

ASSESSMENT OF MAJOR THREATS IN NATURA 2000 SITES FOR THE EGYPTIAN VULTURE (*NEOPHRON PERCNOPTERUS*) IN BULGARIA AND GREECE (2012-2015)

FACT SHEET UNDER ACTION A3

LIFE+ PROJECT
“THE RETURN OF THE NEOPHRON”
LIFE10 NAT/BG/000152



PREPARED BY
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ABOUT THE PROJECT

This fact sheet was prepared under the framework of the LIFE+ project “The Return of the Neophron” (LIFE10 NAT/BG/000152, www.LifeNeophron.eu) funded by the European Union and co-funded by the “A. G. Leventis Foundation” and the MAVIA Fondation pour la Nature, and implemented by the Bulgarian Society for the Protection of Birds (BirdLife Bulgaria), the Hellenic Ornithological Society (BirdLife Greece), the World Wide Fund for Nature – WWF Greece and the Royal Society for the Protection of Birds (BirdLife UK).

BACKGROUND

“The Return of the Neophron” LIFE+ project (www.LifeNeophron.eu) started in late 2011 and was aiming to prevent the extinction of the globally threatened *Egyptian vulture* (*Neophron percnopterus*) in the Balkans. The project is mostly operating in 27 NATURA 2000 sites in Bulgaria (12 Special Protection Areas, SPA) and Greece (15 SPA).

AIM AND METHODOLOGY

This study aimed to assess the major threats for the Egyptian vulture in all 27 project sites of the NATURA 2000 network, and also to evaluate the effect of the project on the mitigation of the species' major threats. For each project site, the top three major threats for the species were identified and ranked for the period 2012-2015, and their magnitude before and after the project was evaluated. Analysis was based mostly on experts' opinion.

RESULTS

In total nine threats for the Egyptian vulture were identified as the most significant in the project sites (Tab. 1, Maps 1-9). The most frequent and severe threat was illegal poisoning present in 26 of the 27 studied NATURA 2000 sites (96%). Food shortage (i.e. decrease of livestock and closing dump sites) was considered the second most frequent threat, identified in 12 SPAs (44%), followed by disturbance, in 10 SPAs (37%). Habitat heterogeneity loss, in 9 SPAs (33%) and wind farms, in 2 SPAs (7%) were considered as major threats only in Greek project sites, while illegal shooting identified in 8 SPAs (30%) and nest robbing, in 6 SPAs (22%) were recognized as major threats mainly in Bulgaria (Fig. 1).

During the project and mainly in Greece, there was strong evidence of poisoning incidents. There were reported cases of five dead Egyptian vultures, as well as other vulture species, namely griffon and black vultures. In Bulgaria the scale of this threat is not well known, but is considered also high due to many human-predator conflicts in areas where the species is present. On the contrary, in Bulgaria there are several recorded cases of nest robbing (eggs or chicks) and illegal shooting of different species. Lack of food is caused either by decrease of available livestock in the area or by closing of dump sites. Disturbance is originated mainly from touristic activities while habitat heterogeneity loss is due to forest expansion as a consequence of decrease in traditional livestock breeding practice.

Since the beginning of the project in 2012, many actions have been implemented to mitigate the threats for the Egyptian vulture in Bulgaria and Greece. Several of them (anti-poison dog teams and task force in Greece, supplementary feeding, public awareness, etc.) focus on the problem of poisoning. Others, such as national wide schemes for supplementary feeding, either using feeding stations or individual feeding at nest sites, aimed to increase food availability and safe food (decreasing the risk of poisoning). Nest guarding aimed to prevent disturbance, poaching and nest robbing, while insulation of dangerous powerlines around the active Egyptian vulture nests decreases the risk of electrocution. Thanks to the project, some of the major threats were mitigated locally (Tab. 1), but their roots are so deep and the magnitude so large (e.g. poisoning is still considered the top threat for the species in both countries), that to effectively secure the future of the Egyptian vulture in the Balkans long-term work and strong law enforcement is needed.

