

## WORKING TOGETHER

By sharing knowledge and working together BEACHES AT RISK is providing information to help improve management of our beaches for coastal defence, tourism and nature conservation.



KC

We are also working with local people to help them better understand and appreciate the wealth of wildlife on their doorstep. In this way, we can help keep the coasts of southeast England and northeast France healthy for years to come.



EH

## FURTHER INFORMATION

For more information please contact:

BEACHES AT RISK Project  
c/o Department of Geography  
Chichester Building  
University of Sussex  
Falmer  
Brighton BN1 9QJ

Website: [www.geog.sussex.ac.uk/BAR](http://www.geog.sussex.ac.uk/BAR)  
Email: [bar-project@sussex.ac.uk](mailto:bar-project@sussex.ac.uk)

## PARTNERS

BEACHES AT RISK is a partnership between the University of Sussex (Project Leader), East Sussex County Council, Kent Wildlife Trust, Université du Littoral, Université de Rouen, Université de Caen and SMACOPI.

Other funders include ABP Marine Environmental Research Ltd, Brighton and Hove City Council, Canterbury City Council, Conseil Régional de Haute-Normandie, Conseil Général de la Seine-Maritime, Dover City Council, the Environment Agency, Halcrow, HR Wallingford, Pevensey Coastal Defence Ltd and Royal Haskoning Ltd, Services Maritimes des Ports de Boulogne et de Calais, Shepway District Council and South Downs Coastal Group.

Picture credits: Kate Cole (KC), Uwe Dornbusch (UD), Patrick Fitzsimons (PF), Alex Tait (AIT), Ian Thomas (IT), Peter Wakely, English Nature (PW)



Cuckmere Haven (KC)

Printed on recycled paper, chlorine free.  
© East Sussex County Council 2006

# LIVING WITH THE SEA



Pevensey Bay (IT)



This project is part-financed by the European Regional Development Fund (ERDF)

## BEACHES AT RISK

Sovereign Harbour (KC)



The coastline of southeast England and northern France is naturally changing, shaped by the weather and the sea. Climate change and development interfere with this, threatening some of our most valuable habitats, as well as many homes and businesses. We need to discover how to manage our beaches so they can continue to protect us and support the wildlife that depends on them. **BEACHES AT RISK** is working towards this goal.

Criel-sur-Mer (UD)



## THAT SINKING FEELING

Climate change means global sea levels are rising, but the effect is worse in southeast England because the land is sinking! During the last Ice Age, the northwest was weighed down by ice, and the southeast rose in response. When the ice melted, the northwest began to spring back and the southeast began to sink, a process that continues today.

Pevensey Bay (PW)



Whilst erosion of the chalk adds some new flint to our beaches, **BEACHES AT RISK** has calculated that this is just a fraction of what is lost through shingle wear and longshore drift.

Birling Gap (KC)



## BLOCKING THE FLOW

Housing on the coast increases the demand for protection. Building concrete walls around the base of chalk cliffs slows down erosion, but it also cuts off the already small supply of new flint pebbles.

Peacehaven (UD)



Breakwaters protect harbours, but can block longshore drift and have serious effects on beaches along the coast. The harbour at Dieppe traps shingle moving from the west, starving the beaches that protect houses to the east.

Criel-sur-Mer (AIT)



# FEELING THE SQUEEZE

Sovereign Harbour (© Getmapping PLC 2006)

Harbour arms and similar structures block the movement of shingle along the shore, starving beaches further down the coast.

Pevensey Bay (IT)

Novel ideas are being tried to strengthen our beaches and reduce the amount of shingle that needs to be brought in to recharge them. For example, bales of used tyres have been used to reinforce the beach at Pevensey.

Rock or timber groynes are often used to slow down longshore drift, and to try to maintain beach levels.

Pevensey Bay (KC)

Encouraging residents to use native plants in their beach gardens makes them eye-catching and easy to maintain, and helps the local wildlife!

**'Coastal squeeze' occurs where a beach is prevented from moving inland in response to rising sea levels. Important coastal habitats may be lost and homes and other development put at greater risk as they are no longer protected by a beach.**

Pevensey Bay (IT)

As our beaches are losing shingle, new supplies have to be brought in, often dredged from offshore shingle bank habitats.

Seaford Beach (PF)

Once a beach has been 'recharged' with new shingle, the shingle will need to be 'recycled'. Lorries are used to move shingle back along the beach and the shape of the beach is rebuilt.

**Important coastal habitats are often lost or damaged by human activity such as development or excessive visitor pressure.**