ENGLISH NATURE

Developing English Nature's Maritime Strategy

State of Nature one year on

working today
for nature tomorrow

Introduction

The Maritime Strategy began as an undertaking from the Maritime State of Nature report *Maritime State of Nature: getting onto an even keel* which was launched on 6 November 2002. **The strategy has two key objectives:**

i. To set English Nature's objectives for our coasts and seas
ii. To act as a catalyst and support implementation of government initiatives, in particular the Marine Stewardship Process and the maritime elements of the England Biodiversity Strategy

It builds on three key issues set out in the Maritime State of Nature report: Fisheries; Water Quality; Coastal management & development. **In the Maritime Strategy we are developing solutions to these key issues through the following themes:**

i. Recovery of our coasts and seas
ii. Better planning and integration
iii. Working with the sea

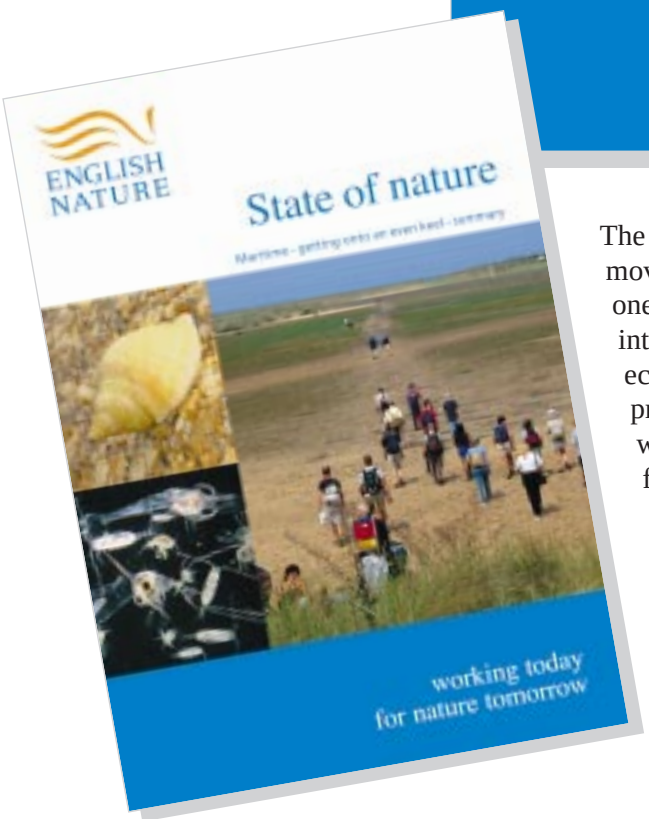
These are underpinned by an examination of how we apply better science and knowledge and how we communicate with others in order to gain support and greater community involvement. The ecosystem approach is central to the developing strategy and we are working with a wide range of stakeholders, including the Joint Nature Conservation Committee (JNCC) and the Department for the Environment, Food and Rural Affairs (Defra), in developing this concept and its practical application.

"We live on an island, so the coast and the sea are woven into our memories, our identities, our lives."

Maritime State of Nature

The *Maritime State of Nature* report highlighted the poor state of our maritime ecosystems and the urgent need for recovery. Out at sea the condition of the ecosystem has changed and deteriorated due to human impacts, the most pervasive of which have been the effects of commercial fishing and, in estuaries and near shore waters, water quality issues. On the coast, whilst habitats are generally in a better condition, real challenges are faced in working with natural change whilst maintaining a distribution of representative coastal habitats and meeting peoples' needs.

Current approaches to maritime governance are sectoral and fragmented. Whilst certain sectors have addressed environmental issues and real gains have been made in procedures or ecosystem quality, much remains to be done to deliver a more effective and integrated approach that has a high potential to deliver sustainable use and allow recovery of ecosystem resilience.



The long-term focus of the strategy is therefore on moving away from a very sectoral approach, to one founded on improved coordination, integration and management. Commitment to an ecosystem approach needs to be developed into practical implementation. Over time this strategy will provide more benefits for biodiversity and for people and recognition of ways in which good management can be delivered in territorial waters.

(previous) Gannet, our largest breeding seabird. Roger Covey/English Nature
(top) State of Nature Maritime summary front cover
(bottom) State of Nature Maritime front cover

Getting people involved

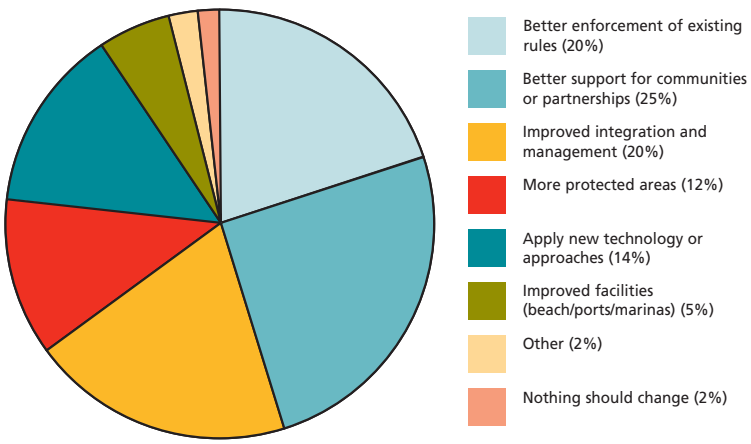
Lynne Collins, English Nature Community Officer with Councillor Anthony Hill, Sefton Deputy Mayor. Rob Wolstenholme/English Nature

Training skippers the WiSe way - observing Bottlenose dolphins. Colin Speedie/MER

Development of the Maritime Strategy is an iterative process, using a range of tools. It builds upon work already underway within English Nature to generate new ideas and approaches to managing and safeguarding the maritime environment and helping to deliver more sustainable development.

