SGSII-3 The Scarce Fritillary



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NEWS

Project name: Realisation of the Action Plan for the Scarce Fritillary *(Euphydryas maturna)* in 2015–2016

Project Nr.: MGSII - 3

Project location: Domanovice, Radovesice II, Zizelice (Central Bohemia Region), Polabi area (Central Bohemia, Pardubicky and Kralovehradecky regions), Kyjovsko (South Moravia Region)

Financial support: EEA Grants, Small Grants Scheme (SGSII) entitled "Action Plans for Endangered Species II', support area 1: "Realisation of Approved Action Plans and Management Plans for Endangered Plant and Animal Species"

Total Resources: 1,214,341 CZK incl. VAT

Financing: Financial resources from EEA Grants are assigned in the amount of 1,032,190 CZK, which is 85% of the anticipated total project expenditure. The state budget grants financial resources in the amount of 182,151 CZK, which is 15% of the anticipated total project expenditure.

Project duration: 1.2.2015 - 30.4.2017

Project partners: no partners

Project guarantee:

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Project Objective and Scope:

The main objective of this project is to provide, by means of various management interventions, a sufficient area of biotope necessary for the critically endangered butterfly the Scarce Fritillary (*Euphydryas maturna*), thus achieving stabilisation of its currently last Czech population in the 'Domanovicky les' Special Area of Conservation. If the stabilisation is successful, the action plan anticipates repatriations of the species to suitable sites formerly inhabited by the butterfly. The project also includes further measures, namely monitoring and research, which contribute to proper administration and development of the action plan.

Project activities:

Reconstruction of a Selected Forest Stand

Forest management is the key type of measure when a sufficient area of a suitable biotope for the Scarce Fritillary is to be provided. Reconstruction of selected forest stands is a measure in which young spruce stands will be removed and replaced by planting oak and ash. This will improve the condition and expand the area of suitable sites for the target species. However, our objective is not only to expand the suitable sites but also to maintain continuity of the occurrence of the species with respect to the ongoing succession.

Targeted Interplanting of European Ash

Other measures consist of targeted interplanting of European ash in new and older clearcuts. This activity aims at improving the offer of the key food plant where it is insufficient. Ash trees are planted directly when establishing new stands after main felling, but older clearcuts must also be worked with. The measure therefore complements the aforementioned reconstruction of stands and other types of interventions, which further helps to secure a sufficient area of suitable biotopes which the Scarce Fritillary may use.

Juvenile Thinning in the Area behind the Gamekeeper's Lodge

The area behind the gamekeeper's lodge must be regularly thinned, otherwise it would thicken too much and become unsuitable for the butterflies. This site is absolutely crucial for the population in Domanovicky les SAC as it is the place where reproduction traditionally occurs and from where the individual butterflies spread into the surrounding stands.

Research at Other Sites

A check of historical occurrence sites is an important part of the project because it is possible that the species may still survive in a currently unknown site. The greatest attention is being paid to the greater Polabi region (areas along the Labe River), i.e., the close environs of the Domanovicky les SAC, where there is relatively the highest probability of successful detection of the species.

Verification of Possible Repatriation of Caterpillars

Repatriation of the species to other sites is the prerequisite for its successful long-term survival. However, this has never been attempted with this species in our country, and it must be verified how the process would work in order to achieve as high a success rate as possible, thus reducing requirements for the quantity of caterpillars collected in the source population.

Monitoring

Monitoring of the larvae and adults is a standard and necessary part of the action plan, without which it would be impossible to succeed. Data collected every year inform us about what is going on in the monitored areas, and thanks to them we can also assess the effects of the measures which we carry out.

Assessment of Measures from the Viewpoint of Forestry

Regular assessment and optimisation of biotope management are necessary tools for proper performance of the action plan. The objective is to assess changes occurring in all the relevant areas since the various measures had been carried out. The results so obtained will be taken as the basis for analyses of the suitability of various management types and also as the underlying document for a proposal for additional measures in the relevant areas.

Genetic Study

With respect to the collapse of the population of the Scarce Fritillary in the Czech Republic in 2009–2010, it must be identified whether there was a decline in the genetic variability of the population, to what extent this happened, and what impact this may have on the long-term survival of this population and species in the Czech Republic. This is rudimentary

information for further planning, especially considering the anticipated reintroductions.

Botanical Research

The Scarce Fritillary mostly feeds on European ash in the Czech Republic. However, it is known that its caterpillars use other food plants in the spring. It is therefore important to pay attention to the species composition of the places where females lay eggs and where caterpillars later find alternative food. The composition of the herb layer and shrub layer can actually be that aspect which has a major influence on the fact whether the Scarce Fritillary will or will not occur in a specific area.

Active Cooperation with Forest Owners

Cooperation with forest owners is a crucial factor for the proper performance of the action plan because the forest where the Scarce Fritillary lives has several private owners. However, communication has been good, thanks to which we have succeeded in realising several long-postponed and, from the viewpoint of commercial forestry, problematic measures which are, from the viewpoint of the Scarce Fritillary, quite beneficial.

Project Publicity

As part of the project publicity, an introductory and closing informational seminar will be held. The project will also be presented at two professional conferences and its website will be established and updated on a running basis.

Photos:

