

Project Update: August 2014

Goal I. To obtain data about individual abundance all endemic species by landscape of steep-sided limestone mounts (mogotes), the use of ecological substrates by the species.

Result of the activities related to goal I:

1. We have accomplished two trips to the national park where we visited five mogotes. During our first visit we observed that on the calcareous thick walls of the mogotes there was a lofty density of land snails, for these ones they were sampled. We have so far 1,146 records of individuals, 405 in the plots of land and 641 in calcareous thick walls. We registered 38 species of which 34 are endemic. We got data on density and use of ecological substrates. During the visits we detected two species that can have grave problems of conservation, *Liguus flamellus* and *Chodropometes vignalensis*.
2. Living individuals and their habitats were photographed in situ too. We have taken 2000 photographic records in order to the future land snail guide of the Valle de Viñales and informative cards of endemic species.

Goal II. Determining and listing the causes that affect the distribution of the endemic species in the landscape.

Result of the activities related to goal II:

1. During the visits we detected that the main causes that affect the distribution of the species are the patches inside the mogotes created by the residents to sow different cultivars such as root crops, coffee and plantain. We observe the animal husbandry (domestic pig, ants, rats and kids) inside and in the base of the mogotes.
2. Of the visited mogotes, two were in the category of fairly degraded and four degraded little.



Picture 1: *Liguus flamellus* in Mogote "El Valle", an endemic land snail from Sierra de los Órganos
Picture 2: *Chondropometes vignalensis* in Mogote "El Valle", an endemic land snail from Sierra de los Órganos



Picture 3: Domestic pig (*Sus scrofa domestica*) no native predator of the land snails in the Viñales National Park. Picture 4: Little zone of cultivations inside of the Mogote "El Valle"