



# Cultural Seascapes in the ‘Sea of Calms’ and La Restinga Coast

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## Abstract

El Hierro has been characterized by the balance between human development and environmental sustainability. The island was historically far from the mass tourism developments dominant on the other Canary Islands. Tourism accommodations in El Hierro are few compared to more developed coastal areas in the Archipelago, and recreational activities are mainly linked to cultural and natural sites and resources. This chapter focuses on La Restinga fishing village and its coasts, where the ‘Sea of Calms’ and one multiple-use Marine Reserve (MR) are located, both of which became popular over the last decade. The tourist development experience has promoted a new way of looking at the sea and conceptualizing its

habitats and populations. In 2014, after the submarine volcano eruption occurred in 2011, we estimated that at least 25,391 dives had been carried out in the diving spots established by the MR and other diving sites close to La Restinga. Despite the difficulties experienced after the volcano eruption, a unique imaginaire has been consolidated, thanks to the image of the island's exclusive nature and iconic elements. In addition, the rapid recovery of the destination is an excellent example of how the tourism system can adapt and incorporate unexpected events such as volcanic eruptions.

## Keywords

Tourism • Seascape • Cultural landscape • Submarine volcano eruption

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## 1 Introduction

Marine and coastal seascapes are undoubtedly linked to historical human developments, including a long history of human-environmental interactions across time and space and the accompanying footprints of human activities in the marine environment. Such deep historical interactions have been recorded archaeologically and ethnographically in several locations in the world, including Australia (McNiven 2018), the USA (Erlandson and Jones 2002), Chile (Latorre et al. 2017), and the Canary Islands (Spain) with aboriginal populations (Rodríguez Santana 1996). In the European context, remarkably, the coasts of southern Andalusia (Spain) are home to so-called ‘*Corrales de Pesca*’ (e.g., Florido del Corral 2011, 2014), which exemplify the richness of cultural seascapes that encompass the complexity and diversity of human and environmental relations. They include, but are not limited to, local and territorial knowledge, ichthyological knowledge, and issues of historical-cultural identity related to anthropogenic structures. According to the 2004 European

Landscape Convention, landscape concerns natural, cultural, and anthropogenic components as well as their interconnections. Thus, the historical and current forms of human development in different areas and the socio-economic relationships play a role in the cultural foundation of understanding the constitution of cultural seascapes. These undoubtedly include the socio-cultural processes related to leisure time that have conditioned the perception of seascapes (Rodríguez-Darias et al. 2016), incorporating the tourist gaze (Urry and Larsen 2011), and recreational interest and uses (Piñeiro-Corbeira et al. 2020).

In island contexts, seascape has been regarded as a limiting factor and a part of a more extensive territory in which the sea belongs to the same space as the cultural and economic interconnection of people living on the island (Hau'ofa 1994). Moreover, besides island size and orography, seascape determines the level of openness in which islands may also be exposed to cultural influences from a wider variety of sources (Pungetti 2017), including island colonization, ecological adaptation, and the modern context of economic development such as tourism. Of course, the territory is rarely homogeneous (Crowley 1989), and human adaptations and resource usage may vary, resulting from various cultural seascapes in different island contexts. In the Canary Islands, the linkages with distant cultures date back at some level to the Phoenician-Punics, first, and the Romans later (del Arco Aguilar 2021). It is unclear yet how deep these ancient relationships were. However, the Spaniard conquest (1402–1496) opened the Archipelago to the European trade, converting some islands into a strategic hub for trade between the American, African and European continents (Vieira 2004; Macías 2009), promoting the introduction and development of some agricultural products, especially sugar (Macías 2009). For centuries their ports were an obligatory stop on all routes to the Southern Hemisphere. Santa Cruz de Tenerife and Las Palmas de Gran Canaria ports became essential coal deposits in the Atlantic, particularly during the nineteenth century (Suárez Bosa 2004). Later, the Archipelago went into the health and tourism businesses. Several places on the islands became centers for patients and rich families from Europe (González Lemus and Miranda Bejarano 2002). Marine tourism, including cruises and coastal recreational activities focused on the sea and sun resources, increased and intensified until well into the second half of the twentieth century. Currently, the European commodities demands are still present in large coastal areas and Canarian landscapes. Tourist resorts have occupied the seascape since the 1960s and intensified in the 1980s. The Canary Islands has one of the highest population densities in Spain, and most of the population lives on the coast. Some coastal tourist areas have densities similar to Central-European cities. Most of the 415,287 regulated accommodations in 2017 were concentrated on the four

islands with a consolidated tourism sector (Tenerife, Gran Canaria, Fuerteventura, and Lanzarote) (Simancas Cruz and Peñarrubia Zaragoza 2019).

