

SUSTAINABLE TOURISM – CASE STUDY: KNOLL BEACH, DORSET

SUSTAINABLE TOURISM is based on wise management of resources and the landscape. The needs of the present are met without compromising the ability of future generations to earn their living and maintain their own landscape. Businesses and activities can develop without spoiling things for the next generations of business people and tourists.

Location of Knoll Beach

Knoll Beach is one of a string of popular beaches along Studland Bay in the Isle of Purbeck region of Dorset on the south coast of England (Figure 1). Shell Bay lies to the north of it towards Poole Harbour and the Sandbanks chain ferry. To the south lie Middle Beach and South Beach, with Handfast Point and Old Harry Rocks (a famous headland with stacks) beyond (Figure 2).

The National Trust

The land at Knoll Beach and the rest of Studland Bay is owned and managed by the National Trust. Many people do not realise just how much of the British coastline this charitable body owns -- more than 1,100 km (over 700 miles), or nearly 10% of the coastline of England, Wales and Northern Ireland. The Trust's Neptune Coastline Campaign began in 1965 to save beautiful coastline locations from development and to promote access to the public for leisure pursuits. Their main aim is to manage the coastline sustainably. Knoll Beach in Dorset is just one of many such sites. Studland Beach is part of the Purbeck estate once owned by



Figure 1: Dorset coastline including the Studland peninsula

the Bankes family and acquired by the National Trust in 1982. The late Mr Bankes played a crucial role in protecting this land from development; when Butlins wished to develop a holiday camp off Ferry Road (Figure 2) he turned down the large sum of money they were offering.

What makes Knoll Beach special?

Studland Bay, Studland Heath and the sand dunes together form a nationally and internationally important site for wildlife. Its high biodiversity includes all six native British reptiles, many of which are nationally rare species: adder, grass snake, smooth snake, slow worm, common lizard and sand lizard. These protected species occupy the largest tract of lowland heath in the British Isles after the New Forest in Hampshire. The area has almost every conservation designation available (Figure 3).

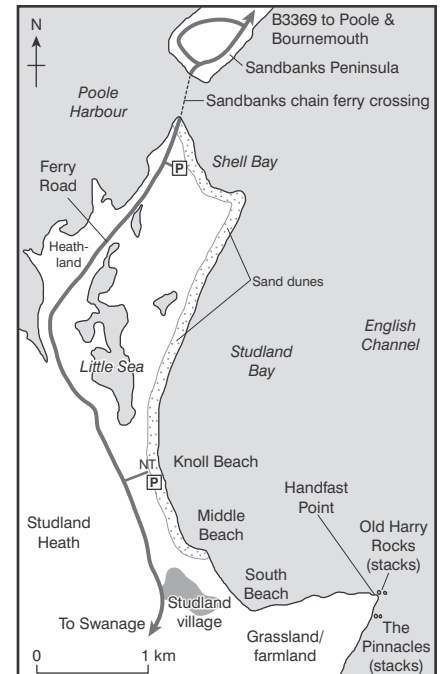


Figure 2: Knoll Beach and the Studland peninsula

Why does Knoll Beach need to be managed?

The 6 km of sandy beaches along the peninsula attract 1.5 million visitors each year; as many as

NNR	National Nature Reserve
SSSI	Site of Special Scientific Interest
AONB	Area of Outstanding Natural Beauty
Ramsar site	A wetland site considered to be of global importance as designated under the Ramsar Convention of 1975
SPA	Special Protection Area
World Heritage Site	Designated by UNESCO as a site of outstanding natural importance
Heritage Coast	Aim to conserve natural beauty and improve access for visitors
And many others ...	

Figure 3: Conservation designations at Studland Bay

25,000 visitors can arrive on a single good day in summer (Figure 4). About 95% of visitors are interested in the beach, leaving only 5% using the dunes and the heathland. While 5% of 25,000 may not sound too many, it is in fact 1,250 people in a particularly fragile environment. Hence the National Trust must put measures into place to protect it.

The majority of visitors arrive by car. Four main car parks and two subsidiary ones (which are opened when needed) provide 2,500 spaces. Clearly, though, this is insufficient to provide for 25,000 people.

Another 1,000 cars can be parked along Ferry Road, which causes a blockage; 400 can be squeezed into Studland village, many on double yellow lines and causing great inconvenience to residents. The car parks themselves are marked out, so the space is well used. The surface is gravel and trees have been planted to soften the otherwise harsh landscape. Cars approach the area either by the Sandbanks chain ferry (Figure 2) which can carry about 48 cars at a time, from the west via Corfe

- Wild landscape
- National Nature Reserve
- Super views
- 6 km of sandy beaches
- Safe bathing and swimming
- Walking
- Horse riding
- Water sports
- Second World War relics
- Naturist beach
- Education (many schools and universities have field trips to this area)

Figure 4: Why do people come to Studland and Knoll Beach?

Castle, or from Swanage to the south. All roads are relatively narrow and often winding. Congestion is an issue, especially of cars queuing for the ferry at peak times or waiting for the pay kiosk on the Studland side of the crossing. In addition 1,600 foot passengers can arrive via the ferry on a sunny day; they add to congestion on the beaches but not on the roads and car parks. The 25,000 annual educational visitors (school and university trips, often geographers) significantly add to the totals. They usually arrive by coach or minibus, which are larger vehicles that may cause inconvenience for other users.

What pressures do so many people create and how are these managed?

