

The LIFE program

The **LIFE** program is the EU's financial instrument supporting environmental, nature conservation and climate action. In particular, LIFE Nature & Biodiversity, is the financial instrument for the protection and preservation of Site of Community Importance (SCI) and Special Protection Areas (SPA) according to Habitats and Birds Directive (92/43/EEC and 79/409/EEC); it contributes to the implementation and management of the Natura 2000 network, an ecological network established by the EU to ensure the maintenance of habitats and species threatened at EU level.

The area of intervention

The **Foreste Casentinesi, Monte Falterona and Campigna National Park** includes the Apennines ridge between Romagna and Tuscany: an area of approximately 36,000 ha. The Park can be considered one of the most valuable forest areas in Europe and its core is represented by the **Sasso Fratino Reserve**, the first Integral Reserve established in Italy in 1959. The park is largely covered by forest habitats, particularly old within the **Casentinesi Biogenetic Reserves** and around the Franciscan Sanctuary of La Verna.



Unione dei Comuni Montani del Casentino



On the cover: picture by Giovanni Cappelli
Internal side: picture by Roberto Sauli, Francesco Lemma, Giordano Giacomini e Paolo Mazzei

Beneficiaries

Parco Nazionale delle Foreste Casentinesi,
Monte Falterona e Campigna

Arma dei Carabinieri

Comando Unità per la Tutela Forestale,
Ambientale e Agroalimentare Carabinieri

Unione dei Comuni Montani del Casentino

Università di Bologna

Università di Pavia

Dream Italia

Life WetFlyAmphibia

www.lifewetflyamphibia.eu

www.facebook.com/lifewetflyamphibia

info@lifewetflyamphibia.eu



DBgrafica

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WetFlyAmphibia

Conservation of amphibians
and butterflies of open wet areas
and their habitats at the
Foreste Casentinesi
National Park



Project purposes

The **Life WetFlyAmphibia project** aims to promote the conservation of amphibian populations and target butterflies and humid habitats where they live. Specific project targets are:

- the improvement of the conservation status of the populations of Yellow-bellied toad (*Bombina variegata*), Spectacled salamander (*Salamandrina terdigitata*) and Crested newt (*Triturus carnifex*);
- the improvement of the conservation status of the populations of butterflies *Euplagia quadripunctaria* and *Eriogaster catax* and their habitats;
- the improvement of the conservation status of wetlands in open areas (Habitat 6430) and of the unique plant species related to these habitats;
- to raise awareness among the population about the need to conserve the species of amphibians and butterflies.

In order to achieve these purposes, the project proposes the following action:

- **Preparatory Actions:** integration of information on the target species, development of procedures for the captive breeding and relocation of amphibians, identification of the populations of flora subject to collection, eco-phytosociological survey of the areas subject to interventions.
- **Concrete conservation actions:** implementation of restoring actions on wetlands and creation of new habitats, reintroduction of individuals of *Bombina variegata* and *Salamandrina terdigitata* in conservation areas, production of plants for the botanic restoration of the Habitat 6430.
- **Monitoring actions:** evaluation of the conservation actions and of the establishment of the restored hygrophile plant communities.
- **Dissemination actions:** development of a project website, realization of dissemination products and didactic proposals on the project topics.
- **Overall project operation:** general project management, monitoring of the actions during the implementation.

The target species

Yellow-bellied toad

The yellow-bellied toad is a small but long-lived species of toad. It is so called because of the bright coloration of the belly and the typical reproductive call. Inside the National Park it breeds in small ponds and drinking troughs and sometimes in streams flowing in rocky sunny areas. Considered an endangered species, in the Park it is not rare, even though the great majority of records are in Romagna. The Apennines toad, or Yellow-bellied toad, is threatened mainly by the reduction of the reproductive habitats, once more common in grazing lands and open areas. The reduction of pastoral activities and the consequent reforestation process represent the main threat to the species.



***Bombina variegata* or *Bombina pachypus*?** The Apennines populations were proposed as a monotypic taxon by Lanza & Vanni (1991), as *B. pachypus*, but many authors consider it a *B. variegata* subspecies (Hofman et al. 2007, Zheng et al. 2009 Fijarczyk et al. 2011).

Spectacled salamander

The spectacled salamander is a small and thin amphibian which present a camouflage design on the back and a typical aposematic design on the belly. The head shows a clearer “V”-shaped coloration, that reminds a pair of glasses, from which the name of the species. Endemic of the Italian peninsula, the salamander is linked to well-structured deciduous forests, crossed by unpolluted streams without fish. Considered rare in the Tuscan side of the National Park, it is still widespread in Romagna.



***Salamandrina terdigitata* or *Salamandrina perspicillata*?** The two species of salamander, *S. perspicillata* and *S. terdigitata*, were separated recently through molecular analysis (Mattocchia et al., 2005; Nascetti et al., 2005; Canestrelli et al., 2006).

Italian crested newt

The Italian crested newt is the largest among the Italian newts, it presents yellow or yellow-orange ventral parts with black isolated spots or fused in various shapes. The Italian crested newt breeds in lentic waters, such as ponds, lakes and drinking troughs, and it is considered rare within the Park. Its sporadic presence is due to the fragility or disappearance of many breeding sites, which leads us to consider the potential risks of local extinctions.



Euplagia quadripunctaria

The *Euplagia quadripunctaria* is a day-flying moth, it is mainly related to high grasses in wetland areas, mostly along the bank of the rivers. It develops a single annual generation with a polyphagous larva that feeds on various species of plants, including hemp-agrimony, viper's bugloss and purple gromwell. The species is reported in many sites within the Park, but as we know it seems more widespread in the Romagna side than in Tuscany. Its major threat is nowadays the reduction of its primary habitats.



Eriogaster catax

The *Eriogaster catax* is a moth linked to semi-natural grasslands and to open and shrubby areas, it presents a single annual generation and a polyphagous larva that feeds on various species of plants including blackthorn and common hawthorn. The species is reported in few locations within the Park, especially on the Romagna side. *Eriogaster catax* is nowadays threatened by a significant reduction of the semi-natural grasslands, that is related to pasture and traditional anthropic activities.

