Tap Dancing on Tarmac – A Question from an Island

Dapeng Bay National Scenic Area, Taiwan
Dapeng Bay National Scenic Area Headquarters
Local Destinations (including villages, cities, municipalities, islands)
Visitor Experience & Destination Management

Summary of Good Practice Story
Xiaoliuqiu (Liuqiu Island), Taiwan's only inhabited coral island, saw tourist numbers jump 43% between 2020 and 2025, and with them a sharp rise in land crab roadkill — nearly 2,800 documented deaths in one breeding season alone, many of them pregnant females struck while crossing the ring road to release eggs into the sea. After years of informal volunteer roadkill tracking by local guides, funding through a 2025 Marine Conservation Local Guardianship Project let the Liuqiu Coastal Ecology Association and the Dapeng Bay National Scenic Area Headquarters coordinate across county, township and NGO lines to trial a nighttime vehicle closure of a 1.2 km stretch of road during the summer breeding season. The first 11-day trial in 2025 ran smoothly and was expanded to 82 days in the following year, giving visitors a quieter, safety-conscious ecological experience while protecting migrating crabs. The lesson: meaningful conservation requires sustained, unglamorous groundwork (years of citizen data collection) before an idea like a temporary road closure can gain the trust and coordination needed to become policy — and it prompts destinations to ask whether tourism must always maximise convenience for humans alone.

Setting the Scene: Destination & context
15 kilometres southwest off the coast and opposite Dapengwan – Taiwan’s largest bag-shaped lagoon and the other component district of the Dapeng Bay National Scenic Area – Liuqiu Island

is the only human-inhabited coral island among the 14 surrounding satellite islands. It boasts abundant marine and terrestrial ecology, as well as remarkable scenery features such as raised coral reefs, dramatic sea caves and towering limestone cliffs. The warm waters also make Xiaoliuqiu a popular, year-round destination for those fancy snorkeling, scuba diving and sea turtle spotting. In recent decades, Xiaoliuqiu has seen dramatic spikes of visitors from the main island, especially since the pandemic outbreak when international travel became limited and less accessible. As tourism booms, scores of visitors streaming into this 6.8 sq km island have real impacts on the ways of living, landscape and life on the island. Unlike the sea turtles, land crabs are (or used to be) common inhabitants of the island: People used to take it for granted that they would be roaming around in nature and the built-up environment. Now dwindling numbers and the ways in which that took place have prompted the introduction of “nighttime traffic control for land crabs” as a destination management tool in 2025.

The Turning Point: Why change was needed

Land crabs are one of the key ecological features of Xiaoliuqiu, but the populations were under threat. According to Dr. Liu Hongchang, research expert in land crab ecology, Xiaoliuqiu has the largest population of purple land crabs, which made up roughly 90 percent of the statistics so far. He also noted that female purple land crabs were found to be smaller in size – around 5-6 cm, when normally they can grow up to 12 cm. He supposed that this was due to road kill.
From 2020 to 2025, the number of tourists to Xiaoliuqiu went up 43% in 5 years, from 450,000 to over one million. Meanwhile, from April to October 2025 roadkill investigations documented 2,800 crab deaths, described as “crab cakes” for the flat and condensed form in which these creatures were found on the asphalt road. “Crab cake” records peaked as numbers of visitors to Xioliuqiu peaked during holidays: The increase of deaths corresponds to that of tourist activities. The Dragon Boat Festival holiday saw over 100 land crabs killed, as opposed to an average of 20 on other days; many of them pregnant females crossing the island’s ring road to lay eggs into the sea. As crab cakes were being tracked and documented, conservationists were realising that the survival of land crab populations depends on tourist activities. Locals were saying that their childhood friends are in severe danger of disappearing. Roadkill numbers must be reduced fast.

The Vision: What you set out to do

For decades, the the Dapeng Bay National Scenic Area has endeavoured to gradually shift from a development-focused tourism model to one that prioritises ecological restoration and environmental governance. Specifically, we intend to continue joining efforts and make the “night time traffic control” a regular practice every summer, for that is the breeding season, when female crabs embark on mass nocturnal migrations to the coast to release their developing eggs directly into the ocean. We hope that Xiaoliuqiu is becoming safer not only for humans but also other forms of life.
We at the DBNA Headquarters ask everyone to consider: Is there only one version of tourism? Can there be alternatives – ones that make people respect other forms of life and understand

the island's limitations? We are convinced that responsible tourists are those willing to make space and leave room for survival in Xioliuqiu.

The Journey: How change happened

As early as 2013, local guides found "crab cakes" when showing the visitors night time interests. They organised themselves to track and record, numbering the dead crabs in an attempt to keep accurate numbers. That project did not persist, mainly due to participating volunteer surveyors overburdened and unable to fully commit sustainably. In the long run, their busy day jobs and personal lives took a toll on them. However, the general concerns for land crabs lasted, and the surveys were done on and off for years. Until veteran tour guide and executive of Liuqiu Coastal Ecology Association WANG Tianzheng was able to get funding from Ocean Conservation Administration, Ocean Affairs Council, through the the 2025 Marine Conservation Local Guardianship Project. Now the NGOs were collecting more effective data and becoming more apprehensive. It occurred to them: Instead of tracking the "crab cakes", how about stop them from being made? Their wishes gave birth to an idea: what if we close the main road in the night time? This apparently viable idea was quickly dropped due to obstacles like the shortages of manpower, funding, and administrative resources, but the final piece fell into place when Director of Liuqiu Workstation CHEN Rongfeng came onboard and suggested an interdepartmental collaboration across different levels and sectors.