Two full-time beach wardens are employed as well as up to another nine temporary ones at peak times. They patrol regularly and aim to see that the beach and dunes are being used considerably. There are also police patrols at times of pressure.

Water sports need space and they often get in the way of other, quieter pursuits like swimming and children paddling and playing. Jet skis and power boats are now restricted inside

Poole Harbour, so they use the Knoll Beach side. The National Trust has no jurisdiction over them as it has control of land only down to the low tide line. Areas close to the beach are roped off for swimmers and children. Some activities, such as kite surfing, need a permit and times and dates for this activity are restricted. Too many boats moor in Studland Bay and they sometimes empty their waste tanks there, causing pollution in the water and on the beach. This is discouraged but cannot be fully controlled. Education of water users is therefore a priority.

Dogs are not allowed on Knoll Beach for the peak eight weeks of the summer. Elsewhere they are allowed all the time, but must be on a lead. This prevents excrement on the beach and keeps the environment safer for children. The National Trust has a duty of care to the users of the beach. Horse riders too can pose a danger, especially to children. Numbers are restricted once again by issuing permits and no one may ride at peak times of day. A riding-stable business does operate in the locality and an amicable balance between the different beach users seems to have been found.

Before the National Trust took over management of the beach in 1982, naturists were already allowed there. This caused considerable conflict with other beach users, especially those with children. This tourist conflict has been managed by limiting the naturists to a 900-metre stretch of dunes. They may not use the actual beach and they must dress to access the road or car parks.

Such large numbers of tourists create a vast amount of litter. Some is material they bring with them – picnics, nappies and so on – and some is from products they buy at the beach shop and café. The shop and café provide an essential income for the



Figure 5: A roped-off section of the dunes

National Trust at Knoll Beach and surrounding areas, so they must stay. Eleven tonnes of rubbish can be generated weekly and regular collections are made. Everything that can be done to encourage users to deal sensibly with their litter is in place. Recycling is done through having several bins at one location, each for different materials. Bin bags are see-through so that people are less likely to put rubbish in the wrong receptacle. Bins are emptied very regularly, often several times a day to prevent overflow.

Even though only 5% of the visitors use the sand dunes, they need particularly careful management because the dunes are so easily damaged. An embryo dune can be destroyed by a single pair of feet! The new line of developing embryo dunes is now roped off so that people can see them but not walk across them (Figure 5). The posts are wood and the barrier made of natural rope, to maintain the natural appearance of the beach.



Figure 6: Duckboards through the dunes

Vegetation has now grown so well in these areas that many of the noticeboards are almost invisible!

In the larger dunes, people are encouraged to keep to the paths, again by placing ropes on either side of the walkways. People walking randomly through dunes causes erosion and these can later develop into blow-outs – gaps in the dunes eroded by the wind. Pathways are strengthened by laying duckboards (wooden slatted pathways) on the ground to limit footpath erosion (Figure 6).

Some visitors like to have barbecues in the dunes, which is hazardous because they can cause fires to start in the dune and heathland vegetation. One special area is set aside for this activity, where the vegetation is more sparse and there is protection from the wind. This helps maintain the ecosystem. Another current idea to maintain the heathland ecosystem is to graze cattle in the area to encourage native plant species.

Studland Study Centre (the education centre) is a fully sustainable building made from timber from a sustainable source. It has a small wind turbine to provide electricity and a new solar panel which turns to follow the sun to maximise output (Figure 7). This provides hot water. Its toilets are compostable ones, i.e. they use bacteria to

break down the waste. This greatly reduces water use. More electricity could be generated to support the tourist facilities, but compostable toilets for huge numbers of visitors are probably not practical.

What are the physical pressures at Knoll Beach?

The National Trust also protects Knoll Beach from wave erosion and associated problems. Erosion processes have become increasingly dominant since the mid-nineteenth century. The cliffs at Middle and South Beaches and the dunes at Knoll Beach are threatened. The beach huts at Knoll Beach (Figure 5) have already been moved inland as a result, sacrificing income-generating car parking spaces. As the risk continues, gabions are being used to limit erosion. Less attractive to look at, these are rather controversial and do not fit into the natural landscape (Figure 8).

Conclusion

The National Trust is extremely important in maintaining the British coastline. Most of its methods are as sustainable as possible, so the areas they manage should remain sustainable well into the future.



Figure 7: Studland Study Centre with solar panels

Activities

1 Define these terms:

- sustainable tourism
- resources
- management.

2 (a) Use your atlas to locate:

- (i) the county of Dorset
- (ii) the Isle of Purbeck region of Dorset
- (iii) Knoll Beach (part of the Studland Bay coastline).

(b) Using the map (Figure 2) and the text in this unit, identify the attractions of Knoll Beach for visitors. Think of the different groups of people who are likely to want to come here.

3 Make a list of the ways in which the National Trust manages tourism at Knoll Beach. What other methods would you employ if you were in charge of the management of Knoll Beach? (You could discuss this in small groups.)

4 Figure 8 shows some management practices in operation at Knoll Beach. Draw field sketches based on the photographs and annotate them as follows: physical features, vegetation, human features of the landscape, evidence of management.

5 To what extent do you think the public are likely to cooperate with the management policies of the National Trust at Knoll Beach? Can you think of any other ways in which people could be encouraged to behave sustainably?

6 For a honeypot site you know personally or have studied:

- (a) List the problems caused by its being a honeypot site.
- (b) State the strategies taken already to limit these impacts.
- (c) Devise your own plan to protect this honeypot site even further.



Figure 8: Management practices at Knoll Beach