

Lesser spotted eagle *Aquila pomarina*

Background

The European Species Action Plan for the lesser spotted eagle (Meyburg et al. 1997) was adopted in 1997 by the Ornithological Committee and in 1999 by the Bern Convention. The species' breeding distribution is restricted to Eastern and Central Europe, and the plan requires active implementation in Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Montenegro, Macedonia FYR, Georgia, Germany, Greece, Hungary, Israel, Latvia, Lebanon, Lithuania, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Syria, Turkey and Ukraine. As a long-distance migrant wintering in Southern Africa, the species is subject of the CMS Memorandum of Understanding of Birds of Prey. The plan has not been revised and its implementation has not been reviewed since adoption. No information was provided by Albania or Russia.

General overview

Progress in the implementation of the action plan has been low (Average IS=1.6) and much further work is needed.

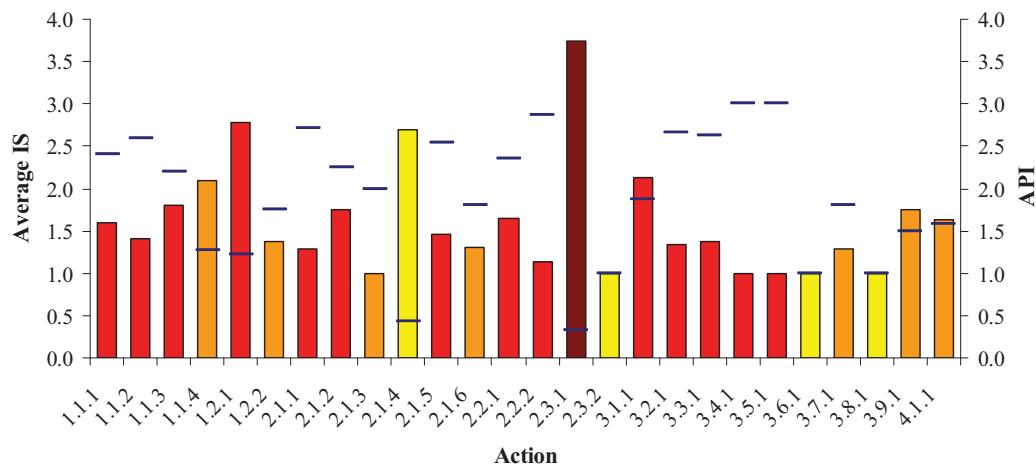


Figure xvi Average implementation score (IS) and Action Priority Index (API) for each Action listed in the lesser spotted eagle species action plan. Colours represent Priority Score.

Status review

The lesser spotted eagle's breeding population is virtually confined to east-central Europe. Following declines in the west of its range prior to 1970, the relatively small European breeding population (14,000-19,000 pairs) was probably stable during 1970-1990, despite declines in some small Balkan populations (Tucker & Heath 1994). However, its numbers fell during 1990-2000, due to a decline in the important Latvian

population and further reductions in some smaller populations in the west and south of its range (BirdLife International 2004). Taking into account the species' long generation length (11 years), this slow decline could be significant if it has continued or accelerated since 2000. Recent research in Belarus indicates that the species may suffer gradual declines in response to both agricultural intensification and abandonment (Geoff Hilton in litt. 2005). At the same time, the population in Ukraine has increased and seems to be expanding its range eastwards to European Russia (BirdLife International 2004; Meyburg et al. 2001), although it is unclear to what extent this reflects increasing observer interest rather than actual expansion.

