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Dear members of the Spanish Scientific Committee CITES,

We would like to bring the following to your attention:

Introduction

Long ago, during our youth, and far for CITES, you saw them everywhere outside the Pityusic Islands, in almost every pet shop; Pityusic wall lizards, often presented in the shop windows, always under miserable conditions. When you spoke about these lizards in terrarium circles you could often hear: “Oh, you mean snake food”, referring to the always ample supply and associated low prices.

We now live in more responsible times, with adapted legislation, international agreements, and a completely changed image of what we should regard as pets. The lizards on and around Ibiza have survived these dark times remarkable well, as we have been able to establish from our own research.

But not for much longer, old times are revived, and in recent years we can speak of *Podarcis pityusensis* as snake food again, what coincides with an unprecedented rapid collapse of *Podarcis pityusensis* populations.

The Spanish government had a duty to intervene, which was left to the regional government in Mallorca. They decided that something had to be done about the invasive snakes, and in particular the horseshoe whip snake. They commissioned COFIB-Ibiza to do this, an organization that previously mainly was occupied with the care of wild animals in need and restoration work on threatened ecosystems, although on a slightly different scale than the new threat.

COFIB-Ibiza (*Consorci per la Recuperació de la Fauna de les Illes Balears*) is not a civil service agency of the Balearic Government. It appears to be an outsourced service provided by the Natura Parc Foundation, a private company. Moreover, COFIB-Ibiza has no oversight on the island of Ibiza itself, but is only accountable to the Regional Minister of the Environment, currently located on the island of Mallorca, Joan Simonet.

The overall short-, medium-, and long-term strategy COFIB-Ibiza is developing to contain the proliferation of invasive snakes and to protect *Podarcis pityusensis* (and all of its subspecies/populations) is unknown. Reports from the Regional Minister of the Environment, COFIB, COFIB-Ibiza or the Balearic Government's leading advising herpetologist, Valentín Pérez-Mellado, are not available. Only statements have been made public in the local press.

Although *Podarcis pityusensis* is the only endemic terrestrial vertebrate of the Pityusic Islands, and is currently an endangered species (EN according to IUCN-2024), a Conservation Plan for the species has never been implemented. It does not benefit from any LIFE project, nor has any protection status been established, with the exception of regional law 1/2023, which provides for the protection of the two species of lizards found in the Balearic Islands (*Podarcis lilfordi* and *Podarcis pityusensis*).

Two years later, all those directly responsible for enforcing it (Balearic Government, COFIB, Port Authority, Civil Guard, Ibiza Island Council) state that it is not within their jurisdiction (Diario de Ibiza 18-02-2025). The only known COFIB-Ibiza intervention consists of setting traps with live mice (protected in a separate compartment) as bait, and the recently established ex-situ breeding pilot project at Barcelona Zoo.

The problem

Capturing snakes with traps is essential, but 20 years after their introduction, it has been shown that this is not enough. COFIB-Ibiza has followed a trapping strategy that has facilitated the spread of the snakes, rather than containing their advance and progressively narrowing the circle. In 2015, the area affected by invasive snakes was delimited, covering less than 20% of the island's territory. Captures were made in areas around plant nurseries that had imported century-old olive trees. It was feasible to delimit this territory by establishing a perimeter trapping belt.

However, the protocol applied by COFIB-Ibiza has been to remove the traps which did not yield any catches by August and move them to the center of the affected area to achieve a greater number of annual captures and improve the "profitability" of the trap/capture ratio. This has made it easier for the hatchlings of the snakes to seek out adult-free territory outside the affected area where they were born in September. Since there are no perimeter traps, they can freely spread throughout the surrounding area, accelerating the expansion of the territory affected by snakes. We know from repeated field observations that when the presence of *Hemorrhois hippocrepis* is detected in an area, the lizard population takes about five years to collapse.

Another shortcoming in COFIB-Ibiza's working methods is the refusal to coordinate with the various volunteer organizations involved in capturing snakes using traps. Most rural residents volunteer by setting traps on their land. There are several very active volunteer networks (SOS Sargantanes connects more than 500 people living in the countryside; Ibiza Snake Trappers consists of more than 130 foreigners living in villas).

