

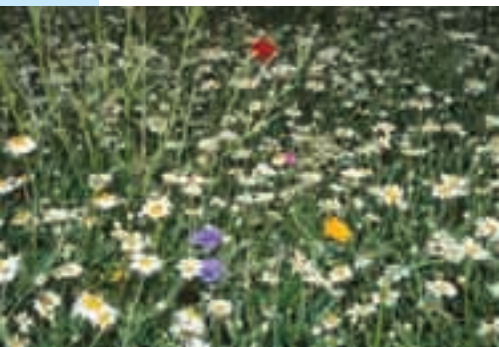


**INCA**

INDUSTRY NATURE CONSERVATION ASSOCIATION

**20 Year Review** 1989 - 2009

# 1. Introduction



**Top**

John Banham,  
Director General CBI at  
INCA Launch 1989

**Middle**

Industry north of the Tees

**Bottom**

Wildflower meadow

1989 was a political watershed, marked by the fall of the Berlin Wall. The top environment story was about the Exxon Valdez disaster, when over 400,000 litres of crude oil were spilled off the coast of Alaska. Here on Teesside a short newspaper report and accompanying photo announced the launch of the Industry Nature Conservation Association (INCA).

The INCA concept had developed from collaboration between ICI and the Nature Conservancy Council, which resulted in a pamphlet supported by John Banham, the Director General of the Confederation of British Industry and Sir William Wilkinson, the Chairman of the Nature Conservancy Council. The theme was avoiding conflict and building trust between industrial developers and conservationists by forming INCAs and working together on shared goals. INCAs were seen as self-help associations whose success or failure would depend entirely on how valuable a service they were held to provide.

ICI and the Nature Conservancy Council provided the resources to start the INCA here on Teesside and founder members were soon added including:

- The Teesside Development Corporation
- Cleveland County Council
- British Steel
- BASF
- Phillips Petroleum
- Northumbrian Water

20 years on there is a more mature relationship between industrial developers and conservation organisations and the framework of legislation is more complex, but passions are still aroused by some development proposals. On Teesside INCA has been instrumental in the process of change and it has delivered significant benefits for both industry and biodiversity. If sustainability is a finite goal then we may have a long way to go, but if it is a journey of change then we have the experience of twenty years of travel and the benefits that go with it.

We have recorded some of the milestones from our journey in this document. We hope you find it interesting.



1988  
INCA concept launched – NCC  
“Partnerships in Practice”

1989  
INCA incorporated – 9th Feb.  
Founding members: industry  
(10), utilities (2), local  
Authorities (4), Government  
agency (1). First Chairman Sir  
Ron Norman Chairman TDC.

1990  
No 6 Brinefield approved  
on SSSI  
Start Amoco pipeline project  
through South Gare SSSI  
Islands modified in Bran Sands  
Pool for nesting common tern  
INCA’s “Cleaning up the  
Tees Conference”

## 2. 20 Years of Change

### 2.1 The Natural Environment

The Tees estuary makes Teesside special. It was originally a haven for wildlife, then an artery for trade and latterly an ideal location for industry. The balance between those three elements has remained much the same over the last 20 years, but there has been an enormous gain in environmental quality.

- The annual average of dissolved oxygen in the river at Haverton Hill rose from below 20% to more than 80%.
- Metals in the river sediment have reduced or were stable. For example copper concentrations have reduced by over 60% and mercury concentrations have halved over the last 20 years.
- Biochemical Oxygen Demand (BOD) from effluents was recorded at 180,000 tonnes per year in 1970, but by 2001 this had reduced to 10,000 tonnes per year.
- In 1995 the annual average concentration of nitrogen dioxide in the atmosphere varied between 33 and 35  $\mu\text{g m}^{-3}$  but concentrations had fallen to between 25 and 27  $\mu\text{g m}^{-3}$  by 2005. Similarly, sulphur dioxide concentrations at Middlesbrough decreased from an annual average of about 16  $\mu\text{g m}^{-3}$  in 1995 to around 4  $\mu\text{g m}^{-3}$ .