Table 41 Population estimate and trend by country

Country	Population at the time of the 1999 SAP (pairs)	Year	Current population	Year	Breeding trend	Reference
Armenia	35-40	1996	30-40	2002-2009	60-80% Fluctuating	168
Azerbaijan	100	1996	20-100 pairs	2000-2010	Fluctuating	169
Belarus	3250 +/- 100	1996	3200-3800	2005	Stable	170
Bosnia and Herzegovina	10	1996	1-10	2010	Unknown	-
Bulgaria	60-120 (1300)	1996	350-400 pairs	2007	10-20% Increasing	171
Croatia	200	1996	60-70	2010	Decreasing	172
Czech Republic	2-5	1996	0	2001-2003	-	173
Estonia	375	1996	500-600 pairs	2008	Stable	174
Georgia	85	1996	50-70 pairs	2000-2008	5-10% Increasing	175
Germany	130	1996	102 pairs	2009	0-10% Decreasing	176

¹⁶⁸ IBA monitoring by ASPB

¹⁶⁹ Birds in Europe 2004, Birds of Azerbaijan. M. Patrikeev, 2004, current field research.

¹⁷⁰ Dombrovski & Ivanovski, 2005.

¹⁷¹ Demerdzhiev et al., 2007.

¹⁷² Red Data Book (2003), personal observation

- Indicates no data available

¹⁷³ Stastny et al., 2006.

¹⁷⁴ Elts et al., 2009.

¹⁷⁵ GCCW IBA project.

¹⁷⁶ Monitoring data (unpubl.) from three federal states Mecklenburg-Western Pomerania (Wolfgang Scheller) Brandenburg (Torsten Langgemach) Saxony-Anhalt (Matthias Weber).

Greece	60-80	1996	80-110	1996-2009	Decreasing	177
Hungary	150	1996	36-45	2009	80-90% Decreasing	178
Latvia	2000-2800	1996	3500	2009	15% Decreasing	179
Lithuania	500-730	1996	1931-2869 pairs	2009	Fluctuating	180
Macedonia FYRO	1-2	1996	5-10	2009	Unknown	181
Montenegro	(see Serbia)	1996	0		-	-
Poland	1660-1850	1996	1800-2000	2007	Stable	182
Romania	100 (2000)	1996	1800-2300	2005	Unknown	183
Russia (European)	-	1996	-	-	-	-
Kaliningrad	20-200 (200)	1996	-	-	-	-
North Caucasus	50 (500)	1996	-	-	-	-
Serbia	23-26 together with MNE	1996	7-9	2009-2010	20-30% Fluctuating	184
Slovakia	>700	1996	600-900	2002	Stable	
Slovenia	3	1996	0 pairs	2008-2009	-	185
Turkey	300-500 (3000)	1996	80-120	2004	Unknown	186
Ukraine	200-250 (800)	1996	800-1200 pairs	2003-2008	10-25% Increasing	187

¹⁷⁷ Compilation of data from Important Bird Area database (mostly within the last decade) and various recent studies. This estimation is based mainly from data obtained from surveys at the existing network of SPAs and IBAs.

¹⁷⁸ MME, 2010.

¹⁷⁹ Aunins, A. & Priednieks, J. 2008.

¹⁸⁰ Mischenko et al., 2003

¹⁸¹ unpublished data of M. Veleviski, T. Lisicanec, B. Hallmann

¹⁸² Chylarecki et al., 2006-2008.

¹⁸³ <http://milvus.ro/lesser-spotted-eagle-census-in-the-carpathian-region-of-romania>

¹⁸⁴ Puzovic, Stojnic, Vucanovic (pers. comm), own data

¹⁸⁵ Monitoring reports by DOPPS

(http://www.natura2000.gov.si/uploads/tx_library/Monitoring_ptice_2vmesno_2004.pdf,

http://www.natura2000.gov.si/uploads/tx_library/Monitoring_ptic_2007-II.pdf,

http://www.natura2000.gov.si/uploads/tx_library/Monitoring_popis_DOPPS_200

¹⁸⁶ Türkiye'nin önemli kuş alanları, 2004 Güncellemesi (Turkey IBA book)

¹⁸⁷ Birds in Europe: BirdLife Conservation Series №12. 2004

Objective(s)

1. In the short term, to halt the population decrease and safeguard all existing breeding habitat.
2. In the medium to long term, to safeguard the distribution and numbers of the European population of the Lesser Spotted Eagle, restoring the range to what it was in 1920.

