

CROYDE BAY, NORTH DEVON.

Grid Ref: SS 43 49



A BEACH PROFILE UNDERTAKEN FOR COASTWISE NORTH DEVON

Paul and Ro Madgett
2008

SUMMARY

Situated between Saunton Sands and Woolacombe/Putsborough Sands.

West-facing sandy beach, backed by dunes and with the rocky headlands of Downend and Baggy Point to the South and North respectively.

The rocky shore is excellent for wildlife and includes features such as Sabellaria (fan-worm) reefs, sea hares and sea anemones (including some rare species). Cowrie shells can be found in sandy gullies with careful hunting.

One of the best beaches in the UK for experienced surfers, but occasional rip currents - not ideal for learners. Lifeguards present during main season.

Good parking and toilets. Seasonal refreshments by main beach entrance and year-round in village.



Croyde Bay and Baggy Point, from top of Croyde Burrows

DETAIL OF LOCATION AND FACILITIES

Croyde Bay, in the parish of Georgeham, is a $\frac{1}{2}$ mile wide west-facing sandy beach sandwiched between the rocky headlands of Downend to the south and Baggy Point to the north. Above these rocky shore platforms, soft rock cliffs rise away from the beach. At the back of the beach, to the east, are sizeable sand dunes (Croyde Burrows) which were stabilised by marram grass some years ago, and through which various footpaths run. The South West Long Distance Path crosses the beach at the base of the dunes.

The entire area of Croyde Sands (down to LWM), the dunes, and rocky foreshore to south and north (as far as the parish boundary on Downend, and "Polly's Gully" along Baggy Point) is in private ownership - at the time of writing (October 2008) understood to be Parkdean Estates, the owners also of the Ruda Caravan Park, the time-share apartments to the north of the beach, plus the chalets and the seasonal camping fields behind the dunes. They undertake seasonal beach-cleaning and (we believe) pay for the life-guard presence.

Croyde Bay has been popular with holiday makers since the 19th century, and the village has increased in size steadily over the last 100 years. Over the last 20 or so years, with increasing interest in water sports, it has become extremely popular and can become very crowded in the summer.

The beach is easily accessed from the adjacent holiday accommodation - seasonal camp sites, mobile homes, holiday lodges, apartments and cottages. There are several car parks (some seasonal only) for the many day visitors. Except in the winter, there are sufficient modern toilet facilities and refreshment outlets close to the beach. Lifeguards are present during the season.

BEACH ACCESS

The main access to the beach is from the north side, down Beach Road and onto the sands. Further along the rocks on the north side, a rock-cut ramp descends to the sand at low tide from the road near Baggy Point car park. This is unsuitable for anyone with impaired mobility. Disabled access is possible from Beach Road and by the central stream, but loose sand on the beach makes the use of wheelchairs very difficult on the beach itself. To the south of the beach, at the northern end of Downend cliffs, an access path descends to beach level via concrete steps, with a gabion-based bank on its seaward side.

A stream enters the middle of the beach and there is pedestrian access here from paths and camping fields behind the dunes.

Further public footpaths cross the dunes themselves in several places.

STATUTORY PROTECTION

The beach, rocky foreshore to either side, and most of the sand-dunes are part of the Saunton-Baggy Site of Special Scientific Interest. (SSSI)

Most years the beach achieves the Blue Flag award.

The whole bay and hinterland is within the Northern Devon AONB, and is part of the buffer zone of the North Devon Man & Biosphere Reserve.

The North Devon Voluntary Marine Conservation Area extends throughout the Baggy Point / Croyde Bay area south to the parish boundary on Down End.

Almost the entire headland of Baggy Point, down to the high tide mark, is owned by the National Trust; included within this are the Lime-Kiln Field and Middleborough Hill.

PHYSICAL CHARACTERISTICS

The sandy beach is roughly 700 metres wide, N-S, and at low spring tides about 700 metres E-W.

The sand is medium-sized, and about 50% fine shell fragments; the beach has a low gradient; a small stream (Croyde/Crydda Brook) enters the centre of beach from the East, expanding across the beach to low-tide mark.

Below the sand to the south of stream is an almost horizontal shore platform cut in ancient Pilton Beds (Devonian age) slatey rocks, with occasional sandstone layers and cross-cutting hematite and quartz veins - normally only visible after storms have stripped away beach sands from part of beach - apart from the slightly up-standing "Cock Rock". To the north of the stream the shore platform surface exposed after stripping of the sand in storms is a stony clay mixture, similar to that in the low cliffs by the stream's entrance to the beach - and contiguous with this material - a solifluction deposit ("Head") formed as an "apron" of debris from the higher ground to the south of the Bay. This is part of the same feature as at Saunton Downend, between the road and the cliff-top, the "Head" comprising the greater part of these low cliffs. A similar feature occurs at the northern side of the Bay, underlying the Ruda Holiday Park and the southern slopes of Baggy Point; the two "aprons" of soliflucted debris presumably meet somewhere under the northern part of the beach, but in our experience the sand here has never been stripped down to this level.



