Lovin Malta

'Mostly, I Find Myself To Blame': A Tragic First-Hand Account Of The Extinction Of The Selmunett Wall Lizard



By Arnold Sciberras March 19, 2025 at 10:00 am



Twenty years have passed since the disappearance of the Selmunett wall lizard (*Podarcis filfolensis*), a population back then was considered a subspecies (*kieselbachi*) once endemic to Selmunett Island, also known as St. Paul's Islands, in Malta.

Its extinction is a stark reminder of the vulnerability of insular species and the devastating impact of human negligence and invasive predators.

Having studied this unique reptile for over a decade before its disappearance, I feel compelled to document the events leading to its loss, the conservation efforts that failed to save it, and the lessons we must learn to prevent such tragedies in the future.

A Unique and Isolated Population

The Selmunett wall lizard was a remarkable population of the Maltese wall lizard (*Podarcis filfolensis*), distinct in its colouration and adaptation to the unique environment of St. Paul's Islands.

Unlike its relatives found on Malta, Gozo, and Filfla, this population exhibited significant variation in body color, with some individuals displaying shades of brown and grey, while others developed striking orange underbellies.

For centuries, the lizard thrived in isolation on Selmunett, an island with no natural predators. It was well adapted to its rocky habitat, relying on a diet of insects, small invertebrates, and occasional plant matter. However, its very existence was precariously tied to the stability of this tiny ecosystem.



The First Signs of Decline

My first extensive surveys of the Selmunett wall lizard began when I was 13 in the late 1997, building upon previous observations by other researchers.

During fieldwork between 1999 and 2003, I started noticing a significant decline in the population. Once common across the rocky outcrops and crevices of the islet, sightings of the lizard became increasingly rare.

By 2003, concern turned to alarm.

Despite intensive searches covering every part of the islet, I could only find a handful of individuals. These were mostly adults - an ominous sign, as the absence of juveniles suggested a catastrophic reproductive failure.

The Culprit: The Brown Rat Invasion

Through detailed analysis, I determined that the primary cause of this decline was the brown rat (*Rattus norvegicus*), an invasive species that had established a significant population on Selmunett. Black rat (*Rattus rattus*) was also present but in small numbers.

These rodents, likely introduced through human activity, thrived on the islet due to the abundance of food waste left behind by visitors.

Brown rats are notorious for their impact on island ecosystems. They prey upon eggs, hatchlings, and even adult reptiles, particularly species unaccustomed to predation.

The Selmunett wall lizard, having evolved in a predator-free environment, was ill-equipped to cope with this new threat. The rats systematically wiped out nests, consuming eggs before they could hatch and hunting down hatchlings.

My investigations revealed clear signs of predation: lizard remains found in rat nests, gnawed bones, actual sightings of predation and evidence of burrowing near known nesting sites. The decline of the population correlated directly with the increase in the rat population, confirming the cause of the impending extinction.



The Call for Conservation - And the Failure to Act

Recognizing the urgent need for intervention, I, along with other conservationists, submitted proposals for immediate rat eradication and habitat restoration.

Among our recommendations were:

- A targeted brown rat eradication program to remove the primary threat to the lizard population.
- A waste management plan to prevent further rat infestations by restricting human littering on the islet.
- Captive breeding efforts to secure a backup population of the lizard in case extinction was imminent.

However, despite these efforts, bureaucracy and lack of funding stalled any real action. The conservation authorities hesitated, citing the need for further studies before implementing drastic measures. By the time discussions moved forward, it was already too late.

Today I feel I mostly find myself to blame because I was too naive and too young to understand how things work. I was only 18. Knowing the things I know now, this population might still exist.

Hopefully, and I believe, so the relevant authorities today work wit h a better mindset than back then.

The Last Sighting and Official Extinction

By 2004, I was unable to locate any remaining individuals, despite exhaustive searches. I knew, deep down, that we had lost this subspecies forever.

A last-ditch effort in early 2005 confirmed my worst fears - there was no trace of the Selmunett wall lizard.

The last three lizards ('declared males' but one of the images evidently shows a female) were released in June 2007 on the islet by officials from the original 7 collected myself for a captive-breeding project.

No live lizards were ever observed alive again on the island.

Although some officials initially hesitated to declare it extinct, the reality was undeniable.

With a land area of just a few hectares, St. Paul's Islands left no room for a hidden population to persist undetected. Unlike mainland species, which may evade detection in remote areas, an extinction event on such a small islet is absolute.



What We Lost

The extinction of the Selmunett wall lizard was more than the loss of a single population.

It was the loss of a unique evolutionary lineage, an irreplaceable piece of Malta's natural heritage.

The failure to protect it exposed the shortcomings of conservation policies and the dangers of inaction in the face of ecological threats.

Moreover, the disappearance of the lizard disrupted the islet's ecological balance. Its role as an insect regulator was left unfulfilled, potentially altering the entire micro-ecosystem of Selmunett.

Lessons for the Future

The Selmunett wall lizard's extinction should serve as a cautionary tale.

The fate of island endemics rests on fragile ecological balances, and even minor disturbances - especially the introduction of invasive species - can lead to irreversible consequences.

To ensure that no other endemic Maltese species suffers the same fate, we must:

- Implement proactive conservation strategies rather than waiting until populations collapse.
- Enforce strict biosecurity measures to prevent the introduction of invasive species to isolated habitats.
- Conduct continuous monitoring of vulnerable species to detect declines before they become irreversible.
- Strengthen public awareness about the impact of human activities on native wildlife.



Final Thoughts

As I reflect on this tragic anniversary, I am filled with regret but also with determination. The extinction of the Selmunett Wall lizard should not be in vain.

It should serve as a rallying cry for conservation in Malta - a stark reminder that nature's treasures are fleeting if we fail to protect them.

Twenty years later, the rocks of Selmunett are silent, their once-familiar reptilian inhabitants gone forever. But their memory should remain a guiding force, urging us to be better stewards of the natural world.

Let us not allow another species to vanish before our eyes.