

Information days of Cedre

Institut Oceanographique

Paris, October 2002

**Organization, activities and  
conclusions of the *Sea  
Empress* incident**

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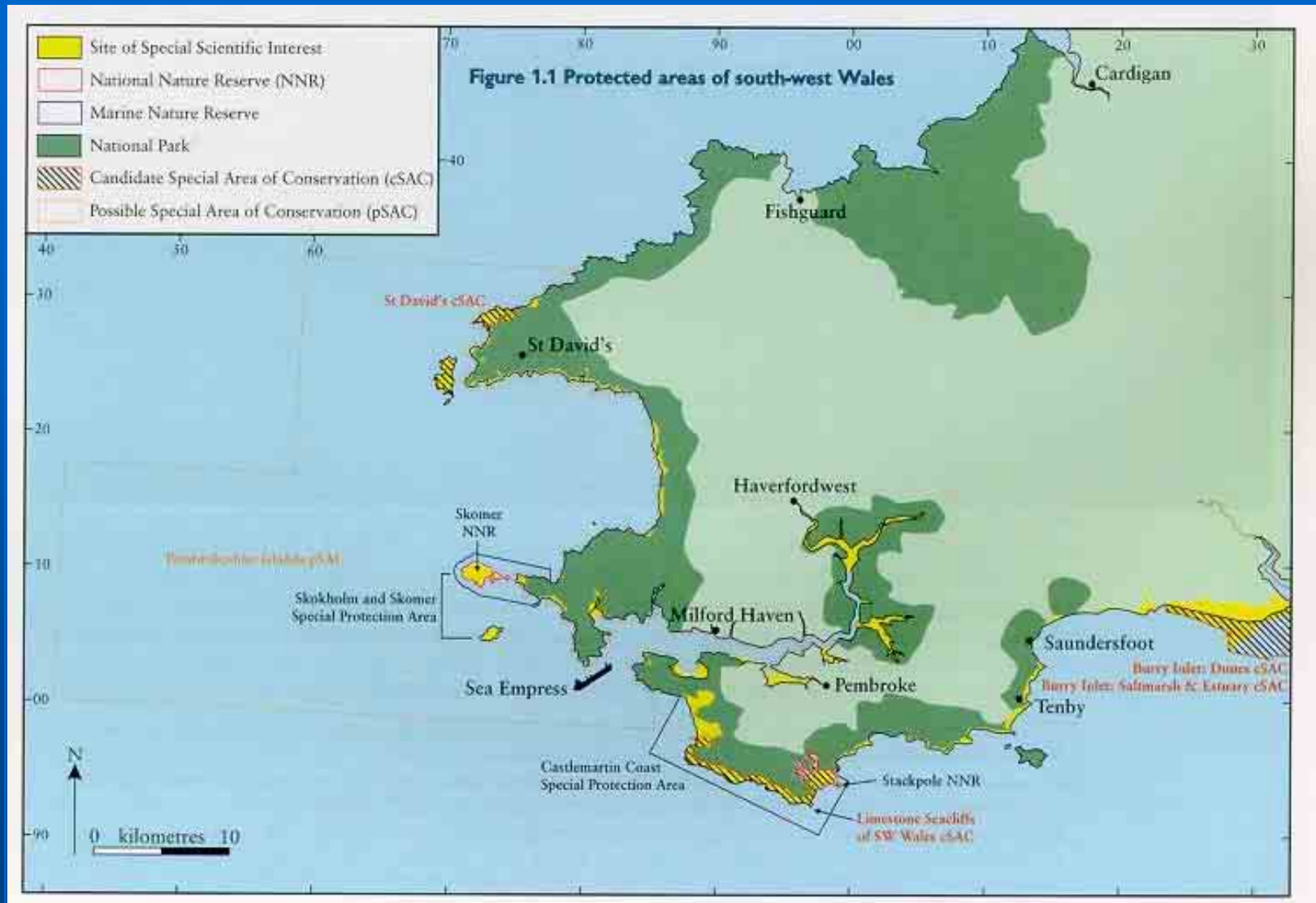
**Acknowledgement: Grateful thanks to the staff of the Skomer Marine Nature Reserve, Countryside Council for Wales for permission to use photographs from the MNR data-base.**