The driving principle is stakeholder participation and the task has been for English Nature to engage with all our existing partners at local, national and European levels and wider, as well as reaching out to the public and other stakeholders to agree actions for *halting biodiversity loss and promoting recovery of our coasts and seas*. Whilst many of our existing partners agree with the priority issues, there is still much to be done to encourage others to acknowledge the problems now observed around our coasts and seas.

What actions do you think should be taken? English Nature Web survey 2003



We have held stakeholder workshops, open events, one to one meetings, and provided opportunities for people to learn more about our coasts. We also conducted English Nature's first ever Web survey *"What do our Coasts and Seas mean to you?"*. We achieved a very good response for a survey of this type. Just under nine hundred people responded and provided their opinions on the state of our coasts and seas, and told us what they think should be done to improve matters. In addition, over 200 said they want to be involved in future market research or development of policy. This clearly shows that people want to be involved and we will continue to develop opportunities for everyone to have a say.

Widening participation

1. For many years volunteers have recorded terrestrial life and this has helped identify both the problems and successes of human activities and conservation programmes. The sea has many fewer visitors but, as an island nation, should be just as important to us. This year English Nature co-funded the SeaSearch project to go national. Some 380 divers attended training days to find out more about their favourite bits of seabed providing nearly 500 new records of what they found.

Seasearch diver recording. Joe Foxcroft

2. Dune Restoration involving tree removal at Ainsdale Sand Dunes National Nature Reserve (NNR) in the 1990s caused a wave of opposition from part of the local community. Employing a Community Officer, English Nature has increased awareness of management issues relating to Ainsdale Sand Dunes NNR through improved interpretation, site visits and events. English Nature is taking steps to rebuild the confidence of the community and there are now far more volunteers getting involved with their local site.

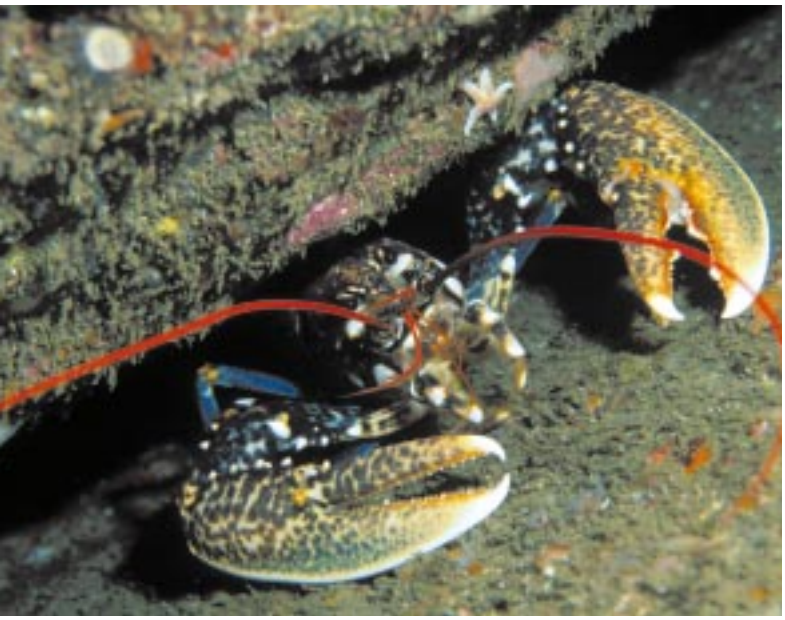
3. Dinosaur Coast Project- Yorkshire. English Nature, in partnership with Local Authorities and Museums, is supporting this Heritage Lottery Fund initiative to make the Dinosaur Coast accessible for all and to help conserve its natural heritage. Access and Community Officers promoting events and sustainable resource use are good examples of raising awareness and building capacity in community and stakeholder groups.

4. The UK's first wildlife-friendly marine accreditation scheme - WiSe (Wildlife Safe) - is training skippers in the south west of England to operate pleasure trips to protect and get the best views of our marine wildlife. The WiSe scheme is designed to work with commercial pleasure craft owners to encourage marine ecotourism to operate in a wildlife-friendly way. It is funded by English Nature, Marine Southwest, European Social Fund and the South West Regional Development Agency.