Thus, on the 24th of June, 2025, Liuqiu Management Station of DBNSA hosted a meeting with Pintung County, Liuqiu Township, and local NGOs to discuss matters of traffic control during breeding season, and concluded that a heavily touristy 1.2 kilometre of the route to Beauty Cave would be closed for vehicles between 19.00 and 22.00.

To prepare residents and visitors of Xiaoliuqiu, Liuqiu Management Station created a street market event, Let Them Walk Safely Home, referencing Taiwanese roadside banquets, campaigning the idea of night time traffic control in peak season for land crab's breeding safety. Then, the celebrations commenced. 19th September, 2025, the first "night time traffic control" took effect and lasted 11 days. Local guides remarked that, without cars and scooters, visitors were having much quieter and better ecological experiences, free to wander and appreciate nature around them. WENG Jingting, our local volunteer recalled, "You can even hear the skittles of land crabs, as clearly as if they are tap-dancing on tarmac. You just watch them moving from the hillside to the seaside, one step after the other… That is a very touching moment".

The Breakthrough: What you achieved

Surprisingly every party agreed on traffic control. At the meeting the main discussions focused on HOW to do it better. A local conservationist commented, "If this idea had been proposed ten years ago, it would have met much resistance". Yet, the veteran land crab guardian knew this consensus did not just happen. He noted that people changed gradually and subtly over time.

The roadkill surveyors' consistent presence impressed on the mind of everyone involved in Xiaoliuqiu's tourism businesses, which in turn made them respond with "Yeah… Good idea" to the proposal of night time traffic control during peak season.

Nonetheless, the procedures to coordinate between local government agencies, police department, local businesses and NGOs… etc. were no easy feat, so by the time we got all the paperwork done, the breeding season was ending. Still, night time tourism during those 11 days offered safer and more in-depth visitor experiences, for the tourists could concentrate on their surrounding ecology without safety concerns and disturbance byracing scooter convoys. In addition, some of those working on the evening shift for this traffic control came away feeling not having done just a job with wages, but something meaningful.

This year, building on our initial results, the 82-day night time traffic control took effect smoothly on 11th of June in peak season.

Perhaps the real difference lies within everyone who comes into contact with life on the island: as tourism continues to grow, people from different walks of life and of varying interests are becoming more willing to adjust how they move across the island for other forms of life. We understand better now, that tourism does not necessarily thrive on unqualified convenience for humans.

Reflections: What you learned and what others can learn

In practice, the manpower required for controlling the traffic of even a mere 1.2 kilometres turns out to be more than what we expected. Our intended road closure time was also greatly shortened due to administrative schedules and budgetary limitations. The administrative budget for coming years can also affect how big the gap between our intended and the actual results.

However, as we endeavor to work within an unestablished institution, hoping to achieve our goals in this uncertain situation, we believe the first trial practice has provided a stepping stone for future conservation initiatives.

Currently most participants are volunteer workers, so the project is still understaffed. Although we find that our protective efforts with limitations of budget and other resources, seem a poor match to the overall environmental degradation risks, we've also witnessed that change is possible with collaboration and cooperation.

This mismatch makes us think harder about where we ought to direct our main efforts next time: How do we make conservation a shared, long-term responsibility for all, instead of passionate convictions of the few? One way is to create locally conservation – related job opportunities, while working holidays may involve visitors in local conservation initiatives.

Land crabs are not the only ones to be safeguarded. It is the future of this island, where humans, rather than exhausting nature to live conveniently, can live sustainably WITH nature.

The Ripple Effect: Lasting impact

Our project to safeguard the land crabs during breeding season is only one step in the journey of ecological conservation, but it is resonated regionally. Director at DBNSA has met with officials at Kenting National Park, which is also situated within the jurisdiction of Pingtung County and having similar issues with crabs, to talk about possible collaboration. Moreover, local reflections on tourism development are reverberating. In 2025, Pintung County and DBNSA have extended several conservation measures, which bring forth the question: Must tourism develop in higher and higher footfall?

Xioliuqiu has been promoting guided eco-tour, land-based recreation and tourist diversion, expecting to reduce pressure on certain hot spots and allowing tourists to see different beauties of the island. At the same time, more public discourse on intertidal management, conservation zoning and island visitor capacity is being conducted.

We haven't the right answers yet, but we have begun to imagine a different kind of tourism: One that develops the island while leaving room for other forms of life. Can that be? This question may well be the biggest rippling effect of our efforts to protect the land crabs.

Awards or Certifications

National Environmental Education Award (Taiwan) – Dapeng Bay National Scenic Area Headquarters.

Web Articles

https://ourisland.pts.org.tw/content/11864
https://www.dbnsa.gov.tw/zh-tw/news/NewsPage?a=116&id=3491&sdate=&edate=&kw=&p=1&refNT=
https://news.ltn.com.tw/news/life/breakingnews/5469297
https://focus.586.com.tw/2026/06/14/p391373/

Other Relevant Links

https://drive.google.com/drive/folders/108viKzKuj6_nXzmTGZuyMBKJo4sqaKvl?usp=sharing

01_DBNSA Proposal for Establishing a Seasonal Land Crab Protection Corridor
02_Land Crab Conservation Coordination Meeting Minutes (24 June 2025)
03_Official Approval for Seasonal Night-time Road Closure for Land Crab Conservation
04_Official Notice to Xiaoliuqiu Scooter Rental Operators on Seasonal Road Closure
05_Four in Love Market Public Awareness Campaign

Quotes or Testimonials

"What really matters is not bringing more people to the island, but making sure the island remains a place where life can stay."

— Local conservation participant