

Michele Panuccio

Throughout the entire time this issue of *Avocetta* was in preparation, the editor, Michele Panuccio was fighting a losing battle against a progressive cancer spread over several parts of his body. In the last days, Michele was under sedation in a hospital in Rome, but sadly he passed away during the night of the 18th June following a week of terrible pain. We all knew him, he was held in high esteem by his peers and was loved by all, he will surely be missed.

Michele, with deep resolve, wished to carry on working on this latest issue, devoted to Raptors, conscious of the ornithological iconic value of these birds. Michele dedicated his life to birds, mainly Birds of Prey, following them in different geographical parts of the Mediterranean as well as in other countries. He was a figurehead of the "Mediterranean Raptor Migration Network", an association of ornithologists working to improve our knowledge and conservation of raptors; and he published numerous original papers in Italian as well as in international journals.

Michele was a true scientist, who was continuously challenging himself with scientific questions, but he was also a person of rare humanity. He joined the Editorial Board of *Avocetta* quite recently, but his presence provided a new stimulus and a surge of ideas that were progressively carried out. His loss leaves a void that cannot be filled. Rest in peace dear friend.

Our deepest sympathy goes to his family.

Centro Italiano Studi Ornitologici

Editorial

Support your local “raptor” team but looking at a wider perspective to improve raptor research, monitoring and conservation at a continental scale

Research on birds of prey are still one of the most attractive field studies for ornithologists and this fact has multiple reasons. Traditional reasons include conservationist needs since up to the '70s raptors were systematically eliminated all across Europe and also elsewhere (Bildstein 2006). That was the worse period for these species and several populations declined or even disappeared across Europe (Bird-Life International 2004). Moreover they were used to verify the presence and effects of contaminants in the DDT era (Bildstein 2006). Of course they are predators and many species have ecological needs that often do not match with landscape changes or with the effects of human activities and they are often considered umbrella species just because of their ecological interaction with the environment. Raptors are also large and impressive species and therefore they are for sure flagship species catching the interest of a large audience (Sergio *et al.* 2005, 2006). But beyond all of these reasons, that we believe are still effective in some way, many authors recently stated that nowadays raptors are of paramount importance because they provide relevant ecosystem services in particular in terms of rodent pest control and removal of livestock carcasses and also from a cultural point of view (Donazar *et al.* 2016). The expanding urbanization is showing interactions that are not always predicted and this is leading to new studies of raptor ecology in cities (Boal & Dykstra 2018). Knowing all these things we were not surprised that *Avocetta* receives many submission of manuscripts relying on raptors and we decided to propose a Special Issue fully dedicated to raptor papers. Our idea was to provide a snapshot on the research lines of some groups that are focusing their studies on raptors in Europe. The number we have in hand is more than we expected when we started. Authors are mostly Mediterranean but the range of topics is wide. Movements occupy a large part of this number but also diet and foraging activity as well as conservation. Only one paper relies on a nocturnal raptor while the others investigate at least eight diurnal raptor species. Used study methods range from visual observations to GPS tracking, playback, genetic and pellet analysis. There are two papers that are of great interest for conservation, one reporting the results of a successfully reintroduction project and another one analyzing in detail the legal trade of raptors worldwide. Of course also most other papers are of conservationist interest because, for instance, showing that maintaining large natural area around cities allow more complex raptor communities to exist. A good amount of the papers published here are the results of monitoring activity of raptors. Protected Areas, local and international projects (i.e. LIFE EU projects), Wildlife Conservation Associations dedicate to raptors a relevant fraction of their monitoring activity. Looking this issue from this point of view is important to stimulate the discussion on how we can support and pushing up the quality and effectiveness of raptor monitoring. Several monitoring programs of raptors are carried out at local or national levels for conservationist or planning purposes. The Bird's Directive of the European Union is supposed to support raptor monitoring programs since most of the breeding species are included in the Annex I. However this is only partially true since the Directive indicates that the European countries must do the monitoring but without giving any mandatory methodological instructions. From the BTO arrived one the main input in this direction through the publishing of a book collecting the experience of schemes used by the Raptor Study Group (Hardey *et al.* 2013). This book, now arrived at its third edition,

includes only information from raptors breeding in Britain, Scotland and Ireland. The effort of BTO does not end here, since on a special issue of *Bird Study* out in 2018 there are collected contributions resuming the main topics discussed during the five-year experience of EURAPMON, a network activity promoted by the European Science Foundation to improve networking through people that are active on raptor monitoring in Europe. The paper presented by the EURAPMON board shows that in Europe there are 236 active monitoring programs, at the time the paper was written, across 37 different countries. The authors concluded that large potential exists to enhance on status and trends of raptors in Europe (Derlink *et al.* 2018). However, this task seems not to be easy to reach at the moment since, despite all the effort to share best practices, to strengthen collaboration and networking activity through different research groups, there are still lacking essential prerequisites. For instance common bird monitoring schemes and opportunistic observations from citizen science are not equal alternatives of using specific monitoring protocols to monitor raptors (Väli *et al.* 2018). This statement might seem banal to expert raptor biologists that use to publish the results of their research on peer-review journals. However most of bird monitoring programs in our countries are ran independently from each other and often coordinated by non-raptors experts. This means that used methods are often extremely different and do not allow proper comparisons. These data are generally published on local, national and international reports (Staneva & Burfield 2017). They are used for detecting population trends and to establish conservation priorities and, last but not least, are widespread cited in our raptor papers. These facts and considerations lead to further questions. What shall we do to improve raptor monitoring? In which direction might these improvements go? Of course it is not in the aim of an editorial to discuss in deep these topics but for sure we need to share common basic protocols for monitoring raptors that allow comparison across different study areas and years.

References

- Bildstein K., 2006. Migrating raptors of the world: their ecology and conservation. Cornell Univ. Press, Ithaca.
- BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status. BirdLife Conservation Series No. 12. BirdLife International, Cambridge, UK.
- Boal C.W. & Dykstra C.R. (eds.), 2018. Urban raptors: ecology and conservation of birds of prey in cities. Island Press.
- Donázar J.A., Cortés-Avizanda A., Fargallo J.A., Margalida A., Moleón M., Morales-Reyes Z., Moreno-Opo R., Pérez-García J.M., Sánchez-Zapata J.A., Zuberogoitia I. & Serrano D., 2016. Roles of Raptors in a Changing World: From Flagships to Providers of Key Ecosystem Services. *Ardeola* 63: 181–234.
- Hardey J., Crick H.Q.P., Wernham C.V., Riley H., Etheridge B. & Thompson D.B.A., 2013. Raptors: a field guide for surveys and monitoring. BTO guides, UK.
- Derlink M., Wernham C., Bertonecelj I., Kovács A., Saurola P., Duke G., Movalli P. & Vrezec A., 2018. A review of raptor and owl monitoring activity across Europe: its implications for capacity building towards pan-European monitoring. *Bird Study* 65(S1):S4–S20.
- Sergio F., Newton I. & Marchesi L., 2005. Top predators and biodiversity. *Nature* 436:192–192.
- Sergio F., Newton I., Marchesi L. & Pedrini P., 2006. Ecologically justified charisma: preservation of top predators delivers biodiversity conservation. *J. Appl. Ecol.* 43: 1049–1055
- Staneva A. & Burfield I., 2017. European birds of conservation concern: populations, trends and national responsibilities. BirdLife International, Cambridge, UK.
- Väli Ü., Elts J. & Pehlak H., 2018. Are common bird monitoring schemes and opportunistic observations appropriate for estimating raptor trends? *Bird Study* 65 (S1): S35–S42.

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