

## No, the snakes will not eat all the lizards in Ibiza before 2030

The greatest expert on 'Podarcis pityusensis' doubts that the Pitiusan endemism will disappear from Ibiza in eight years as a result of the expansion of the horseshoe snakes, as stated in a thesis that he harshly criticized



**José Miguel L. Romero**

saint joseph | 27 03 22 | 06:00 | Updated at 08:49

Just a year ago, panic spread: "The rate at which the invasive population is spreading allows us to predict that the lizard will be extinct from the island of Ibiza before 2030." This was what was assured in the abstract (synthesis) of the thesis 'Natural history and impacts of an invasive snake: the horseshoe whip snake on Ibiza', presented at the University of Valencia by Elba Montes, a former council technician. In eight years, not one. Valentín Pérez Mellado, doctor in Zoology from the University of Salamanca, the greatest expert in Pitiusan endemic reptiles, doubts it, as he stated yesterday during the talk he gave as part of the 1st Conference on Scientific Dissemination organized by the Nature Reserves of es Vedrà , es Vedranell and the islets of Ponent next to the Ses Salines Natural Park.

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Basically, Pérez questions both the conclusions of that thesis and the purity of the scientific method used. «In the work of Elba Montes it is said that the lizards have practically disappeared from the northwest of the island. It is not true. Nor is it true that, as the thesis points out, they were once uniformly distributed throughout the island. It would be the only case on the planet », Pérez pointed out, based on the data he collected together with Dr. Ana Pérez Cembranos in 2017:« In the northeast, the density is discreet. And it already was before the arrival of the snakes », she affirms.

**"Not for not seeing them there are not"**

The professor of Zoology also criticized the way in which, based on a 500-meter transect, Montes draws the conclusion that there is no longer any trace of lizards in the analyzed area because the snakes have eaten them: "I don't know you can do a 500-meter transect and, if you haven't seen them, say that they don't exist anymore. Negative data is not easy to obtain, it requires many years of work [...] As a scientist I do not accept that for a 500 meter transect you say that there are no lizards anymore because you have not seen them».

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From his experience (he has been studying pitiusan lizards for more than 40 years), sometimes there are, sometimes not: "The fluctuations, especially on the islets, are very large." Magnificent populations six years ago "remain at lower values later, but that's not why you have to throw your hands in the head. It is necessary to have series of years to be able to say something concrete about it", indicates Pérez, who gave the example of es Vedrà: "Now it has extraordinary populations, but they were very low five years ago".

### **"Apocalyptic Conclusions"**

In this sense, he explained that "apocalyptic" conclusions should not be reached without taking into account other data, such as stochastic factors (processes whose evolution over time is random), "those that we cannot govern." For example, the rain. In his studies on the lizard of the Air (Menorca), he confirmed that "there is a correlation between rainfall and the number of lizards. The more it rains, the more there is. It is a factor that must be taken into account." Sometimes, a storm is enough to decimate them, as usually happens on the islet d'en Pou, in the middle of es Freus, or in es Caragoler, where now "a population can be estimated, when for years not a single one was seen". Populations are not a still photo.

**«You cannot make the syllogism that if you do not see lizards in the northeast of the island, which is not true, in 2030 they will have disappeared from Ibiza»**

In Pérez's opinion, "you cannot make the syllogism that if you do not see lizards in the northeast of the island, which is not true, in 2030 they will have disappeared from the lizards of Ibiza", as indicated in Montes's thesis . «The situation -he warned- of the Podarcis lizards is serious, but an apocalyptic scenario cannot be dramatically established. When it doesn't happen in nine years, they'll laugh at us."

Pérez considers that snakes "are a problem", so they must be "controlled", given their appetite for Podarcis pityusensis: "But there are other characteristics that have an impact. [...] The populations are not doing well, it is true, but not only because of the snakes. There are many reasons why his situation is difficult."

### **Bell the cat**

For example, he advocates controlling cats: «I claim that we should not place all the focus on snakes. You have to put the bell on the cat. What is going on with them? You have to include them in the equation, but since they are so popular. Since we have a Judeo-Christian upbringing, it is easy to demonize snakes; cats is more complicated. Christian education and watching so many Disney movies, which have distorted our vision of the animal world to the point of infantilizing it.

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The herpetologist considers that the horseshoe and ladder snakes "have been the last straw for populations of lizards that have been threatened for a long time." Because in 60 years "the island has changed brutally." Urban planning, cementing the walls... That has put them on the ropes for decades, he says: "In Ibiza, what happens, the main problem, is that the natural environment disappears."

### **Lizards at 20 euros**

The Professor of Zoology from Salamanca recalls that each islet has its own endemic species (more than four dozen in the Pitiusas), with unique genetic material: «Creating 44 evolutionary

units, maintaining that gene bank, would mean creating a captive breeding center that does not exist anywhere in the world. It is unfeasible to have these populations », he points out about that other recent occurrence. And it would not be useful either, in his opinion, because the animal is not only genetic: "There is epigenetics [modifications that occur in response to changes in the environment], the influence of environmental conditions, which is not achieved in captivity. We always opt for artificial solutions, when what needs to be protected is the population, the islet where they live".

