



A Community Shaped by the Sea-Understanding community value and use of the Shetland coastline



2021

This report has been prepared as part of the 'Shetland Islands' Marine Spatial Plan' (SIMSP) which is a partnership between Shetland UHI and the Shetland Islands Council, guided by a local advisory group. Funding for the SIMSP and this coastal character assessment was provided by Marine Scotland and Shetland Islands Council.

Please note in 2021 the NAFC Marine Centre UHI merged with Shetland College UHI and Train Shetland to become Shetland UHI.

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Background

The sea is evident in every part of Shetland life, from the climate to the main industries, to the most popular recreational pursuits. The sea is intertwined into the culture and history of the Shetland community and visiting the coast is the top activity for visitors to the islands [1]. This report seeks to provide background information and evidence relating to the Shetland sea and coast, and its use and value to communities. This information is provided to help facilitate strategic and project level planning which considers the range of uses and benefits provided by the coast and sea.

In this context this report supports the Shetland Regional Marine Plan (SIRMP). Shetlands' marine plan aims to guide marine development while meeting the long terms needs of people and nature. The latest edition of the marine plan can be downloaded from the Shetland UHI web-page¹. Shetlands' marine plan has been developed by the Shetland Marine Planning Partnership, consisting of Shetland Islands Council and Shetland UHI (formally NAFC Marine Centre UHI), guided by an advisory group.

The Shetland Islands Regional Marine Plan (SIRMP) adopts the Ecosystem Approach to management, and considers the links between ecosystem components and the goods and benefits derived by society. One part of this are cultural ecosystem services (CES), defined as "the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences." [2]. CES covers a vast range of services both tangible and intangible, Figure 1. Often CES do not have a direct monetary value making it difficult to quantify, meaning it can get left out of the decision-making process [3].

Approach

This report presents the results of a series of Shetland wide community surveys to capture the value and use of different areas of the Shetland coastline and how it makes people feel. The questionnaire was distributed in paper form and online (see Appendix A). The first part of the questionnaire asked respondents to rate different statements from 1-5 (1 strongly disagreeing and 5 strongly agreeing) such as "Spending time near/ on the sea or coastline around Shetland gives me a sense of wellbeing". Other questions included how long they had lived in Shetland and activities they participate in at the coast. The second part of the questionnaire asked people to map where they value and where they use around the coastline of Shetland. They were also asked to note what they used the area for and/or why they valued it. Although people value the spaces they use, by separating the two it allows people to map areas that they may not visit frequently but are of value to them.

A slightly simplified questionnaire was created for children in primary school aged between 8-11 years old and another questionnaire was developed to specifically gather data around the importance of the coast for creative businesses in Shetland. The results of the questionnaire are contextualized with other relevant data where appropriate.

Shetland Coastal Character Assessment

The Shetland coastal character assessment (SCCA), updated in 2021, provides a useful context to consider questionnaire responses, providing a link between physical characteristics and values. The aims of the SCCA were to gather information about the various coastal character types found around Shetland, the experiences the coast currently offers to local people and visitors, and any sensitivity to development, both inland and out to sea [4]. The assessment builds on previous assessments by NatureScot, and divides Shetland into 43 Coastal Character Areas with each area surveyed and mapped. Fourteen coastal character types were identified around the Shetland coast with a further four subtypes. A map of the character types can be seen in Figure 2.

¹ https://www.shetland.uhi.ac.uk/research/marine-spatial-planning/





Figure 1: Subcategories of cultural services, adapted from MA (2005, pg40).

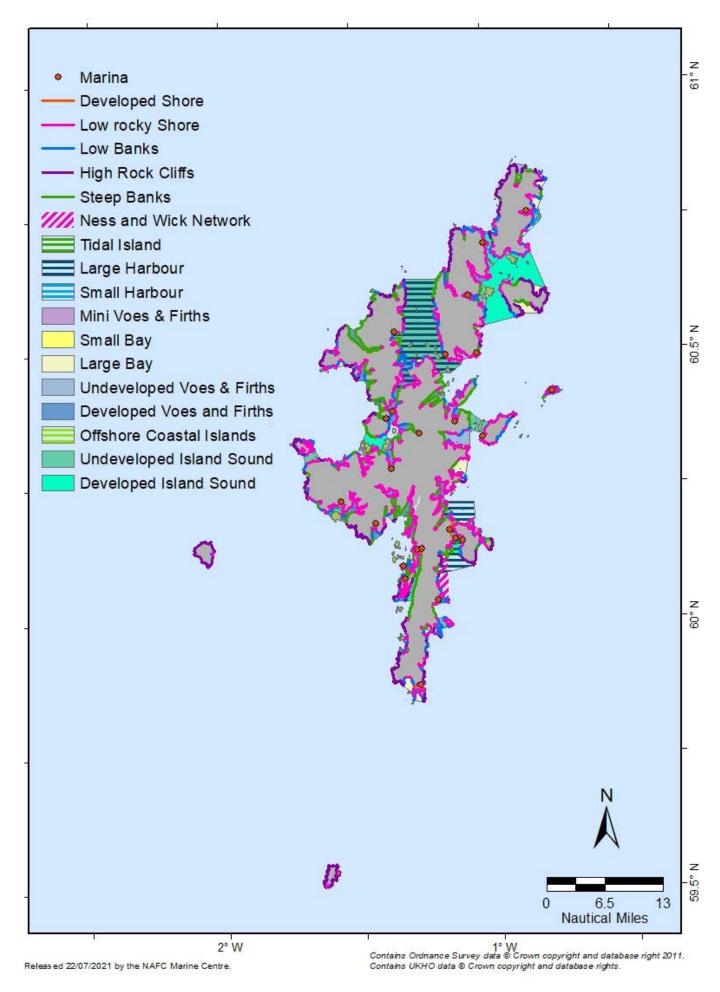


Figure 2: Coastal Character Types Map reproduced from the Shetland Coastal Character Assessment © Shetland UHI



Survey Results

The questionnaire was complete by over 200 people of whom 80% were residents and 20% visitors. Of those resident 71% had lived in Shetland since birth, 12% over 20 years, 3% 10-19 years, 5% 5-9 years, 9% less than 5 years. Key reasons given for living or moving to Shetland were: employment, family and friends, scenery/ landscape, peace and quiet, wildlife, access to outdoors, safe place for children/ families, Up Helly Aa, Figure 3.

Spending time at the coast was clearly important to respondents with over 75% stating they visited or were near the coast at least once per week, of these 43% visited several times a day or everyday. In contrast only 51% of children said they visited the coast more than once a week but only 2% said they almost never visited the coast.

Coastal Value and Use

In response to 'the Shetland sea and/ or coastline is...' respondents either agreed or strongly agreed that 'a place of natural value' (89%), 'important for wildlife/ biodiversity' (87%), 'of historic value' (76%), 'community value' (77%), 'a place for education and learning' (75%), 'a place for family trips' (77%), 'a place where enjoyment can be free' (85%), 'a place for employment opportunities' (41%), 'an important source of recreation opportunity' (76%).

In response to 'what do you use the coastline for' respondents answered 'collecting things' (57%), 'swimming/ paddling' (56%), 'wildlife/ nature watching' (54%), 'beach play' (51%), 'picnicking/ eating/ drinking' (48), 'creative activities' (38%), 'fishing from a boat' (37%), 'fitness' (29%), 'fishing from the shore' (29%), 'work or employment' (17%), 'reading' (15%), 'surface water sports' (14%) and 'diving/ snorkeling' (14%). Other reasons given include walking, coasteering, walking dog, making fires/ bonfires, photography, crofting, laying in the sun/ relaxing. In contrast the questionnaire

targeting those in the creative sector responded 'collecting things' (94%), 'picnicking/ eating/ drinking' (84%), 'creative activities' (81%), 'nature watching' (69%), 'beach play' (56%), 'swimming/ paddling' (50%) and 'fitness' (44%).