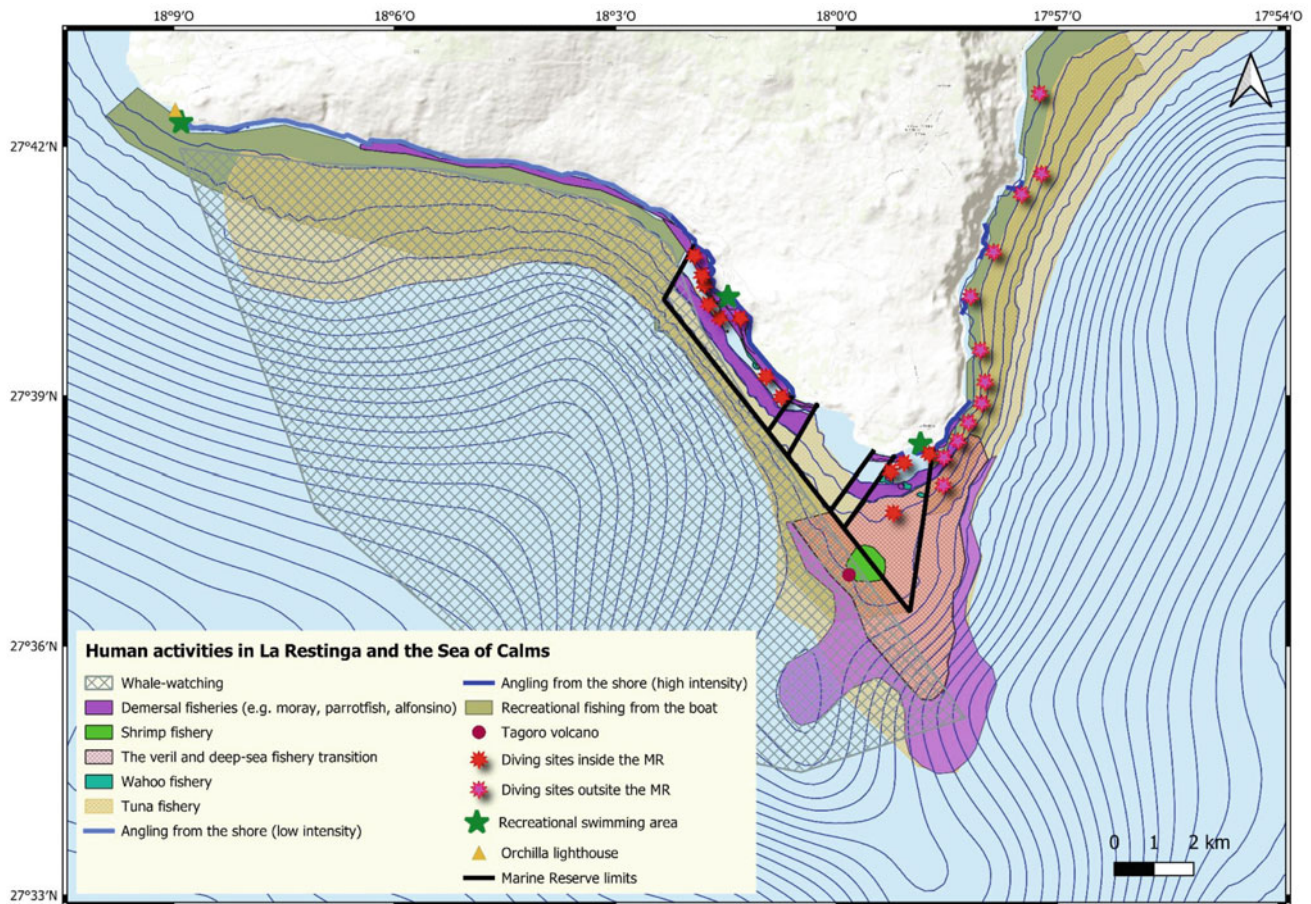
In contrast to these macro processes in some of the islands in the archipelago, El Hierro has been characterized by the balance between human development and environmental sustainability. El Hierro's port was built during the second half of the twentieth century. According to the official tourist accounts, El Hierro has traditionally received fewer tourists than other islands (e.g. 268,405 passengers arrived at the airport in 2019 of whom approximately 133,325 were tourists, according to the Canary Islands Institute of Statistics<sup>1</sup>). The island was not included in the aforementioned trans-oceanic trade routes and was far from the tourist developmental movements on the other islands. Tourism accommodations are few compared to more developed coastal areas in the Archipelago. In 2019 there were only 23,721 travellers staying in tourist establishments in El Hierro.<sup>2</sup> Recreational activities are mainly linked to cultural and natural sites and resources, tangible and intangible ones. On the southern tip of the island, the Marine Reserve (MR) 'Punta de La Restinga-Mar de Las Calmas' (La Restinga Point-Sea of Calms) was declared as *MR with fishing interest* (Jentoft et al. 2012). This chapter focuses on La Restinga and its coasts, where the 'Sea of Calms' and the above-mentioned MR are located (Fig. 1), both of which became the most popular coastal tourist destination in El Hierro over the last decades (De la Cruz Modino et al. 2010). The Sea of Calms takes its name from the, almost year-round, excellent weather conditions in these waters, due to the protection from the dominant winds provided by the island's mountains. The Sea of Calms extends from La Restinga on the east to the Punta Orchilla Lighthouse, the westernmost place in Spain.

## 2 La Restinga and the Sea of Calms

There was no stable population living in La Restinga until the middle of the twentieth century, although some historians have pointed out that the pier was used as early as 1922 (Acosta Padrón 2003). Initially, some families from the nearby farming village of El Pinar used to go fishing to La Restinga certain times of the year, but it was a temporary endeavour. They used to sleep in caves, between their small boats, or in small huts made with branches and a lichen called '*orchilla*' (Galván Tudela 1997). In the 1940s, some

<sup>1</sup> Source: Canary Islands Institute of Statistics. Canary Islands Regional Government. 2000–2019. Service Sector.

<sup>2</sup> However, there is an extensive parallel tourist accommodation offer among second residences and holiday-houses, employed by tourists without being officially counted.



**Fig. 1** La Restinga and the Sea of Calms

small-scale fishers from La Gomera (Canary Islands) arrived at La Restinga, and soon established the first permanent settlement. The reasons for these families to move to La Restinga are linked to Francoist repression (Pascual-Fernández et al. 2018) and the conditions in La Gomera (López Felipe 2002). On La Restinga coast and the Sea of Calms (Fig. 1), the good weather allowed fishing throughout the year, and the early permanent fishing settlers could exchange seafood for crops and livestock products with El Pinar and, over time, establish family ties (Pascual-Fernández et al. 2018).

According to the EU definition, fishing activity in La Restinga can be termed as ‘small-scale coastal fishing’ carried out by fishing vessels with an overall length under 12 m and not using towed gear (Pascual-Fernández et al. 2020), even though many fishers switch their fishing gear from season to season depending on the available species. They employ very selective fishing gear, mainly hand-held artifacts such as canes, hooks and lines, and harpoons and traps for morays or shrimps. Fishers from La Restinga fish mainly within a mile offshore and return to the homeport every day and combine demersal (e.g. blacktail comber, groupers,

alfonsinos) and pelagic fisheries (e.g. skipjack tuna, bluefin tuna), especially for tuna, which is sometimes caught around other islands. Tuna fisheries have been relevant for the entire Canarian fleet and promoted the development of the fishing industry in the southwest coasts of the entire archipelago during the past century. At the end of the 1950s, some tuna canning companies became interested in La Restinga, and began buying local catches and installed an ice factory (De la Cruz Modino 2012). Despite the difficulties that accompany the marketing of artisanal fishery products, the fishermen set up a local cooperative with the support of the government of the island (*Cabildo Insular*) in 1990 (Galván Tudela 1990), which manages most of the products today (Pascual-Fernández et al. 2018). Besides tuna fishing, fishers from La Restinga catch wahoo with harpoons, a legacy of their Gomera origins. These fishers have also developed specific techniques, such as the ‘*puyón*’, which is used to target parrotfish (*Sparisoma cretense*). Fishers snorkel around the rocky bottoms to target individual fish using just a line and a hook, taking advantage of the clear waters.

Migration is part of the history of La Restinga, not just because of its origins. During the second half of the

twentieth century, many islanders migrated to other islands and to South America, especially Venezuela. Some of them later returned but, generally, not to the primary sector. Many migrants built apartments, as did others living in other islands. One immigrant family began promoting scuba diving among the German market, even though the airport was still rudimentary and had a small passenger terminal until the 1990s. Later, the scuba-diving businesses expanded, led mainly by foreign families. A generous offer of fresh-fish restaurants consolidated thanks to the local fleet and the involvement of fishing households and women especially (Fig. 2). These changes rendered the community less dependent on fishing, but they maintained the fishing culture and traditions. Since 2000, the population of La Restinga has increased slightly from 443 to 631 inhabitants, 346 men and 285 women.<sup>3</sup> In addition to socio-demographic and territorial change, the tourist development promoted a new way of looking at the sea and conceptualizing its habitats and populations under a new gaze that seeks recreation in marine contemplation. However, these two ways of considering the ecosystem, productive and contemplative, have not been antagonistic in La Restinga. On the contrary, the local population, which maintains critical control over the coastal resources (partly thanks to the declaration of the MR), has established synergies with the service sector, taking advantage of the opportunity opened by tourism development. This has helped give stability to the marketing of different fish products and helped overcome the historical imbalance between men and women in the local population, through the creation of new employment possibilities (De la Cruz Modino and Pascual-Fernández 2005).

### 3 The Marine Reserve and the Marine Tourism Development

The Sea of Calms is a fragile ecosystem with a high biodiversity, exceptional underwater visibility, and a warm sea surface temperature, making it potentially a great tourism destination, especially for scuba divers (Pascual-Fernández et al. 2015). Some subtropical species are the spotfin burrfish (*Chilomycterus reticulatus*) (Fig. 3f), different rays (e.g., *Mobula tarapacana*, *Myliobatis aquila*, *Dasyatis pastinaca*, *Taeniura grabata*) (Fig. 3b), and sharks such as the angel shark (*Squatina squatina*) and the smalltooth sand tiger shark (*Odontaspis ferox*) (Fig. 3h) occasionally seen in the Sea of Calms (Barría et al. 2018). Also, sea turtles (mainly *Caretta caretta*) (Fig. 3a) and various marine mammals such

as dolphins (e.g., *Tursiops truncatus*, *Stenella frontalis*) (Fig. 3e), Bryde's whale (*Balaenoptera brydei*), and two beaked whale species, Cuvier's (*Ziphius cavirostris*) and Blainville's (*Mesoplodon densirostris*) (Arranz et al. 2014) are common along these coasts. The narrow underwater shelf, with caves, cliffs, and rocky and sandy habitats, add to the spectacular seascape. Some benthic species, such as groupers (*Epinephelus marginatus*, *Mycteroperca fusca*) (Fig. 3c), and the common spiny lobster (*Palinurus elephas*) (Fig. 3d), inhabit the rocky and sandy bottoms. La Restinga hosts a statue of a famous grouper called 'Pancho', who died in 2011 and has become a symbol of the natural marine landscape of the area. Before its death, fishers and tourism operators reached an agreement not to fish for groupers, highlighting the importance of Pancho for the destination.