Robin Hoods Bay SSSI and SAC, part of Yorkshire's Dinosaur Coast. 21,876

Recovery and maintenance of ecosystems

Following the launch of the English Nature's *Maritime State of Nature* report there was strong support for the conclusion that the current state of our maritime ecosystems is poor and that an ecosystem approach to recovery is central to delivering future sustainable use. Our work this year started to flesh out what the ecosystem approach may look like in practice. This was achieved through the production of a multi-agency authored English Nature Research Report on *"Adopting an ecosystem approach for improved stewardship of the maritime environment: some overarching issues"* (ENRR 538). An ambitious programme is now being developed for 2004 - 2008 through English Nature's Marine Science Technical Advisory Group to take forward the ecosystem approach in a very practical way with a group of scientific experts and advisory bodies from the UK and further afield.



Lobster. MWPA. 00018

Significant effort has also focussed on three key issues:

- Building networks of protected areas
- More sustainable fisheries management
- Water quality improvements

Building networks of protected areas

Government has an important leadership role to play on Maritime Protected Area (MPA) networks through the Review of Marine Nature Conservation and the Marine Stewardship process. In particular on integrating fisheries and nature conservation, by raising the profile of this issue across other government departments, and by providing effective policy and legislative frameworks to enable stakeholders to implement networks by the existing internationally agreed timetables.

In June English Nature hosted a stakeholder workshop on implementing the target from the 2002 World Summit on Sustainable Development for establishing representative networks of protected areas in the maritime environment by 2012. This was not only one of the first events of its kind in Europe, but also a key milestone for the UK in initiating discussions on the implications of internationally agreed network targets with a wide range of relevant stakeholders. The results have stimulated integration and development towards a common vision, and raised awareness and interest both in the UK and at a global level.

A wide range of organisations and individuals participated in the workshop, including the Department for the Environment, Food and Rural Affairs (Defra), Centre for Environment, Fisheries and Aquaculture Science (Cefas), Sea Fisheries Committees, The Marine Biological Association of the UK, Royal Society for the Protection of Birds (RSPB), World Wide Fund for Nature (WWF), The Wildlife Trusts, the Marine Conservation Society, the University of York, the University of Plymouth and Associated British Ports.

Juvenile scallop on maerl beds, Fal Estuary SAC, Cornwall.
Jason Hall-Spencer

Key messages from the MPA workshop are:

- There is a need for government to define the scope and nature of maritime protected areas (MPAs) and networks, through the Review of Marine Nature Conservation process and in a European context via the European Union Marine Thematic Strategy
- Networks need to be more than just a patchwork of sites and need to be designed to include full representation of biodiversity, replication of sites, and creating areas of permanent closure
- We have enough information to start building networks now and existing MPAs are important as the building blocks of an evolving network
- A focus is required on ecosystem recovery, not on maintaining biodiversity and ecosystems in a poor condition
- A shift in mind-set needs to occur away from just a concentration on rare and threatened habitats and species to involve ecosystem considerations
- Mechanisms need to be created to achieve local community ownership and buy-in from others

Support for a framework for managing the marine environment including no-take and multiple-use reserves has been established and promoted under this theme. As part of this process, links with experts in the field around the world and within the UK have been created and supported. Work to support the application of the Habitats Directive on existing sites, and on new sites both within and outside the 12 nautical mile limit, mainly via the Natura 2000 Project Group run by Joint Nature Conservation Committee (JNCC) has also continued. The UK's first statutory no-take zone for nature conservation purposes has been designated at Lundy Island and proposals are being developed for partnership projects to implement networks of no-take zones around the coast of south-west England. A wider project to review research and experience of existing marine reserve initiatives in British waters and to trial approaches to the implementation of wider networks of MPAs is also being developed.

Fisheries management

We need more sustainable fisheries both for fishing communities and for the health of the marine environment. The *Maritime State of Nature* report brought together the evidence that fishing damage goes beyond the direct impact on the seabed, to affect the goods and services ecosystems can provide, such as the cycling of nutrients into food chains. A damaged maritime ecosystem is less able to absorb, process and recycle nutrients into the food chain to feed fish. Thus not only are these goods and services damaged but fish stocks are less able to recover. English Nature has advised COST-IMPACT, a pan-European project funded by Directorate General (DG) Fish that is investigating the real impact of fishing on the seabed. What is clear from this is that awareness of this issue and the support English Nature has been giving COST-IMPACT on this matter will strengthen commitment to tackling the consequences of

fishing in a more significant way than in the past. Marine conservation advice has also been provided to the Prime Minister's Strategy Unit Fisheries Project. This will play a part in raising the profile of environmental impacts of fishing and the seriousness of the ecological issues we now face as a result of that impact.

Key strategic links to the fishing industry are being strengthened, with recognition of common ground - the desire for long-term viability and sustainable resources in the future. English Nature and fisheries representatives have collaborated on the development of a definition of the ecosystem approach that is both accessible to industry interests and meaningful to those involved in nature conservation. We have worked with other nature conservation agencies to influence Common Fisheries Policy reforms and the Royal Commission on Environmental Pollution. Work is now focusing on the Defra-led enquiry into the reform of inshore management and establishing fora with inshore and offshore fishers' representatives to help further develop and inform our maritime policies and to explore ways of working together for healthier seas and sustainable fisheries.