To identify areas of coastal use and value respondents were asked to map three places they use and three place they value the most. The questionnaire results indicate that while there is overlap between where people use and value they are not the same. Figures 4 and 5 show where people use and value as word maps, the larger the font, the more people mentioned it. The top three valued locations were Sumburgh, Eshaness and St. Ninians Isle. In contrast usage was more widely spread across Shetland with more locations mapped. Most commonly used locations included Burra, Bannaminn (Burra), Sumburgh, Eshaness, St. Ninians Isle, Muckle Roe and West Sandwick (Yell).

Children and coastal usage

Of the children that participated in the study 91% of respondents thought spending time near or on the sea was 'fun', 80% 'somewhere to play', 94% 'important for wildlife', 76% 'important for learning about history', 90% 'important for their community', 80% 'a place for learning' and 96% 'a place for family trips'. In response to 'what do



Figure 3: Word Cloud of Reasons people visit or live in Shetland



you use the coastline for' the children who participated were more likely to swim or paddle than adults (73%). Children also responded that they 'picnic or eat at the coast' (63%), 'collect things' (76%), 'wildlife or nature watch' (51%), 'beach play' (82%) and 'walked, ran, or played games' (78%) while visiting the coast. 'Fishing from the shore' (41%) and 'fishing from a boat' (35%) was also popular.

Nature, wellbeing, belonging and spirituality

Blue space, which includes inland and coastal waters, have been shown to offer mental health benefits. In Shetland, respondents either agreed or strongly agreed that 'being near or on the sea gives me a sense of wellbeing' (71%), 'helps me feel I belong' (66%), 'makes me feel happy' (81%), 'makes me feel calm and relaxed' (77%) and 'is rejuvenating' (56%). Additionally 70% agreed or strongly agreed spending time near/ on the coast 'connects me with nature'. Whereas, only 8% stated that being near or on the sea made them feel 'nervous, worried, or stressed'. Respondents also agreed or strongly agreed that the sea or coast was 'peaceful and quite' (70%), while 32% reported that the sea or coast gave them a 'sense of spirituality'.

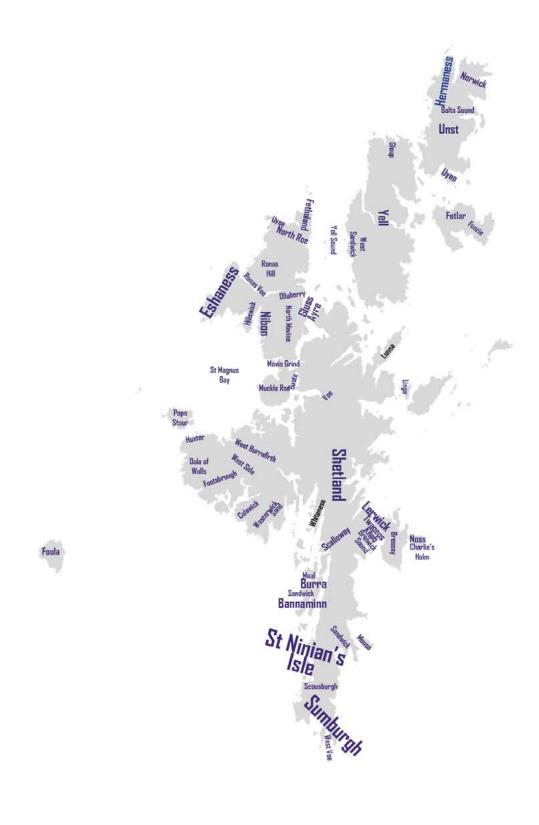
From the children surveyed, 90% said it 'made them feel good about themselves', 83% said that being close to the sea made them 'feel calm and relaxed', and 75% said it was 'peaceful and quite'. Children also reported that they found it 'exciting' (82%) and 'fun' (90%). Only a small proportion finding the coast 'scary' or 'boring' (4%).

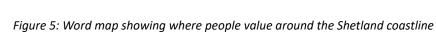
The importance of the natural environment for mental and physical wellbeing has become even more apparent during the COVID-19 pandemic. The theme for Mental Health Awareness Week 2021 was "Nature" with the Mental Health Foundation Scotland stating that 69% of adults in Scotland said connecting with nature helped them manage their mental health throughout the pandemic and 55% of adults in Scotland said that spending time next to water had a positive impact on their mental health [5]. NatureScot are currently leading a cross-sectoral initiative called Our Natural Health Service which aims to improve people's mental and physical health through green environments and nature [6]. Since 2018, GPs in Shetland have been able to prescribe getting out in nature as part of a patient's treatment after a successful pilot project was run by NHS Shetland and RSPB Scotland [7].

Cultural heritage also feeds into having a sense of place and belonging. A sense of place not only needs to link to the past but also the future, evolving with successive generations and changing perceptions [8]. In 2016, the Shetland Islands Council used the Place Standard approach to gather data on what people in Shetland think about their place and what they thought should be improved. Over 900 people took part in the consultation and they rated 'Identity and belonging' 3rd highest [9]. This is supported by the survey conducted for this report with 48% of respondents agreeing that the coast helped them 'feel like they belong'.



Figure 4: Word map showing where people use around the Shetland coastline





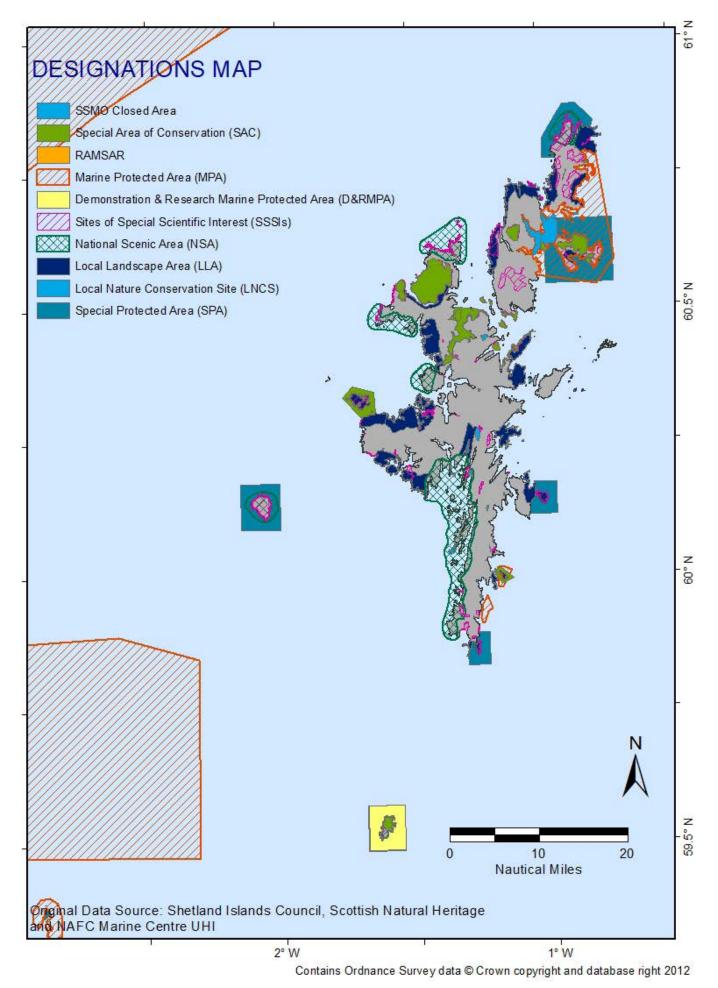


Figure 6: Map showing habitat designations across Shetland



Restricted use of the Coast

Through the questionnaire, participants were asked what restricted them from using the coast more. The top answer was poor weather, with 77% of respondents to the adult survey stating it as a reason and 96% of respondents to the children's survey. Other reasons included 'time' (56%), 'lack of public access' (e.g. stiles or gates) (14%), 'lack of information on where to go' (13%), 'lack of car parking' (16%), 'lack of public transport' (15%), 'degradation/ fouling' (10%). Results from the creative sector showed similar results, however children highlighted 'marine litter' (35%) and 'wanting to go other places' (33%) as key reasons they didn't visit the coast more frequently, Figure 7. Nationally the Scottish Government report on 'Access to outdoor recreation by older people in Scotland', nearly all the participants stated an aspect of poor weather was a barrier for accessing the outdoors [10].