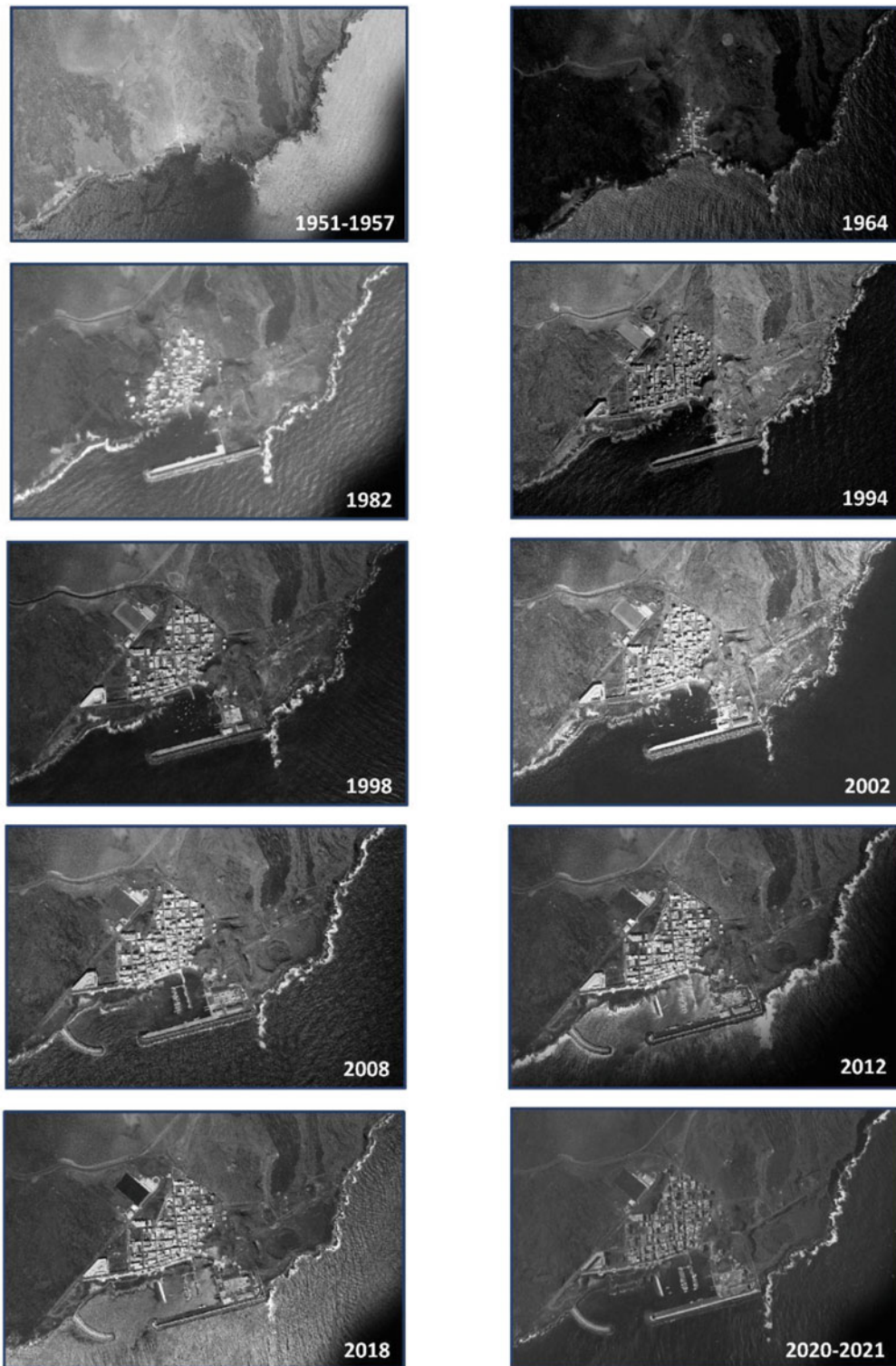
There are currently 15 marine tourism companies in El Hierro, offering various products (e.g., scuba diving, recreational fisheries, leisure). We have identified 34 marine tourism products, which focus on multiple coastal resources. Most companies and activities are located in La Restinga and the MR and work year-round.