FIGURES AND TABLES

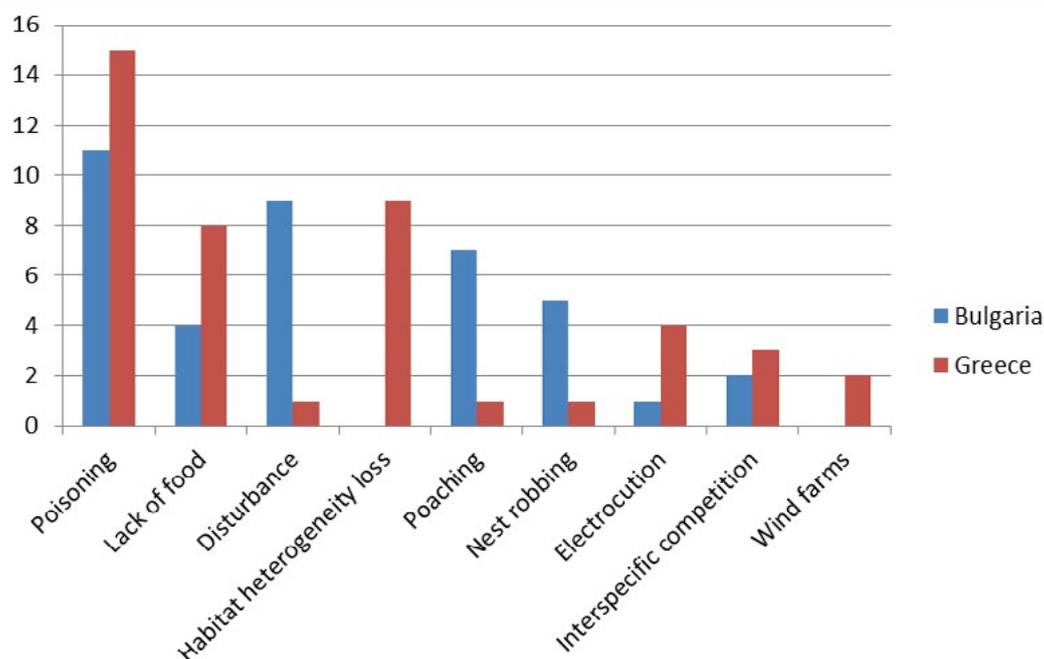


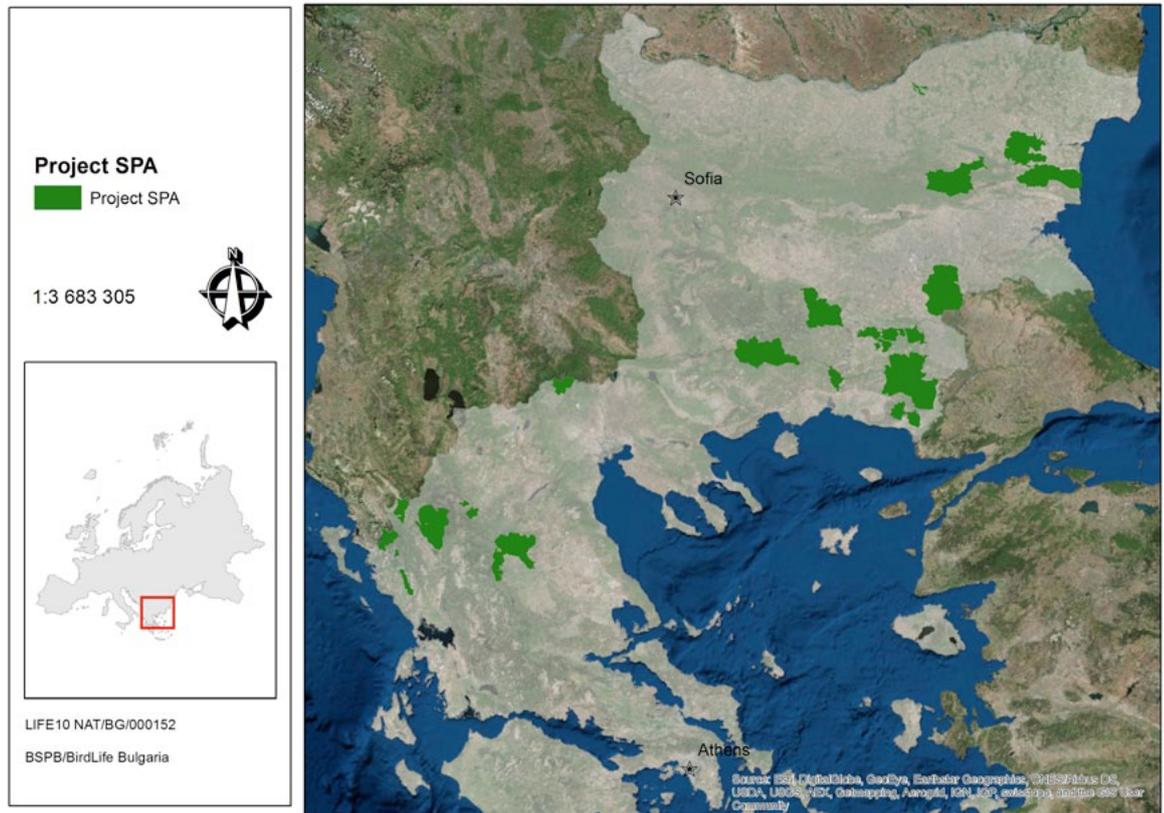
Figure 1. Major threats for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA). Vertical axis indicates the number of NATURA 2000 sites where the threat was considered significant.

Table 1. Ranking and before/after project status of the most significant threats presented in 27 NATURA 2000 sites important for the conservation of the Egyptian vulture in Bulgaria and Greece.

Threat	Number of SPAs where threat is present			Magnitude (locally)			Before/after project status		
	Total (%)	Bulgaria	Greece	High	Medium	Low	↑	↓	≈
Poisoning	96	11	15	24	1	1	0	3	23
Food shortage	44	4	8	1	7	4	0	2	10
Disturbance	37	9	1	0	3	7	0	2	7
Habitat heterogeneity loss	33	0	9	2	4	3	0	0	9
Illegal shooting	30	7	1	1	6	1	0	1	7
Nest robbing	22	5	1	1	4	1	0	2	4
Electrocution	19	1	4	0	4	1	0	1	4
Interspecific competition	19	2	3	0	0	5	0	0	5
Wind farms	7	0	2	0	1	1	0	0	2

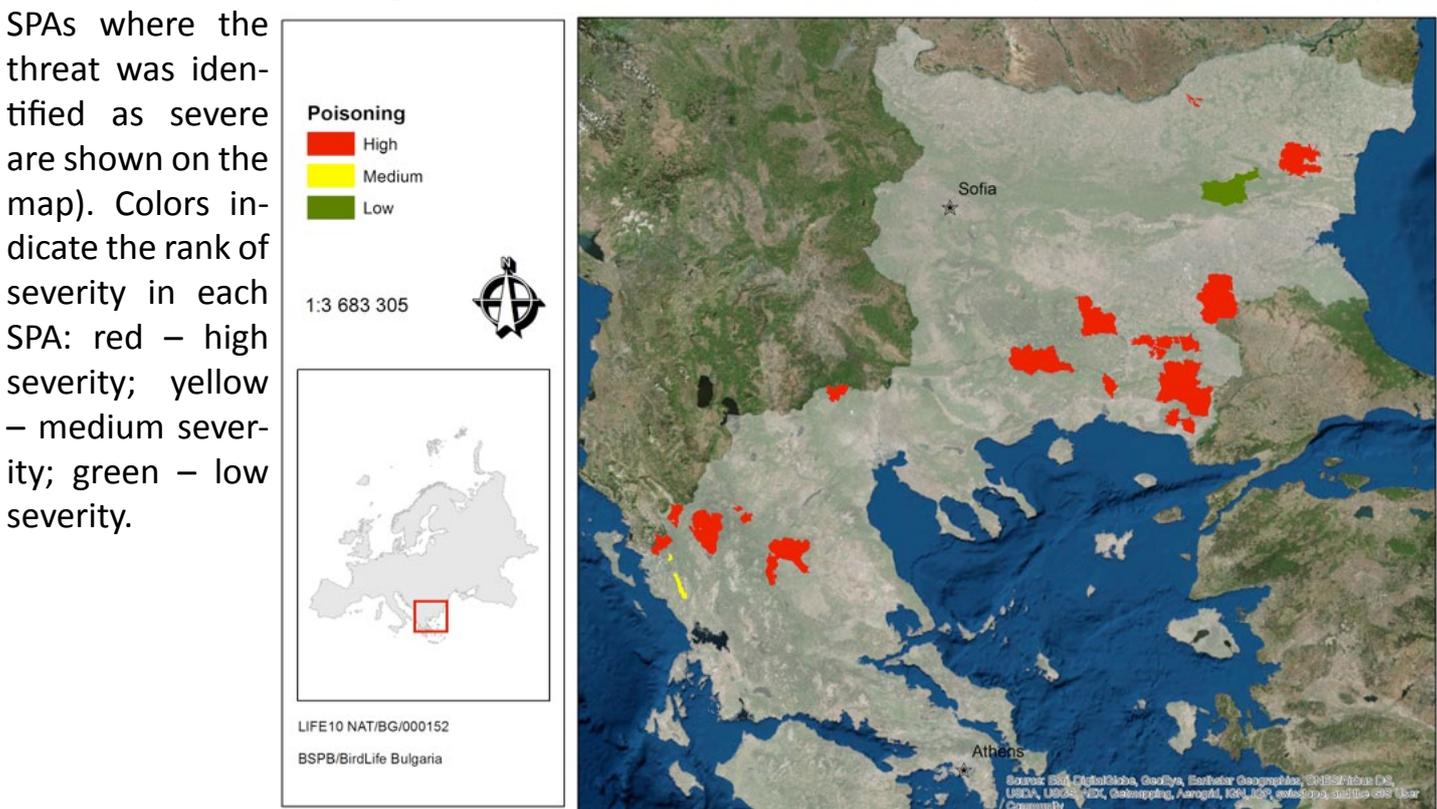
Legend: * Only the top three major threats are shown; ↑ - severity of threat increased during the project; ↓ - severity of threat decreased during the project; ≈ - severity of threat more or less the same before and after the project

