

Fondo Sociale Europeo Plus 2021/2027

FSE+

Sportello 2025 P.S. 20/24

Sostegno alla realizzazione di dottorati di ricerca

With Decree No. 9526/GRFVG of February 28, 2025, the Friuli Venezia Giulia Region published the Notice regarding the submission of operations for Specific Program No. 20/24, which aims to support higher education through the realization of PhD programs.

Specific Programme 20/24, through the funding of doctoral scholarships, contributes to the achievement of the objectives of the Sustainable Smart Specialisation Strategy (S4). It supports the development or strengthening of integration with the regional production system and/or research organisations, through coordination and collaboration mechanisms with regional enterprises or research bodies, or by leveraging the potential for technology transfer of processes, products, applications, or, more broadly, research outcomes.

- Sportello 2025
- Ciclo 41
- CUP J93C25000640008
- Progetto 2025/6525/28

Dottorato in **Enviromental Life Sciences**

“Development of tools for predicting and mitigating the conflict between large carnivores and the livestock and tourism industries in Friuli Venezia Giulia.”

The increase of large carnivores (golden jackal, wolf, brown bear) in the regional territory, together with the consequent rise in conflicts, is generating concern among stakeholders. This phenomenon is understandable, given that the livestock industry in FVG developed for centuries without the stable presence of the wolf (absent from the Alps since the 1700s) and the jackal (arrived in the 1980s), with only the sporadic presence of the bear. However, the concern is not justified, considering the numerous solutions for coexisting with these species. Currently, FVG lacks up-to-date knowledge on the distribution of these carnivores and a conflict prediction plan, as well as a communication plan with stakeholders (livestock and tourism) regarding prevention methods. The project aims to bridge these gaps with the following objectives:

- Develop models to predict the risk of conflict (with jackal, wolf, and bear) on a regional basis, using data collected via camera traps.
- Evaluate the feasibility of identifying large carnivores through artificial intelligence (AI), to develop automatic monitoring systems with camera traps connected to the GSM network.
- Evaluate, through field experiments, the effectiveness of acoustic deterrents for jackal and wolf, triggered by the detection of the species via camera traps.

Expected results include:

- Distribution models for the three species, with the identification of areas at risk of conflict.
- Development of an app (created with Rshinyapp) to assess the risk of conflict in the regional territory, based on the results of the first objective. The app will allow users to know the probability of conflict risk at any site in the region using mobile georeferencing, proving useful to both stakeholders and tourists.
- Results of feasibility tests for the use of acoustic deterrents to keep large carnivores away from livestock farms and wildlife enterprises.