But COFIB-Ibiza, or any other government agency, refuses to coordinate efforts. At one point, it has even been suggested that volunteers could be unfair competition for COFIB-Ibiza. They likely intended for the volunteers' captures to be counted in COFIB-Ibiza's results to secure government subsidies.

The lack of knowledge of the real situation, or attempt to hide the real situation is obvious. On February 19, 2025, the head of COFIB-Ibiza, Víctor Colomar, along with the Minister of the Environment, Joan Simonet, displayed his ignorance of the most basic ecological and

evolutionary mechanisms, claiming that *Podarcis pityusensis* is not in danger of extinction and that there will be many more lizards in 2040 than there are now (Diario de Ibiza, 19-02-2025).

Valentín Pérez-Mellado, Emeritus Professor at the University of Salamanca, and the herpetologist regularly hired by the Balearic Government to census lizard populations, in 2022 denied the risk of extinction of *Podarcis pityusensis* (Diario de Ibiza, 27-03-2022), while attacking Elba Montes' cum laude doctoral thesis, which highlighted the serious situation due to the introduction of *Hemorrhois hippocrepis*. In 2017, he dared to claim that lizards had learned to identify the presence of the horseshoe whip snake and developed anti-predatory behaviors (Diario de Ibiza, 20-01-2017) based on an oversimplified experiment (Ortega et al. 2017), ignoring the time usually required for evolution to take effect.

However, in 2025 Pérez-Mellado changed his 2022 opinion, and advocates for new studies to be commissioned to understand the new situation suffered by *Podarcis pityusensis* (Diario de Ibiza, 10-02-2025).

Consensus

The scientific community has done enough research to assess the situation on its merits (*see references in the appendix*), and within the local population of Ibiza there is generally sufficient understanding and concern about the current situation. This is also a topic of discussion among interested audiences internationally, see f.i. the lacertid lizard website on *Podarcis pityusensis*. There is unambiguous agreement that too little has being done, and that at least more should be tried.

Proposals

In-situ breeding areas: It is urgent to establish areas where native Ibiza and Formentera lizard populations remain, with no snakes, and surround them with snake-proof fences. This can also be achieved on the larger uninhabited islands. Small piece of land for breeding populations should be established, however this will take some time and needs funding.

Ex-situ breeding: The first ex-situ breeding pilot program hast started this year at Barcelona Zoo, in cooperation with CREAF (University of Barcelona) and COFIB-Ibiza, with lizards from Ibiza and Formentera.

In order to guarantee the genetic diversity of the entire species, this program should be expanded as soon as possible to include other valuable populations such as those of ses Bledes, es Vedrà, s'Espartar, s'Espardell de s'Espartar, es Malvíns, sa Conillera, s'Espalmador and s'Espardell.

But the highest priority should be given to the populations with the highest relatedness to the now extinct population of northern Ibiza: **sa Margalida**, **Murada**, **Tagomago, es Canar** and **illa Redona de Santa Eulària**, most of these populations are already affected by the horseshoe whip snake (the formerly big population of illa Llarga de Santa Eulària already has become extinct). **So no time should be wasted!**

This effort is probably to big to be performed by one single institution. We know that Münster Zoo, Osnabrück Zoo and Jersey Zoo have long ago indicated that they want to participate in such a project. This topic was also discussed at the last meeting of the Zoo keepers in Leipzig.

Active eradication: The population of *Hemorrhois hippocrepis* initially grows exponentially, like all species that colonize a new area. Once stabilized, it moves to sigmoid, with a slow decline. Currently, it is observed to be declining in the north-east of Ibiza (the first place where a breeding population of the horseshoe whip snake was established). It is still increasing in the south and west (sites of recent colonization). However, its presence now covers the entire island of Ibiza. In 2-5 years, population growth will have stabilized and will likely begin to decline. Active eradication measures can then be implemented: trained dogs, blowing hot air or smoke into cracks in walls, traps with gonadal hormones, etc., while maintaining capture pressure with mouse traps.

Different attitude in technicians and scientists: There is no point in investing more money in measures that are the same as until now. The responsible persons involved must evolve with the problem and, if this proves impossible, they must be replaced.

Our request to your committee

With the responsibility entrusted to you, we ask you to put pressure on the parties involved to take measures that can alleviate the problem.

Kind regards,

Dra. Antònia M. Cirer

Michael Kroniger

Marten van den Berg

Appendix - References

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