Sands of Breckon

Shingle Shores

The composition of these beaches largely depends on the local geology. Pebbles are deposited according to size, with the largest ones at the top of the shore. The shingle is moved around by the tides and a series of peaked ridges may be thrown up by storms. Many of the sand spits and bars around the coastline have a shingle base.

Sandy Beaches

Varying in size, the sand mainly consists of finely ground-up rocks and fragmented sea shells. The composition, structure and angle of slope is determined by wave action. Some beaches reflect the local geology such as the sparkling mica sands in Unst. The diversity of organisms on a sandy beach is largely determined by the size of the sand particles, smaller grains retaining most sea water at ebb tide. This enables a greater diversity of life to exist beneath the sand.

Mud Flats

Mud flats form where fine particles of silt and mud accumulate on a level beach, often where fresh water enters the sea. High levels of organic material build up supporting large populations of invertebrates, an important food source for waders and shelduck.

Mudflats at Swinister, Delting

Seashore Safety

1. Be aware of tide times and avoid being trapped by an incoming tide.
2. Check the local weather forecast before departing.
3. Be careful on slippery rocks, especially near the edge of the sea, and watchful of incoming waves.
4. Keep well clear of cliff edges, especially in wet conditions.
5. Do not touch any strange objects washed up on the shore as these may be dangerous. Any hazardous or suspicious items should be reported to the Coastguard or Police.
6. Please leave any bird corpses on or above the strand line as these are counted monthly on some beaches.

Shetland Names

Shetland name	Common name	Shetland name	Common name
Banks	Sea cliffs	*Plucker*	Sea Scorpion
Voe	Sea inlet	*Buckie*	Common Whelk
Wick	Bay		
Geo	Inlet with steep rocky sides	*Grottie Buckie*	Cowrie
Skerry	Isolated rock in the sea	*Yoag*	Horse Mussel
		Ebb Wirm	Lugworm
Baa	Sunken rock	*Tirrick*	Tern
Ness	Headland	*Dunter*	Eider
Taing	Projecting point	*Shalder*	Oystercatcher
Ayre	Beach	*Sandiloo*	Ringed Plover
Noost	Boat draw	*Stenpikker*	Turnstone
Craigstane/ craig saet	Angling rock along foreshore	*Maalie*	Fulmar
		Solan	Gannet
Waar/Tang	Seaweed	*Sea craa*	Razorbill
Banksflooer	Sea Pink	*Loom*	Guillimot
Buggiflooer	Sea Campion	*Skarf*	Shag
Spoot	Razorshell	*Taamie Norie*	Puffin
Skaddiman's Head	Sea Urchin		

Seashores

heritage Shetland culture

A shoreline to suit everyone

Introduction

With around 1,500km of coastline, Shetland has something to offer most visitors. Absorb yourself in the day-to-day life of a seabird colony amidst magnificent cliff scenery, or take a gentle stroll along a sandy beach. Let the children investigate fascinating rock pools, or step into the past and explore some of the archaeological features found near the shore. Whatever your interests, allow yourself to relax and enjoy the scenery and wildlife around you.

The action of the waves is constantly changing the coastline

One of Europe's finest tombolos at St Ninian's Isle

Coastline of Fair Isle

Cliffs

Spectacular cliff scenery is concentrated in the west and north of Shetland and on Fair Isle and Foula. The complex geology means that sea cliffs come in a range of colours, such as the pinkish-red granite of Ronas Voe, the reddish-brown sandstone of Sumburgh Head, the blue-green serpentine of Fetlar and the dark basalt of Eshaness.

Rocky Shores

This is the predominant type of coastline in Shetland. On exposed shores the constant pounding by the sea prevents the growth of seaweed and allows only hardy organisms like Barnacles and Limpets to survive. Sheltered rocky shores support the greatest diversity of seashore organisms tucked away in crevices, pools and overhangs.