Changes in the natural environment were reported in 1995 in INCA's report on the State of the Natural Environment of the Tess Estuary (SONET) and the more recent 10 year update, published in 2009, ([www.inca.uk.com](http://www.inca.uk.com))

### 2.2 The Built Environment

There have been two major changes in the geography of Teesside over the 20 year period. First, the construction of a barrage reducing the tidal reach of the estuary to 16.5km and converting 20 km of estuary to permanent fresh water. Secondly, the redevelopment of brownfield sites left by the rationalisation of industry in places such as Teesdale, Thornaby, although the quantity of redeveloped land is not recorded.

### 2.3 Environmental Regulation

The demand for INCA's services has been influenced by the network of legislation at an ever finer mesh, much of it stemming from European Union initiatives. In 1995 the Teesmouth and Cleveland Coast Special Protection Area was designated as a series of non-contiguous sites around the estuary covering 1247.3 ha and updated in 2000. The designation flowed from the European Birds Directive (79/409/EEC) and impacts upon a range of regulatory activities including the planning process, waste regulation, the safety of industrial processes and pollution control.

1563.4 ha of land are designated as Sites of Special Scientific Interest around the estuary and a further 44854 ha are designated on the edges of Teesside. 355 ha at North Gare and Seal Sands were designated as a National Nature Reserve in 1995.