Delicate pink sea fan, Lundy MNR should benefit from first statutory no-take zone Francis Bunker.
English Nature

Lundy Island is England's first official NTZ for nature conservation. Initially proposed by Devon Sea Fisheries Committee and English Nature in July 2002, it was then confirmed in January 2003 with support from the local fishermen and other stakeholders. **By setting aside the 3.3 sq km, long term benefits could include;**

- Enhanced fish and shellfish stocks within and adjacent to the area
- Creation of a refuge for fish and shellfish stocks
- Increased biodiversity and better protection of delicate branching corals such as the pink sea fan
- Increased benefits to the local economy including tourism and fishing

The St Agnes Voluntary No Take Zone (NTZ) Demonstration Trial is funded by the Objective One Fisheries Fund and English Nature with support from Cornwall County Council, Cornwall Sea Fisheries Committee and the Cornish Fish Producers Organisation. As part of this work a NTZ Roadshow is being taken to coastal communities across the county in conjunction with the Cornish Fish Producers Organisation. So far, well over 400 fishermen, divers, anglers, conservationists and members of the public have attended the NTZ workshops, with many more planned. It is hoped that in a few years time there will be a network of small NTZ around the Cornish coast which, along with existing fisheries and conservation management measures, could secure the future of the inshore fishing industry and help to protect Cornwall's fantastic marine life.

Dogwhelks are still affected by TBT antifoulants.
Dan Laffoley. English Nature

Water quality

Two key issues were raised in the *Maritime State of Nature* report in relation to water quality; nutrient enrichment and the effect of toxic substances:

Nutrients - The *Maritime State of Nature* report raised concern regarding the existence, and risks of eutrophication in marine waters, including areas designated as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) under the Habitats Directive. Most effort has been concentrated on the co-ordination and development of future work required to assess eutrophication in marine waters in the context of an ecosystem approach. A wide range of organisations with an interest in nutrients in the marine environment contributed to this and highlighted the need for closer integration and future collaboration in this area. Further work, commissioned by the Environment Agency, English Nature and Countryside Council for Wales, on the development of a model that could be used in predicting the impacts of nutrients in estuaries that have designations such as Special Areas of Conservation and Special Protection Areas, is almost complete. Predicting the impacts is a first step in gathering the evidence required to help us to control the inputs of nutrients. This model will assist in the assessment of the risk of effects from nutrients and will be used in the Environment Agency's Review of Consents on European marine sites.

Toxic substances and sub-lethal effects - More information on the risks of long-term exposure of wildlife to toxic chemicals is needed. In 2002 English Nature commissioned a study reviewing biomarkers (biological indicators which provide evidence of exposure to, or harm from, chemical pollutants) and held a workshop to discuss the potential of using such tools in environmental monitoring programmes. Delegates included specialists in ecotoxicology and environmental monitoring from a wide range of organisations. Suggestions for the way forward will be incorporated in a review, which is due to be published later this year.

The application of biological-effects tools in marine monitoring was further examined at a workshop held in Plymouth to discuss the findings of a study commissioned by the Environment Agency, the Countryside Council for Wales and English Nature on characterising water quality in South-West European Marine sites. Organisations are now considering further options to pilot the deployment of biomarkers in areas within South-West SACs and SPAs known to be polluted by toxic chemicals.

The issue of contaminated sediment and the need to understand associated adverse effects was also raised in the *Maritime State of Nature* report. English Nature and the Environment Agency have been developing a framework to assess risk from contaminated sediment in the Environment Agency's review of consents project. In addition, an English Nature Research Report (ENRR 531), *"Endocrine Disruptors in European Marine Sites in England"* which details the risks posed by endocrine disruption to European marine sites, was completed this year.

Better planning and integration

Implementing the integrated approach advocated in the *Maritime State of Nature* report requires not only better governance but also recognition of the need for different mechanisms, from protection through management to planning, at different spatial scales (habitat and species, landscape, regional sea and large marine ecosystem).

In reflecting on the above we are focusing attention on:
- Integrated Coastal Zone Management (ICZM)
- Marine Spatial Planning
- Regional approach

We are directing effort on these areas because they complement the work Government is already undertaking on a number of initiatives.