A lack of information on where to go was also highlighted. There are a number of sources that offer suggested walks around the Shetland coast such as Peerie Wanders put together by the SIC Access Officer and Promote Shetland also have walks on their website. There are also a number of books available from the Shetland Library and the Shetland Times Bookshop.

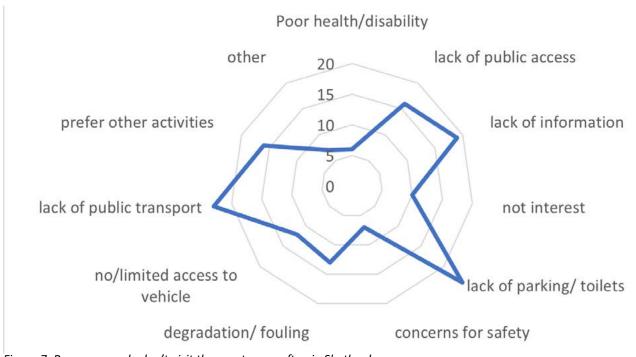


Figure 7: Reasons people don't visit the coast more often in Shetland



Marine Litter

Marine litter is a global problem and was highlighted as a problem in all or part of all community council areas surveyed as part of this study. The first reports of plastics being found in the oceans began in the 1970s and it is estimated that 10% of all plastic waste ends up in the sea [11]. Thirty five percent of children surveyed stated rubbish around the coast was a reason for not visiting more compared to 10% of adults.

In Shetland, the Shetland Amenity Trust organises a number of initiatives to try and prevent and remove litter from the environment.

Dunna Chuck Bruck

'Dunna Chuck Bruck' means 'don't throw rubbish' in Shetland dialect. It was originally launched in 1986 with the aim to remove agricultural scrap, redundant vehicles and marine litter. The project was relaunched in 2012 to help local communities in Shetland carry out environmental projects and offer educational workshops for schools [12].

Da Voar Redd Up

Beginning in 1987, 'Da Voar Redd Up' ('the spring clean' in Shetland dialect) is an annual community litter pick held over a weekend in April/May. It is one of the most successful community clean ups in the UK covering beaches, coastlines and roadside verges in Shetland with around 20% of Shetland's population taking part [13]. The most recent figures from the clean in 2019 can be seen in Figure 8.

Fishing for Litter

The Fishing for Litter scheme encourages fishermen to land any litter brought up in their fishing nets and gear. Lerwick Harbour was involved in the original launch of the initiative by KIMO in 2005, the scheme has since expanded with 15 harbours now participating across Scotland, including Scalloway and Cullivoe Harbours.



Figure 8: Da Voar Redd Up 2019 statistics (Shetland Amenity Trust, 2019)



Recreation - activities and clubs

The importance of marine and coastal recreation for physical and mental health is well documented. It has been estimated that the UK economy could benefit from £176 million in health care savings per year if 10% of the adult population undertook activities in the marine environment [14]. There are a variety of recreational activities pursued in Shetland on, in and next to the water. It is recognised in the SIRMP that these activities support and enhance the local community in a myriad of ways including social integration and improving quality of life [15]. As part of the ongoing marine spatial planning data collection work in Shetland, formal recreational pursuits were recorded by sending out questionnaires to clubs and groups. The collated information can be seen in Figure 9.

Informal recreation, activities undertaken outside of a club or formal group, is also important as highlighted by the survey results (see Coastal Use and Values). In this context informal, defined as more spontaneous activities and often conducted alone or in small groups such as going for a walk or fishing [16]. Questions surrounding informal recreational activities were asked during the questionnaire process. Seventy-six percent of respondents in Shetland agree or strongly agree that the sea and coastline of Shetland is important for recreational opportunities.

A summary of recreational activities in Shetland can be found in Table 1. Figure 10 shows locations of beaches, core paths and shore access used for both informal and formal recreation.

Table 1 Recreational activities in Shetland

Recreation Activity	General Information	Clubs and Competitions
Coasteering	Coasteering combines sea swimming with low level rock climbing and cliff jumping. The SIC offer coasteering to school children as part of their outdoor education. Groups can also book guided coasteering experiences.	N/A
Diving and Snorkeling	The clear waters around Shetland offer excellent diving and snorkeling opportunities. There are historical and modern shipwrecks as well as natural environments to explore. As well as local clubs there are a number of companies who offer dive charters in Shetland.	based in Lerwick, with RIB and
Fishing from Shore	"Gaan tae the Craigs" has strong historic ties in Shetland. Today it is a popular pastime to catch piltocks (coal fish) or sometimes a mackerel for your tea but in the past, it was a way to gather bait before heading to the fishing. Because of the deep seabed relatively close to shore in Shetland, it is possible to sometimes catch quite large fish from the coast.	N/A
Jet skiing	There are a small number of privately owned vehicles and one company offering trips around Shetland.	N/A



		<u>r</u>
Kayaking	The fragmented coastline of Shetland is regarded as one of the best kayak locations in the UK. As well as independent sea kayakers (local and visitors), there is an active kayak club and a local company offering trips.	Shetland Canoe Club organise regular trips and a biannual sea kayak symposium. Seakayak Shetland offer guided kayak trips.
Rock Climbing	The variety of geology in Shetland offers an exciting rock climbing experience with the majority of the climbs having a coastal element. There are around 1000 routes to climb across the islands.	Climb Shetland organise trips during the summer. Other info: http://shetlandclimbing.info/
Sailing	Sailing is a popular recreational activity with numerous sailing clubs and races held throughout the year. There are also facilities for visiting yachts. Sail Training Shetland offer opportunities for people aged 15-25 to take part in sailing races such as the Tall Ships Race. The Swan Trust offer sailing trips (including races) and charters on a traditional herring boat.	Clubs: Lerwick Boating Club, The Swan Trust, Walls Regatta Sailing Club, Whalsay Boating & Sports Club, Scalloway Boating Club, Delting Boating Club, Bastavoe Yacht Club, Sail Training Shetland, Shetland Sailing Centre, South Nesting Boating Club, South Yell Boating Club, Unst Boating Club, Shetland Inter-Club Yachting Association, Sandwick Sailing and Boating Club Competitions: The Shetland Inter-Club Yachting Association Regatta is held in August each year and there are various other regattas which include sailing events over the summer.
Sea Angling	Sea Angling is a popular recreation in Shetland with numerous competitions held throughout the year. During the summer is the most popular time with the calmer seas and long day light. There are a number of companies that offer charter services and fishing trips during the summer.	Competitions: A number of eelas (inshore fishing competitions) are organised every year. Some are part of wider regatta weekends and others are stand alone. The Viking festival is an annual sea angling competition with around 60 vessels taking part. Associations: Shetland Anglers Association, Shetland Association of Anglers and Whalsay Anglers Association (focuses more on loch fishing)
Surfing	Exposed to swells from the North Sea and the Atlantic, there is opportunity for surfing when the conditions are right. Most of the surfing occurs in the South Mainland around Sumburgh.	60°N Boardriders club is affiliated to the Scottish Surfing Federation (SSF).