Low cliff of "Head" below the dunes, south of the mouth of the stream.

Both to north and south the beach sands end at a series of low rocky ridges of Pilton Beds slates and sandstones, intercalated with sand-filled linear hollows, mostly aligned East-West, with occasional "cross-cutting" sand or pebble-filled linear hollows, generally aligned roughly NW-SE. These relate to the structure of the ancient rocks, their generally steeply-dipping layers trending E-W, with the main cross-cutting joints and faults mostly aligned NW-SE.



Rocky reefs aligned west-east, north side of beach.

Thus the beach sands form a fairly thin layer above a surface cut across the older rocks; this layer is dynamic in that it is constantly moved with the tides and waves, but for most of the time this dynamism is an "equilibrium" one. The main noticeable changes day-by-day, week-by-week, are to the surface of the sand, so that ripples and sand-waves develop and disappear, with intervening pools at low tide. The latter can sometimes be quite deep and steep-sided, thus causing a potential hazard to unwary surfers and bathers.

Strong rip-tides develop at certain stages of the tide, and are probably responsible for many of the above beach features. These make surfing conditions much less predictable than at Saunton or Putsborough beaches to N & S of Croyde, and hence more of a challenge to the experienced. Unfortunately the "cult status" of Croyde as a surfing venue means that the experienced have to share the waves with 100s of raw beginners for much of the year, with attendant dangers for all!

The dunes (19 hectares) to the back (east) of the beach have had a relatively stable front over the past 40 years, sometimes being eroded to show sections of low cliff in the underlying platform of the solifluction "apron" referred to above, at other times this being buried by fresh accumulations of blown sand from the beach.

THE SEA

Tidal range is up to 10 m. due to the funnelling effect of Bristol Channel / Severn Estuary. Locally Low Water of Spring Tides occurs in the middle of the day.

Off shore currents are relatively strong and can lead to unwary surfers being dragged westwards towards Baggy Point (resulting in occasional helicopter rescues). Dangerous rip currents develop at certain stages of the tide when there is strong surf running.

The best surf for long-boards tends to occur just after low tide for a couple of hours; whereas shortly before high tide is best for body-boarders.



Surf from strong Atlantic swell, late autumn 2005.

Configuration of the sandy shore (sand-waves etc) can cause problems for surfers and bathers, the former suddenly "bottoming", the latter suddenly finding themselves out of depth.



"Pock-marked" beach, due to strong rip currents.

Just offshore there is usually a well-marked line* between less-saline, often turbid waters coming out of the Taw-Torrige estuary and normal marine waters.

The whole area is near the edge of the coastal zone affected by the turbid waters of the Severn Estuary.

[* on 11-07-08 Ro Madgett saw an exceptionally well-defined boundary from the estuary mouth out to about $\frac{1}{2}$ mile south of Down End; there had been heavy rain in previous days, with greatly increased flows down the Taw & Torridge rivers.]

LAND-BASED WILDLIFE

Sea Holly, Sea Spurge & Portland Spurge, Pyramidal Orchid (etc.) can be found in the dunes and Sea Rocket and Sea Sandwort along the seaward edge of the dunes. Along the cliffs towards Baggy Point are Rock Sea Spurrey, Rock Sea Lavender, and many others.



Rock Sea Lavender

Common Lizard and Adder occur in the dunes. There is a nationally important Common Toad breeding colony in the artificial lakes behind the dune system.

No birds breed on the sandy shore, but Linnet and Stonechat (and others) have bred in the more vegetated parts of the dunes. Reed Bunting and Sedge Warbler are among those breeding by the lakes behind the dunes. A small Rookery is present in the pines behind the southern dunes. On Baggy Point breeding birds include Herring Gull, Fulmar,

Shag, Kestrel, Meadow & Rock Pipits, Skylark, Stonechat, Wheatear, & Dartford Warbler.

SHORE-BASED WILDLIFE (AS NOTED ON 19-07-08)

The rock pools are excellent for a wide variety of plants and animals. A typical rock pool might contain some of the following: sea anemones of several species (Beadlet, Snakelocks, Gem, Strawberry noted on 19-07-08, Glaucus Pimplet in October 2008); winkles, dog-whelks, top-shells, limpets; barnacles; hydroids and bryozoa; prawns; crabs; gobies, blennies, pipefish, wrasse, sometimes grey mullet, sand-eels; sponges; worms; occasionally sea-slugs (sea hare).