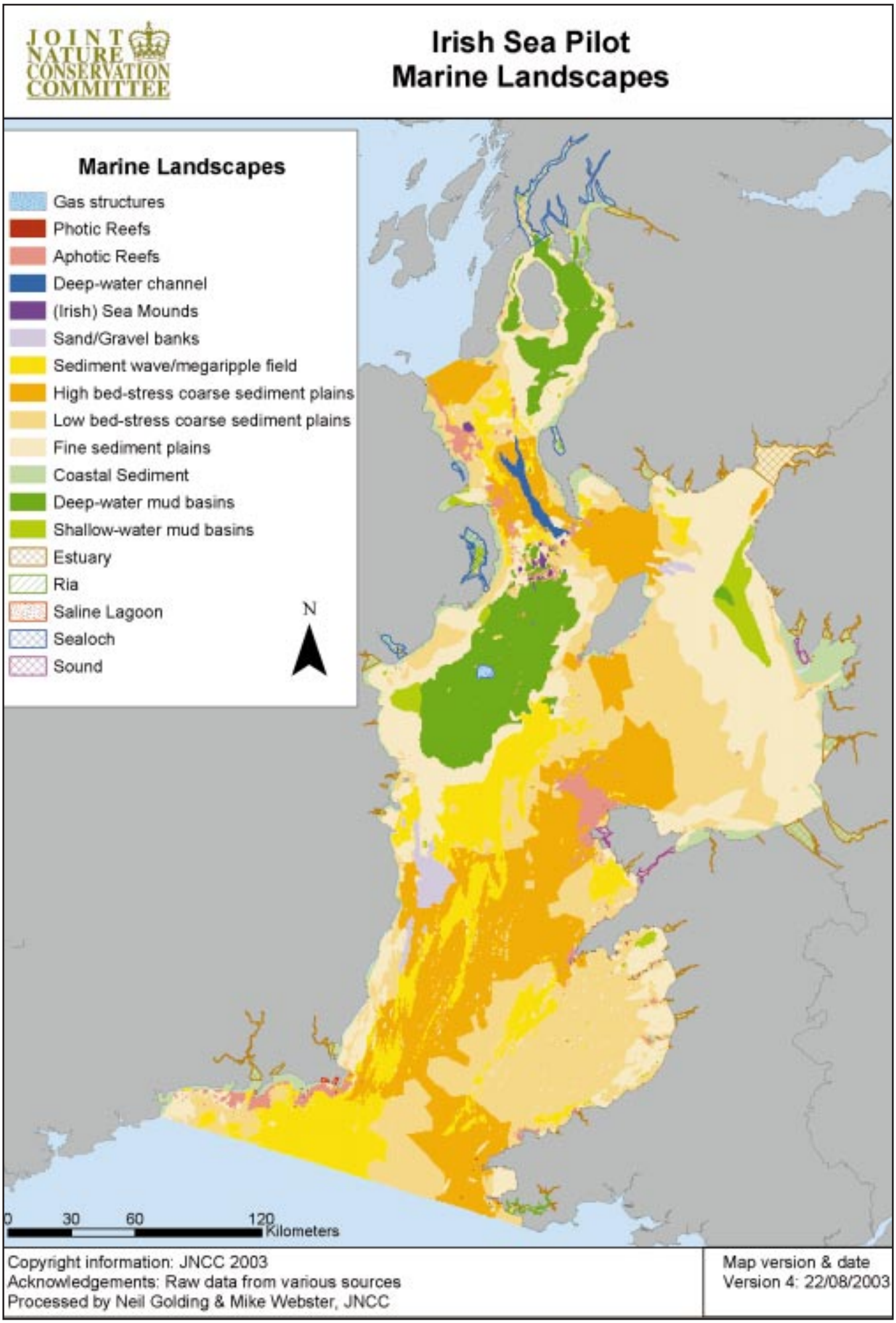
ICZM

There is a range of local projects, such as Estuary Management Plans, which demonstrate ICZM in practice. However, from a strategic and national perspective ICZM is still relatively unmapped territory and without this perspective local initiatives will continue to be largely ad-hoc. Our main action on this issue has been contributing to the Defra-led national stocktake as part of implementing the European Union (EU) ICZM Recommendation. Here a group of national experts guide consultants working on behalf of Defra to review the current status of ICZM in England, detailing successes and failures - clearly identifying best practice. A final report outlining the way forward will be published in early 2004.

