

APUS &Co TRACKER: a 3 years study. Using Citizen Science to spread environmental awareness, map colonies and findings of fallen swifts (*Apus sp.*) and swallows (*Hirundo rustica*, *Delichon urbicum*) and promote wildlife conservation.

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Every year during the spring and summer seasons thousands of swifts (*Apus sp.*) come to Italy to breed. Although swift colonies are generally abundant, data about them are scattered (virtually absent in some regions) and populations are facing everywhere increased pressure due to destruction of nesting cavities during building renovations, lack of awareness, the use of pesticides and pollution, extreme meteorological events. The last is particularly true in Sicily, where hundreds of young swifts have been falling en masse prematurely from their nest during the breeding season over the last years. Unfortunately these animals often end up dieing because of the serious paucity of wildlife rescue centers, diffused misinformation among the general public and gross negligence from competent Institutions in acknowledging the phenomenon. From the experience of groups such as Monumenti Vivi, who have successfully protected swift colonies in Northern Italy, we know that in order to preserve them it is important to map their exact location as well as disseminating environmental awareness among citizens and local Institutions.

On the basis of these considerations we developed APUS &Co TRACKER, a project that try to directly address the above mentioned issues. It consists on a web-app www.apustracker.com made to engage the general public and young people, with a catchy and easy to use interface, and a geolocalization software to map nesting sites and findings of fallen swifts and swallows (*Hirundo rustica*, *Delichon urbicum*). The site contains many informative sections about the biology of the species, plus an "SOS - First Aid" page, where people can find instructions on what to do and who to contact to rescue fallen birds, on the basis of their location. At the end of the season maps are published and made available to structured monitoring groups who request them. These data are

useful to assess the health status of populations over the years, identify critical issues locally and put pressure on Institutions to implement concrete measures for wildlife conservation. Here we present preliminary results and maps generated from the study conducted in Italy in 2021-2022-2023; some reflections and future perspectives will be discussed.