#### Top

River Tees at Newport Bridge

#### Middle

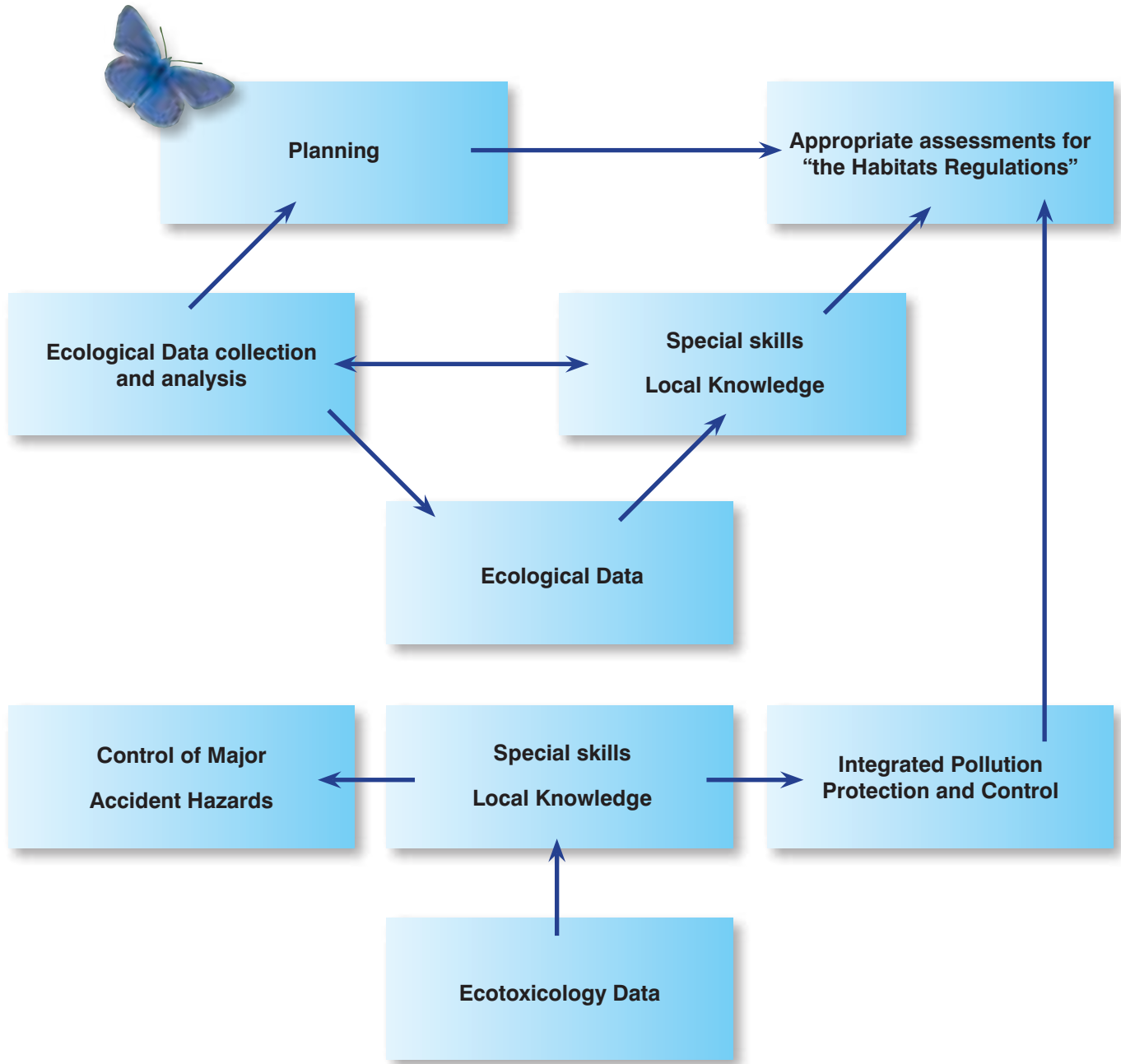
Tees Barrage

#### Bottom

Seals Sands Teesmouth



# INCA Regulatory Services



1994

First recorded weaning of Harbour Seal pup for approx. 100 years  
 Tees Barrage commissioned  
 INCA launches Ecology Database

1995

Completion of Intertidal SPA Project - 11 ha wetland created  
 Teesmouth & Cleveland Coast reserve designated  
 Teesmouth National Nature reserve designated

1996

State of the Environment of the Tees Estuary published  
 Environment Agency established  
 Marsh Harrier - first successful nesting record in Tees Valley  
 INCA begins management of Little Tern project

## 3 Biodiversity

It was a term not used much in 1989, but following the United Nations Earth Summit in 1992 and the resulting Convention on Biological Diversity it emerged as a theme which led to the first UK Biodiversity Action Plan. The plan listed 1149 species and 65 habitats which merited attention to stem the loss of species and the consequent reduction in biodiversity. It is a thread running through much of UK environmental legislation.

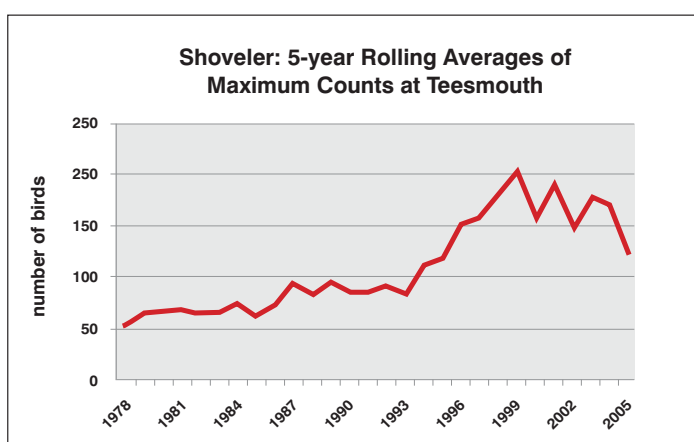
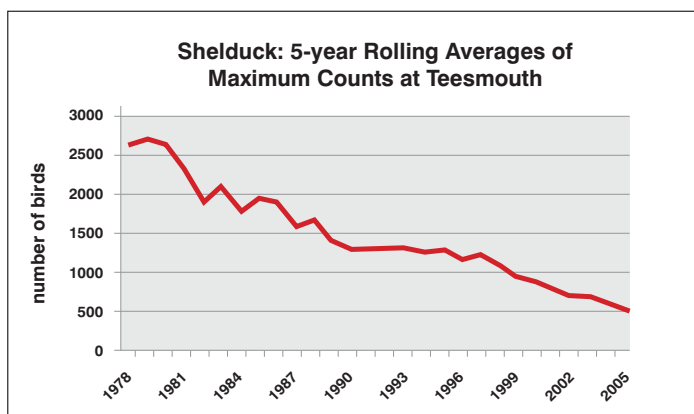
The three animals that have formed the main focus for INCA have been the harbour seal from the UK Plan and little tern and common tern from the Tees Valley Plan.