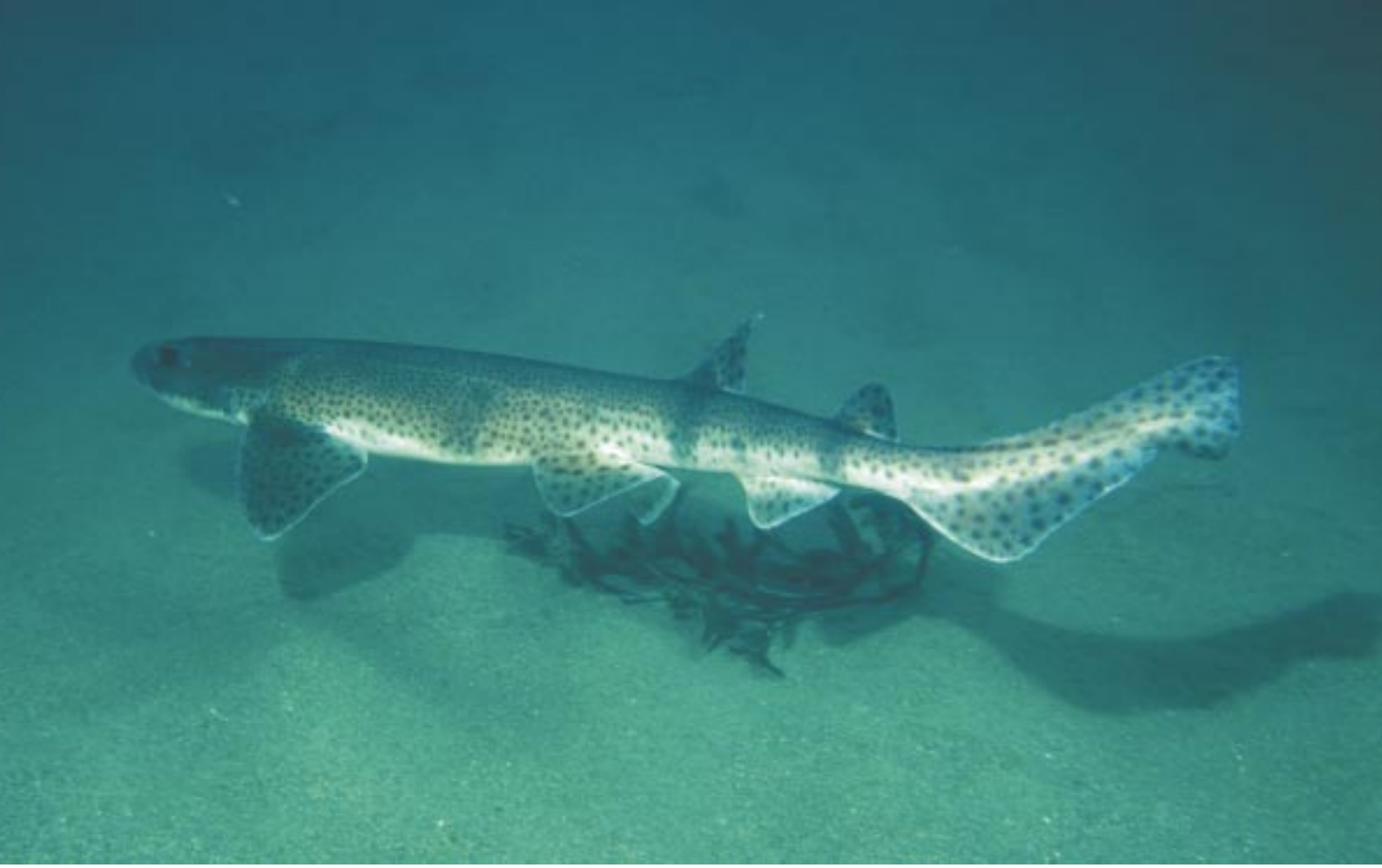
In parallel with the general initiative on ICZM, we believe it is important to explore the links between ICZM and key sectors and management tools, such as marine spatial planning, which contribute to it regionally and nationally.

Marine spatial planning

At a national and international level the UK is committed to investigating some form of marine spatial planning to assist in the planning and management of marine resources. This is in response to a number of issues including the complexity of the current regulatory regime and lack of co-ordination between regulating authorities, concern about cumulative effects, uncertainty both to developers and to assessing effects on the environment, the need to ensure there is room for different activities and conservation measures and the need to allow for democratic decision making in our society as exists in terrestrial planning. We recognise that a network of protected sites will not achieve their intended aims or contribute to achieving sustainability if they are not placed within an effective planning and management framework and if the surrounding environment is in poor health.



Distribution of seabed habitats in the Irish Sea. JNCC. (Golding N, Vincent M, & Connor D.W., 2003. A Marine Landscape classification for the Irish Sea Pilot: a consultation paper. Peterborough, Joint Nature Conservation Committee.). Irish Sea Pilot Copyright information Defra 2003.



Lesser spotted dogfish, move into deep water for mating and then return to shallow water for spawning at the end of the summer. Paul Kay

Key areas for discussion include:

- The scope and benefits of a marine spatial planning system
- The principles it needs to be based on
- The contribution of marine spatial planning to achieving better use of the sea
- What a spatial plan might look like and who would use it
- What should be aimed for in the short, medium and long-term

Over the last few months, English Nature has explored these issues with a wide range of stakeholders through one to one discussions followed by a national conference on 1st October 2003.

Important messages from the conference include:

- General and widespread support for some form of marine spatial planning
- A range of data needs to inform various aspects such as broad scale spatial information, boundaries and cumulative effects
- The challenge of integrating sectors, not least those with an international dimension to their management such as fisheries and shipping
- Integrating policy and management across marine and terrestrial components of particular sectors, such as aggregates and energy
- The need to clarify what legislation is required to underpin any system

We are already pursuing actions to address some of these issues and we have commissioned a short analysis of the relevance and lessons of the land use planning system to marine spatial planning. We are also, in conjunction with JNCC, government and others, developing a proposal to provide a simple, interpreted geophysical map of marine seabed and water column features (‘countryside map for the sea’) as one fundamental information layer to underpin marine spatial planning.

Regional approach

The debate about both ICZM and marine spatial planning includes a regional dimension. ‘Regional’ can refer to both naturally defined regions and political-administrative boundaries such as government regions.

Marine Natural Area profiles (to be published in 2004) will help set the context for developing a better planning framework at sea. There is clearly a need for broad scale spatial information, e.g. seabed types, to underpin planning and management. English Nature is working with the Joint Nature Conservation Committee to pursue such a “countryside map”, building on the work of the Irish Sea Pilot.