# Milford Haven, West Wales, UK



# *Coastal scenery of Pembrokeshire*





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# *Sea empress*

**Type:** Suezmax

**Built:** 1993

**LOA:** 274m

**Breadth:** 43m

**Draught:** 17.02m

**Deadweight:** 147,273

Tonnes

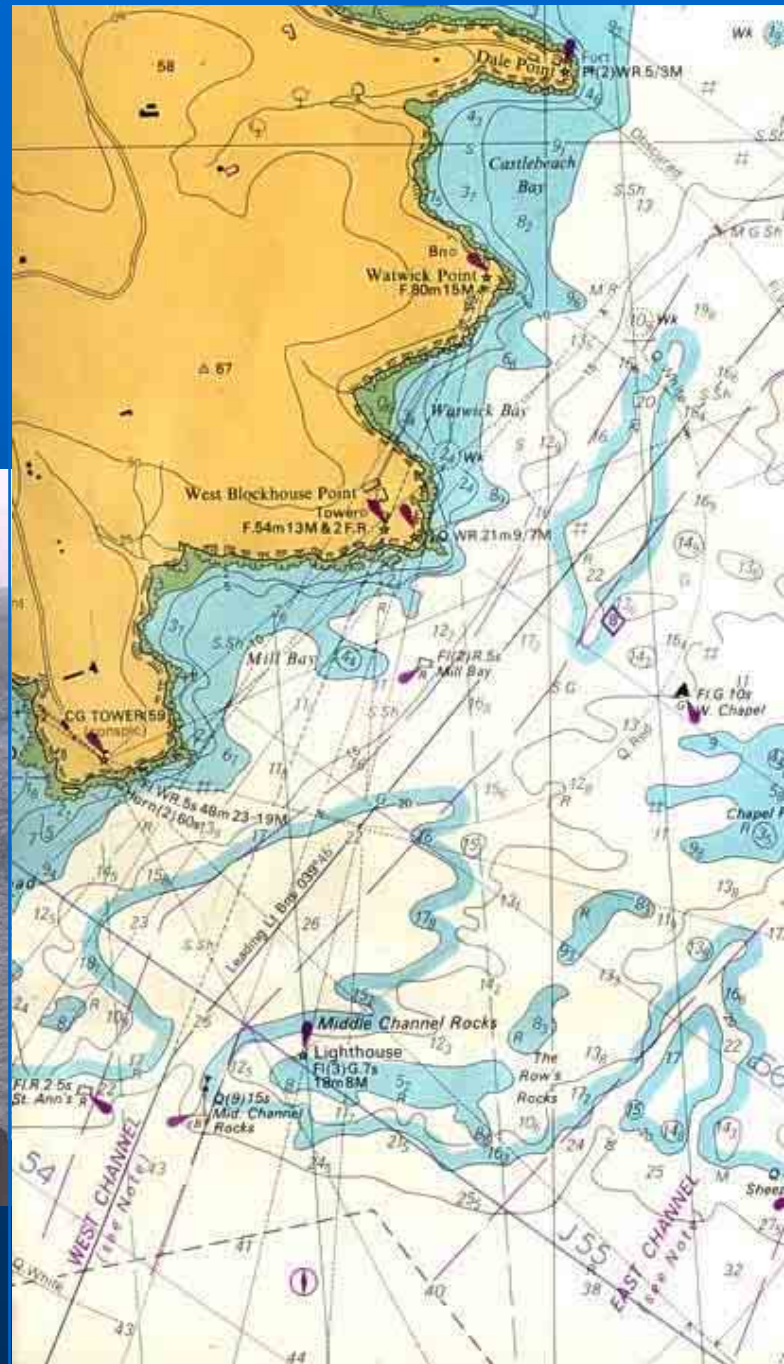
Single hull, 14 tanks

**Crew:** 27 (Russian)



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**Gale force winds**

**Casualty head to  
wind**

**Weather  
deteriorates**

***Control of vessel  
lost***

**Efforts to regain  
control – 4 days**

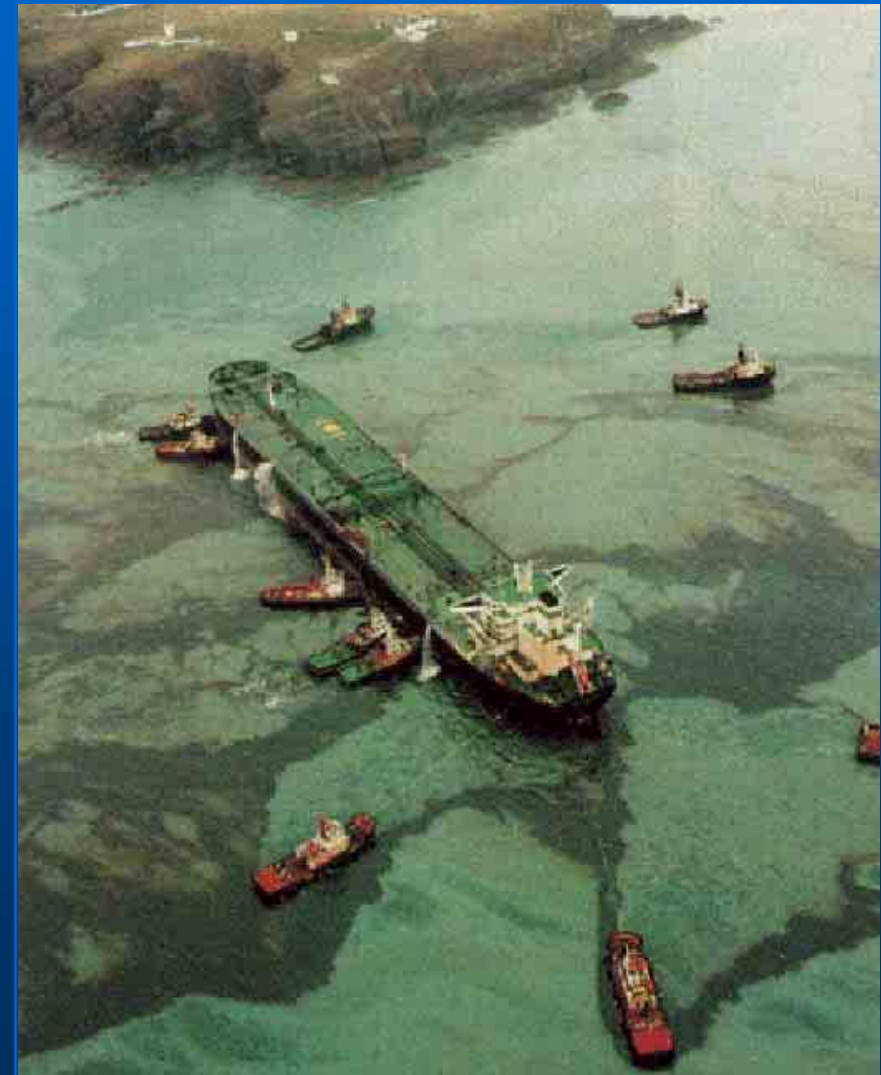
**6 days after initial  
incident – under  
control**