The Tees harbour seals weaned their first pup in 1994 and although the subsequent decade saw more pups, the fertility rate was low. 2008 produced 12 pups which is probably the fertility rate appropriate for the population. (More information can be found on our website at [www.inca.uk.com](http://www.inca.uk.com))

Little tern is one of the rarest breeding seabirds in the UK and we are fortunate to have a nesting colony on our coast. A recreation beach is not a good choice of nesting site, but wardening and protection have seen the number of fledged chicks at 102 and 67 in 2007 and 2008 although the weather, natural predation and egg theft in earlier years sometimes reduced productivity to nil. (More information is available at [www.inca.uk.com](http://www.inca.uk.com)).

Common tern have benefitted from secure nesting islands created at industrial locations. Nesting pairs rose from only a handful in the late 1980s to 530 in 2002 and 422 pairs used newly created islands at North Tees in 2007.

Not all bird species have fared as well as the terns. Shelduck, teal and mallard numbers for example are down by around 50% but, populations of shoveler and pochard have increased their number, the latter by over 150%. More information on bird populations can be found in SONET II, see [www.inca.uk.com](http://www.inca.uk.com).



1997

Publication of "Tees Estuary Management Plan"

Portrack sewage treatment transfer to Bran Sands

Accidental oil release to river Tees



1998

SITA Energy from Waste Plant operational

Completion of No. 4 Brinefield Saline Lagoon

1999

Accidental hydrochloric acid release onto Greenabella SSSI



**Tees Valley Biodiversity Partnership**

Tees Valley BAP published (TWT)

Huntsman comes to Teesside

**Top**  
Harbour Seal

**Middle**  
Little Tern

**Bottom Left**  
Shoveler

**Bottom Right**  
Newt Rescue

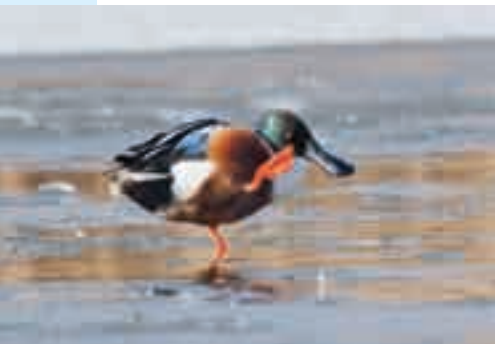


By 1989 intertidal habitat had become a scarce natural resource on the Tees Estuary but, with industrial funding we have recreated 11 ha of mudflats. We have also contributed 5.5 ha of scarce saline lagoon habitat, a contribution towards the UK target of 90 ha by 2010. Funding for the project was provided by English Nature (now Natural England), Industry and landfill tax credits.

There have also been numerous projects to support a diversity of mammals,

birds, amphibians and insects. Botanical projects too have conserved uncommon habitats on Teesside, including wetlands and calcareous plant communities, which have established on land claimed from the estuary by infill with blast furnace slag.

Wildlife relocation projects too have involved everything from uncommon wildflowers to invertebrates and amphibians, sometimes involving member's workforce to help carry out the work.



2000  
British Waterways manages Tees Barrage

2001  
Improved grassland management at North Gare Dune Slacks  
Boardwalk and access path across Greattham Tioxide land.