Much of our effort to develop a regional approach has been directed through the Irish Sea Pilot, which we hope will catalyse a more comprehensive approach to regional seas around the UK. We have been helping with work on particular topics, such as conservation objectives and criteria for nationally important features, as well as commenting on various consultations.

At a regional level, we have been advocating the need to consider maritime issues to regional bodies such as Regional Development Agencies (RDAs) and in regional instruments such as the developing Regional Spatial Strategies.

We welcome the plan to set up Regional Advisory Committees (RACs) as part of the reform of offshore fisheries governance. Ecological expertise will be important to these bodies in developing more sustainable fisheries management that respects the marine environment and facilitates its recovery.

Saltmarsh at East Stiffkey Marshes, Norfolk.
Allan Drewitt/English Nature

Working *with* the sea

Concrete sea wall and eroded saltmarsh, Abbots Hall, Essex. Sue Rees/English Nature

Much of England's coastline is responding to rising sea levels and climate changes, such as increased storminess, and has been subject to extensive development (around 30% of England's coastline is developed). The resulting changes are leading to the loss of intertidal habitats as a result of 'coastal squeeze', as habitats become trapped between rising sea levels and fixed sea walls. There are also restrictions on the ability of habitats to 'migrate' landwards in response to these changes. As well as the impacts on coastal habitats and species, this has implications for the management and cost of flood defences, many of which rely on coastal habitats to reduce wave energy.

Considerable progress made in the management of our coasts over the past 10 years and many of the conflicts between changing coastlines and development, flood management needs and recreational use are now being addressed. In the last year, a number of realignment projects have been progressed and these are helping to re-create coastal habitats, including saltmarsh, mudflats and coastal freshwater habitats, to offset some of the losses due to coastal squeeze. However, as the *Maritime State of Nature* report highlighted, despite this progress, losses of coastal habitats are continuing and we have yet to put sufficient measures in place to offset the annual losses of coastal habitats due to coastal squeeze of 100 ha/yr or replace a further 40ha/yr of habitat lost since 1992. Unless we make further progress we will fail to create functional coastal ecosystems that deliver sustainable flood defences, achieve the aims of the Habitats Directive and help achieve the Government's Public Service Agreement and Biodiversity Action Plan targets.

Through the Maritime Strategy, we want to stimulate the changes required to support a more strategic and sustainable approach to our changing coasts. We are working to shift English Nature's current philosophy from one of working with 'natural coastal processes' to an approach centred on the creation and delivery of functional coastlines and sustainable estuaries. This will include ensuring that our definition of the coast encompasses the full range of marine, fresh and brackish water systems to ensure that they are managed as a whole.

Coastal communities working with change box

Completion of the Living with the Sea Project in July 2003 has helped make England a pioneer in coastal management throughout Europe and beyond. We are incorporating the best environmental management principles into both engineering and conservation practice. Through conferences, scientific review and practical demonstration, the project is influencing how we protect wildlife and ourselves.

November 2002 saw the largest coastal realignment project in Europe with the breaching of the sea wall at Abbots Hall Farm, Essex. More than 70 hectares of arable farmland were converted into saltmarsh, mudflat and grassland. While schemes like this demonstrate how a sustainable approach to flood management and nature conservation in estuaries can be achieved there are still too few operational realignment schemes.

Paull Holme Strays was breached in early autumn 2003 as part of the Humber Strategy. The Strategy involves Partnerships of organisations working together with local communities to deliver both flood defence and habitat creation through the creation of up to 800 hectares of managed realignment.

Work is currently progressing on managed realignment of sea defences at Alkborough, and creation of new wildlife areas. This is a massive undertaking being led by the Environment Agency, and involves the participation and resources of many organisations. Through the Nature For People funding programme, English Nature was able to make a substantial contribution to the purchase of the site. In due course we expect that over 400 ha of valuable habitats will be created over the site, including saltmarsh, mudflats, reedbeds, lagoons and grazing marsh.

We are working to define and gain acceptance for a long-term vision for the coast that encompasses the need to:

- create a sustainable and functional coastline for England;
- create space for those habitats and species that require a coastal location and ensures provision for those that do not;
- recognise the benefits to society including the reduction of flood and erosion risk to people and property.

We expect that the application of this vision will lead to an overall gain in the area of functional ecosystems, changes in the distribution of coastal wildlife habitats as well as more effective coastal management, and ultimately to benefits for coastal communities and visitors to the seaside.

People are central to ensuring the required changes are achieved and there is still a great deal of work to do before coastal communities, regulators and conservation practitioners recognise that coastal systems change and evolve over time. We are working to achieve a position where coastal change is widely accepted as a reality rather than just being seen as a damaging threat. English Nature accepts that coastal change can create real difficulties for those immediately affected and believes there is a need to address local concerns when determining strategic options.