The MR was declared in 1996, covering 750 ha, with the support and active involvement of local small-scale fishers and scientists from the University of La Laguna (Tenerife). We consider this MR as an example of a co-governance system, where fishers, scientists, and government cooperated to support the sustainable development of small-scale fisheries and the conservation of marine resources (Pascual-Fernández et al. 2015) (Table 1).

In 2011, in the middle of the 2008–2014 economic crisis in Spain the underwater volcano *Tagoro* erupted giving rise to a novel shallow submarine volcano, seriously affecting marine life, as well as fishing and other marine activities along the coast of El Hierro. In the immediate wake of the volcanic eruption, La Restinga villagers were temporarily evacuated, and professional fishers abandoned all fishing activities from October 2011 to March 2013. However, recreational fishing remained active on parts of the island. Studies from the University of La Laguna showed the area has recovered (Lazzari 2015; Mendoza et al. 2020), and commercial fishers agree. Between 2013 and 2014, fishers came back to their main traditional small-scale fisheries and fishing grounds (Piñeiro-Corbeira et al. 2022). Also, marine tourism activity in the area entirely recovered (Fig. 4). In 2014, we estimated that at least 25,391 dives had been carried out in the diving spots established by the MR and other diving sites close to La Restinga. We also estimated that 2621 diving tourists arrived, spending 609,384 euro in scuba-diving alone during that year (Ordoñez García 2014).

Despite the difficulties experienced after the volcano eruption, a unique imaginary (Dela Santa and Tiatco 2019) has been consolidated, thanks to the image of the island's exclusive nature and iconic elements, such as Pancho the

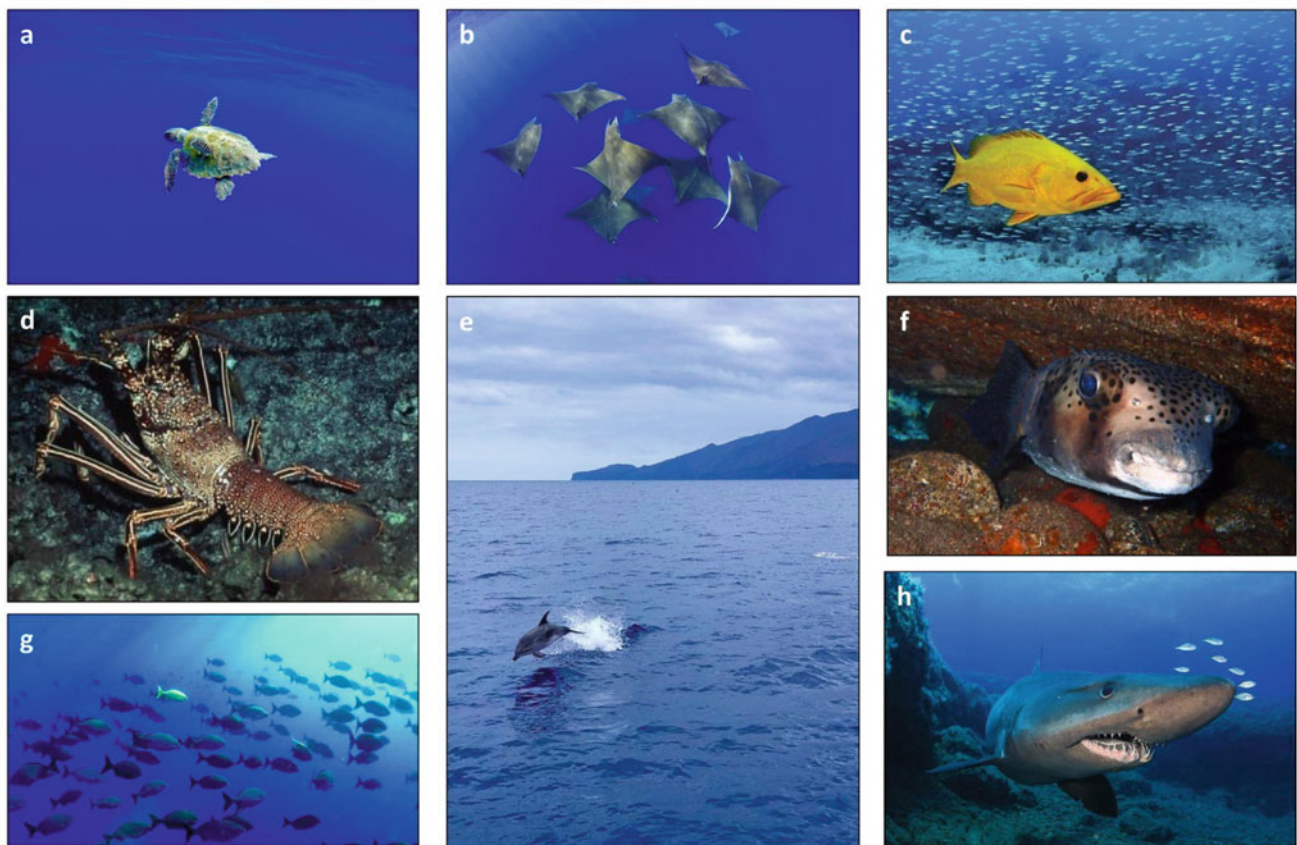
<sup>3</sup> Source: National Institute of Statistics. Spanish Government. 2020 Demography and population. Register. Population by municipalities. Nomenclator. Santa Cruz of Tenerife.



