

Ibiza, September 19, 2025

Very Honorable Madam President of the Balearic Government:

As is widely known, since 2003, several species of invasive snakes have appeared on the island of Ibiza and, recently, on some of the Pityusic islets.

This irruption is considerably distorting terrestrial ecosystems, as it is causing the disappearance of the Pityusic lizard, an endemic species with a fundamental ecological function to maintain the balance of the environment of our Islands.

We know of the great economic effort that the Ministry of Agriculture, Fisheries and the Environment is making, but sometimes money is not the key to success if the actions are poorly directed: more money without an appropriate strategy can worsen the problem. And this is precisely what is happening in the Pityusic Islands with the problem of invasive snakes: that there is an error in approach and diagnosis from its origin, in addition to a lack of control over the tasks carried out from the island of Ibiza itself, which makes it difficult to solve.

Initially, the impact caused by invasive snakes was incorrectly assessed, despite the reports of the Spanish Herpetological Association (AHE, 2010) recommending work to eradicate invasive species as soon as possible. Instead, the Ministry of the Environment favored some **optimistic and amateurish diagnoses**, but not very realistic, such as the forecasts of Dr. Valentín Pérez-Mellado who bet on a possible adaptation of the lizard to coexistence with snakes, alleging supposed anti-predator adaptations and the perspective of the evolution of the species *Podarcis pityusensis* towards a new ecological reality.

These changes cannot occur in the course of the time considered, since evolution works with much longer times than those contemplated in this hypothesis. **It was also convenient**, but without corresponding to the reality of the Ibiza countryside, that Joan Mayol predicted that a new ecological balance would be achieved in which the new introduced species and the native lizards would coexist, as happens on the continent. But let us remember that this coexistence has never occurred in Mallorca, neither with the native lizard *Podarcis lilfordi*, nor with the introduced *Podarcis pityusensis*, which lives confined to the city walls without having had the capacity to colonize rural areas.

This hypothesis that will become the new equilibrium does not consider that island ecosystems are different and not comparable to continental ones. Neither are the density counts of lizard populations carried out by the team from the University of Salamanca, which in 2019 ventured that there were no significant decreases in the densities of the "studied populations". These studies only included lizard populations from the west of the Pityusic Islands, where the snakes had not yet arrived in 2019, therefore, there could not have been any decrease yet. Regarding the eastern areas, they indicated that there were no lizards, but that there were none before either. This before referred to 2010-2012, at which time the populations in the Sant Carles area were already extinct. In 2022, even this team denied the risk of extinction of *Podarcis pityusensis* (Diario de Ibiza, 27-03-2022).

At different times in the 20th century, from 1980 to 1994, I surveyed the Pityusic Islands extensively without detecting any decline in the lizard population, in any area of the island of Ibiza. Something that I did confirm with multiple surveys from 2012 onwards. The pattern repeats itself:

- First sighting of an invasive snake. The lizard population does not seem to have changed.
- After two to three years, there was a continued decline in lizard density.
- Disappearance of any presence of lizards in less than five years.

Observed throughout the island of Ibiza: from the moment the first invasive snakes arrive, the lizards in the area take about 5 years to disappear completely.

With these initial errors, the successive departments of the Balearic Government that manage the environment have opted to carry out "pest control" tasks, instead of promoting a strategic plan for the eradication of invasive species.

After **fifteen years lost** waiting for the arrival of this new balance, in which thousands of snake captures have been made by COFIB-Ibiza, Ibiza Preservation, Hunters' Associations, SOS-Sargantanes volunteers, GEN-GOB, Friends of the Earth, Ibiza Snake Trappers, and other non-affiliated volunteers; Every year the number of snake catches increases and the affected territory increases, with the realization that the pest control strategy is a failed action that swallows up all the economic and human investment without obtaining results that benefit the ecosystems or the endemic fauna. On the contrary, where there used to be lizards, there are now snakes and nowhere has the coexistence of the two species been observed, therefore, it does not seem that we can expect the balance advocated at the beginning of the 21st century by the successive Environment teams of the Balearic Government.

Often, excuses are heard from those responsible for COFIB-Ibiza indicating the exceptional situation of snakes in Ibiza. They say that they have learned to swim, indicating that in Jaén there is no news that they swim. Snakes have always been able to swim. It would be like indicating that there is no news that dogs in Jaén swim, and when we threw one into the sea it swam. There is also talk of the exceptional gigantism of snakes; something obvious if we consider that the problem of invasive snakes in Ibiza is accentuated by the lack of natural predators of snakes (there have never been snakes, therefore, there are no predators for this type of prey). If there is no predator, large size is not a handicap, they are not visible to be preyed upon, and they have all the advantages of being large. That is why there is this gigantism of snakes, it is nothing extraordinary, it happens in all island ecosystems.

Excuses to **cover up ignorance of the problem**, the ineffectiveness of actions and to be able to hide that the real causes of what is happening in the field, nor the appropriate solutions, are not being sought.

The situation in which the lizard *Podarcis pityusensis* finds itself today on the island of Ibiza is extremely serious. Currently, it is an endangered species (EN according to IUCN-2024), and a Conservation Plan has never been implemented for the species, it does not benefit from any LIFE project, nor has any protection status been established, with the exception of the autonomous law 1/2023, promoted by Carmen Tur Ferrer and myself, which has not yet been implemented and is already completely insufficient.

