removal of shrub vegetation from grassland territories through shredders and bulldozers, drainage of water bodies, construction of solar parks on pastures and meadows. The construction of wind farms in the breeding territories of the Lesser Spotted Eagle poses a direct threat to the species, causing mortality of breeding individuals or their offspring. The threats along the migration route are mainly related to the shooting at birds and the expanding construction of wind turbines in Turkey and the Middle East, as well as the construction of a new airport in the vicinity of Istanbul, located exactly on the birds' migration path. Electrocution during migration is another threat to the species, which has not been studied sufficiently yet. In the wintering grounds, the hazardous power grid and the construction of wind farms represent potential threats to the Lesser Spotted Eagle. However, the limiting factors in the wintering grounds require further research and more extensive analyses.

In addition to dealing with threats, the participants also shared their experience in different Lesser Spotted Eagle conservation methods. The practice of establishing micro reserves and buffer zones

around the nests of the species applied in Germany, Slovakia and the Baltic countries stirred particular interest among the participants.

The present collection contains 8 research articles by 24 authors representing 5 countries, covering a range of topics related to the biology and the conservation of the Lesser Spotted Eagle. For example, several contributions updated our knowledge of the species distribution in the southern and the eastern periphery of the species range (DEMERDZHIEV et al. 2019a, MISCHENKO & MELNIKOV 2019, MELNIKOV & MISCHENKO 2019), as well as at the western limit of the distribution range (BĚLKA et al. 2019). These manuscripts also present the habitat requirements of the Lesser Spotted Eagle in Northern Greece (POIRAZIDIS et al. 2019), Southeastern Bulgaria (DEMERDZHIEV et al. 2019b) and Belarus (PAKUL et al. 2019). The information on the migration of the species along *Via Pontica* flyway has been summarized and presented, emphasizing the importance of this migration path to the species (IANKOV et al. 2019).

We would like to think that the symposium itself was a fruitful and positive experience for all participants (Fig. 1). The international forum and the subsequent publication of this collection are funded by the project "Life for Eagle's Forest" (LIFE 12/NAT/BG001218) implemented with the financial support of LIFE+ Program of the European Union. We would also like to thank the editors of the Collection – Dr.

Ülo Väli, Dr. Rimgaudas Treinys and Dr. Michele Panuccio, for their dedicated and voluntary contribution, editing the manuscripts, as well as the editor-in-chief and the staff of *Acta Zoologica Bulgarica*.

References

- BĚLKA T., BUŠEK O. & HORAL D. 2019. Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) breeds in the Czech Republic again. *Acta Zoologica Bulgarica*, Supplement 14: 67-70.
- BIRDLIFE INTERNATIONAL 2018. Species factsheet: *Clanga pomarina*. Downloaded from <http://www.birdlife.org> on 26/03/2018.
- DEMERDZHIEV D.A., DOBREV D.D., ARKUMAREV V.S., TERZIEV N.G. & GEORGIEV G.S. 2019a. Distribution, abundance and breeding performance of Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) in Southeast Bulgaria. *Acta Zoologica Bulgarica*, Supplement 14: 15-33.
- DEMERDZHIEV A.D., POPGEORGIEV S.G., DOBREV D.D., ARKUMAREV S.V., & TERZIEV G.N. 2019b. Habitat requirements of the Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) at the southern periphery of the distribution range (Southeast Bulgaria). *Acta Zoologica Bulgarica*, Supplement 14: 35-65.
- IANKOV P., MATEEVA I. & SIERDSEMA H. 2019. Migration of the Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) in Bulgaria. *Acta Zoologica Bulgarica*, Supplement 14: 91-103.
- MELNIKOVA V.N. & MISCHENKO A.L. 2019. Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) on the eastern border of the present range in Russia. *Acta Zoologica Bulgarica*, Supplement 14: 85-89.
- MISCHENKO A.L. & MELNIKOVA V.N. 2019. Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) in Russia: recent data on numbers and distribution. *Acta Zoologica Bulgarica*, Supplement 14: 71-75.
- PAKUL P., DMITRENOK M., DOMBROVSKI V., OSTROVSKY O., UHLIANETS S. & KUZMICKIJ A. 2019. Habitat preferences of Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) in Belarusian Polesie. *Acta Zoologica Bulgarica*, Supplement 14: 77-83.
- POIRAZIDIS K., BONTZORLOS V., SCHINDLER S. & VASILAKIS D. 2019. Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) in Dadia-Lefkimi-Soufli National Park, Greece: Population Trends and Spatial Use in Respect to Continuous Landscape Changes during the Last 35 Years. *Acta Zoologica Bulgarica*, Supplement 14: 7-14.