**Fig. 2** Territorial development in La Restinga. *Source* Grafcan

group and the MR itself. The cultural landscape is created through a seascape that combines two visions: the local view and the tourist gaze. In addition, the rapid recovery of the destination is an excellent example of how the tourism system

can adapt and incorporate unexpected events. An example of such capacity is the increase in sports events along the Sea of Calms, such as the '*Travesía a nado Volcán las Calmas*' (Las Calmas Volcano Swimming Tour). This event, unlike the



**Fig. 3** Marine habitats and species in the Sea of Calms. *Source* Buceo El Bajón

**Table 1** MR characteristics

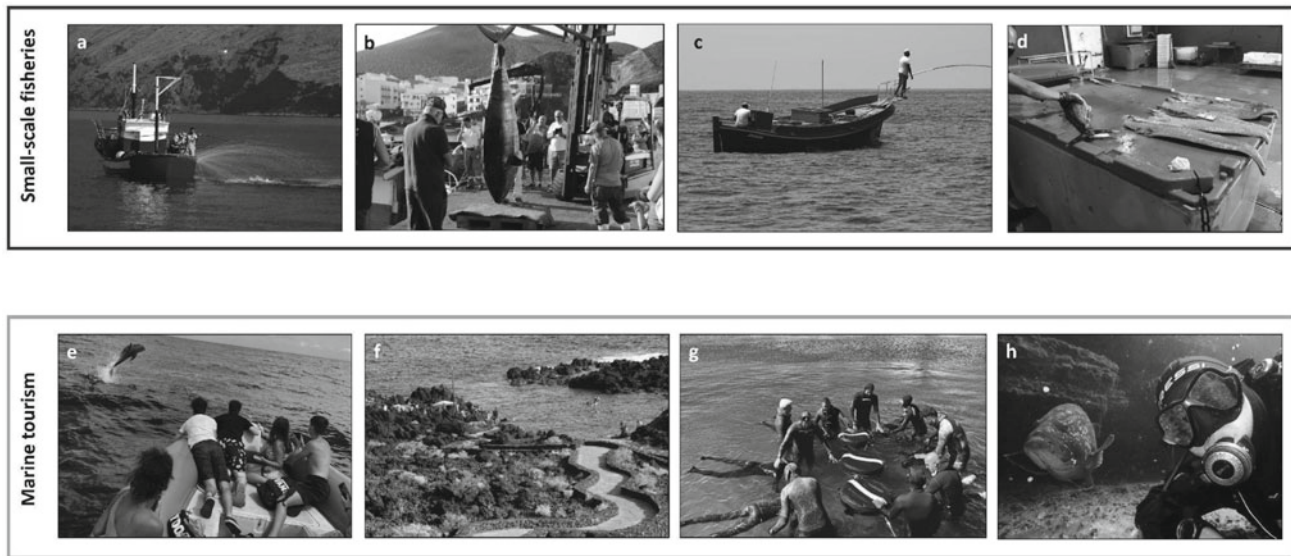
	Punta de La Restinga-Mar de las Calmas MR			
Responsible	National and autonomous government			
Declaration	1995 (BOC) 1996 (BOE)			
Depth range	0–400 m			
Habitats	Rocky reefs, caves, sandy substrates			
Protection objectives	Small-scale fisheries enhancement and conservation			
Fishers co-management	The <i>Cofradía</i> has a strong presence in all governing bodies created or related to the management of the MR			
Forbidden	Anchoring/recreational fishing from boat/spearfishing/scuba diving with propulsion elements/other extractive uses different at described and allowed uses			
<b>Zone classification</b>	<b>Total MR</b>	<b>Maximum restricted area</b>	<b>Buffer zone</b>	<b>Multiple uses area</b>
Uses	Professional fishing uses recreational uses	Professional tuna fishery	Professional fisheries	Professional fisheries/scuba diving /angling from the shore/other recreational uses