2002  
Accidental benzene release to river Tees  
Saline Lagoon constructed on No. 5 Brinefield  
Humber INCA established  
PDV seal virus reported from North sea coast but no confirmed cases at Teesmouth  
420 pairs Common Terns nest on Bran Sands Pool  
First recorded breeding of Roseate tern in Tees Valley

# 4 Industrial Development

For many years INCA has been a unique asset for Teesside in the drive to improve economic performance. We have helped by:

- Advising how to minimise the ecological impact of development.
- Providing early advice in the development process to avoid conflict with ecological assets.
- Building biodiversity gains into new developments
- Ensuring disturbance to wildlife was avoided during the construction phase and operation phase.

The potential benefits to a developer have come from minimising the timescale of the planning phase of developments and saving time and avoiding cost associated with appeals or resubmissions. It has also helped businesses towards achieving their sustainability objectives.



**Top**  
Erecting Newt Fence

**Bottom**  
Great Crested Newt



2003

EU Water Framework Directive launched

Common Tern nesting relocation

2004

"Biodiversity indicators and targets for the North of England" published

2005

Tees Estuary water quality classified as "Fair"

Harvest Mice introduced onto Industrial Sites.

# 5 Environmental Regulation



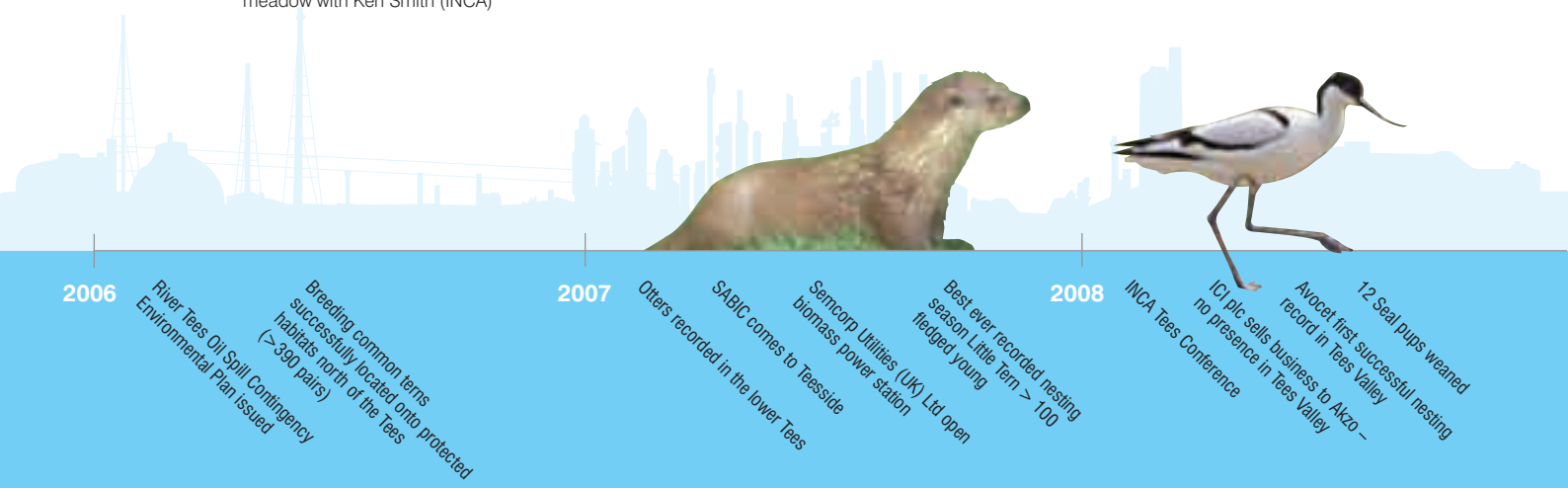
**Top**  
Tony Marron (Huntsman Pigments) with rescued fox cub.