Gem Anemone

NOTABLE SPECIES

Sabellaria reefs (fan worms) on the lower shore are a Biodiversity Action Plan (BAP) habitat, the multitude of crevices harbouring many small creatures.



Sabellaria reef, north side of Bay, Low Water Spring Tide.
 [Please do not walk over these, as they are easily damaged]

Indicators of climate change include some barnacle, cowrie and top shell species. The slipper limpet has been found recently among shells on the shore.

An example of what may be found in a short survey is listed below:

Croyde Bay - Rocky Reefs on North Side of Bay

Coastwise North Devon survey, 17th October 2008 - Species Noted by Paul & Ro Madgett:

[NB - species list below is incomplete; many more species may potentially be found by other surveyors, and at different times of the year]

Location on Shore: U=Upper; M=Middle; L=Lower; R=Rock-pools; A=Above normal High Tide

	Common Name	Scientific Name	Location
ANIMALS (PHYLUM/Class)			
MOLLUSCA-Gastropoda	Snails		
	Toothed Top Shell	Osilinus lineatus	U
	Purple/Flat Top Shell	Gibbula umbilicalis	M/L
	Common Periwinkle	Littorina littorea	U
	Small Winkle	Littorina neritoides	U
	Flat Periwinkle	Littorina obtusata	
	Rough Winkle	Littorina saxatilis	U
	Dog Whelk	Nucella lapillus	M
	Common Limpet	Patella vulgata	M
	Blue-rayed Limpet	Helcion pellucidum	L
	Sea Slug sp.		R
MOLLUSCA-Bivalvia	Bivalves		
	Common Mussel	Mytilus edulis	L/M
ARTHROPODA-Crustacea	Crustaceans		
	Acorn Barnacle	(Species not determined)	U/M
	Volcano Barnacle	Balanus perforata	L
	Shore Crab	Carcinus maenas	R
	Common Prawn	Palaemon serratus	R
CNIDARIA-Zoantharia	Corals, Anemones		
	Beadlet Anemone	Actinia equina	R
	Strawberry Anemone	Actinia fragacea	R

	Snakelocks Anemone	Anemonia viridis	R
	Gem Anemone	Bunodactis verrucosa	R
	Glaucus Pimplet (Anemone)	Anthopleura thallia	R
	Common Name	Scientific Name	Location
CNIDARIA-Hydrozoa	Hydroids		
	Hydroid spp.	(Species not determined)	L
PORIFERA	Sponges		
	Sponge	(Species not determined)	L
BRYOZOA	Moss animals		
	Bryozoa spp.	(Species not determined)	L
ANNELIDA-Polychaeta	Bristleworms		
	Honeycomb Worm	Sabellaria alveolata	L
	Spiral Tube Worm	Spirorbis spirorbis	L
CHORDATA-Pisces	Fish		
	Common Blenny / Shanny	Blennius pholis	R
PLANTS			
SEAWEEEDS (Algae)			
	Gutweed	Ulva intestinalis	U/R
	Flat/Spiral Wrack	Fucus spiralis	U/M
	Irish Moss	Chondrus crispus	R/M
	Channelled Wrack	Pelvetia canaliculata	U
	Coral Weed	Corallina officinalis	R/M
	Sea Lettuce	Ulva lactuca	R/M
	Dulse	Palmaria palmata	L
	Laver	Porphyra umbilicalis	U/M
	(A Brown Seaweed)	Bifurcaria bifurcata	R
	(Encrusting lime algae)	"Lithothamnia"	R
	Oarweed	Laminaria sp.	L
	Serrated Wrack	Fucus serratus	L
	Pepper Dulse	Osmundia pinnatifidia	M
LICHENS			
		Lichina spp.	U
		Verrucaria spp.	U
		Xanthoria spp.	A
		Caloplaca spp.	A
		Ramalina spp.	A
		Lecanora spp.	A

At various times through the year otters visit the shore and cliffs, curlew feed on nearby fields and on the rocky foreshore in the winter. Great Green Bush Crickets can be heard calling on Baggy Point and in the dunes in late summer.



Great Green Bush Cricket in the dunes.

Invasive alien species found include Wireweed in the rock pools, with Hottentot Fig and Japanese Knotweed on Baggy Point - although both latter plants are now actively controlled by the National Trust.

FISHING

Mackerel, Bass and Grey Mullet are all caught close to the shore. Anglers use the rocks along the southern side of Baggy Point, while some spear-fishing takes place here on calm days; some beach angling out of the main holiday season. Crab and lobster pots are set off Baggy Point on most days. Small fishing boats (probably mainly from Appledore and Ilfracombe) use the waters off Baggy Point.

The British rod-caught record for Tope, a species of shark, was for a long time a specimen caught off Baggy Point.