We are probably in the last decade in which we will still be able to observe it in its natural habitat. It is very urgent to establish measures to save, even if it is a small sample, what was one of the depository species of an important part of the world's biodiversity. Let us remember that it is an endemic species, which only lives in the Pityusic Islands in a natural way and that it is the last exponent of the vertebrate terrestrial fauna that existed in the Pityusic Islands before humanity arrived. In order to save the lizard population on the island of Ibiza from definitive extinction, we **ASK** you to promote several combined actions:

**In situ breeding shelters.** Enable small areas, in Ibiza, where lizards can live and reproduce as they have done so far, where the usual ecological conditions are maintained with the native flora that facilitates the presence of the usual invertebrates of our islands, with the presence of dead stone that generates abundant burrows for lizards.

Spaces that are called "Lizard shelter", "Lizard sanctuary", "Lizard reserve", "Lizard sanctuary", or whatever name you want. It is only essential that these spaces are surrounded by an effective anti-snake fence, with the upper end turned outwards to prevent snakes from entering.

There is already a failed attempt at a "Lizard Reserve" in the Puig des Molins Necropolis space, promoted by the MAEF (Archaeological Museum of Ibiza and Formentera), the Ibiza Island Council and myself in 2021-22. This enclosure has a perimeter fence and the initial plan included adding a supplement with a turn towards the outside that would prevent snakes from accessing it. The pre-existing fence has not yet been conditioned with an anti-snake structure, and snakes were already caught inside the enclosure in 2023; therefore, there is no guarantee of the sustainability of this lizard population. The only guarantee is to delimit the space with anti-snake fences.

There are many publicly owned spaces that could be equipped, from urban gardens, road roundabouts, school playgrounds, sports centers, rural properties, etc. In addition to entities and private citizens willing to carry out small arrangements on their properties to have a "lizard sanctuary".

We would like to remind you that the glued bark or stone, wood and clay boxes with holes that have been installed in various garden areas, called "lizard sanctuaries", are not an attractive refuge for lizards, which prefer traditional dry stone walls, nor do they offer any guarantee. Let's remember the obvious, if a lizard can enter through a hole, a snake can enter more easily.

**Ex-situ breeding of lizards.** Promote the presence of lizards in the different zoos that have suitable facilities. At the moment there is a successful population in the Barcelona Zoo. It is advisable that there are more facilities of this type in different cities, to avoid the risk of occasional loss due to unforeseen causes.

The more populations in the reserve, the more guarantees we will have of the survival of the genetic biodiversity of *Podarcis pityusensis*, to be able to continue studying this great example of evolution and adaptation to island microecosystems and to be able to repopulate the places where invasive species can be eradicated.

**Strategic action plan.** It is essential that all administrations and volunteer citizens are governed by a Strategic Plan, carried out by the public administration towards the eradication of invasive snake species and the protection of the endemic lizard species, which includes the purpose of the plan, the objectives and the actions that should be implemented in the short, medium and long term. Reassessed periodically as reality changes, with effective and efficient control from the democratic institutions of the island of Ibiza itself, and public exposure to all citizens.

So far, the only known intervention consists of the placement of traps with a fair amount of secrecy regarding the actions, financing and results (except for the number of captures declared) and the ex situ breeding pilot project at the Barcelona Zoo. But the final objective of these actions is unknown. What will be done with these lizards in ten or twenty years?

It is essential to capture as many snakes as possible, a task in which the population of Ibiza is willing to collaborate, but it must be done in a structured and coordinated manner, in addition to implementing more radical and technical actions by the Ministry.

**Coordination of efforts to capture snakes.** Currently, there are many actors with parallel organizations that capture snakes, just to mention the most important: COFIB-Ibiza, the Hunters' Federation, Ibiza Preservation, volunteers from SOS-Sargantanes, GEN-GOB, Friends of the Earth and Ibiza Snake Trappers. Each one acts separately. One of the biggest mistakes in the actions that have been taken so far has been not wanting to bring all the actors together under a guideline that would facilitate:

- Distribution of free traps for everyone willing to keep it active.
- Exchange of mice between volunteers and free replacement of mice that die. Remember that if there are no mice, the trap does not work.
- Help and assistance to euthanize snakes. Many volunteers are still afraid to do so.
- Scientific-theoretical advice if the volunteer requires it. Accompanying the volunteer.

**Exploration of eradication mechanisms.** Citizens can capture many snakes with the traps. This frees up technicians to look for new eradication mechanisms, not only for pest control. Such as:

- Activating traps with pheromones obtained from the gonads of captured snakes.
- Cages with families of mice (pinkies). Which requires a review every 3 days, and not every 3 weeks as COFIB-Ibiza currently does. And a citizen network to distribute the surplus of mice that are obtained.
- Actions to get snakes out of their dens by injecting smoke, heat or water.
- Training dogs to catch snakes when they come out of their dens.

I ask you, Madam President, to study these proposals in order to improve the situation and try to make an effort to avoid the extinction of the lizard population on the island of Ibiza.

Signed, Antònia Maria Cirer, PhD in Biology