**Middle**  
Cowpen Marsh

**Bottom**  
Russian environmental manager discussing industrial wildflower meadow with Ken Smith (INCA)

The framework of legislation providing environmental protection has produced a much finer mesh of controls in the last 20 years. Planning controls and conservation of species and habitats we have mentioned, but there is a third element of regulation associated with safety and prevention of pollution. From 1989 to 1999 INCA maintained an ecological database that could be used as a source of baseline data in assessing the likely impact of a pollution incident and guiding any remediation. Changes in legislation in 1999 and 2000 on major accident hazards and pollution control saw a more active use of the database. Ecotoxicology data were added and while the database still serves the original purpose we now also routinely produce reports for regulated industries on ecology and ecotoxicology which are used to:

- Give environmental context to industrial operations
- Assess the potential ecological impact of accidental emissions or normal operating emissions
- Inform the risk management process of a business
- Support the production of safety cases for submission to the regulating authority.



## 6 Partnerships

Everything we have done is either in partnership with others or on behalf of the partnership of INCA members. But there are some projects which INCA has coordinated and merit a separate mention. They are:-

- The Tees Estuary Management Plan (1995)
- The Cowpen Marsh SSSI Management Committee (1992-2009)
- The Oil Spill Contingency Plan (2003)
- The European Marine Site Scheme Of Management (2009)

We have also provided support to Local Strategic Partnerships in local government, the regional and sub-regional biodiversity networks and academic institutions.

INCA has championed the value of nature conservation and biodiversity in industrial environments. Over the years we have hosted many visitors representing universities, environmental organisations, industry and government. Some of these visitors have been UK based but others have ranged from places as far away as Poland, India and Russia.



**Above**  
Lord Cranbrook (Chairman Natural England)  
opening new bird watching hide

## Environmental Legislation, 1989-2009

- Environmental Protection Act 1990
- Water Industry Act 1991
- The Conservation (Natural Habitats & c) Regulations 1994
- Environment Act 1995
- The Planning (Control of Major Accident Hazards) Regulations 1999
- The Control of Major Accident Hazard Regulations 1999
- The Town & Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 1999
- The Harbour Works (Assessment of Environmental Effects) Regulations 1999
- Countryside and Rights of Way Act 2000
- The Pollution Prevention and Control (England & Wales) Regulations 2000
- Control of Pollution (Oil Storage) Regulations 2001
- The Environmental Information Regulations 2004
- Planning Policy Statement 9, Biodiversity & Geological Conservation 2005
- Natural Environment and Rural Communities Act 2006
- Regulation (EC) No 1907/2006 on the Registration Evaluation, Authorisation and Restriction of Chemicals (REACH)
- The Environmental Damage (Prevention and Remediation) Regulations 2009



2009

Official opening of Saltholme  
Wetland Reserve  
10 Year update published for the  
State of the Natural Environment of  
the Tees Estuary

## INCA Members

- Able (UK) Ltd
- Anderson Barrowcliff LLP
- Artenius UK Ltd
- Augean PLC
- Biofuels Corporation Trading Ltd
- BioRegional Quintain
- BP Exploration Operating Co Ltd
- British Waterways
- Cleveland Potash Ltd
- Coastal Energy Ltd
- ConocoPhillips UK
- Corus plc
- Dow Chemical Company Ltd
- Exwold Technology
- Fine Organics Limited
- GrowHow UK Ltd
- Huntsman Polyurethanes
- Huntsman Pigments
- INEOS Chlor
- INEOS Nitriles (UK) Ltd
- Invista UK Ltd
- Johnson Matthey
- Koppers (UK) Ltd
- Lucite International UK Ltd
- North East Process Industry Cluster (NEPIC)
- Northumbrian Water plc
- nPower Cogen
- PD Teesport Limited
- Petroplus
- px limited
- SABIC UK Petrochemicals
- SembCorp Utilities UK Ltd
- Simon Storage Ltd
- SITA Tees Valley Ltd
- Sonhoe Development Company
- Tees Bay Pilots Ltd
- Teesside Power Limited
- Thor Cogeneration Limited
- Croda
- Vertellus Specialties UK Ltd
- Vopak
- Nature's World
- Royal Society for the Protection of Birds
- Teesside Environmental Trust
- Tees Valley Wildlife Trust
- Teesmouth Bird Club
- Teesmouth Field Centre
- Wildfowl & Wetlands Trust
- Hartlepool Borough Council
- Middlesbrough Borough Council
- Stockton-on-Tees Borough Council
- Redcar & Cleveland Borough Council
- Environment Agency
- Natural England