Evaluation

If only population numbers and trends are taken into account the short term objective of the plan has been met as the population has stopped declining overall, as data from the breeding range and from autumn migration counts in Israel suggest. It may have even increased in some countries, but to what extent this is a genuine increase or result of new data it is not clear. The trends in the key countries with significant and well monitored populations is stable. It is also suspected that species may be expanding its breeding range eastwards, but there is a lack of accurate data from Russia to quantify this.

Whether “all existing breeding habitat” has been safeguarded¹⁸⁸ we can not measure accurately with the available data. On one hand the total forest cover has been increasing or at least been stable throughout the species range. On the other hand, the second important component of the suitable breeding habitat – mosaics of pastures, meadows and arable fields has been under pressure from agricultural intensification (in the W of the range) and abandonment (in the N and E of the range). Overall, we assume that the available suitable habitat has not decreased since the adoption and the species is not restricted due to lack of suitable habitat.

Conservation and Legal Status

The species is currently listed globally as Least Concern (IUCN, 2010) and as *Declining* in Europe (BirdLife, 2004).

It is listed in Annex I of the Birds Directive and Appendix II of the Bern and Bonn Conventions and in Annex 1 of the CMS “Raptors” Agreement.

It is legally protected in all countries where the plan applies.

Overview of past and current threats

The main threats identified at the time of preparation of the plan remain relevant today (habitat changes caused by forestry; agriculture; shooting; disturbance). The intensity of forestry as a threat is perceived lower on average in most countries, but is still the highest rating threat to the species, followed by agricultural activities in the foraging areas that affect the quality of the hunting habitat. The importance of shooting has fallen.

Novel threats identified in this review are collision with windfarms (e.g. cases in Germany, elsewhere reported as potential) and degradation and loss of wetlands.

¹⁸⁸ We find problematic the use of the words ‘safeguard’ as it is not clear what it means, and whether the same meaning is used for the habitat, distribution and numbers.

Assessment of the implementation

Implementation by action

National and regional species action plans

Only three countries have developed national action plans (Estonia, Slovakia and Ukraine).

Species conservation

Ensuring the legal protection regime for the species and prohibiting poisoning are the best implemented actions.

Limiting disturbance by forest operations in the vicinity of the nests is not sufficiently well implemented (best in PL and BY, followed by EE and DE and not at all in LT and LA).

Supplementary feeding.

Saving the second chick in broods has not been tried

Captive breeding, restocking, reinforcement, reintroduction has not been considered priority.

Species working groups are set up in EE, PL, RO, SB, SK.

Site conservation

There are 98 IBAs designated for the species in its breeding range (74 in the EU) and the population covered varies from 84% in DE to less than 10% in countries with large and dispersed populations (LT, LV, PL, EE). The same applies to the coverage of the species by protected areas and less than 50% of the population is covered. Generally roosting sites and areas of concentration of the non-breeding population and on migration are not well covered by protected areas, as they are not well known.

Management of protected areas with the species as objective has not been implemented well, except for DE and PL.

Habitat conservation

Making forest policies compatible with conservation of the breeding habitat of the species is insufficiently achieved (AIS 1,6), it is best implemented in EE, DE, HU and BY (e.g. Belarus has a flexible system that protects all known nests of birds of prey from logging; EE has a national register of the known nests which are automatically protected from logging) and least implemented in AR, AZ and TR, where even the distribution of the species is not well known. Although felling of trees with nests is prevented in most countries, the disturbance by forest operations during the breeding season remains a problem as reported by LV, RO, SK.

Farming practices are less favourable to the species overall (AIS 1,5) only HU stands out with a higher score. The weakest actions have been to prevent the effects of agricultural intensification and removing harmful subsidies both leading to loss of grassland habitats. Agri-environmental measures supporting semi-natural grasslands exist in HU, LT, LV, SK but they are not specifically targeting the species.

