PA DMS 5/6

cc DP

Prime Minister (2)

The DoE booklet has now arrived. I had Cockfield would have liked more in it on preserving wildlife and the countryside.

Await printed booklet from DoE

DMS 4/6

DMS 31/5

Chancellor of the Duchy of Lancaster

CABINET OFFICE,
WHITEHALL, LONDON SW1A 2AS

31 May 1984

Dear Patrick,

BOOKLET ON UK ENVIRONMENTAL ACHIEVEMENTS

Your Private Secretary's letter of 29 May to David Barclay was copied to me.

The booklet seems to have been written almost entirely from the point of view of the control of pollution. The story it tells there is a good one. But the other aspect of the environment, namely the protection of the countryside and of wildlife is dismissed in a couple of column inches. It is as unconvincing as it is short. Unfortunately - for us that is - the potection of the countryside is of great public interest: the popular view is that the Wildlife and Countryside Act has made matters worse not better; and that our own forming policy has subsidized the despoliation of the countryside. I was hoping that this booklet would have provided some of the answers to these criticisms - if answers exist.

I say this because I had been hoping that we could send the booklet to our candidates in the European Elections. But I suspect that its use in that connection would be limited.

I am copying this to the other recipients of your Private Secretary's letter.

Booklet in folder att. to file

Yours,
Arthur

COCKFIELD

The Rt Hon Patrick Jenkin MP
Secretary of State for the
Environment
Department of the Environment
2 Marsham Street
London SW1P 3EB

ENV AFFAIRS : Env Pollution
Sept 79

24

CCDP

SECRETARY OF STATE FOR THE ENVIRONMENT

2 MARSHAM STREET
LONDON SW1P 3EB
01-212 3434

My ref:

Your ref:

29 May 1984

Await printed version.

DJB 29/5

Dear David

BOOKLET ON UK ENVIRONMENTAL ACHIEVEMENTS

I attach for information a copy of an (uncorrected) proof text of the booklet on UK environmental achievements which my Secretary of State undertook to have prepared by the London Economic Summit.

As you will see, the text has already had to go to the printers; and if the booklet is to be ready for the Summit by 7 June, it is too late to change it. But we have incorporated as many as possible of the comments which officials in the Departments with a particular interest made on a draft circulated last week.

I am copying this to the Private Secretaries to all Cabinet Ministers, the Chief Whip, and Sir Robert Armstrong.

Yours,

Andrew

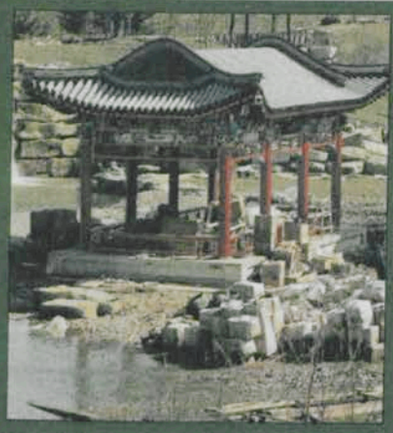
ANDREW ALLBERRY
Private Secretary

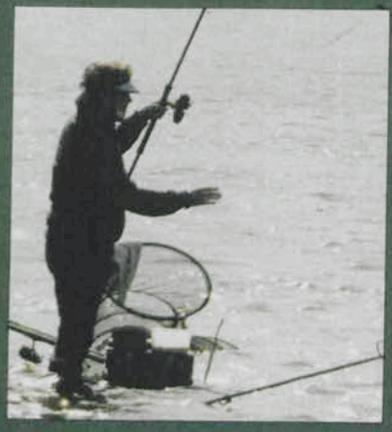
David Barclay Esq

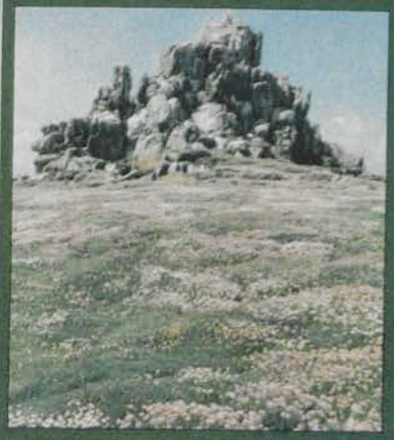
Environmental Protection

Problems, Progress, Practice, Principles and Prospects

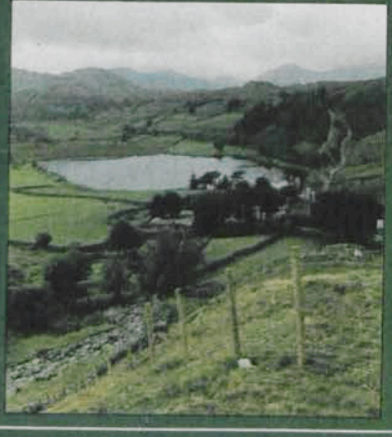
THE DEPARTMENT OF THE ENVIRONMENT








The Rt Hon Patrick Jenkin MP

Message from the Secretary of State for the Environment

We in Britain are sometimes too modest about our achievements. This is certainly true in relation to the improvement of our environment. Indeed, to read our newspapers or watch our television, one might be tempted to believe that things are forever getting worse. In fact, the exact opposite is the case. Things are steadily getting very much better.

So the purpose of this booklet is to set the record straight. It describes the problems we have faced, the way in which we have tackled those problems, and the considerable success we have had.

Of course there is still much to be done. Some of the most worrying problems are international and Britain is determined to play a full part in finding solutions. It is my purpose that we continue to build on the firm foundations described in the pages of this booklet.

Patrick Jenkin

Problems

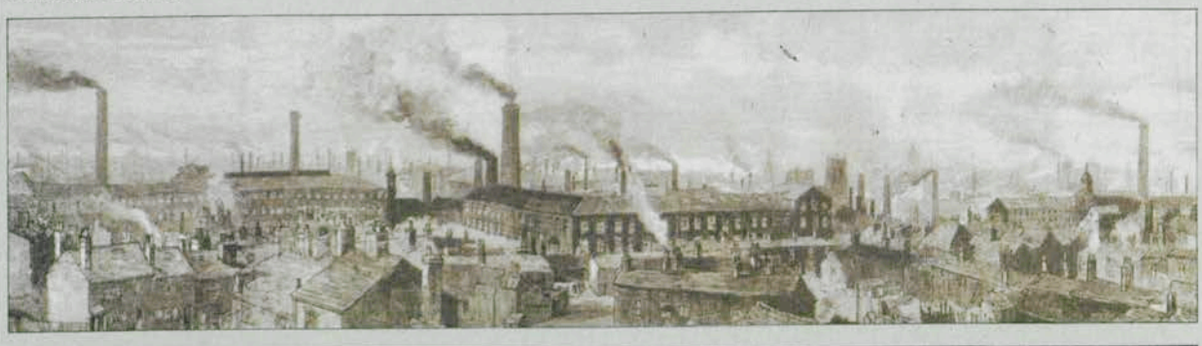
Just over 200 years ago the industrial revolution began - in Britain. Mines were opened and mills and factories were built in thousands to exploit plentiful supplies of coal, water and iron ore and the inventiveness of the new industrialists - men like Watt, Arkwright and Wedgwood. Millions of people eventually came to work in the great urban areas that sprang up. Industry ruled.