Walking	Walking is a popular recreational activity in Shetland. The majority of the SIC core paths in Shetland are coastal or have coastal elements. There are a number of tour guides who also offer walking tours around Shetland. Peter Guy published a series of books which cover the whole of the Shetland coastline and Healthy Shetland have also published leaflets of walks around Shetland. They also promote "Walk da Rock" to get more people walking outside.	Walk Scalloway meet weekly for a walk around Scalloway. The Shetland Field Study Group offer walks every two weeks through the summer/ early autumn which can be booked through the Tourist Information Centre in Lerwick.
Wild swimming	Wild swimming has grown in popularity and is pursued all year round.	There is an informal group called the Selkies which have a Facebook page which allows people to connect to swim together.
Windsurfing and kite-surfing club	The Shetland windsurfing club is based at the Delting Boating Club which is RYA accredited and offers short courses as well as club nights.	Shetland Windsurfing Club are based in Brae but have no website. There is a Shetland Windsurfing and Kite-surfing group on Facebook.
Yoal Rowing	Yoals are traditional boats in Shetland which were once used to go fishing at da haaf (deep sea fishing, sometimes 60 miles offshore). Yoals have six people rowing with one oar each and a coxswain controlling the rudder and keeping time. There are regattas held across the summer split into nine race the race distance is 1km.	Clubs: Aith, Burra, Bigton, Delting, Lerwick, Nesting, Scalloway, Unst, Vidlin, Whiteness & Weisdale, Yell. Competitions: there are around 10 regattas held over the summer across Shetland. In recent years there has also been a regatta with Orkney, with the regatta held by each island group year about. Main Association: Shetland Yoal Rowing Association

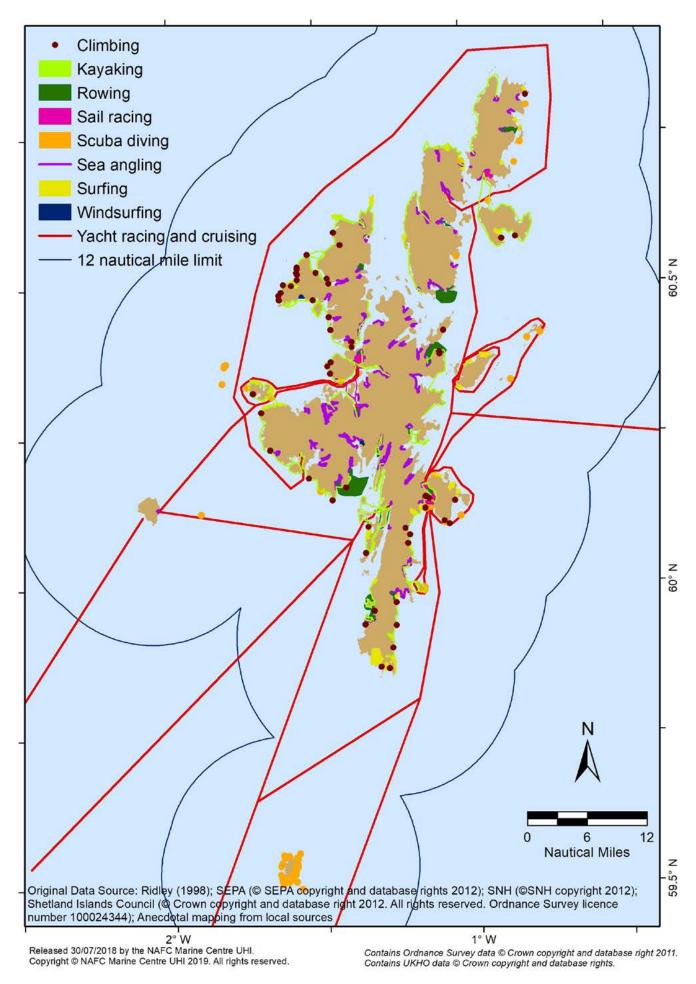


Figure 9: Recreation Map (Shetland Islands Marine Planning Partnership, 2021)

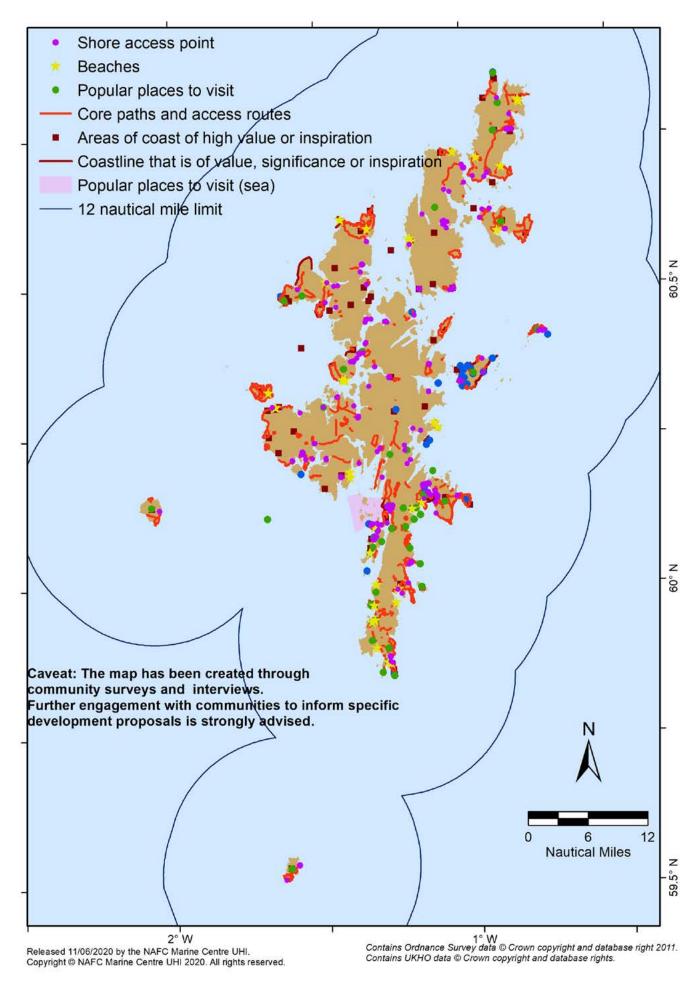


Figure 10: Informal Recreation Map (Shetland Islands Marine Planning Partnership, 2021)



Creative Inspiration

The marine environment has inspired art for thousands of years. There is a strong creative community in Shetland. The views, colours and sounds of the seascapes of Shetland provide inspiration for the creative industries and hobby artists. The UHI Centre for Rural Creativity is based in Shetland and there are a range of creative facilities in the islands such as Mareel - a music, cinema and creative industry venue, run by Shetland Arts.

Inspiration also comes from the history and cultural heritage of the islands, the dramatic skies and even the flotsam and jetsam that washes up on the shore.

"As a small boy in the 1980s I roamed freely around the banks and geos of the isle and what I found there was treasure. Floats, fish boxes, toys, animals and drift wood washed up could change my little world." [4].

Questionnaire respondents indicated that spending time near the sea was inspiring (62%) and a place people undertook creativity activity, with 36% of adult respondent and 29% of children said they partake in creative activities while visiting the coast such as drawing, painting or photography. A summary of creative pursuits in Shetland can be found in Table 2.

Creative Industries

In 2008 it was estimated that creative industries provided up to 460 jobs in Shetland and an annual turnover of up to £25 million [17]. Half of respondents to the EKOS report stated that they relied on local markets for the majority of their sales [17]. There are a number of art galleries across the isles and also the opportunity to partake in art residencies. There are craft fairs throughout the year as well as a craft trail where a number of creators welcome you into their studios.

From the pool of creative businesses surveyed for this report, 75% stated that the Shetland coast inspired their work and 94% agreed or strongly agreed that the Shetland coastline was inspiring. Fifty percent consider the coastline as a place of employment. When asked what aspects of the coast they found inspiring there was a variety of answers but colours, waves, geological aspects and nature featured highly. The quality of light and the sky were also mentioned. When asked if there were any threats to inspirational areas around the Shetland coast, coastal erosion was the most common answer followed by the Viking wind farm which is currently under construction. Figure 11 shows inspirational places around the Shetland coastline as highlighted in the questionnaire for creative industries.

