

BIODIVERSITY CASE STUDY

Company: S&B Industrial Minerals

Country: Milos island, Greece

Title Monitoring and evaluating quarries rehabilitation with the use indicators from the local terrestrial fauna

Context In Chivadolimini Quarry, a perlite quarry operated by S&B Industrial Minerals S.A. on Milos Island, a study was performed of the University of Athens Biology Department on “Monitoring and evaluating quarries rehabilitation with the use indicators from the local terrestrial fauna”. The Chivadolimini quarry was depleted since 1994 and rehabilitation works started 9 years before the realization of the study. Two other areas (a natural undisturbed area and an old china clay quarry rehabilitated 3 years ago) were used as reference areas. The use of fauna is an index to indicate whether the ecosystem created maintains the ecological values of the area as it was before the commencement of mining activities.

Solution A list of species as “indicator species” appropriate for continuous monitoring was created. Different plant species were used in the rehabilitation of the two different quarries. The study showed that the sites have characteristic species that are adapted to the conditions at each study area.

Result The study concluded that appropriately designed rehabilitation can contribute to the creation of habitats suitable even for rare or protected species, like the snake *Macrovipera Schweizeri* or other threatened fauna species of the island. At the company site studied, where the reclamation had been completed 8 years ago, there was no difference in the number of fauna observed, in comparison to the undisturbed area used as reference. Quite impressive is the fact that at another company site studied, where the reclamation was completed 3 years ago, the number of fauna was richer than that of the undisturbed reference area.

Partners University of Athens Biology Department

Related publications & Links Adamopoulou C.& Legakis A. (2006) “Using reptiles and soil arthropods as indicators for open quarry restoration in Mediterranean-type ecosystems”; 10th International Congress on the Zoogeography and Ecology of Greece and adjacent regions, Patra, 26-30.6. 2006. Book of abstracts, p. 6. link to [PDF](#); Adamopoulou C.& Legakis A.(2006). Monitoring and assessment of the restoration of open quarries in an insular environment using indicators from the local terrestrial fauna; 1st European Congress of Conservation Biology. Eger, Hungary, 22-26 August 2006. Book of Abstracts, p. 93 link to [PDF](#)

Chivadolimni mine: a popular beach today



1989



1991



2007



2013

Today, 2014