MAPS

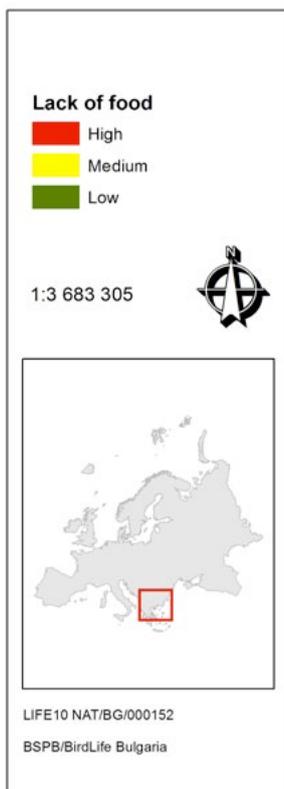


Map 1. Study area: 27 NATURA 2000 sites (SPA) in Bulgaria (12 SPA) and Greece (15 SPA).

Map 2. Evaluation of the magnitude of illegal poisoning as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map).



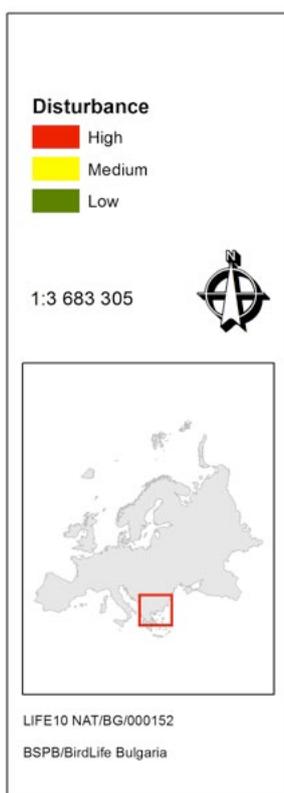
Map 3. Evaluation of the magnitude of food shortage (i.e. decrease of livestock and closing dump sites) as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map).