Right: The conditions experienced by foundry workers in late Victorian times.

Below centre: Leeds during the nineteenth century.

By the middle of the last century, much of Britain's air was smoky and acrid. Rivers were dying or dead, choked with industrial effluent, domestic sewage, or both. The new industry, and the sheer number of people moving to work in it, had taken their toll. Something had to be done to safeguard public health.

Below: Coalbrookdale during the eighteenth century. Abraham Darby bought the local ironworks in 1708 and discovered how to extract iron using coke instead of charcoal. The foundry was later producing parts for the first iron bridge and the first railway locomotive.



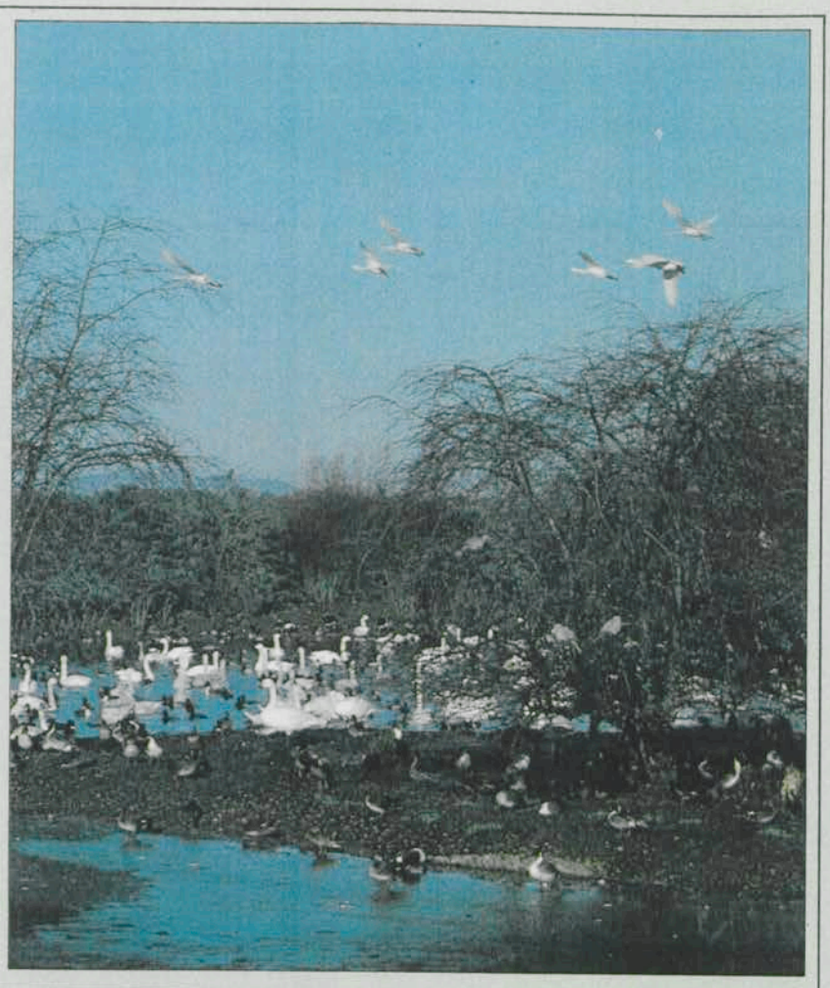
Progress

The Public Health Act of 1848 introduced measures to control freshwater pollution. The Alkali Act of 1863 tackled the worst types of air pollution - beginning with hydrochloric acid gas emissions from the old alkali industry. Environmentalism was born - in Britain.

Over the years since then, steadily increasing efforts have been made to improve the state of our environment - concentrating initially on the safeguarding of public health, but broadening later to include the protection of wildlife habitats and conservation of the countryside.

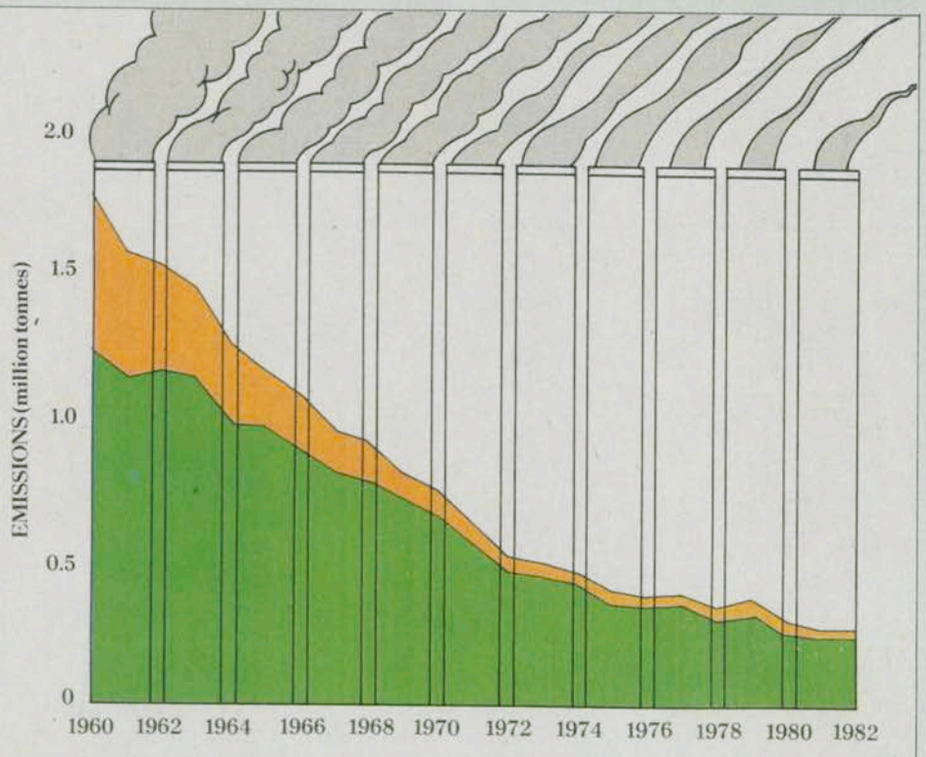
The results are there for all to see.