**Left**  
*Dactylorhiza orchid*



## Chairman's Remarks



Has INCA had a positive impact; has it made a difference?

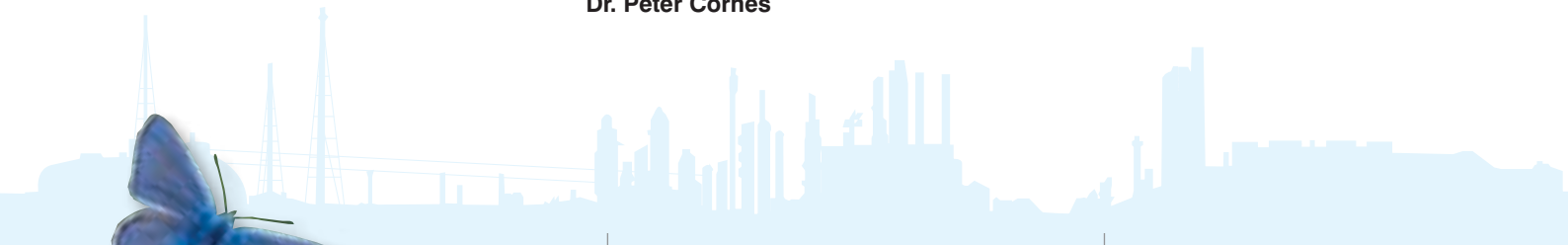
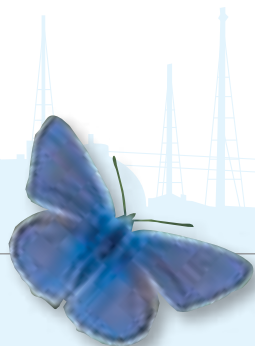
Anyone who has experience of INCA during the past 20 years will have an opinion. In my view, in an often understated but thoroughly professional way, INCA has added considerable value to Teesside. Using detailed local knowledge, an unusual but highly relevant skill mix and the ability to harness the diverse interests and experience of our members we have:

- Helped businesses realise potential development opportunities in the shortest possible time by taking proper account of Teesside's special local environment during planning and implementation
- Provided data and expertise in support of members involved with the control of major accident hazards, pollution control and habitat protection
- Developed and maintained the only comprehensive data base of the ecology of the Tees Valley for use of members
- Helped to achieve large gains for biodiversity through the contribution of businesses and their land holding
- Facilitated partnerships across the business sector, public sector and conservation organisations
- Provided a cost effective resource of high value skills to members
- Provided our services in confidence and on tap in an even handed manner.

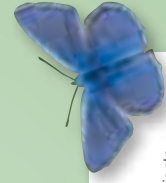
I am proud to have been Chairman of INCA for the last three and a half years. I have seen how it works quietly in the background and punches well above its weight. I am sure it will continue in that vein for many years to come.

A handwritten signature in black ink, appearing to read 'Peter Cornes', written over a horizontal line.