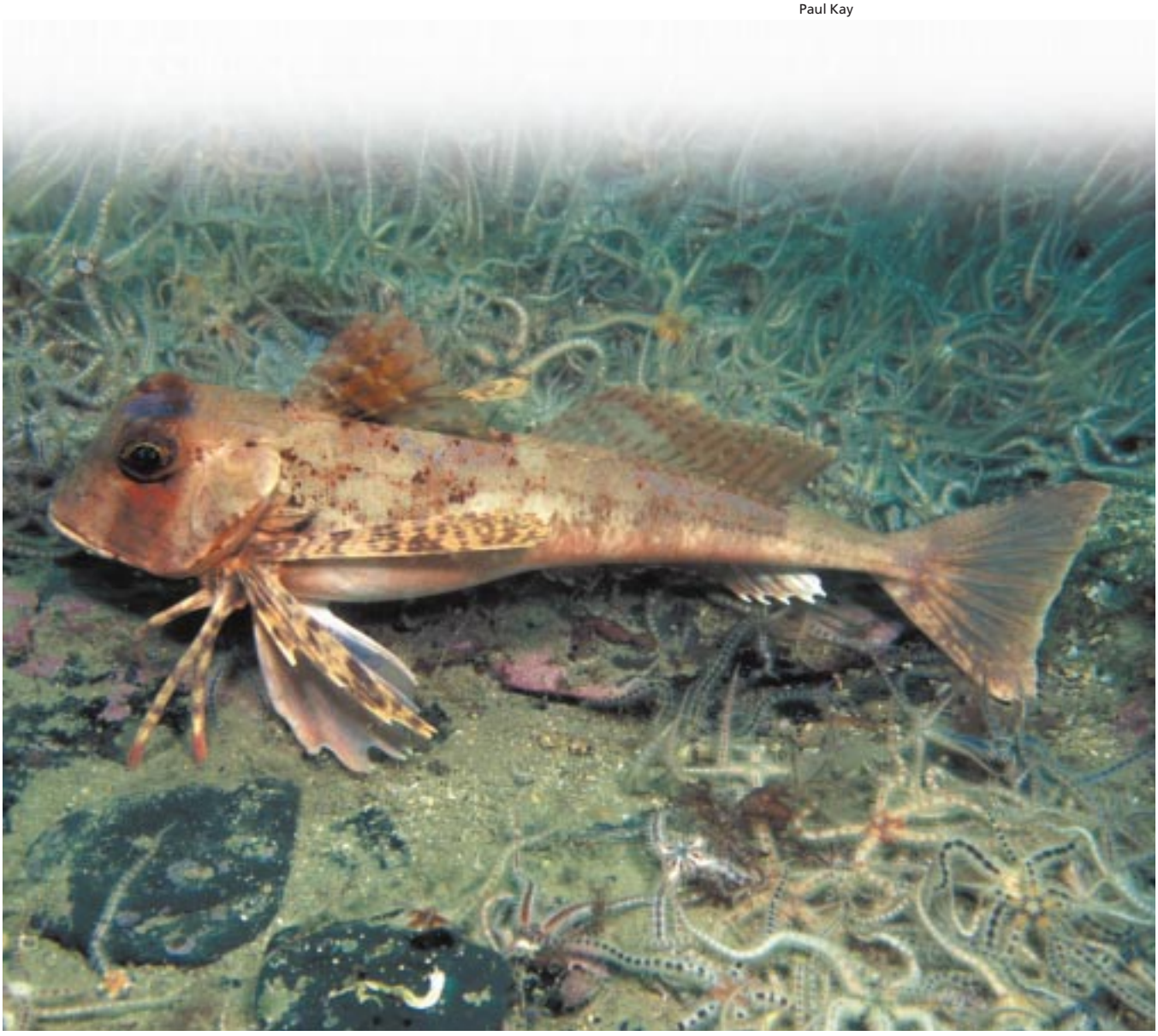
We need to ensure that the legislation supports delivery of a shared vision for the coast. We remain of the view that there is a need for reform of the 1949 Coast Protection Act. However, we also acknowledge that in many cases, it is the interpretation of legislation or accompanying regulations that is constraining actions. Where we do identify a need for legislative change, we recognise that this is a long-term aim.

Natterjack toad emerging at dusk, Ainsdale Sand Dunes NNR. Rob Wolstenholme/English Nature

Next steps

English Nature will continue to develop the themes over the coming months and we will produce our maritime strategy for consultation in spring 2004. This will outline targets and actions, making close links to other initiatives such as the England Biodiversity Strategy, the Marine Stewardship process and the European Union Marine Strategy. It will also inform the government's and English Nature's contribution to developing an ecosystem approach to halting biodiversity loss and achieving recovery in our coasts and seas. Truly sustainable solutions can only be achieved through joint working and to this end we will continue to involve stakeholders in both the development and implementation of our strategy.

Tub gurnard amongst brittlestar, Portland, Dorset.
Paul Kay



ENGLISH NATURE

English Nature is the Government agency that champions the conservation of wildlife and geology throughout England.

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Top left: Main: Nest of oystercatcher in drift line habitat. Paul Glendell/English Nature 24,512
Bottom left: Children rockpooling, Rosemullion Heas SSSI, Cornwall. Roger Covey/English Nature
Main: Harmless basking sharks, second largest fish in the world, visit our waters regularly. Paul Kay/MWPA 000,937

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