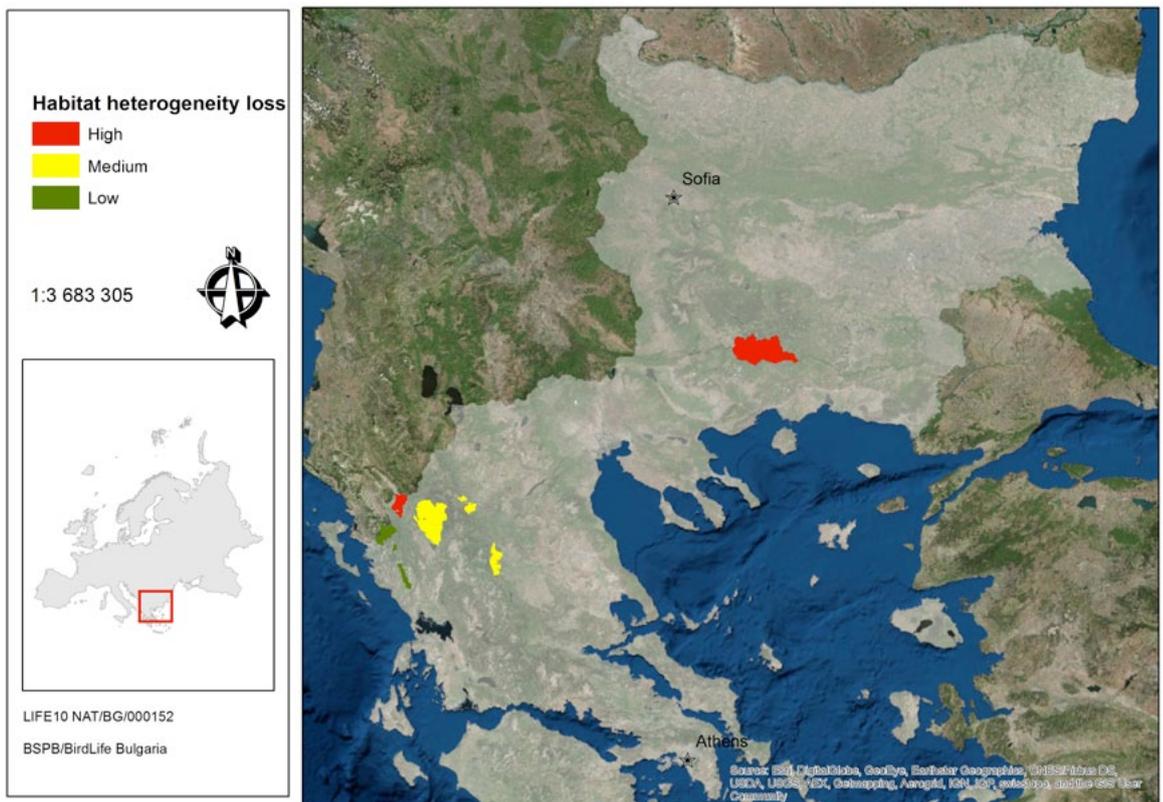
Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.

Map 4. Evaluation of the magnitude of disturbance as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map).

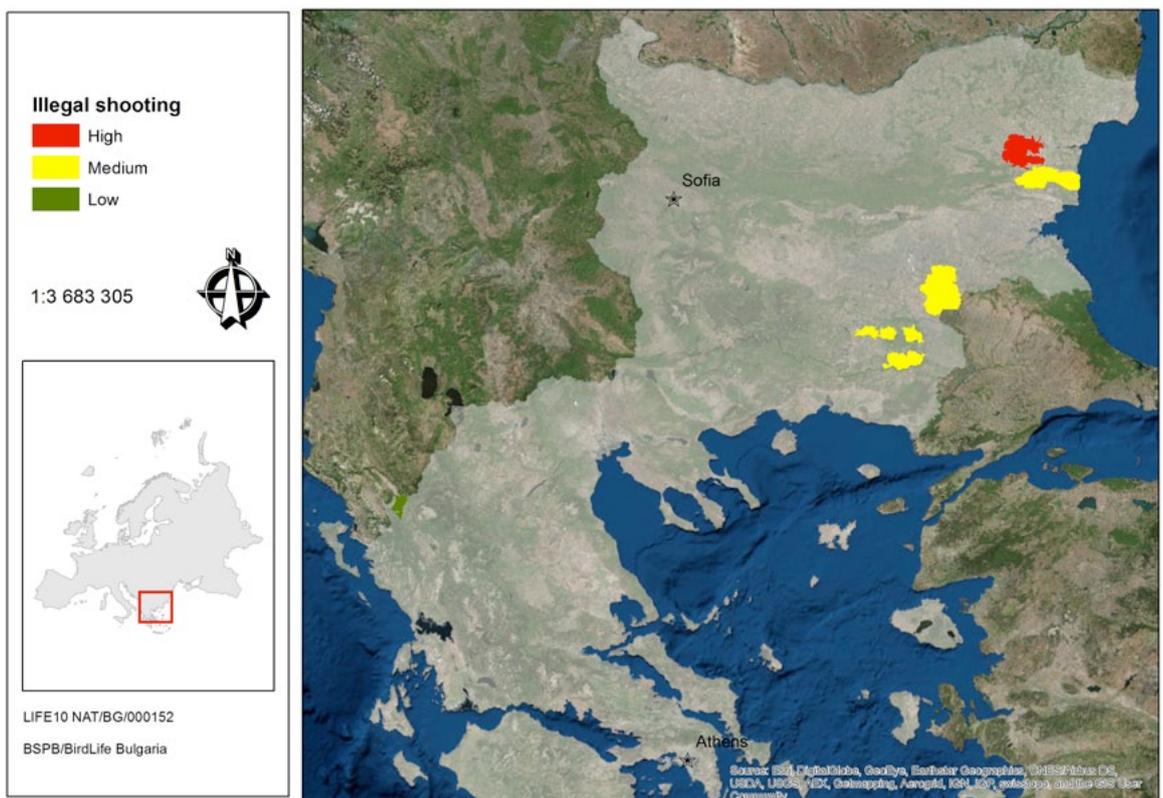
Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.