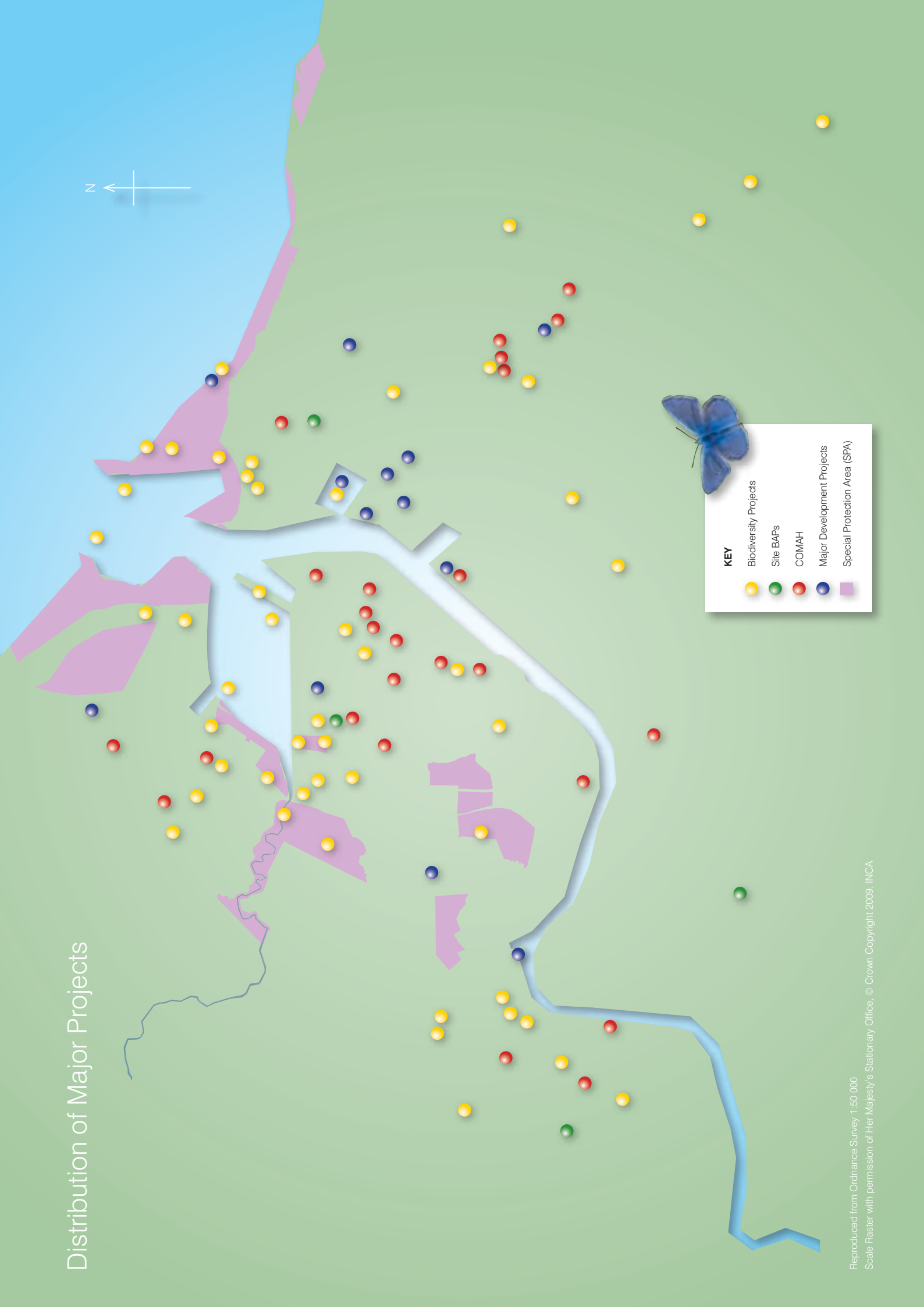
**Dr. Peter Cornes**



# Distribution of Major Projects



- KEY**
- Biodiversity Projects
  - Site BAPs
  - COMAH
  - Major Development Projects
  - Special Protection Area (SPA)





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