The least implemented actions are those related to preventing unfavourable modifications of the water tables and construction in the breeding territories (only DE reports a system of zoning preventing windfarms within 6 km of known nests).

Other specific conservation measures

Small scale actions to provide artificial nests have been tried in several countries, but these are not considered of high importance.

Prevention of electrocution and collisions with powerlines has been addressed in DE, SK and HU.

Monitoring and Research

National monitoring schemes operate in 11 countries and in two more this is done for the population in some protected areas only and this action has been well implemented (AIS 2.4). Monitoring schemes of raptors (PL, EE) carried out by NGOs.

Ringling, marking, telemetry is well coordinated among the countries involved (by the World Working Group on Birds of Prey). National species and raptor conservation working groups exist in (BG, DE, ES, PL and SK). Specific conservation related research is done in most of these countries.

Public awareness and stakeholder involvement

IBA-caretaker project on one of the most important LSE breeding site in Belarus - Nalibockaja pusca.

In Latvia, there are awareness-raising actions involving work with mass-media, web-cams, questionnaires, films.

In Romania, informational meetings are currently organized in the target areas inviting stakeholders who will be important in future management of the SPA's: local farmers, foresters and representatives of professional and non-profit organizations/authorities.

Some works to increase knowledge of foresters of conservation of lesser spotted eagle nests were performed by USPB (Ukraine) in 2008 during the first pilot project on LSE nest site detection and installation of nesting platforms.

Community financial support

Eight LIFE projects¹⁸⁹ that benefit the lesser spotted eagle or its habitat have been implemented, in Bulgaria (1), Croatia (1), Estonia (1), Greece (3), Poland (1) and Romania (1), during the period 2000-2010, with a total budget of more than 14.3 million Euros, of which the total European Union contribution was more than 10.4 million Euros. In addition, nine projects receiving over 300,000 Euros of national government or international donor funding have been carried out.

¹⁸⁹ LIFE07NAT/BG/000068; LIFE05 TCY/CRO/000111; LIFE04NAT/EE/000072; LIFE02 NAT/GR/008497; LIFE02 NAT/GR/008489; LIFE 99 NAT/GR/006475; LIFE08 NAT/PL/000510; LIFE 08 NAT/RO/000501.

Conclusions

Progress in the implementation of the action plan has been low (Average IS=1.6). National implementation scores (NIS) are highest in Poland, Germany and Estonia.

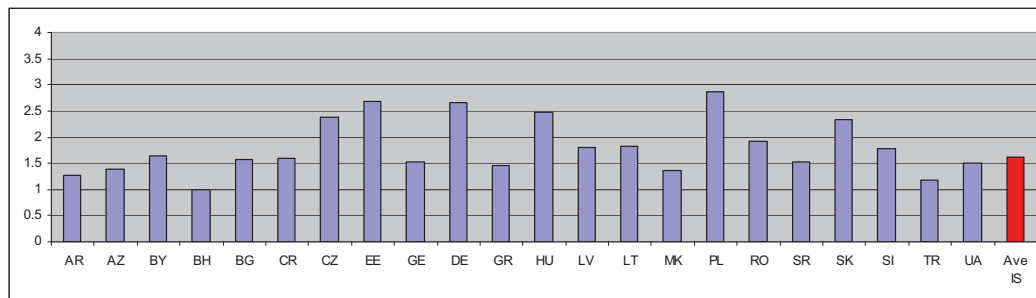


Figure xvii National Implementation Scores for each country in the lesser spotted eagle action plan

There are still major gaps and further implementation of the following actions is needed:

- Studying lesser spotted eagle migration and wintering, in particular:
 - Monitoring lesser spotted eagle numbers during migration,
 - Identifying all major roosting places on migration and identifying means of their protection.
 - Researching habitat requirements, food diversity and losses during migration
- Protecting roosting places on the migratory route
- Preventing of disturbance in breeding areas near nests
- Ensuring Agricultural and farming policies are sympathetic to wildlife and are compatible with the conservation of the lesser spotted eagle.