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There is another pressure on lizards: human. In the 19th and 20th centuries (until 1983, supposedly) hundreds were captured for scientific collections: «That collection continues; in na Bosc we saw in 2017 several traps with plastic bottles. They continue to be marketed." Up to 20 euros each, despite its prohibition.

Some Germans try to legalize their farms to "export them to the United States." Cites (Convention on International Trade in Endangered Species of Wild Fauna and Flora) asked Valentín Pérez for a report on the matter. And he was categorical: «This trade cannot be legalized because there is no way of knowing the origin of these lizards, which is sure to be recent. Since 1983 it is forbidden to take them out of here. The Germans say they have had them for 50 years. It's another barbarity. They use as an argument that they could be used for translocations [moving individuals of a species to another place to repopulate] in case they are in danger in some islets. That reasoning, which is purely commercial, is outrageous.

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Because the translocations of lizards "are impracticable", in his opinion: "Each population is a treasure that must be preserved". Each one of them, in each islet, "has been isolated for hundreds of thousands of years, with unique characteristics. It doesn't make sense to translocate, it's outrageous. That's not a conservation measure." For example, if the population of lizards in es Vedranell plummeted, "it would be insane to relocate lizards from es Vedrà to solve that problem."

### **The endemism of es Vaixell**

Pérez recalled the experiment carried out 90 years ago by Martin Eisentraut on the islet of es Vaixell (among others). He introduced 58 lizards from the island of Ibiza there. It was believed that they had disappeared, until a person in charge of the Nature Reserves, Jorge Calvo, saw them with binoculars from Na Gorra. When he went up to es Vaixell (given its devilish relief, it has to be done by alpine climbing), the ones that Valentín Pérez saw had nothing to do with the ones in Ibiza. Further analysis determined that their genetics were unique: completely melanistic, their DNA is very far from that of the main island and close to that of na Gorra, but with subtle differences. They are a unique subspecies (although Pérez prefers to speak of a significant evolutionary unit): «It does not contain haplotypes from Ibiza. Ergo, those introduced by Eisentraut did not come together with those of es Vaixell, they disappeared».

## COMMENTS

**Carme 334** 03/28/2022 10:40

Ibiza lizards are disappearing. This gentleman (Pérez Mellado) contradicts the opinion of other experts and denies the evidence. Who awarded him the title of "Top Pocomis pityusensis Expert"? At best I think it is very dubious.

**nick\_55a7f7** 03/27/2022 10:12

I am in a country house in Sant Llorenç de Balafia, for three years not a single sad lizard has been seen, when I say not one, it is not one, and on the other hand if there is sighting of snakes, it is true that they have disappeared from all over the northwest of the island, and the progression is unstoppable. This mister finds it exaggerated that in 2030 there will be no lizards left, but if it is not on this date, it will be in 2035. Part of the blame for this situation lies with the council that should have put money and means years ago to eradicate the snakes, not to leave the initiative alone to the good will of the volunteers in setting traps, a massive campaign should have been carried out.

## SUBMITTED COMMENT

**Maria D. Calvo Vila** - Diario de Ibiza | 05 04 22 | 06:01

I read in the Diario de Ibiza on March 27, the article about Mr. Pérez Mellado's conference on March 26 at Can Jeroni. I am surprised by the headlines and the somewhat derogatory tone about some data. I do not know if it is from the journalist in charge of writing it or if it reflects the one used by the speaker. 'No, the snakes will not eat all the lizards in Ibiza before 2030'. So will it be in 2031 or 2040?

I live in the NE part of the island, between Santa Gertrudis and Sant Miquel, I walk around the house and the area almost daily, and I haven't seen a lizard in four or five years! The lecturer says: «Not for not seeing them, there aren't any» but it is that before we contemplated them with my children, sunbathing on the stones, calm. Now, we don't even see them running from afar. With the same premise: I see snakes because there are, I don't see lizards because there aren't.

Cats, possible predators of lizards... (they have always been in country houses). We don't have cats at home and if there are, they don't get between the stones of the wall to rummage in the nests of the lizards. Snakes can do it.

I don't know Elba Montes, but a thesis is not done in any way, nor are results given at random. The area I control is about 40,000m<sup>2</sup> and day after day I come to the same conclusion: in the NE area of Eivissa there are no lizards! Interesting data on the new attempt to market the lizard: surely the corresponding authority will be attentive.

At the moment, here in Ibiza, with the 'Salvem les sargantanes' project, work is being done to make public administrations and the population aware of the need to control the entry of snakes and to carry out practical actions to prevent these predators from spreading and endangering the existence of our lizards. Participating in the issue of traps, sightings of snakes/lizards, creating a refuge zone for the latter in the southern zone (where according to the data, it seems that the snakes have not spread yet) is a practical, real and I believe than effective in preventing its disappearance. It is to be hoped that we combine knowledge and practical work to achieve this.