## THE IMPACT

***Cargo:* 130,018  
forties light crude**

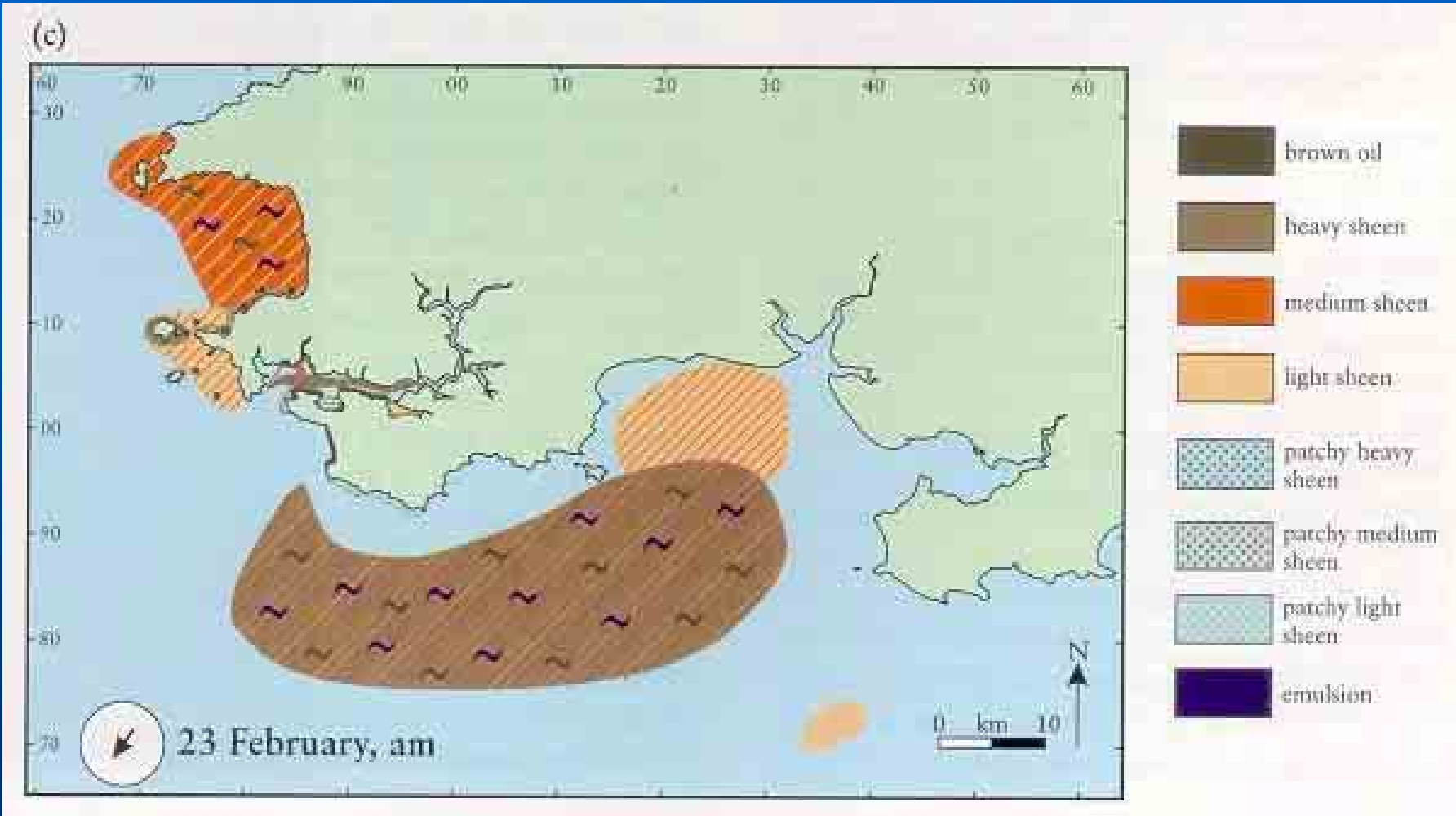
***Spillage:* 72,000  
tonnes crude, 480  
tonnes fuel oil**

***Impact:* 200km/120  
miles coastline**





# The spread and impact of oil 8 days after initial incident



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£2 million downturn in tourism  
(£160 million income 1995)





**IMPACT: 3700-5300 tonnes oil ashore (5-7%)  
: 950 people working on clean-up  
ashore, 250 at sea.**



- 7000 oiled birds washed ashore
- 3100 oiled birds of 20 species treated of which 60% survived
- Guillemots: 70% of cleaned birds died within 14 days of release, only 3% survived for more than 2 months

- **Shore clean-up costs 23 million**
- **After 16 months, untreated beaches recovered to similar degree as those cleaned**



# CAUSES & CONSIDERATIONS

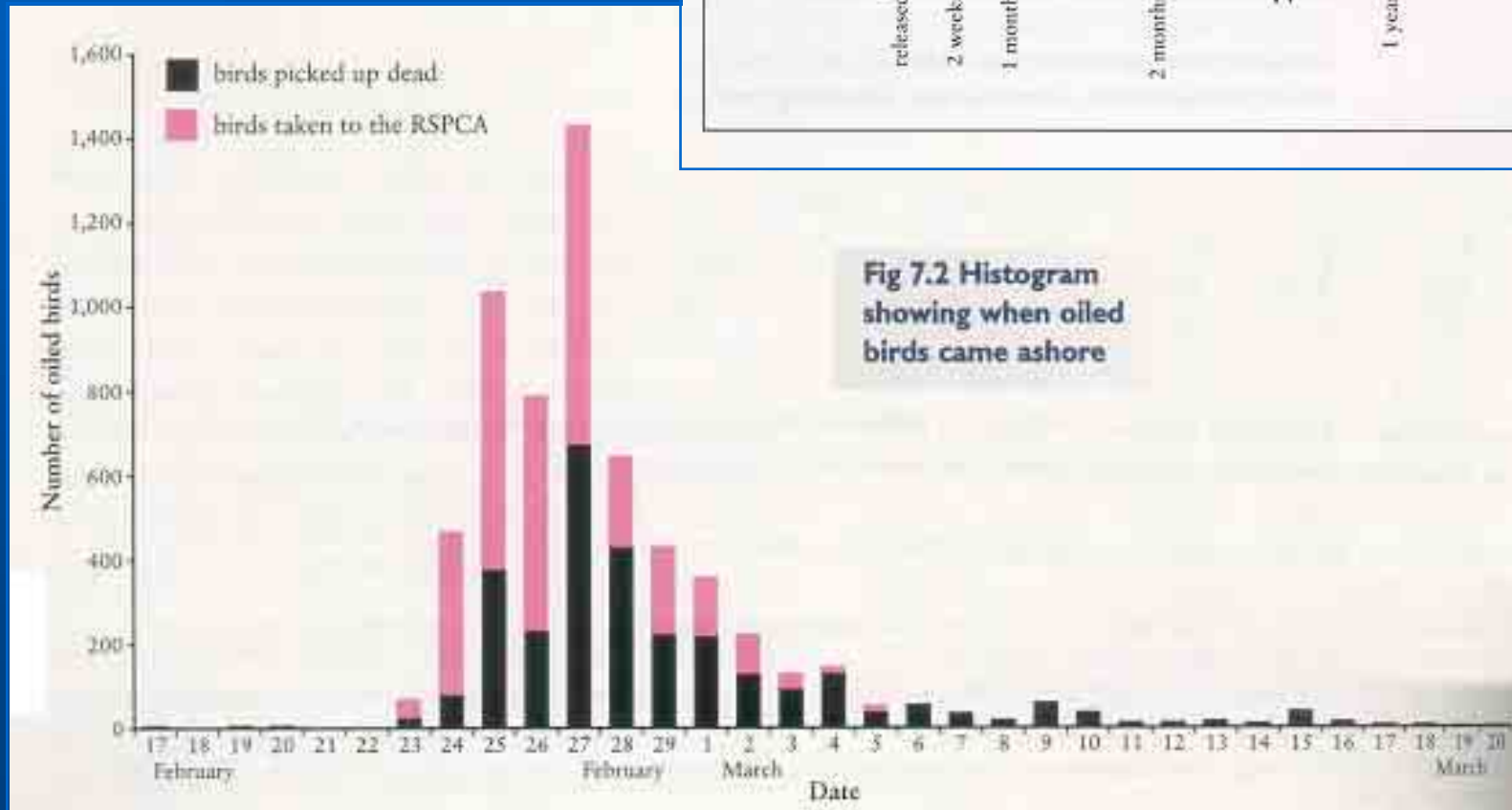
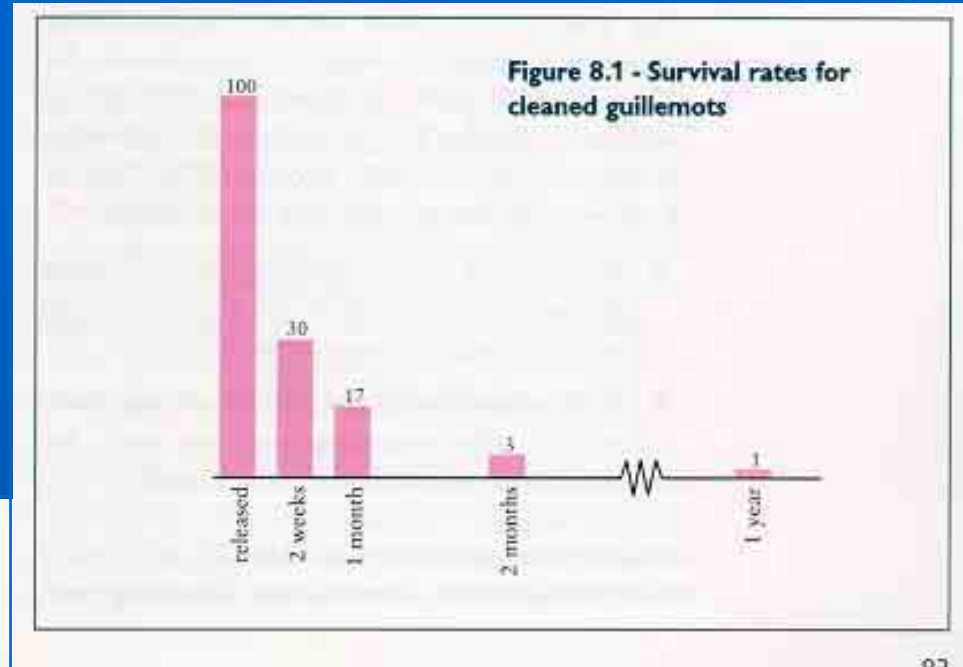


- Pilot error
- Bad weather
- Insufficient tugs of appropriate power and manoeuvrability
- Lack of understanding of tidal streams

# Rescue of oiled seabirds

- Over 90% of oiled birds were of 3 species – common scoter, guillimot and razorbill
- By 1997 breeding season, numbers recovered significantly







# No impact of oil on grey seals, porpoise or dolphins



In any other year, localized oil spills can impact on seals



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# Skomer Island Nature Reserve & Marine Nature Reserve



# Sea - anemone (*Peachia*)

*Sand-mud-shell gravel, lower shore to  
-30m*



# Ross coral (*Pentapora foliacea*) – colonial animals



# Angler fish (*Lophius piscatorius*), *spines, foremost with lure*



# Star coral, (*Balanophyllia regia*). Solitary, rare and local





## Phylum Bryozoa.

*Bugula*, spiral,  
branched  
colonial  
animals



## Boring Sponge (*Cliona celata*), animal bores into soft rocks and shells



*Grey seal (*Halichoerus grypus*). 2% world population, 900 pups born in area each year*



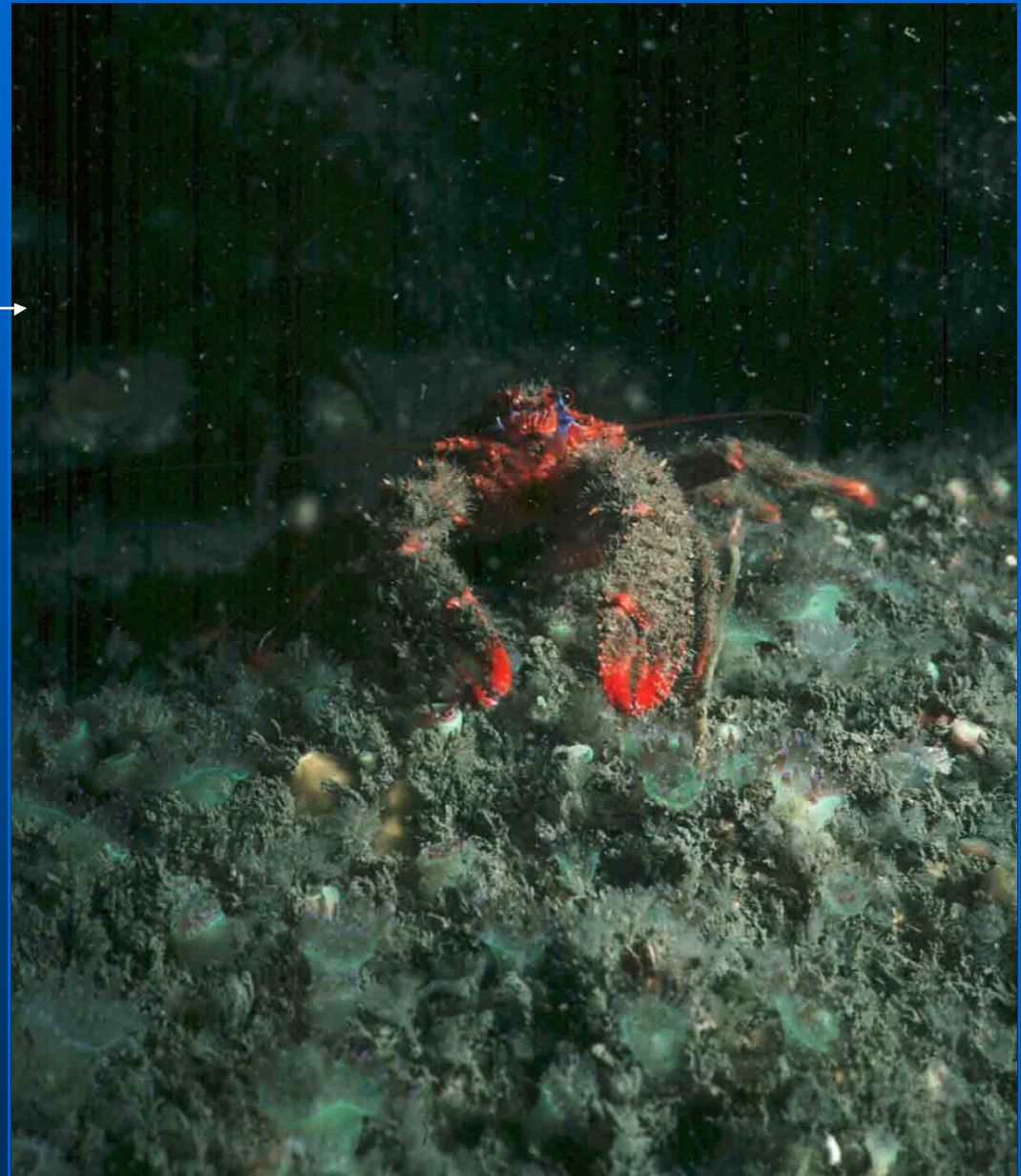
Tompot blenny (*Blennius gattorugine*),  
uncommon S. and W. coasts, rare  
elsewhere