*Source* De la Cruz Modino and Pascual-Fernández (2013)

traditional Open Foto-Sub, is available to all participants, not only divers.

As the situation stabilised, the Spanish government proposed the creation of a Marine National Park in the Sea of

Calms along the affected coasts. The proposed area included two existing protected areas, one Natura 2000 site and one Special Protection Area (SPA). The proposal focused on the protection of the volcanic cone as well as known marine



**Fig. 4** Small-scale fisheries and marine tourism activities in La Restinga and the Sea of Calms. Source: Buceo El Bajón (a, c, e, g, h); Manu Machín Quintero (b, f); Raquel De la Cruz Modino (d)

mammal habitats. Commercial fishers supported the proposal through their *cofradía* (fishers’ organization) (Bavinck et al. 2015). However, the recreational fishers opposed it because they felt that a National Park would restrict recreational fishing. Since then, conflicts between recreational fisher groups and small-scale fishers became acrimonious (Pascual-Fernández et al. 2015), although different stakeholders have tried to mediate. Some of them appeared in the local marine governing arena for the first time, such as NGOs that did not take part in the MR creation. The situation, apart from the conflict, is symptomatic of how the cultural landscape is changing with the entry of so many new actors on the territory. The park as projected does not focus on simply protecting fishery resources, as the MR intended, but rather on ‘marine resources’. It is also not intended as a fisheries management tool, but rather from the perspective of marine governance, which affects many more public and private agents from the civil society, such as new administrations, not only the traditional fishing responsible. Thus, the protection of the Sea of Calms is not just about the management of fisheries but about marine governance as a whole.

#### 4 Concluding: Cultural Landscape Besides Natural and Fishing Heritage

The landscape, at the intersection between nature and culture, both past and future, as Pungetti and Makhzoumi stated, has a discursive elasticity that encourages its use as a framework for an elastic culture (Pungetti 2017). The Sea of Calms and La Restinga coasts are undoubtedly linked to the

fishing tradition, which constitutes the ‘sense of place’ (Galván Tudela 2003) of this village, which was built in the twentieth century around fishing families that depended on the natural resources of this area and pelagic fish. This natural landscape is particularly fragile due to the small submarine platform surrounding the Island, so fishers are conscious of the need to secure these resources. The MR was built upon this need, but at the same time facilitating the preservation of a submarine and cultural beautiful seascape for visitors, encompassing traditional fishing activities together with marine and scuba diving tourism while securing the natural values of the area (Pascual-Fernández et al. 2018). However, the experience of La Restinga and the Sea of Calms also reveals the active role played by the visitor’s gaze, with which locals cohabit. Along with fishers and tourists, new stakeholders and new images (Chuenpagdee et al. 2020) emerge on the Sea of Calms and its resources. As well as environmental emergencies, especially climate change and its effects, including ocean warming and marine ecosystems collapse (Bulleri et al. 2020) may leave their footprint on the cultural landscape. These facts highlight the seascape’s dynamism and stakeholders’ diversity. The seascape of La Restinga plays an essential role in the provision of cultural services and, despite the difficulties experienced after the submarine volcano eruption, this small-scale fishing village has been consolidated in the tourism market by taking advantage of its remoteness, pristine nature, and exclusivity values.

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