Table 2 Creative pursuits in Shetland

Creative pursuit	General Info	Clubs, Festivals or Companies
Architecture	The traditional architecture of Shetland were squat single story croft houses with small windows and low doors to keep the harsh winter weather out. Shetland houses were roofed with a range of materials, including heather and flagstones. Today, taking in the spectacular views Shetland's coast offers is an important aspect in most house designs and many new builds have a distinct Scandinavian style. Shetland architects have won a number of prestigious prizes for their work in Shetland and further afield.	

Music	Shetland has a strong traditional music scene with numerous festivals throughout the year. Music is intrinsically connected with the sea with the 'gue' – precursor to the Shetland fiddle said to have been brought to Shetland by a stranded sailor. The fiddle grew in popularity due to its easy transportation and was often taken on whaling trips. Many of the traditional Shetland tunes are about the sea and the oldest surviving Shetland song, written in Norn (the Unst Boat Song), is about going to sea.	 Shetland Fiddle and Accordion Festival Young Fiddler of the Year Haltibonhoga Shetland Fiddle Orchestra
Photography & Film	The Shetland coast offers opportunities for photography and film, both in and out of the water. Coastal scenery, wildlife, the northern lights and maritime industries have all been the focus of award winning photography and film in recent years. Both amateur and professional photographers and film makers take photos and film of the Shetland coast all year round. A number of tour guides offer specific photography tours.	to their members. Islesburgh Photographic Club Shetland Film Club Shetland Arts offer film and photography equipment to hire. Facebook pages for locals and
Publishing, Advertising and Marketing	There are a number of publishers based in Shetland who publish Shetland focused books and magazines. The Shetland Times, the local newspaper, was established in 1872 and is published every Friday.	N/A
Storytelling & Writing	The storytelling tradition of Shetland is intrinsically linked with the dark winter months when the weather was poorer, and people would gather together to listen to stories. The folklore, with strong Scandinavian ties, was passed down through the generations. Sea creatures are a prominent feature in Shetland folklore with creatures such as the selkies, mermaids and brigdi. Published writing from Shetland mainly began in the 19th century. The New Shetlander, which is thought to be the longest running literary magazine in Scotland, is a quarterly magazine showcasing prose and poetry.	group
Textiles	Both Fair Isle and lace knitting have motifs related to the sea. Shetland wool was known for the warmth and waterproof properties it provided while at sea, with fishermen wearing knitted garments when going to da haaf and whaling. Items of knitting were used to barter for goods from passing ships in Shetland. In 1953 T.M. Adie & Sons provided knitted jumpers for Edmund Hillary and his team who were the first people to reach the summit of Mount Everest. Weaving is also part of Shetland heritage with a number of businesses creating tweed, often inspired by the coast.	Knitters, Weavers & DyersLocal "Makkin and Yakkin" groupsShetland Wool Week
Visual Arts	The coastline of Shetland has provided inspiration for the resident and visiting artists in Shetland for centuries. The Shetland Arts and Crafts website provides listings of artists, including painters, illustrators, sculptures, ceramicists, resin artists, textile artists, jewellers, glass artists and woodcraft. There is a rich visual arts community throughout the islands and the UHI Centre of Rural Creativity is also based in Shetland. Visual art courses from HNC to PhD are offered through Shetland UHI.	Bonhoga Art Gallery Da Gadderie (within the Shetland Museum and Archives) Shetland Gallery Da Weaving Shed Vaila Fine Art The Tait Gallery

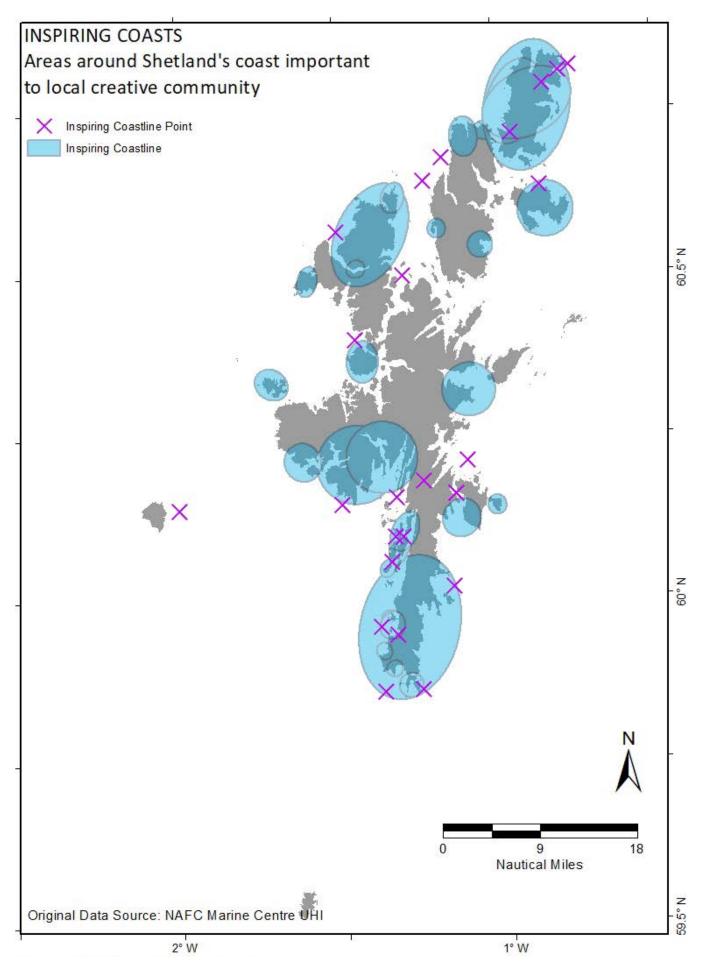


Figure 11: Inspirational Coastline around Shetland



Cultural Heritage

"Cultural Heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions, and values." [18]. It includes tangible heritage which can be split into a further three sub-categories; movable (sculpture, manuscripts, paintings etc.), immovable (archaeological sites, landscapes, shipwrecks, underwater ruins etc.) and intangible (e.g. oral traditions, performing arts, rituals etc.) [19].

With poor land for farming, Shetlanders traditionally traveled to all corners of the world in search of employment and Shetland's position in the North Sea also meant many ships stopped to gather supplies and sailors creating a cultural mixing pot of tradition [19]. The strong ties with Scandinavia are also in Shetland culture through the language, architecture and 'Up Helly Aa' festivals held each winter. The landscape and the seascape play an important part in the cultural heritage of Shetland. Everything that has been exported or imported over the centuries has had to travel by sea. Shetland knitwear and music have international reputations [17].

Traditional dancing (similar to the Scottish Ceilidh) is common place in Shetland. There are groups across Shetland that practice through the winter months and it is often part of wedding celebrations, Up Helly Aa festivities and other events through out the year. There a few dances that are unique to Shetland such as the Papa Stour Sword Dance, Foula Reel and the Shetland Reel.

Questionnaire results indicated a strong link between the coast and cultural heritage, with 72% respondents agreeing that the coast of Shetland is of historic value and 74% believe it is of community value. From the children surveyed, 76% agreed that the coast of Shetland was important for learning about history and 91% thought it was important for the community.

There are a variety of ways to experience the cultural heritage of Shetland such as museums (see Figure 12), archaeological sites (see Figure 13), and festivals (see Table 3). Table 4 gives a summary of different types of cultural heritage found in Shetland.