- Emissions of smoke have fallen by over 85 per cent since 1958 - partly as a result of the Clean Air Acts of 1956-1968, but also as a result of the switch from coal to cleaner, more convenient fuels (such as natural gas).



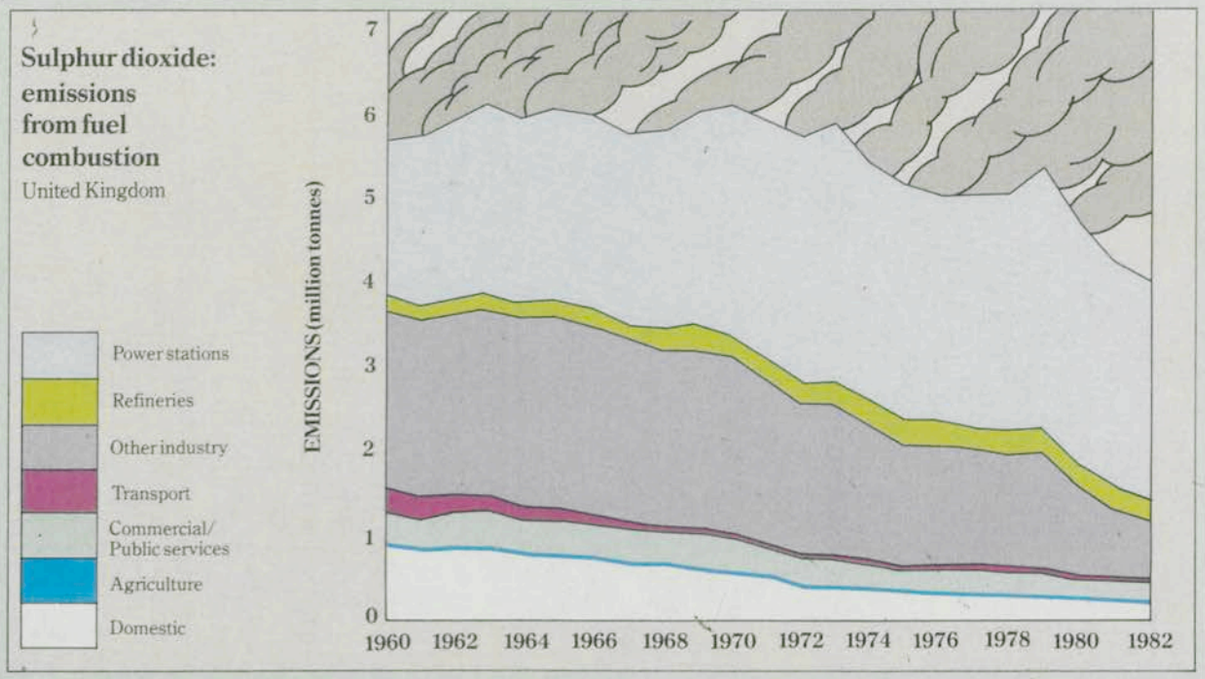
Right: Slimbridge Wildfowl Trust in Gloucestershire.

Smoke: emissions from coal combustion
United Kingdom

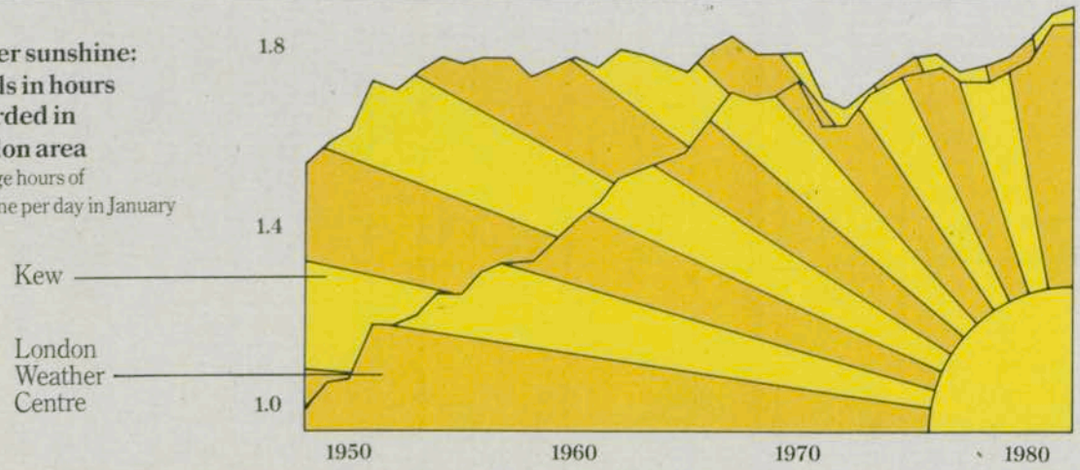


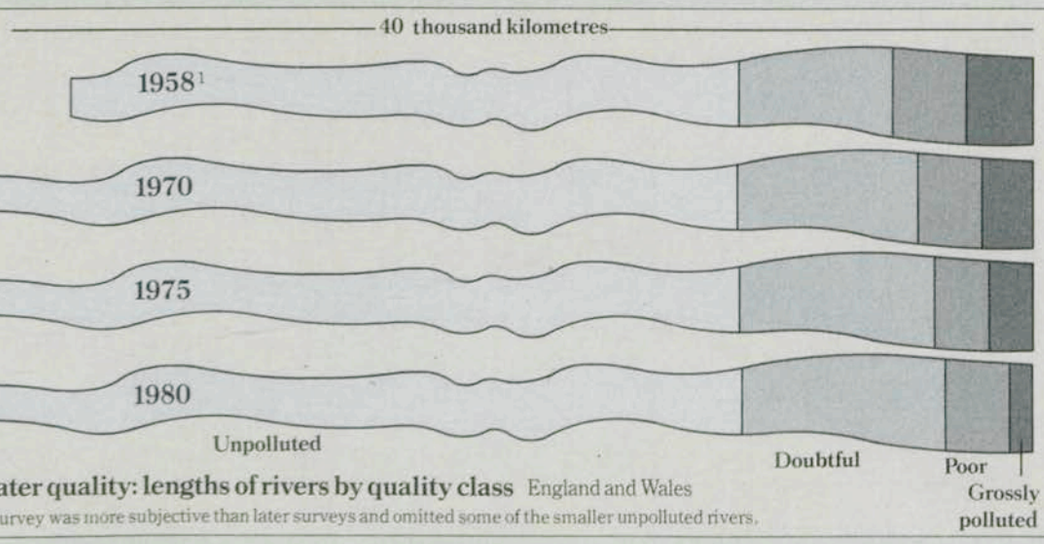
Progress

Sulphur dioxide: emissions from fuel combustion
United Kingdom



Winter sunshine: trends in hours recorded in London area
Average hours of sunshine per day in January