# SQAT LOBSTER

(*galathea strigosa*)

*Polymastia* Sponge



# SEA-FAN (*Eunicella verrucosa*), soft coral, colonial polyps in calcareous skeleton



**CUCKOO WRASSE (*Labrus mixtus*),**  
hermaphrodite, changing with age female  
to male



# SEA SLUG (*Nudibranch*), annuals, *feed on anemones*



SEA-anemone  
(*Sagartia elegans*)



Eel Grass  
(*Zostera marina*)





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## SUNSTAR

Starfish  
(*Crossaster  
papposus*)

## AFTERMATH

The judge blamed the grounding on the “careless” navigation of the Port Authority’s pilot, who had “scanty” experience of such large vessels.

However, the judge in turn blamed the Port Authority for putting the pilot in a position where “he could make an error of navigation”

**Milford Haven Port Authority was prosecuted under the ‘*Water Resources Act*’ (normally used when rivers or streams are polluted).**

**This was the first time that it had been used in a maritime context and the Act creates an offence of *strict liability***

**As a Conservancy, Milford Haven Port Authority manages the waterway and lays down the pilotage requirements and entry conditions for vessels**

**For this reason it was considered to create and operate a system which put the pilot in a position where he might make an error of navigation**

- In January 1999, MHPA was fined £4million – the heaviest penalty ever made in pollution procedures in UK
- The judge said that it “*reflects the genuine and justifiable public concern*”
- *Prosecution costs of £825,000*

- **The fine was reduced to £750,000 on appeal**
- **Six years after the incident itself, the Port Authority is being sued for £34 million in the civil court by the insurers**
- **MHPA is currently preparing “to defend itself vigorously”**

# FATE OF THE OIL

- Of 72000 tonnes crude oil and 480 tonnes heavy fuel oil:
- 40% evaporated
- 52% dispersed into water column
- 1-2% collected from sea surface
- 5-7% stranded ashore

# FURTHER CONSIDERATIONS

- **Clarification of roles and involvement of Marine Pollution Control Unit (MPCU) at scene**
- **Organization of the Joint Response Committee and training of beach masters**
- **Health and safety of those involved in clean-up**
- **Liaison with media**



# Intervention powers

- **“The use, or the threat of the use, of intervention powers has tended to be bitterly resented by salvors and harbour masters” (Donaldson, 1999)**
- **“Just as the ship, the cargo, the salvors, and the harbour master, (acting in the best interests of the harbour), have a role to play in decision-making process, so should a representative of the wider public interest...”**

## Liability and Compensation (Recommendation 4)

- **Government should amend the merchant shipping act to make it clear that the shipowner has no claim to compensation because he is strictly liable for all consequences of the pollution**

## Liability and Compensation (Recommendation 5)

- **The salvors shall have no claim against the Secretary of State, leaving them with their claim against the ship or the ship and cargo.**
- **(This may well take account of the fact that the task of salvage was rendered more difficult or costly as a result of intervention)**

# PROSECUTION

## Recommendation 7)

The Government should amend the Water Resources Act in order to ensure that jettison and unavoidable pollution from, for example, pressing up tanks to increase buoyancy is not an offence if undertaken with a view to avoiding greater pollution.

Meanwhile prosecution policy should reflect the public interest in this respect

# Lord Donaldson's Review

(Recommendations continued)

“We (also) question whether it is in the public interest that there should be criminal sanction for accidental marine pollution whether in the course of a salvage operation or otherwise, since this will discourage full and frank disclosure of what happened” (Reg.11 MARPOL in relation to salvor and harbour master)