Table 3 Festivals that happen annually in Shetland

Festival	When	Where
Up Helly Aa	Second Friday of January through to the end of March	Scalloway, Lerwick, Cullivoe, Northmavine, South Mainland, Delting, Bressay, Norwick, Nesting and Girlsta, Uyeasound and Walls
Shetland County Drama Festival	March	Lerwick
Shetland Folk Festival	End of April/Beginning of May	Various venues throughout Shetland
Shetland Young Fiddler of the Year	April	Lerwick
Rowing and Sailing Regattas	Summer	Various venues across Shetland
Shetland Classic Motor Show	June (biannual event)	Lerwick
Mid Summer Carnival	Mid June	Lerwick
Simmer Dim Rally	Mid June	Ollaberry

Bergen-Shetland Races	End of June	Lerwick- Bergen
Shetland Nature Festival	July	Various venues throughout Shetland
UnstFest	July	Unst
Folk Frenzy	July/August	Various venues throughout Shetland
Agricultural & Horse Shows	Beginning of August through until September	Voe, Cunningsburgh, Walls, Unst, Yell, Lerwick
Shetland Boat Week	August	Various venues throughout Shetland focusing on Lerwick
Screenplay	September	Lerwick
Wordplay	September	Lerwick
Shetland Wool Week	September/October	Various venues across Shetland
Taste of Shetland	October	Lerwick
Shetland Accordion and Fiddle Festival	October	Various venues across Shetland
Christmas Craft Fair	November	Lerwick
Shetland Songwriting Festival	Winter	Lerwick
Lerwick Winter Festival	December	Lerwick

Table 4 Types of Cultural Heritage in Shetland

Type of Cultural Heritage	Tangible/ Intangible	Description	Examples
Archaeology	Tangible	There are over 8000 archaeological sites in Shetland spanning 6000 years of history. See Figure 13.	Stanydale TempleOld ScatnessMousa Broch
Architecture	Tangible	Much of Shetland's architecture is related to crofting or fishing. Many ruins can be seen across Shetland and there are some restored historic buildings open to the public.	 Croft House Museum Old Haa Museum Tangwick Haa Museum Fethaland fishing station Older parts of Lerwick & Scalloway Sumburgh Head Lighthouse
Artefacts	Tangible	Historical artefacts which are related to Shetland heritage can be seen in the museums across Shetland and in archives. Some have been transferred to the Museum of Scotland.	 Museums across the isles (see Figure 13) New Connections Across the Northern Isles project
Celebrations	Tangible	There are a variety of celebrations throughout the year, historically many of these were related to the fishing and crofting calendars. Today festivals include Up Helly Aa in the winter and regattas in the summer.	Up Hella Aa ExhibitionFestivals
Fashion	Tangible	During the 19 th century textiles became a commercial entity, a way for women to gain income for their families. Fair Isle knitwear, lace knitting and tweed continue to be important in the isles.	Museums across the islandsGlobalYellShetland wool week
Fishing	Tangible	There is a strong fishing heritage in Shetland from da haaf, to the herring boom, whaling and aquaculture. The modern fishing industry remains an important industry.	 Museums across the islands Herring stations e.g. Fethaland Whaling stations e.g. Ronas Voe Modern day fleets e.g. Lerwick, Scalloway, Whalsay, Cullivoe The Swan – A traditional Fifie boat used for sailing trips and training.

Food Heritage	Tangible	Historically salt was the main way to preserve food, reflected in a number of traditional dishes. Reestit Mutton - mutton soaked in a brine before being hung in the "reest" or rafters to cure. Salt fish - fish were salted and usually air dried, undertaken on a commercial scale during the 18/19 th century. There is also a strong baking tradition in Shetland.	 Taste of Shetland – October Sunday Teas across Shetland during the summer months
Language	Intangible	The Shetland dialect has developed from the Old Norn language that was spoken in the isles until around the 19 th century. Shetland dialect also varies between different parts of Shetland.	ForwirdsFacebook group 'I hear dee'
Music	Tangible	Shetland fiddle music has a long heritage. The fiddle proved a popular instrument as it was easy to transport. Today traditional music scene is still popular, with folk, fiddle and accordion festivals throughout the year.	 Folk Frenzy – summer Shetland Folk Festival – spring Fiddle and Accordion Festival- October Mareel
Natural Heritage	Tangible	Shetland has a rich natural heritage, with wildlife watching a popular past-time. Seals, otters, birds and cetaceans are of particular importance. Geodiversity is also of importance in Shetland, with Shetland recognised as a GeoPark.	 Geopark Shetland Shetland Biological Records Centre Shetland Community Wildlife Group
Performance Art	Tangible	The Papa Stour Sword Dance is probably the most famous performance art from Shetland. Thought to have Norse origins, the earliest mention of the dance was by George Low who toured the islands in the late 1700s. Community theatre is popular in Shetland with the County Drama Festival happening every March and other performances throughout the year.	Papa Stour Dance: Performed at community events through the year Community Theatre Garrison Theatre Mareel Various halls throughout Shetland
Place Names	Intangible	Many of Shetland's place names have Norse origin having been named by the Vikings as they were invading and settling in the isles. Many of these names relate to the landscape characteristics or the wildlife that was found there. Some also have folklore attached.	 Everywhere around Shetland. The Amenity Trust have developed a <u>leaflet</u> to explain place names.
Public Art	Tangible	There are a number of public art installations across Shetland which are related to the landscape and heritage of the islands.	 Lerwick - LOCUS Art Trail, Da Lightsome Buoy, Herring Barrels, Shetland Receivers, Lerwick, Mural, Sandveien Scalloway Art Trail Hillswick Wildlife Sanctuary, Hillswick Collafirth Brig Da White, Yell
Sports and Games	Tangible	Shetlanders compete in local, national and international events on a regular basis. Of particular marine relevance is yoal and sail racing.	 Local sporting events throughout the year The Islands Games – biannual sports competition
Stories and Folklore	Intangible	For many generations, the winter evenings were spent telling stories around the peat fire. Many of these stories had a Norse link and often featured the sea.	 Forwirds website Numerous books about Shetland folklore Wordplay festival - September

Superstitions	Intangible	There were many superstitions in Shetland particularly relating to fishing where "tabu words" were used. Tabu words were mainly of Norn origin and used while at sea. Examples are 'dratsi' for otter and 'hema' for wife. Other superstitions were to ward off evil spirits and the weather.	 Shetland Dictionary has a list of tabu words and their meaning Shetland Museum and Archives
Traditional Craft	Tangible	For centuries Shetlanders used the natural materials of the islands to make everything they needed from soapstone bowls to woven cloth from the wool of the Shetland sheep. Shipwreck material was very valuable especially wood.	 Museums across Shetland Shetland Arts and Crafts Amenity Trust leaflet
Traditional Dancing	Tangible	Traditional dancing is common place in Shetland happening at a variety of events throughout the year. It has a strong heritage with some dances being unique to Shetland and many known Scottish dances performed with a Shetlandic style.	 Shetland Folkdance South Mainland Traditional Dance Club Northmavine Dancers
Visual Art	Tangible	Shetland has long inspired artists both residents and visitors. The Shetland Archives has a large collection of art that has been bought/donated over the years and there are a number of art galleries to see modern art throughout the isles.	 Shetland Museum & Archives Old Haa Museum Bonhoga Shetland Gallery Da Weaving Shed Vaila Fine Art The Tait Gallery Mareel Gaada Shetland Film