River-water quality: lengths of rivers by quality class England and Wales

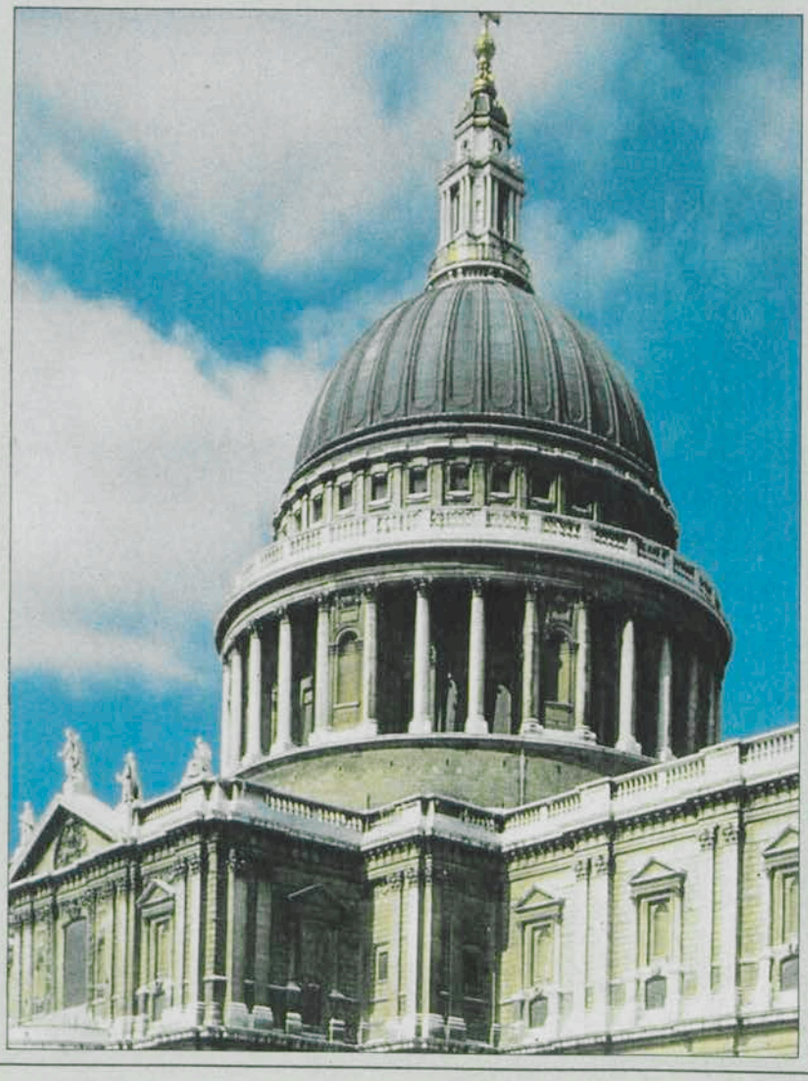
[1] The 1958 survey was more subjective than later surveys and omitted some of the smaller unpolluted rivers.

Progress

- Sulphur dioxide emissions have fallen by a third since 1970.
- Cleaner air means more sunshine. The amount of winter sunshine in central London is now almost the same as it is on the outskirts.
- Between 1958 and 1980 the length of tidal and non-tidal rivers and canals in England and Wales classed as grossly polluted fell from 7 per cent to 2½ per cent of the total length of those waterways. The first mature salmon since 1835 was recently caught in the Thames.

Right: London, midday, December 1962. 'Smog' obscures all but the closest objects. People cover their faces with scarves or masks to keep out the chemicals and dirt.

Above: Fishing in the River Thames today is not only a peaceful, but also a productive, pastime.



Right: London, midday, December 1983. Winter sunshine glints on the dome of St. Paul's.

Progress

- In round figures, over the last decade or so 17,000 hectares of derelict land have been reclaimed in England; 6,000 in Scotland; and 3,000 in Wales.
- A number of pesticides with dangerous side-effects (such as DDT) have been or are being phased out. Over the last 20 years there has been a steady decrease in pesticide residues in food.
- Several species of birds which were endangered ten years ago are now increasing dramatically in numbers.

Question – How have these improvements been achieved?

Answer – By a variety of measures tailored to meet particular needs.

Above left: Dereliction – St. Helen's, Lancashire.

Below: Thorpe Water Park near Chertsey, Surrey, was previously a disused gravel pit.

Practice

Above: Scunthorpe ironworks in the 1950s.

Below: A modern factory in Scotland.

Smoke from house chimneys has been reduced by enabling local authorities:

i. to declare smoke control zones within which the emission of smoke from housing is banned;

ii. to help people to pay for the installation of special grates for burning smokeless fuel.

Smoke from lorries, buses and other diesel-engined vehicles has been reduced by setting tighter standards to be met by manufacturers and enforcing better maintenance through annual inspections. Pollution from railway engines has been much reduced by the switch from coal burning to electric and diesel power.

Government chemists and engineers exercise increasingly strict control of noxious emissions from industry.

Below centre: Steam locomotion was picturesque but had its problems.

Below: The high-speed train of the present.

Practice

Discharges to water courses are carefully regulated by the water authorities, which are committed to a progressive improvement in the condition of the waters under their care. A particular discharge to fresh water is allowed only if, taken in conjunction with all other discharges, it will not jeopardise the particular uses to be made of that particular stretch of water. This applies both to direct discharges by industry and to discharges from sewage treatment works (to which most industrial discharges are in fact channelled).

Discharges direct to the sea or to estuaries and sea-dumping of wastes are regulated on the same lines. The sea has a much greater absorptive capacity than fresh water, and we can use this capacity to advantage. But we rely on the sea and the sea-shore for sea-food. Sea-birds and a wide variety of other wildlife depend upon them. They are important for amenity purposes. We cannot, and do not, allow them to be damaged by indiscriminate discharges. So we monitor the effects of existing discharges to sea, and assess the likely effects of proposed discharges with great care before granting any new consents.