Contributors

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Appendix 1

Actions	Measures	PS	AR	AZ	BY	Bi	BG	HR	CZ	EE	GE	DE	GR	HU	LV	LT	MK	ME	PL	RO	RS	SK	SI	TR	UA	Ave IS	API	
1.1.1	Forestry policies are compatible with conservation of the lesser spotted eagle	3	1	1	2.2	1	1.5	1.2	1.4	3.5	1.8	2.8	1	2.3	1.7	1.3	1	0	3	1.8	1.5	1.8	1.2	1	1.6	1.6	2.4	
1.1.2	Agricultural and farming policies are sympathetic to wildlife and are compatible with the conservation of the lesser spotted eagle.	3	1	1	1	1	1.5	1	0	1.4	1.2	1	1	2	1.6	1	1	0	1.6	1.8	1.4	1.8	1.4	1	2	1.5	2.6	
1.1.3	Protected areas policies and regulation should promote conservation of lesser spotted eagle habitat	3	1	1	1	1	1.5	1	0	2.3	2.3	3	1	2.5	2.3	1.8	1.5	0	3.5	2	1.3	2	1.3	1	2	1.9	2.2	
1.1.4	International co-operation occurs between conservationists working on the LSE and its habitats																											
1.2.1	Promote national legislation which adequately protects the species and its habitat	3	2	2.85	3.3	1	2.8	3.3	4	3.3	2.8	3.3	2	3.3	2.3	2.3	2.5	0	3.8	2.8	2.9	3	3.5	2.8	2	2.8	1.2	
1.2.2	Preparation of detailed action plans for the species	2	1	1	1	1	1	1	0	4	1	1	1	0	1	0	1	0	1	1	0	3	1	1	2	1.4	1.8	
2.1.1	Prevention of disturbance in breeding areas near nests	3	1	1.3	1.8	1	1	1	1	2	1.3	2.8	1	3	1	1.3	1	0	2.3	1	1.3	1.3	1.8	1	1	1.3	2.7	
2.1.2	Prevention of forestry operations in breeding areas near nests	3	1	1.3	4	1	1	1.3	1	3.7	1	3.3	1.7	3.7	1.3	2	1	0	4	1.3	1.5	1.7	2	1.3	1.7	1.8	2.2	
2.1.3	Provision of artificial nests	2	1	1	1	1	1	0	0	1	0	1	0	1	1	1	1	0	0	1	1	1	0	1	1	1.0	2.0	
2.1.4	Prevention of mortality by poisoning	1	1	4	4	1	1	3	1	0	1	3	2	0	4	4	0	0	4	4	4	1	2	4	1	2	2.9	0.4
2.1.5	Maintenance of LSE habitat in the agricultural landscape	3	1	2	1	1	1	2	0	2	1	3	2	2	1	1	1	0	2	2	1.5	3	1	1	1	1.5	2.6	
2.1.6	Reduction of electrocution	2	0	1	1	1	1	0	3	1	1	3	1	0	1	1	1	0	2	1	1	3	1	1	1	1.3	1.8	
2.2.1	Identify and protect all main breeding concentrations	3	1	1.5	1	1	2	0	0	3	1.5	2.5	1.5	0	1	2	1	0	3.5	1.5	1.8	1.5	0	1	1	1.6	2.4	
2.2.2	Protect roosting places on the migratory route	3	1	1	1	1	2	0	0	0	1	0	1	1	1	0	1	0	0	2	1	0	1	1	1	1.1	2.9	
2.3.1	Control of hunting	4	4	3	4	1	4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	2	3	3.7	0.4	
2.3.2	Increase breeding success by saving the second chick	1	1	1	0	1	1	0	0	1	2	1	2	1	0	1	0	1	0	1	1	0	1	1	1	1.0	1.0	
3.1.1	Conduct surveys of LSE breeding populations	3	1	1	1	1	1	1	0	4	1	4	1.5	2.5	2	2	1	0	4	2.5	1	3.5	3	1	1.5	2.2	1.9	

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