In late summer huge Sunfish may be seen lazily floating off Baggy; the lucky few may spot a Basking Shark, though these tend to stay well out towards Lundy. A few years ago a Great White Shark was reportedly seen off Baggy, but although this generated a lot of local interest, it was never authenticated.

MARINE MAMMALS

The end of Baggy Point is a good site to look for cetaceans. Harbour Porpoise sometimes feed in the tide race off the Point - occasionally accompanied by feeding Gannets. A small pod of Dolphins are seen offshore most years.

Larger whale species have been reported occasionally just offshore; bones of one stranded on the beach in 1915 may be seen by the footpath on Baggy Point.



Whale bone, Baggy Point.

Grey Seals are frequently seen just off Baggy; twice in recent years a pup has been born here, but each time it has been "rescued" - they are much more likely to survive if left alone, and rarely do when well-meaning humans interfere - so please don't!



Grey Seal pup, Baggy Point, October 2005.

MAN-MADE STRUCTURES OF INTEREST

To the north are 2 former lime-kilns, one of which is not very apparent but its remains are in the seawall/building to the west of the rocky ramp that descends to the beach from close to Baggy Point Car Park. The ramp and associated grooves across the foreshore rocks are evidence of the route used by carts that came down to the beach to remove lime from ships that beached at high tide to deliver their cargo. The lime was taken to the kilns to be burnt before being used to "sweeten" the soil in the fields.



Cart-track cut across fore-shore rocks.

On the south side of the beach are two WW2 pill-boxes set in the low cliffs; remains of other WW2 structures can occasionally be seen within the dune system.

Around the Bay there is a good network of well-marked footpaths, all of which are worth exploring. Local map guides are available.

IMPACT OF HUMAN ACTIVITY & MANAGEMENT ISSUES

Croyde Bay is a very heavily used holiday and surfing beach; surfing in particular is a year-round activity. Several major surfing competitions are held each year, the most important being the Gold Coast OceanFest, when the National Trust allows the use of its Lime-Kiln Field for the associated stalls, land-based competitions, and music festival. The greatly increased popularity of the area for surfing and associated activities has changed the village from one of predominantly retirement and second homes, with a short but very busy peak "family holiday" season, to a place alive with youthful activity throughout most of the year.



Surfers taking the shortest route to the low-tide waves.

In recent years there has been heavy pressure for intensification of the developments on the northern side of the Bay, firstly Croyde Bay House Hotel rebuilt and extended (2007-8) as holiday homes, now (2008) pressures to redevelop the next section west as a "boutique hotel" complex.



Croyde Bay, north shore development; Middleborough Hill behind; 2008. Because of the popularity of Croyde Bay for surfing, as well as "traditional" family beach holidays, its potentially treacherous waves and currents mean that the provision of life-guards during the summer season (increasingly extended into "shoulder" weekends) has become a necessity. A separation of surfing and bathing areas is policed by the life-guards.

"Cult status" as a surfing venue has caused problems due to over-crowding of the surf-zone by a mix of novices and experienced surfers. Ambulance calls to attend "surf-board injuries" are a constant feature of summer weekends, and several times a season require landings on the beach by the Devon Air Ambulance helicopter, or by the RAF Air-Sea rescue helicopter based at Chivenor.



Heavy use of the beach by holidaymakers means that the owners try to keep the sands clear of litter (mostly from the sea), thus mechanical beach-cleaning occurs for about half the year, removing not only litter but also the strand-line seaweed etc which many shore creatures (including birds) depend upon. Such cleaning is seen, however, as a necessary feature of a holiday beach.

By the 1970s un-restricted access to the dunes from the beach meant that these lost much of their binding vegetation, resulting in sand-blows across adjacent properties. A mix of physical barriers and marram-planting re-stabilised the dunes, but in recent years access to these, especially the northern half, has again become virtually un-restricted, with potential future problems for the holiday chalet site to their east. The board-walk installed during the 1970s across the southern half of the dunes is now in poor repair, and mostly buried under blown sand. This southern half of the dunes is designated as a "nature reserve" by the owners.



Unofficial camping within the dunes at the height of the summer season has sometimes been a difficult problem for the owners.

Croyde Bay is regularly tested by the Environment Agency for water quality during the spring /summer /autumn, and nearly always passes their tests - problems arise after heavy rain when bacterial counts can increase greatly, thought to be due to the stream carrying farm animal wastes to the shore. The overall water quality has greatly improved in recent years, since a new sewage works with full tertiary treatment was built - as this is on National Trust land, great care was taken over the design, so much so that visitors have frequently asked whether "that attractive barn conversion is available for holiday lets"!

AND FINALLY....

Croyde Bay has some of the best sunsets it is possible to see anywhere!