Over the last few years we have successfully tapped the North Sea's oil and gas reserves in extremely hostile waters without damage to the environment. This is a great achievement.

Below: A puffin in flight over Flamborough Nature Reserve in North Yorks.

Top: The challenge - sewage effluents polluting a river.

Above: The response - an analytical chemist evaluates samples of river water for dissolved oxygen, ammonia content and pH - all very important parameters for the health of fish and other river organisms. The Thames Water Authority maintains mobile laboratories on launches and sludge vessels.

Principles

Each of the problems required its own solution, and we have therefore adopted a flexible approach - taking each problem as we find it rather than attempting rigid controls across the board. No industrial nation can eliminate waste entirely from its production processes; nor can we clear up every black spot overnight. But by concentrating on the worst problems first and applying sensible control measures in each case taken on its merits, we have restored most of our environment to an acceptable quality.

Our approach is simple. Discharges and emissions of harmful substances must be kept as low as can reasonably be achieved: the more harmful the substance, the tighter the control. Where wastes have to be disposed of, we strongly support the 'best practicable environmental option' - the option which will protect the environment most effectively without excessive cost. In practice, we rarely need to impose standards which are so stringent that to meet them would jeopardise the very viability of the industry on which we depend for our livelihood.

We believe that the pragmatic approach which has served us so well in the past will continue to do so in the future.

But some pollution problems are international in character, and to these an international response is often necessary. Different countries may have similar problems but different methods of dealing with them and different priorities. International negotiations are often protracted and frustrating. But they are well worthwhile if the end product is a more effective instrument for improving the environment. Britain has helped to develop proposals in a wide range of international groupings in recent years, and we have a number of successful initiatives to our name - leading, for example, to the protection of endangered species, such as the whale.

We shall continue to press, both within the European Community (EC) and more widely in bodies such as the United Nations, for environmental measures which are based on sound science and economical good sense. The more carefully money is spent on each environmental measure, the more improvements will be possible.

Question - But can there be all that many environmental problems left to solve, given the progress that has already been made towards solving them?

Answer - Alas, environmental problems still abound.

Below centre: St Katherine's Dock in the heart of London has been transformed from an industrial eyesore into an attractive and functional area.

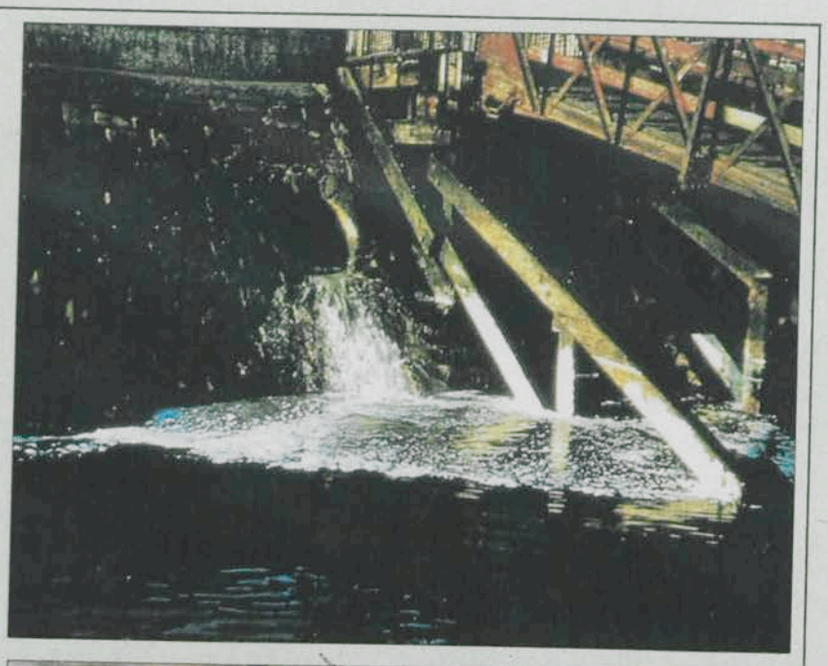
Below: This 70-tonne machine is a powerful aid in disposing of 15 million cubic metres of waste material from coal mines in the Barnsley area of Yorkshire.

Prospects

There is widespread international concern about 'acid rain' (more properly, 'acid deposition' because there are dry forms) and the effects it may have on forests, rivers and lakes. In Britain, about £4 million will be spent in 1984/5 on research to help determine precisely how acid deposition affects the environment. We are also playing a full part in following up the United Nations Economic Commission for Europe Convention on Long Range Transboundary Air Pollution.

On a European scale, an EC scheme is in place to ensure that industry and government have enough information on chemicals before they are marketed on a significant scale to ensure that their potential health and environmental effects can be assessed. The need for this kind of precautionary approach is illustrated by the fact that there are no fewer than 129 items on an EC list of existing substances which require investigation to decide the level of control needed to ensure that releases to water do not cause irreparable damage.

At home, some of our estuaries, particularly those whose rivers and banks are the sites of older industries and of large centres of population, are nowadays categorised as grossly polluted and need to be cleaned up. The cost can run into thousands of millions of pounds; and it is only recently that we have been able to make a start on some. In particular, the Mersey Estuary, the rivers in its catchment, and their general surroundings are to be cleaned up. But the effort and cost are high and it is a task for a generation.



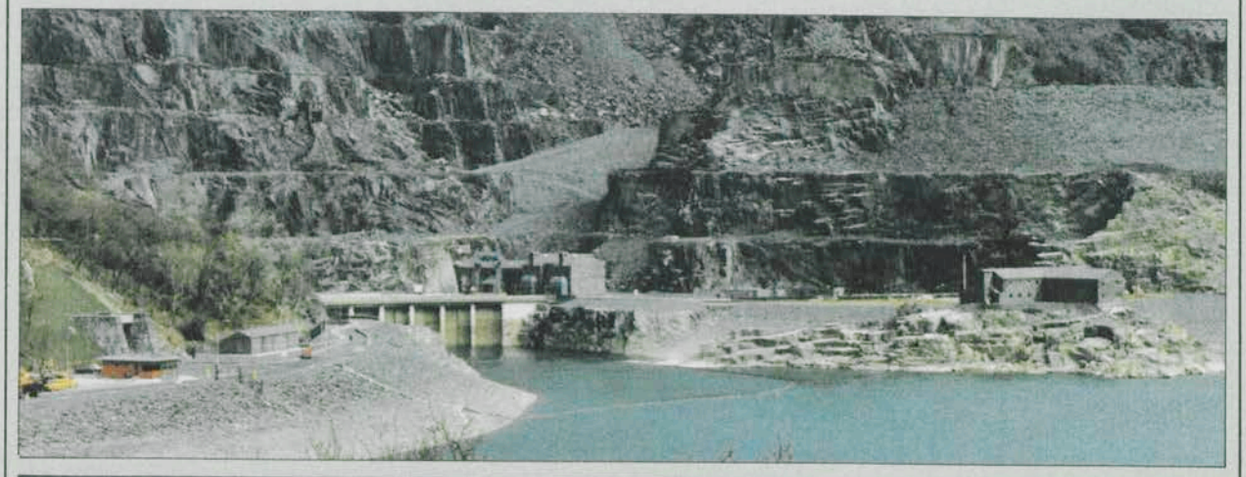
Top: Sewage being discharged into the River Tyne, Newcastle.

