

SARDINIA

THE STORY

University of Sassari Crusade to Save the Last Sardinian Mouflons

Eradication plan on Giglio island: the colony is at risk of extinction

by Nadia Cossu

Sassari The SOS launched by a group of citizens of Giglio Island (small pearl of the Tuscan Archipelago) has mobilized the Department of Biomedical Sciences at the University of Sassari. The Sardinian mouflons present on Giglio are in danger of disappearing forever - is the cry of alarm started by a group of inhabitants. The Park Authority considers them a threat to biodiversity in the context of the Island and has put in place an eradication plan. And in the face of what immediately appeared to be a call for help addressed to the land of origin of these specimens, the University of Sassari did not sit idly by.

Paolo Mereu and Monica Pirastru-both lecturers/researchers in the Department of Biomedical Sciences-conducted a study together

For Tuscan island park authority they threaten biodiversity, but the population is mobilizing

with other colleagues from Piacenza and Siena that led them to a very interesting discovery. "The results of our work reveal that the mouflon population present on Giglio constitutes a remnant of genetic variability originating in Sardinia, which has now disappeared on the mother island. This means that they have a 'high conservation priority and should not be eradicated, but rather safeguarded as a unique element of biodiversity,'" The study done by the two professors from Sassari together with the Catholic University of the Sacred Heart in Piacenza and in collaboration with colleagues from the International Union for Conservation of Nature's Species Survival Commission and, again, from the University of



The project to safeguard the species A nucleus relocated in 1955

► In the original project submitted for funding, titled "LetsGo Giglio," the Park Authority describes Giglio mouflons as having been introduced for hunting purposes in the late 1990s. "Instead, historical documents testify how those mouflons," the team of scholars argues, "were the result of a conservation effort to safeguard the species at a time when it was estimated that only a few hundred remained in Sardinia. In 1955, a nucleus of mouflon consisting of seven specimens was introduced to Giglio thanks to Professor Ugo Baldacci and represents an achievement in the history of nature conservation. This small population was housed in a private, fenced property on the Franco promontory, which still has an environment similar to that of Sardinia." A monument with a bronze statue of a mouflon was even erected on a granite pedestal where it still stands today. "The 1955 design, as the recent scientific study shows, is still valid and has great significance both historically as well as from a conservationist point of view."(na.co.)



Sassari Department of Biomedical Sciences in defense of Sardinian mouflons

Siena, has made it possible to establish that "the Giglio mouflons," Mereu and Pirastru explain, "possess genetic variants that are no longer present in the source population, which, as has been ascertained, is precisely the Sardinian one. In practice, the specimens from the Tuscan island "represent that classic missing link that was thought to have been lost, essential to reconstruct chronologically the evolutionary path of the mouflon of Sardinia, from the Neolithic to the present day. Protecting this population is equivalent to preserving a potential reservoir for possible

future reintroductions in Sardinia and Corsica where the oldest specimens of European mouflon live."

In the face of the eradication plan, a group of Giglio islanders raised funds to help finance the study recently published in the scientific journal "Diversity." "Like a time capsule - reveal the two researchers from Sassari, who say they are estranged from any ideological or political position but moved only by the moral obligation to fill a gap in scientific knowledge - the Giglio Island seems to have preserved a portion of the ancestral DNA variability of the Sardinian mouflon.



Paolo Mereu: specimens that could disappear are

Essential for reconstructing the evolutionary pathway

Our results highlight the urgent need to stop eradication activities and devise conservation plans to preserve what remains of this unique genetic resource." Today, Giglio Island's mouflon population has been mislabeled by the Park Authority as an "invasive alien" species in its "Life LetsGo Giglio" project. "The individuals remaining," Paolo Mereu Monica Pirastru added, "will be relocated and surgically sterilized or shot. The Park Authority has not provided genetic studies or evidence that the mouflons pose a threat." The

eradication plan will cause an irreversible loss from a biodiversity point of view," conclude the two Biomedical Sciences professors- To date, very few mouflons remain on Giglio; the exact number has not yet been census. Since the Park Authority's board of directors decided to eradicate them in 2007, about 100 have been killed, with an average of eight per year. With the implementation of the Project "Life LetsGo Giglio", about 40 mouflons were captured and translocated, and some were shot."