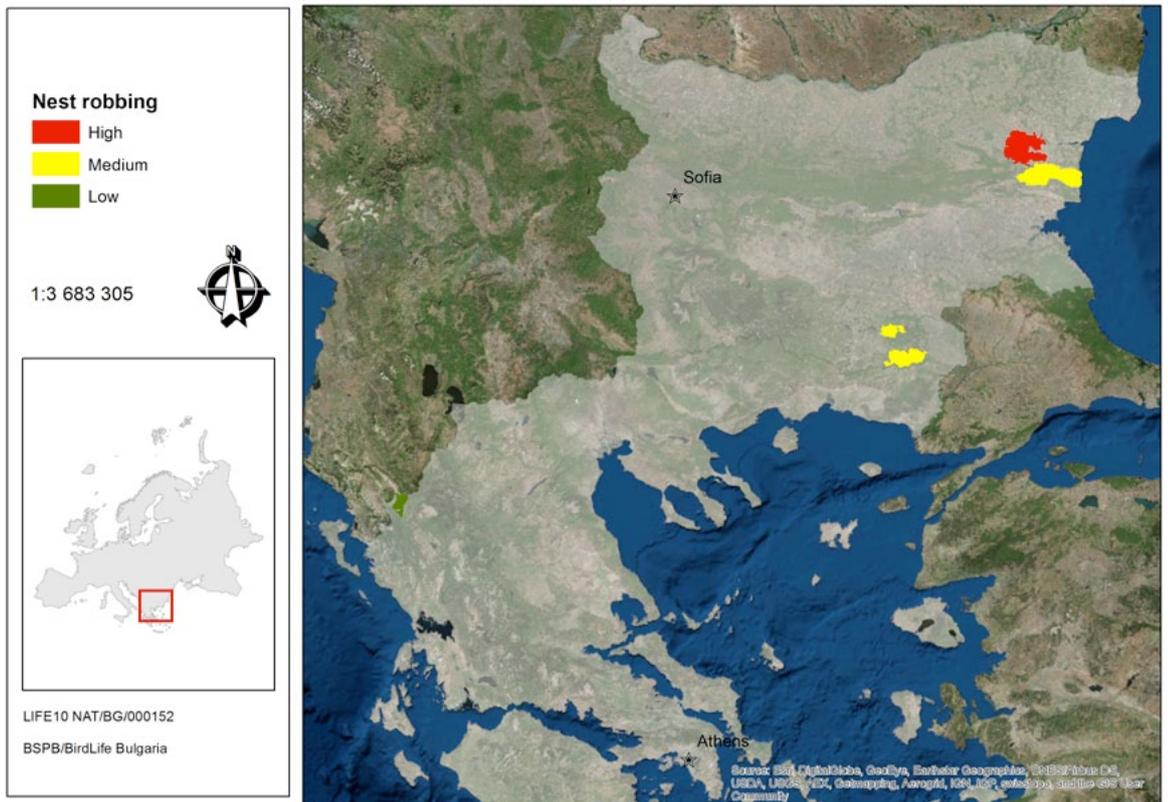
Map 5. Evaluation of the magnitude of habitat heterogeneity loss as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map). Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.