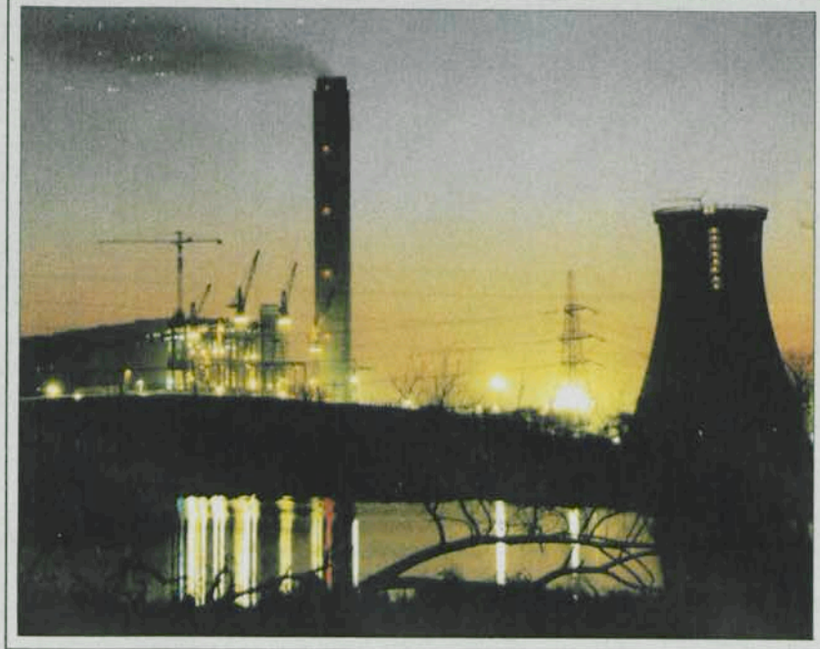
Above: Marine biologists analyse the day's catch collected from the circulating water screens of the Thurrock Power Station. The once heavily polluted Thames has been cleaned to such an extent that 98 species of fish have been recorded in water which, as recently as 1960 supported only eels.

Prospects

There are still a handful of older industrial plants whose air pollution record also leaves much to be desired: although their emissions are not having any detectable effect on human health or causing appreciable harm to the environment in general, they are dispiriting and an eyesore. Acceptable solutions need to be found without jeopardising the livelihood of communities dependent upon the works for employment.

Left: A typical old industrial valley in South Wales.





Middle: The Dinorwic pumped water scheme - built entirely inside a slate mountain in North Wales - has the fastest response of any comparable scheme in the world, being able to contribute 1,320MW of its total 1,880MW output to the national grid within ten seconds of demand. Buildings have been kept to a minimum on the surface to ensure that the area of outstanding natural beauty is not impaired.

Left: The Drax Power Station complex near Selby in Yorkshire. A glasshouse complex has been built that uses excess heat from the power station cooling water for the production of horticultural crops. In addition, the pulverised ash from the station is being used to build a landscaped hill which will screen the complex from public view.

Prospects

Waste tips can contain substances which may be harmful and, if the tips are not properly planned and managed, may leach into water-courses. Even though their contents are harmless, quite a few tips have caught fire – causing smoke, smells and subsidence. Waste disposal needs to be carefully controlled. A comprehensive new system has been introduced in recent years to ensure that this happens.

There are also other problems with land. In particular land previously used for industrial purposes or for waste disposal requires special care as it is brought back into beneficial use. The need for this was recognised early in Britain.

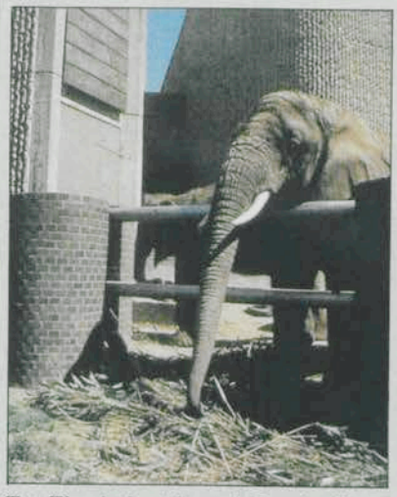
Building on land which is chemically contaminated will always need special attention if people's health and the fabric of the buildings are to be properly protected. Government advice on this has been available for some time and is being continually updated in the light of experience and new knowledge.

There is also derelict land to contend with: some 34,000 hectares in England and 13,000 in Wales currently justify reclamation (there has been no recent survey in Scotland). The transformation of 100 hectares of derelict dock area in Liverpool into the site of an international garden festival in under 2½ years is a dramatic example of what can be done. Last year local authorities in England were invited to spend up to £75 million on reclaiming derelict land – most of it reimbursed through Government grant-aid; and in Scotland and Wales the Scottish and Welsh Development Agencies spent £23 million and £11 million respectively. The programme is to continue.

Top: The Lea Valley, once an industrial wasteland, has since been landscaped and transformed.

Below: Liverpool – the 1984 International Garden Festival. Intensive work has transformed a derelict waterfront into the largest horticultural event of the year.