Rocky shore at Cunningsburgh

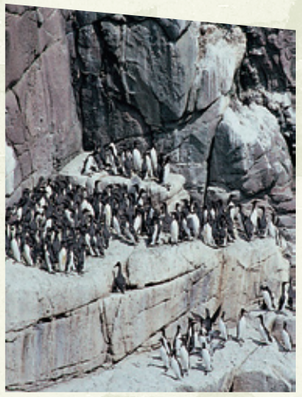
Shetland Beaches and Shorelines

1. **Norwick:** Scenic east-facing sandy beach.
2. **Lund:** Two sand and shingle beach complexes with nearby archaeological remains.
3. **Sands of Breckon:** Extensive north-facing area of shell-sand beach, dune and machair. Interesting plants and archaeology.
4. **Tresta:** Fine sandy beach backed by shingle – good for shells, especially tellins.
5. **West Sandwick:** West-facing sandy beach with dunes and machair.
6. **Eshaness:** Impressive dark cliffs, geos & stacks in volcanic rocks. Extensive blowhole at the Hols o Scraada. Seabirds and coastal turf flora.
7. **Sandness:** Sandy beach at Norby and coastal trail to Deepdale taking in spectacular cliff scenery.
8. **Sands of Sound:** Fine sandy beach, good rocky shore with pools and boulder beach. Good site for observing marine invertebrates and seashore life at low tide.
9. **Meal Beach:** West facing shell-sand beach. Car park and toilets at main road.
10. **Bannaminn:** Shingle tombolo and sandy beach.
11. **St Ninian's Isle:** Classic example of sand tombolo linking island to Mainland. Archaeological interest on the island.
12. **Spiggie Beach:** Sheltered north-facing shell-sand bay backed by dunes and machair which cut off Spiggie Loch.
13. **Pool of Virkie:** Tidal basin with large area of mud flat. Important feeding area for waders and ducks.
14. **West Voe:** South-facing sandy beach near Sumburgh Head and archaeological sites at Jarlshof and Scatness. Toilets at east end.

Cliff scenery at Deepdale, Sandness

An explorer's guide to the seashore

All shores are influenced by the twice daily tidal cycle. Extreme low and high tides occur around the spring and autumn equinoxes. The seashore divides into a series of horizontal zones with different plants and animals living in each zone depending on the length of time each area is left uncovered. Zonation is best observed on a rocky shore.



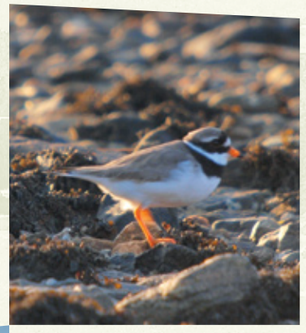
Many colonies of seabirds breed on sandstone sea cliffs, which weather into a series of suitable nesting ledges and crevices. These are occupied by Fulmars, Gannets, Puffins, Guillemots, Razorbills, Kittiwakes and Shags. Ravens and Hooded Crows also nest here. Safe from grazing animals and enriched by salt spray and seabird guano many cliffs have colourful "hanging gardens" which may include Sea Pink, Roseroot, Sea Campion and Moss Campion.

Oarweeds or Kelp grow in shallow waters offshore. Look for Eiders feeding on mussel beds.

The middle shore, the area between the high and low tide levels, is exposed and submerged regularly and is dominated by the brown seaweeds known as wracks. Species such as Shore Crab, Periwinkles, Dog Whelks, Barnacles, Limpets, Sea Anemones and edible Mussels are adapted to survive in this changing environment. When the tide recedes they avoid predation and drying out by retreating beneath stones and seaweed, remaining in rock pools or clamping tight to the rocks. Look for a black encrustation on the rocks - not oil but a black lichen called Verrucaria maura.

Most of the permanent inhabitants of a sandy beach, such as bivalve molluscs, Lugworms and Ragworms, live buried beneath the sand. Look for the shells of common species such as Cockles, Trough Shells, Sand Gapers, Carpet Shells, Razorshells, Striped Venus and thin Tellins.

Shingle beaches are the most barren of all shorelines – the continually moving pebbles prevent colonisation by plants or animals.



Shingle beaches also provide valuable nesting habitat for Arctic Terns, Oystercatchers, Ringed Plovers and Eiders.

Rock pools may contain small Jellyfish, Sea Anemones, Hermit Crabs, Sea Urchins and Sea Slugs. Use a clear-bottomed container for viewing the inhabitants.

Shingle ridges above the average high tide level accumulate organic matter and are colonised by plants such as Oraches, Sea Sandwort, Sea Campion, Silverweed, Sea Mayweed and Goose Grass. A rare species found at a few sites is the blue-flowered Oysterplant.

Turn over small rocks and stones to expose seashore life. Many animals attach themselves to the underside of the rock as well as sheltering beneath. Please make sure you turn rocks and stones back when you are finished!

The lower shore is only uncovered on low spring tides. Look for delicate organisms which cannot withstand prolonged exposure such as Scale Worms, Sea Spiders, Starfish, Brittlestars, Seasquirts and Sponges. Shallow water fish such as Butterfish and Five-bearded Rockling shelter under stones.

The strand line accumulates cast-up seaweed and other debris which harbour tiny crustaceans and kelp fly larvae and is a favourite hunting ground for birds such as Turnstone, Rock Pipit and Starling.

Only a few species such as the small Periwinkle and the Sea Slater can survive on the upper shore, the area above the average high tide level.

Look for plants such as Sea Pink, Moss Campion, Scurvy Grass, Spring Squill and lichens on the rocky foreshore. Shetland Wrens often creep mouse-like amongst the rocks.