



## Unione Zoologica Italiana 79° Congresso Nazionale

Lecce, 25-28 Settembre 2018

## Riassunti



## MANUEL ANDREA ZAFARANA<sup>1</sup>, ROSARIO GRASSO<sup>1</sup>, MARIA TERESA SPENA<sup>1</sup>, ANTONINO BARBERA<sup>1</sup>, GIOVANNI SPINELLA<sup>1</sup>, SALVATORE SURDO<sup>1</sup>, DAVIDE PEPI<sup>1</sup>, MASSIMILIANO DI VITTORIO<sup>1</sup>

1 C.L.E.S.A. (Comitato Linee Elettriche Sicure per l'Avifauna), c/o Laboratorio di Ornitofauna e territorio Dipartimento di Scienze Biologiche, Geologiche ed Ambientali - Sez. di Biologia Animale, Via Androne, 81 95124, Catania (CT) www.clesa.org - comitatoclesa@gmail.com

## THE ENVIRONMENTAL IMPACT OF POWER LINES ON BIRDS IN SICILY

Electrocution is a serious conservation problem worldwide for a large number of bird species (BEVANGER, 1994, 1998; BIRDLIFE INTERNATIONAL, 2004; PRINSEN et al., 2011). Due to its wide extension, it is necessary to seek methods that optimize the identification of the most dangerous pylons (JANSS and FERRER, 2001; MANOSA, 2001), lines and the highest risk areas (TINTÓ et al., 2010; GUIL et al., 2011). Actually, the data on bird mortality caused by electrocution and collision in Sicily are deficient, however, a preliminary study suggests that the White Stork (Ciconia ciconia L., 1758) is one of the most threatened species inside two Special Protection Areas (SPA) (ZAFARANA and BARBERA, 2016). The project C.L.E.S.A. aims at making a complete checklist of the species at risk, collecting information from published articles and personal reports. Unpublished data were collected through a request for information widely circulated among professional and dabbler ornithologists, local sections of bird conservation ONG and wildlife services. A standard monitoring method was used to collect data, monthly during the entire sampling period. First, we selected different transects randomly, and, subsequently, we counted and removed all the birds found dead. A total of 152 cases were collected from 1996 to 2017, of which 85 caused by electrocution and 67 by collision. The 55.5% of the founded species are considered as "Birds of Community Importance" (included in Annex I of the Council Directive 2009/147/EC on the conservation of wild birds). C. ciconia is the most species killed by electrocution and *Phoenicopterus roseus* Pallas, 1811 by collision. These preliminary results suggest that this problem, as well as having serious consequences in terms of conservation, could has serious economic repercussions for human societies, as power failures, loss of revenue, necessity of repairs infrastructures and cost of legal compliance (LEHMAN et al., 2007). The monitoring activities of the C.L.E.S.A. volunteers have the purpose of implementing direct conservation actions for endangered species. The synergy between power companies and C.L.E.S.A. will be basic to adopt the measures suggested by the Conference of the Parties in Resolution 7.4 "Electrocution of migratory birds" (BONN, 2002) and the current management plans for SPAs. This partnership will improve the effective field actions in Sicily.