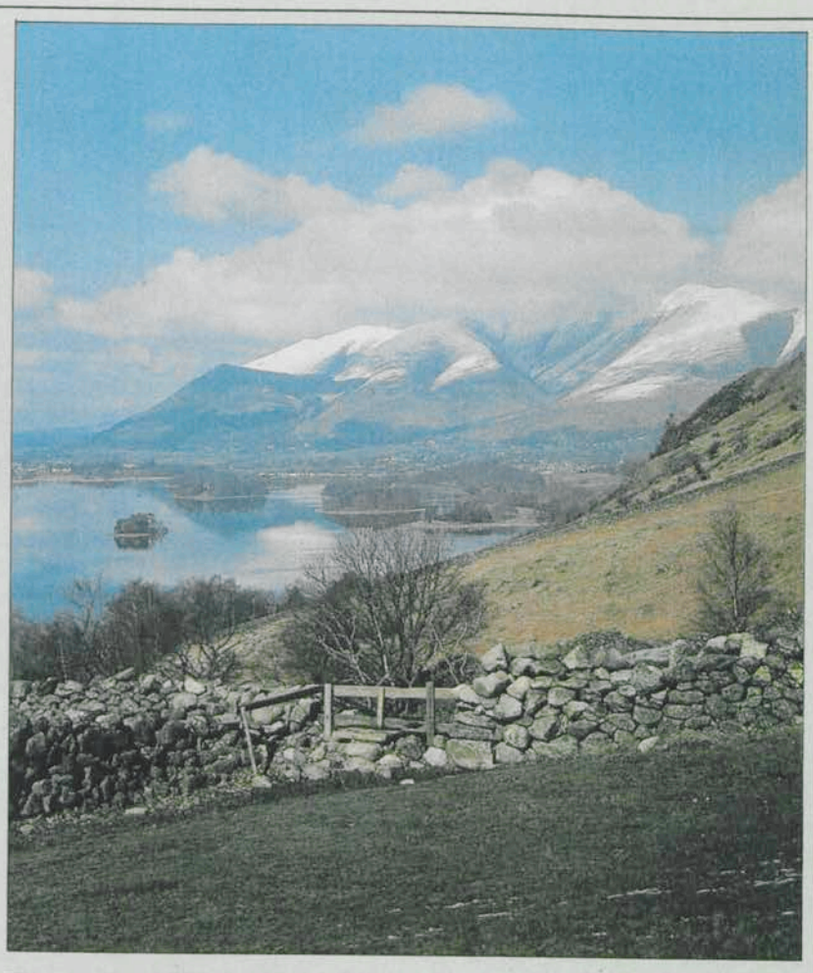
Prospects



Top: The elephant house in London Zoo.

Right: Derwentwater in the Lake District.

Bottom: The golden eagle – once threatened with extinction in this country.



There is widespread concern about the protection of the countryside. A major step forward came in 1981 with the passing of the Wildlife and Countryside Act.

Funds are now being provided for management agreements with owners and occupiers to safeguard areas of special landscape and wildlife interest.

So far six Nature Conservation Orders have been made, giving special protection to important wildlife sites. More generally, Government-sponsored advice is now widely available to farmers and landowners on how best to integrate effective wildlife and landscape conservation and successful farming.

We are also doing our best to protect wildlife species, both at home and elsewhere. In association with other EC countries we have banned the import of whale and certain seal pup products; we have introduced a system of licensing zoos to ensure that captive animals are not kept in unsuitable conditions; and new controls are in place to protect wild birds and to make it more difficult to take them or their eggs from the wild.

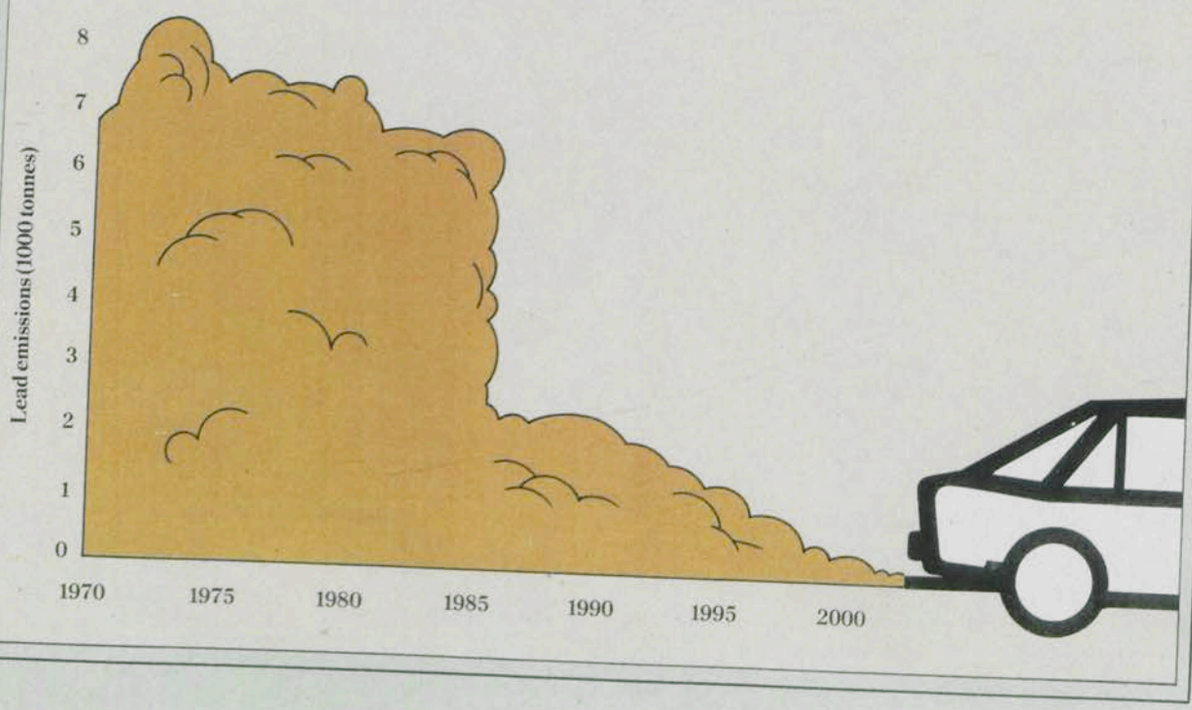
Prospects

In addition:

- the problem of lead in the environment is being tackled more vigorously than ever before. It is steadily being phased out of food-can solders, and petrol-lead levels will be down by two-thirds by the end of 1985. By 1990 at the latest, we aim to start phasing out leaded petrol. Also by 1990, we shall have completed a nation-wide programme to treat water supplies so as to minimise their tendency to dissolve or carry lead;
- lead is the best known example of a substance where a broad approach to reducing exposure has been adopted. But some other substances - for example, asbestos - have raised sufficient concern in recent years to justify a similar broad approach. They, like lead, are characterised by a real and perceived hazard and properties which make them extremely persistent once released into the environment. Other examples of difficult substances are the 'heavy metals' mercury and cadmium, and polychlorinated biphenyls (PCBs). Our intention is that in each case, the people most at risk should be identified, the risk should be assessed, and any action necessary should be taken. The aim for the future is to 'manage' such substances so as to reduce exposure to them to the minimum practicable;