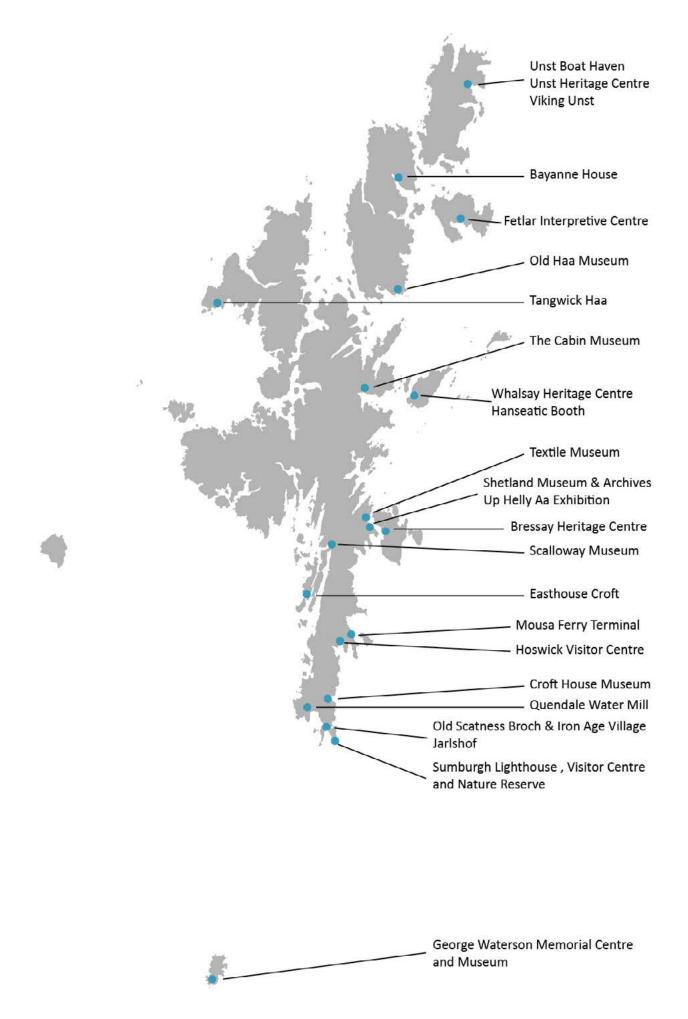


Figure 12: Map of Museums across Shetland

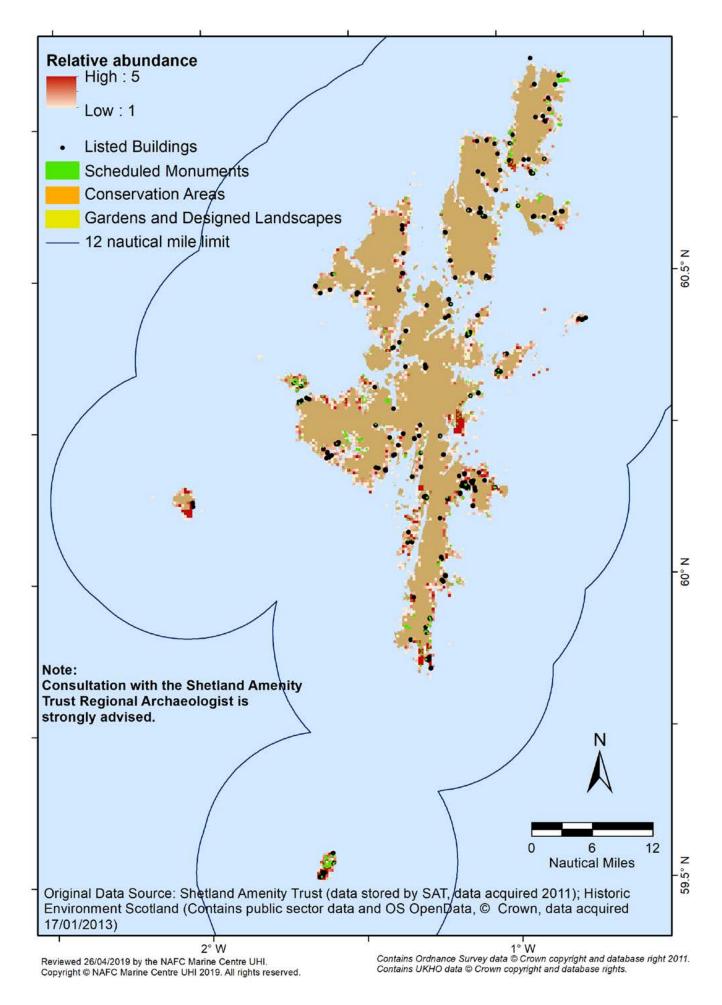


Figure 13: Archaeology Sites Map (Shetland Islands Marine Planning Partnership, 2021)



Employment

In 2018, over 2000 people (around 16% of all employment) were employed in marine sectors, with a turnover of £308 million [20]. The main marine industries are fishing, aquaculture, transport, oil and gas, and tourism. However, there are many other jobs in Shetland which include a marine element. Questionnaire respondents agreed or strongly agreed that the sea and coastline of Shetland is 'a place for employment opportunities' (53%) and they 'used the coastline as part of their work or employment' (18%).

Fishing

There is a substantial fishing industry in Shetland from large pelagic boats over 80m long to inshore shellfish boats sometimes only a couple of metres long. Fishing not only provide jobs for the fishermen but also the processors, sales, administration, and chandlers.

The Shetland Shellfish Management Organisation (SSMO) manages and regulates the shellfish fisheries within the six nautical mile limit of Shetland. Boats have to apply for a licence and the SSMO works with Shetland UHI to create a sustainable fishery.

Aquaculture

Aquaculture began in Shetland in the 1970s and has grown to Shetland's largest sector. The main species are Atlantic Salmon and blue mussels. Shetland produced 17% of the farmed salmon and 80% of the farmed mussels in Scotland in 2019. In total the aquaculture industry provided 287 full time jobs and 37 part time jobs in 2019 [13].

Transport

The majority of goods imported or exported from Shetland are moved by sea. There is one external ferry service which connects Lerwick with Kirkwall in Orkney and Aberdeen. Two ferries take passengers and freight, and one ferry takes only freight. In 2017, 926,826 tonnes of cargo was handled in Lerwick Harbour with 4898 vessels using the harbour. In comparison, there were 221,876 aircraft movements and 1,150 tonnes of freight through Sumburgh Airport during 2017. In total this equated to 1250 jobs in transportation and storage across Shetland [16].

There are nine internal ferries, these routes are managed by SIC with the exception of the Foula ferry which is contracted out to a private company. The total number of passengers that traveled on SIC ferries in 2017 was 773,694 with 4,139 passengers using the internal flights to Fair Isle and Foula [21].

Tourism

The special qualities the Shetland Islands provide as a tourist destination are primarily the large areas of low development, its potential for marine recreation, and its cultural and environmental assets. In the Shetland Island Visitor Survey 2019 suggests that the majority of visitors came to the islands during the summer with 54% visiting between June-August and 20% were visiting friends or family [1].

The scenery and landscape was the main reason for leisure visitors to visit the islands, with 69% of respondents stating it as a factor. History and culture also featured highly with 49% of respondents giving it as a reason to visit [1]. The top attractions on Shetland for visitors were: Sumburgh Head, Jarlshof and St Ninian's Isle, with 63%, 54% and 48% stating they had visited these sites.

The top activity in Shetland was visiting beaches and experiencing coastal scenery with 74% of respondents to the Shetland Visitor Survey partaking in these activities [1].

In 2017, Shetland's Gross Value Added from marine tourism and recreation was calculated as £37 million, with a



turnover of £66 million [21]. The industry also provided around 900 jobs in 2017 [20].

Oil and Gas

The Sullom Voe Terminal was officially opened by Queen Elizabeth II on the 9th of May 1981 although the first oil was received on the 25th of November 1978 [18]. Currently, the oil is received by pipeline from oilfields in the deep waters west of Shetland and the East Shetland Basin before being exported by tanker to be shipped worldwide [19].

A gas plant was opened next to the Sullom Voe Terminal in 2016, processing gas from the Laggan and Tormore fields initially and the Glenlivet and Edradour fields from 2017 [22]. The gas is then piped to the UK mainland for use.

