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Benefits in avifaunistic monitoring through the use of an unmanned aerial vehicle (UAV) in the Nature Reserve of Saline di Priolo (Sicily, Italy)

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The photo-video technologies applied to UAV were used to monitor the presences of two nesting species in the natural reserve, Saline Priolo. A colony of more than 500 Flamingo specimens (*Phoenicopterus roseus* Pallas, 1811) and about 100 specimens of Little tern (*Sternula albifrons* Pallas, 1764) were studied. The species chosen for the study varied hugely in size in order to compare the data collected through the use of UAV and the data collected through traditional ground observations in relation to the size of the species.

When UAV was used for the larger species (Flamingo), the number of counted specimens compared to observations from the ground was significantly higher; on the other hand for the smallest species (Little tern), the use of UAV gave comparable results with the ground ones only when using a drone with a high definition camera.

Moreover, concerning Flamingos, the use of drone observations allowed for higher efficiency in counting the nesting specimens and chicks as well as a more accurate estimation of the percentage of fledging individuals.

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