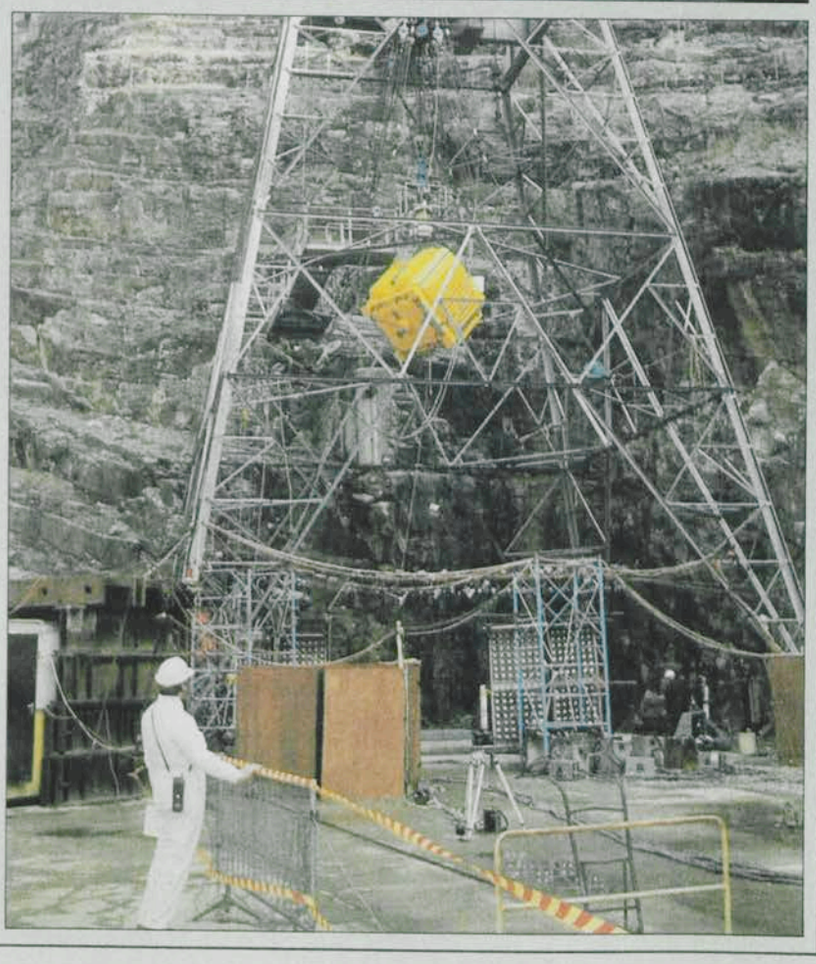
Above: Heavy traffic around Parliament Square in London.

Total UK lead emissions from vehicles
achieved and planned (despite increasing car mileage).



Prospects

- the main discharges of radioactive waste, which are from the Sellafield reprocessing plant, have been cut in recent years. There will be another big reduction in 1985 - beta/gamma radiation to 10 per cent of the level in the early 1980s, and alpha radiation to 20 per cent of that level; and further reductions are planned. Plans are being worked up for the development of land sites for depositories for low and intermediate level wastes;
- vehicle emissions are being progressively reduced. In 1986 the levels are due to be reduced to the lowest ever, with good prospects of further reductions resulting from advanced engine design;
- more stringent model by-laws have been introduced to deter irresponsible straw burning. The farmers' code of practice has been brought into line with these by-laws;
- water sources and water supplies are being carefully monitored to ensure that levels of nitrate are kept within acceptable limits;
- where sewage contaminates bathing waters which have been designated under the relevant EC Directive, substantial capital schemes are being undertaken to achieve conformity with the Directive's standards;



Top: Sellafield reprocessing plant.

Right: A 48-tonne nuclear fuel flask dropped under experimental conditions to test its strength survives intact.

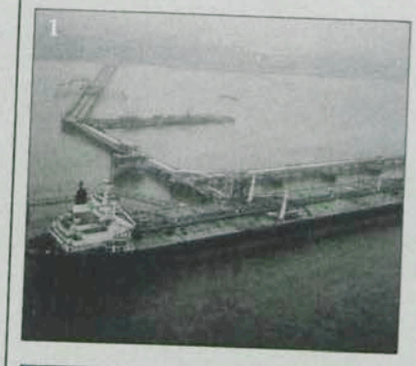
Below: Stubble burning.

Prospects

- a new Hazardous Waste Inspectorate has been set up to help local authorities to improve their control of waste management and to work towards consistent and environmentally acceptable standards in this field;
- special, comprehensive Government advice is available on the handling of hazardous wastes;
- we encourage recycling of materials whenever this is economic, and in particular have given strong financial and technical support to the development of full-scale plants for the production of fuel derived from waste;
- the UK Pollution Abatement Technology Award Scheme has just completed a very successful first year. The quality of the entry showed that ingenuity and innovation are very much alive in Britain, and the scheme will be repeated annually in future;
- to supplement existing material, comprehensive Government advice on the redevelopment of contaminated land is being prepared;
- Government-backed research and development to produce quieter heavy lorries is continuing so as to enable manufacturers to meet much tighter European standards that will come in at the end of this decade. Regulations banning excessively noisy motorcycle exhausts have just been made. Aeroplanes are getting progressively quieter. Everything practicable is being done to give us more peace and quiet.

In September 1983, the Sivand *collided with a jetty in the Humber (1), spilling 6,000 tonnes of crude oil (2). Prompt action by the Government's Marine Pollution Control Unit (3) ensured that the oil was cleared quickly, with no apparent long-term damage to the environment (4).*

Photographs provided by ITOPF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Dartmoor National Park

Postscript

To help us to respond effectively to problems old and new we are fortunate in having in recent years had a standing Royal Commission on Environmental Pollution. Their periodic reports on the environment as a whole or significant aspects of it have been and will remain invaluable as a check on the past and a guide to the future.

Britain has a good record on environmental issues. But there are always new challenges and new problems. This pamphlet shows that we do not intend to rest on our laurels. Protecting the environment is a continuous process, which we intend to maintain.

Prepared for the Department of the Environment by the Central Office of Information 1984.
Printed in the UK for HMSO
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