

**Subscribe** →

News website of the year

**News Opinion Sport Culture Lifestyle****The age of extinction**

## Lizards or snakes? The stark game of survival playing out in Ibiza

The growing trend for imported olive trees has brought hoards of invasive snakes to the Spanish island, threatening the future of its wall lizard

The age of extinction is supported by

the  
guardian  
.org

About this content

**Sam Jones in Ibiza**

🐦 @swajones

Fri 27 May 2022 10.00 BST

---



Far below the Ibiza sun, a solitary lizard fidgets across the baking rocks on the southern tip of the island, happily oblivious to what may lurk ahead.

After 6m years of isolated evolution, the Ibiza wall lizard, whose scaly finery runs from cobalt blue to acid green, is facing an existential threat summed up in the Catalan phrase *sargantanes o serps*: lizards or snakes. Over the past two decades, the wall lizards have completely disappeared from some areas of Ibiza and the neighbouring island of Formentera thanks to the rapid proliferation of invasive, non-venomous horseshoe whipsnakes and ladder snakes.

---

Advertisement

“The density of the lizard population across the islands used to be very, very high,” says Antònia María Cirer, an Ibizan biologist who has studied the reptiles since the late 1970s. “It was extraordinary. There were so

many that if you sat down anywhere to eat a sandwich or a piece of fruit, the crumbs would bring the lizards out straight away.”

That began to change about 20 years ago. Until then, the islands had been snake-free apart from the odd interloper that arrived with freight. According to scientists, conservationists and the Balearic government, the fateful moment for the lizards came when wealthy property-owners in Ibiza and Formentera developed a taste for adorning their gardens with ancient olive trees imported from mainland Spain and beyond.



▲ Horseshoe whipsnakes came to Ibiza in olive trees imported from the Spanish mainland. They now threaten the island's native species. Photograph: Patricia Escriche/The Guardian

Beautiful as the non-native trees are, they have served as Trojan horses for the ophidian onslaught, their cracks and hollows perfect compartments for laying eggs and hibernating. The snakes have adapted quickly to their new environment and its menu - lizards make up 56% of their diet and are now threatened by the newcomers' voracious appetite.

---

Advertisement

“If they’ve managed to colonise half the island in 20 years, then the snakes are likely to spread around the rest of the island in less than 20 more years,” says Cirer. “It would be a very quick extinction for the lizards. It’s not just that they’re eating the lizards; it’s that they’re pushing them out of their habitat.”

Cirer says the lizards are an important species, whose biological value is on a par with that of the [finches Charles Darwin found on the Galápagos islands](#). Each of the dozens of islands and islets that make up [the Pityusic islands](#) has a different population and, on many of them, the lizards’ colouration is unique and exclusive to that island.

“Every link in the evolutionary chain is still present,” she says. “And we still haven’t had time to do a genetic study of how their evolution has worked. But we’re going to lose some of these links before that can be done.”







▲ The Ibiza wall lizard was once found everywhere on the island, but they are the main prey of the invasive snakes and are now under threat. Photograph: Patricia Escriche/The Guardian

Although efforts are underway to get rid of the snakes, the scale of the challenge is immense. The regional government's wildlife teams captured 8,274 ladder snakes and horseshoe whipsnakes on Ibiza and Formentera between 2016 and 2021, but there is more work than they can handle.

---

Advertisement

Dean Gallagher, a British-Australian teacher and property manager who has lived in Ibiza for 15 years, is one of those taking up the slack. As well as catching the snakes - a skill he picked up as a child in Australia - he is working to educate people about the reptiles.

“I think the authorities are trying as much as they possibly can, but this is a new situation,” he says. “They’re still learning; I’m still learning; everyone’s still learning. But more residents of the island need to accept that this is the new reality, get over their fear of snakes and reptiles and become more aware of issues facing the ecological balance of the island.”

▲ Dean Gallagher, who learned how to handle snakes as a child in Australia, lets a captured horseshoe whipsnake coil around his arm Photograph: Patricia Escriche/The Guardian

Between May and September last year, Gallagher recovered and euthanised 365 snakes. As the weather grows warmer and more snakes emerge, he is finding himself in ever-greater demand.