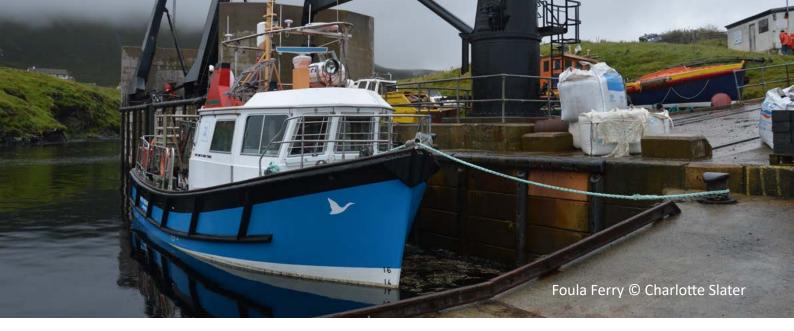


Conclusion

As this report shows, the sea is a vital component to life in Shetland offering education and employment opportunities, biodiversity and positive effects on community health and wellbeing. The sea impacts most aspects of life and therefore it is important to consider the variety of effects it has socially, environmentally and economically.

Although the economic and environmental value of the coast is often included in development plans and policies, by considering cultural ecosystem services it gives a more holistic view of the value the coast has for the community and captures qualitative data.

The benefits of the coast to Shetland are more than tourism and economic value, it is one of the main components of Shetland's identity and needs to be managed in a sustainable manner now, and for future generations.



References

- [1] Visit Scotland & Shetland Islands Council, 2020. Shetland Islands Visitor Survey 2019, s.l.: Visit Scotland.
- [2] Hirons, M., Comberti, C. & Dunford, R., 2016. Valuing Cultural Ecosystem Services. *The Annual Review of Environment and Resources*, Volume 41, pp. 545-574.
- [3] Anon., 2005. Millennium Ecosystem Assessment, MEA, Washington D.C.: Island Press.
- [4] Slater, C. & Shucksmith, R., 2021. The Shetland Coastal Character Assessment, Scalloway: Shetland UHI.
- [5] Mental Health Foundation, 2021. *Nature. How connecting with nature benefits our mental health,* s.l.: Mental Health Foundation Scotland.
- [6] NatureScot, 2020. Our Natural Health Service, Edinburgh: NatureScot.
- [7] RSPB, 2018. *Nature to be prescribed to help health and wellbeing*. [Online] Available at: https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/nature-prescribed-to-help-health/ [Accessed 26 May 2021].
- [8] Russell, H., Smith, A. & Leverton, P., 2011. Sustainable Cultural Identity and a Sense of Place- New Wine in Old Bottles or Old Wine in New Bottles, Reading: The College of Estate Management.
- [9] Shetland Islands Council, 2017. Our Place: Place Standard Final Report, Lerwick: Shetland Islands Council.
- [10] Bergman, M., Gutow, L. & Klages, M., 2015. Marine Anthropogenic Litter. s.l.:Springer Link.
- [11] Scottish Government, 2016. Access to outdoor recreation by older people in Scotland, Edinburgh: Scottish Government
- [12] Shetland Amenity Trust, 2012. *Dunna Chuck Bruck*. [Online] Available at: https://www.shetlandamenity.org/dunna-chuck-bruck [Accessed 11 June 2021].
- [13] Team Shetland, 2019. *Da Voar Redd Up & Why Shetlanders Make it A Success*. [Online] Available at: https://www.teamshetland.com/blog/dunna-chuck-brucks-da-voar-redd-up-and-the-communitys-impact-on-it-blog [Accessed 11 June 2021].
- [14] Papathanasopoulou, E. et al., 2016. Valuing the health benefits of physical activities in the marine environment and their importance for marine spatial planning. *Marine Policy*, Volume 63, pp. 144-152.
- [15] Shetland Islands Marine Planning Partnership, 2021. *Shetland Islands Marine Regional Plan*, Scalloway: Shetland UHI.
- [16] King, G., Petrenchik, T., Law, M. & Hurley, P., 2009. The Enjoyment of Formal and Informal Recreation and Leisure Activities: A comparison of school-aged children with and without physical disabilities. *International Journal of Disability, Development and Education*, 56(2), pp. 109-130.
- [17] EKOS Limited , 2008. Creative Industries in Shetland Today Summary Report, Glasgow: EKOS Limited.
- [18] Hartmann, R., 2020. Heritage and Economy. In: A. Kobayashi, ed. International Encyclopedia of Human

Georgraphy. s.l.:Oliver Walter, pp. 369-372.

[19] UNESCO, 2017. What is meant by "cultural heritage?". [Online] Available at: http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/unesco-database-of-national-cultural-heritage/ [Accessed 2 June 2021].

- [20] Scottish Government, 2020. Scotland's Marine Economic Statistics 2018, Edinburgh: Scottish Government.
- [21] Shetland Islands Council, 2017. Shetland in Statistics, Lerwick: Shetland Islands Council.

[22] Cope, C., 2018. Forty years and counting for oil at Sullom Voe. [Online] Available at: https://www.shetnews.co.uk/2018/11/23/forty-years-and-counting-for-oil-at-sullom-voe/ [Accessed 6 May 2021].

Appendix A

1) How many years in total have you lived in Shetland?

	X
Since birth	
20+ years	
10 - 19 years	
5 - 9 years	
Less than 5 years	

- 2) If you <u>moved here</u>, please describe the qualities/aspects of Shetland which attracted you (including employment). If you were <u>born here</u>, please describe which qualities/aspects of Shetland made you stay (including employment).
- 3) How often do you actively visit or spend time on or near the coast?

	X
More than once a day	
Once a day	
Several times a week	
Once a week	
Once or twice a month	
A few times a year	
Almost never	
Never	

4) To what extent do you agree with the following statements: "Spending time near/on the sea or coastline around Shetland..." (please check box that is most accurate):

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Gives me a sense of wellbeing			1000		
Is inspiring					Î
Helps me feel I belong					J.
Makes me feel happy					
Helps me feel calm and relaxed					
Is peaceful and quiet		i i			Î
Makes me feel spiritual or connected to something above and beyond myself					
Inspires me to be creative					
Is uninspiring					
Makes me nervous, worried or stressed					
Helps me to think more clearly, calm my mind and/or de-stress					
Makes me feel more connected to nature					
Is rejuvenating					

5) To what extent do you agree with the following statements: "The Shetland sea and/or coastline is..." (please check box that is most accurate):

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
A place of natural value					
Important for wildlife/biodiversity					
Of historic value					
Of community value					
A place for education/ learning					
A place for family trips					
A place where enjoyment can be free					
A place for employment opportunities					
An important source of recreational opportunities					

6) Do you use the coastline for any of the following (please check all that apply):

	X
Reading	
Creative activities (e.g. drawing, painting, writing, photography)	
Collecting things (e.g. shells)	
Wildlife/nature watching (e.g. bird watching)	
Eating/ drinking/ picnicking	
Swimming/ paddling in the sea	
Beach play (e.g. rock pooling, sand castles)	
Surface water sports (e.g. sailing, kayaking)	
Diving/ Snorkelling	
Fishing from the shore	
Fishing from a boat	
Walking	
To increase/maintain fitness levels	
Running/jogging	
Work/employment	
Other (please specify)	
- Constitution of Production Conference on Profession (P. 199)	

7) Where do you do the above activities?

8) What sorts of things currently restrict you from making more use of the sea /coastline? Check all that apply.

	X
Bad/poor weather	
Poor health/disability	
Time - too busy	
Lack of public access (e.g. stiles, gates)	
Lack of information on where to go	
Not interested	
Lack of car parking and/or toilet facilities	
Concerns about safety	
Degradation/fouling of the environment (e.g. litter, poor water quality, etc.)	
No/limited access to a vehicle	
Lack of public transport	
Prefer to do other activities	
Other (please specify)	

9) Are there any inspirational areas around Shetland which you feel are under threat? If so, please explain the nature of the threat (e.g. litter, noise, construction or development, water quality, land use, etc.)

	X	
Yes		Nature of threat:
No		The state of the Control of the Cont

- 10) Take a look at the map below:
- 11)A) Places I use/utilise the most:

	Name of Area/Region	Name of Specific Location (if applicable)	What I do there/ use it for
1			
2			
3			

B) Places of value, significance or inspiration:

	Name of Area/Region	Name of Specific Location (if applicable)
1		
2		
3		

