

Heritage project

The hermit
butterfly



RAISING STONES
events

ACT FOR THE BIODIVERSITY

Our company is **committed** to three essential causes: water protection, social assistance, and biodiversity preservation. Together, we are building a sustainable and supportive future

Protecting biodiversity is essential for our planet. By preserving species and ecosystems, we ensure a natural and sustainable balance. These actions are in line with the United Nations' criteria for sustainable development, which encourage the conservation of biodiversity.

The protection of **biodiversity is essential** for a number of reasons. Firstly, biodiversity is important for maintaining ecological balance, as every species plays a unique role in the ecosystem. When even one species is lost, it can have negative consequences for other species and the environment as a whole.

biodiversity plays a critical role in mitigating the effects of climate change. Plants and trees absorb carbon dioxide from the atmosphere, helping to reduce greenhouse gas emissions. By protecting biodiversity, we can help to maintain healthy ecosystems that are better equipped to absorb and store carbon.

Finally, protecting biodiversity is a moral and ethical imperative. Every species has a right to exist, and it is our responsibility to ensure that future generations can enjoy the same richness and diversity of life that we have today.

In conclusion, protecting biodiversity is essential for maintaining ecological balance, promoting human health, supporting economic development, mitigating climate change, and fulfilling our ethical and moral obligations to future generations.

Some datas:

- According to the International Union for Conservation of Nature (IUCN), approximately 27% of all assessed species are at risk of extinction. This includes 40% of amphibians, 25% of mammals, and 13% of birds.
- Habitat loss, degradation, and fragmentation are the main drivers of species extinction. This is often caused by human activities such as deforestation, urbanization, and agriculture.
- Climate change is also a major threat to biodiversity. It can cause changes in temperature and rainfall patterns, alter ocean currents and acidity, and lead to more frequent extreme weather events. This can affect the distribution and abundance of species, and lead to their extinction.
- Invasive species are another threat to biodiversity. Non-native species can outcompete native species for resources and cause their populations to decline.
- According to a report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), over one million species are currently threatened with extinction.

OUR PARTNER

The Domaine des Courmettes, situated between Grasse and Vence, is managed by A Rocha. It is a Christian centre welcoming churches and individuals for various activities and offering seminars, internships and themed holidays raising environmental awareness. Located at 850 metres the centre offers a unique and superb panorama of the coast from Nice to Cannes.

The property is open to the public. Many walks are possible on the estate, which is crossed by 3 hiking trails

The Courmettes estate, managed as a nature reserve, is part of the Parc Naturel Régional des Pré-Alpes d'Azur.

Various Mediterranean environments are present on the site, as the Courmettes estate is located on a property with significant variations in altitude: forest of holm oaks several hundred years old, scrubland, grazed meadows, numerous flowers in spring.

Raising Stones supports and believes in this organization's efforts to protect biodiversity, which is under threat now more than ever.



PROJECT PRESENTATION

Hermit is a butterfly that is present in Europe and particularly on the Courmettes site. Today, this butterfly is classified in the red list of endangered species.

In an attempt to save the Hermit, the Domaine des Courmettes, with the CEN and the OPIE, have launched a scientific study. To study both the species and the Courmettes population.

4 roles of the hermit butterfly:

- **Pollination:** As a nectar feeder, the hermit butterfly helps to pollinate plants as it moves from flower to flower in search of food. By transferring pollen from one flower to another, the butterfly helps to fertilize plants and ensure their continued reproduction.
- **Food source:** The hermit butterfly serves as a food source for many other animals, such as birds, lizards, and spiders. By providing food for these animals, the butterfly helps to maintain the balance of the ecosystem.
- **Indicator species:** The presence or absence of the hermit butterfly can serve as an indicator of the health of the ecosystem. As a species that is sensitive to changes in its environment, the butterfly can provide valuable information about the condition of its habitat.
- **Genetic diversity:** The hermit butterfly contributes to genetic diversity within its species, which is important for the long-term survival of the population. Genetic diversity can increase the ability of a species to adapt to changes in its environment, making it more resilient and less vulnerable to extinction.

THE STUDY

In May/June, search for the caterpillars of the species to identify the plants on which they feed and the areas where the species breeds. As the caterpillars are nocturnal, surveys are carried out at night.

We carry out a scientific protocol called CMR (Capture Marking Recapture) to evaluate the size of the population on the site, the dispersal capacity of the species, and the average lifespan of the adults. We walk two areas every day and then every other day for 5 weeks. This protocol also provides other information on the species such as the plants that the adults forage on, the behavior of males and females according to the period, the environments they prefer, etc

In addition to the CMR protocol, we conduct surveys outside the protocol to gain a better understanding of the species' distribution on the 600ha site. However, the CMR protocol is time-consuming, so only two restricted areas can be targeted. We also sample genetic material to cross-reference physical data with genetic data. This analysis must be carried out on an inter-regional scale to provide interesting results on the species.

In order to continue this study and analyze the samples, the site needs funding.

Financial target: 12 000€ - Donation from 500€



Up to 60% of your donation is tax-deductible under certain conditions.