The first call on a recent Saturday, his busiest day, takes him to a snake trap on a remote property in the mountains. He takes a 70cm horseshoe whipsnake out of the compartment that separates it from the bait mice and lets it coil around his arm to calm it down. The snake is enervated and its neck scrawny, suggesting it is malnourished.

---

Advertisement

When the time comes to put the snake down, Gallagher stuns it with a blow to the head and then dashes its brains with a rock. Before he does so, he says a few solemn words that he will repeat a dozen times that day: “Sorry mate. Come back as a bird or a lizard.” With that, he casts its body into the cloud-covered valley below as food for the birds. Larger snakes, of which there will be more as the day wears on, are buried.

Gallagher says that while “99.5% of people are on board” with eradicating the snakes, a small number think nature should be left to take its course. “But the reality is that we have to make a stark choice between the snakes and the lizards. The two cannot peacefully coexist and the snakes will decimate the lizard population if nothing is done.”



▲ A snake trap on Ibiza uses a mouse as bait. Spain's environment ministry is hoping to develop more efficient traps. Photograph: Patricia Escriche/The Guardian

Both Gallagher and Cirer would like a much stricter approach to live imports - including a quarantine period to detect snakes arriving in trees - but the regional government says EU rules on free movement of goods make that difficult.

---

Advertisement

“We’re talking to specialist environmental lawyers to see whether there might be a legal way to restrict the entry of ornamental plants that are

susceptible to bringing snakes into Ibiza and Formentera,” says a spokesperson for the Balearic islands environment department. “We’re confident that all these efforts will help us to reduce the snake populations in the islands, even if the chances of completely eradicating them are slim.”

Spain’s national environment ministry says it has been channelling funds into tackling invasive snakes in the two Balearic islands - and in the Canaries, where the native lizards are under threat from another invasive species, the California kingsnake. It is also hoping to develop traps that are more efficient.

▲ Dean Gallagher throws the body of a horseshoe whipsnake into the valley so it can be eaten by the birds.  
Photograph: Patricia Escriche/The Guardian

Another step towards protecting the sargantanes would be to move them up the International Union for Conservation of Nature's (IUCN) red list. A spokesperson for the IUCN says that while the lizards are classified as "near threatened", a reassessment is underway and will take into account the threat posed by the snakes. The review is expected to be published early next year.

---

Advertisement

Although the eradication effort has already led to noticeable reductions in some areas of Ibiza, the situation remains critical: on the day the

Guardian visited, 11 snakes and just three lizards were spotted.

Gallagher is gearing up for another long summer season and is already getting twice as many calls as this time last year. “One day last week, I extracted 11 snakes from five or six different properties,” he says. “The callouts are constant.”

Cirer, whose affection for the lizards is deep, welcomes plans to set up a reserve for them on the south-west of the island. But she warns that far more needs to be done, because the loss of these vivid little lizards would be felt far beyond the Balearics.

---

Advertisement

“We’re at risk of losing a species that has an extraordinary biodiversity value,” she says. “Yes, the Spanish government and the people of Ibiza have a responsibility to protect this species, but if it’s lost, it’s lost to the whole world.”

*Find more [age of extinction coverage here](#), and follow biodiversity reporters [Phoebe Weston](#) and [Patrick Greenfield](#) on Twitter for all the latest news and features*

Topics

[Global development](#) / [The age of extinction](#)

[Snakes](#) / [Invasive species](#) / [Endangered species](#) / [Spain](#) / [Europe](#) / [Wildlife](#) / [features](#)



**[View on theguardian.com](#)**

- About us

Contact us

Complaints and corrections

Securedrop

Work for us

Privacy settings

Privacy policy

Cookie policy

Terms & conditions

Help

Advertise with us

Search jobs

Patrons

Discount Codes
- All topics

All writers

Modern Slavery Act

Digital newspaper archive

Facebook

Twitter

Support The Guardian

Contribute

Subscribe



Back to top

^

© 2022 Guardian News & Media Limited or its affiliated companies. All rights reserved.