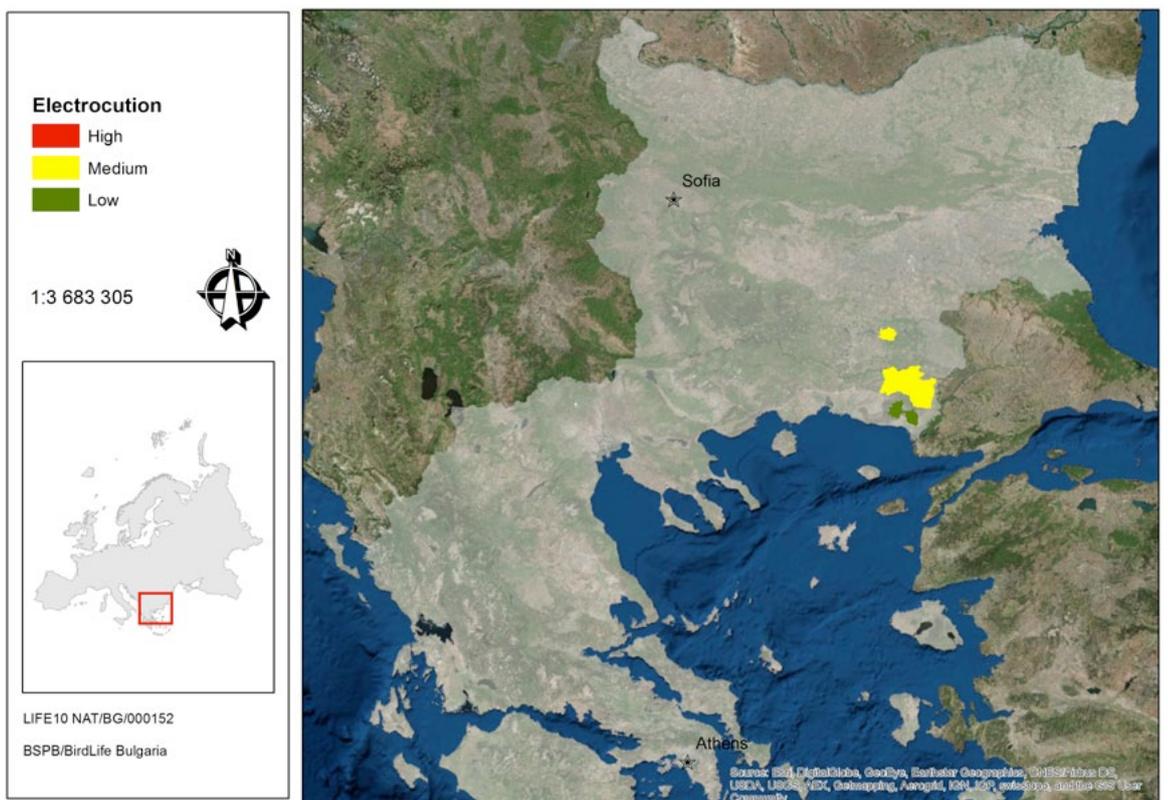
Map 6. Evaluation of the magnitude of illegal shooting as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map). Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.



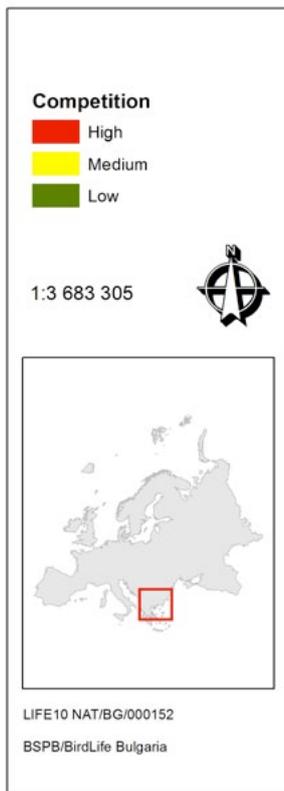
Map 7. Evaluation of the magnitude of nest robbing as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map). Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.



Map 8. Evaluation of the magnitude of electrocution as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map). Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.



Map 9. Evaluation of the magnitude of interspecific competition as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map). Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.



Map 10. Evaluation of the magnitude of collision with wind farms as a threat for the Egyptian vulture in 27 NATURA 2000 sites in Bulgaria (12 SPA) and Greece (15 SPA) for the period 2012-2015 (only the SPAs where the threat was identified as severe are shown on the map). Colors indicate the rank of severity in each SPA: red – high severity; yellow – medium severity; green – low severity.

