

INCA

Industry Nature Conservation Association



Summary of Activity

2016





Summary

The INCA team had a very busy, varied and rewarding year. We continued to provide a valued advisory service to our members on ecological issues, particularly in relation to breeding bird activity. We carried out a range of biodiversity-related work for those of our members who have Site Biodiversity Action Plans.

INCA also played a pivotal role in supporting the Tees Estuary Partnership and managed to satisfy demand from non-members for work, in particular associated with bat surveys.

During the year we successfully consolidated the organisational changes which took place at the end of 2015 and were delighted to be joined by Mike Leakey, formerly of Natural England, in October 2016. Mike has joined us on a part-time basis and brings with him extensive experience gained in his former organisation and considerable expertise in ornithology, which undoubtedly will be of great value to INCA and its membership over the coming years.

Ken Smith has moved on to enjoy a well-earned retirement and Bob Pailor replaces Ken in working as the main COMAH contact, a role that he now carries out for INCA on a part-time project basis.

INCA's new structure and enhanced pool of organisational knowledge, experience and ability gives us a platform of strength and capability to continue to provide an excellent and valued service to our members through 2017 and beyond.



Tees Estuary Partnership

There has been significant progress since the inception of the Tees Estuary Partnership (TEP) in January 2016, a process in which INCA continues to play a central role.



The TEP steering group comprises a range of key stakeholders across the Tees Estuary, many of whom are members of INCA, including industrial organisations, regulators, local authorities and

conservation non-governmental organisations. Initially, formation of the group was driven by a need to address the particular concerns of industry in relation to Natural England's review of the Teesmouth Cleveland Coast Special Protection Area (SPA) boundary, which it proposed to extend in order to protect internationally important waterbirds (in particular common tern and avocet).

The Partnership embarked upon a bold approach aiming to extend the level of cooperation already existing between stakeholders to create a new initiative across the Tees Valley which meets the needs of legislation and nature conservation, and does so in a manner that gives certainty to business and planning while encouraging inward investment.

The work has required a reasonable timescale to undertake in order to consolidate all of these elements together at the same time and in a single plan. To this end a year-long extension of the SPA consultation process was agreed by DEFRA. Over the extended period, INCA has been working with businesses to





Shoveler

clarify and minimise the potential impacts of an extended SPA area on their operations, at the same time ensuring that our internationally-important bird populations are properly safeguarded.

Discussions between INCA and industry were completed during Spring and Summer of 2016 and a Memorandum of Understanding (MoU) is being prepared which will document those current operational activities that are deemed not to impact upon the new features of the SPA.

The MoU will have supplementary documents including a 'Sensitivity Map' and an 'Advice on Operations' tool which will give specific detail about how the MoU framework will be applied locally. The feature sensitivity map will be developed further to alert industry and regulators to where particular operations may be more problematic in terms of their potential to cause disturbance to SPA birds. Future activities may require further assessment so the tools will also identify activities where more information is needed, either because of the potentially disturbing nature of the activity or the sensitive location where it is planned. Marine Impact Risk Zones will be collated for the area to identify low risk activities that can be screened out, with conditions (if required) to streamline the process further.

There will be a formal consultation in relation to the SPA extension process, which is estimated to begin early in 2017. The aim is to finalise the MoU before formal consultation, and this will continue to be pursued with input from stakeholders. The formal consultation period will run for three months during which time wider stakeholders will

have an opportunity to comment. Classification of the pSPA is anticipated at the end of 2017 after which all of the associated documentation will be fully available online via the Natural England website.



Avocet

The Natural England advice package, which includes the 'Advice on Operations' tool, is still being collated but will be available as a draft version for informal use by stakeholders from April 2017 onwards.

The next stage of the TEP project in 2017 will see the development of a Habitat Framework which, in addition to the MoU, is one of the key outcomes of the whole project. This aims to facilitate improvement of the Tees Estuary habitats by developing a common understanding of current habitat distribution and extent and identifying the opportunities for habitat enhancement. The output will be a series of Feasibility Reports for specific sites, including intertidal locations, where landowner willingness is identified. The Habitat Framework will set out a prioritised suite of enhancements that could be taken forward for delivery in subsequent projects, including large-scale habitat creation projects and also a suite of smaller scale options suitable for river frontage locations. Both have inherent value to biodiversity and together will give a range of mechanisms to landholders to consider. A key part of the ongoing TEP discussions will also address potential benefits to industry and



Oystercatcher

planners through early mitigation of future development as well as how industry can be compensated for taking land into long-term nature conservation use.

Bird Disturbance Surveys

The revised boundaries of the Teesmouth & Cleveland Coast Special Protection Area SPA are to a large extent aimed at protecting the feeding habitats used by common tern.

Common terns are known to forage widely over coastal waters and the original proposed boundary extension was derived from a model, based on visual tracking studies at other colonies, which predicted common tern use of an extensive marine area offshore from Teesmouth along with the River Tees channel as far upstream as the Tees Barrage. In order to provide some verification for the model, Natural England commissioned three surveys of common tern activity in the offshore area between Victoria Harbour in north Hartlepool and the River Tees upstream to the Tees Barrage in 2015.



Redshank

The proposal to extend the SPA to include all of the navigable length of the River Tees was met with some concern by industries based around Teesside, due to

the potential for restrictions on current and future operations. Discussions, facilitated by INCA as part of the Tees Estuary Partnership, concluded that the sample size in the 2015 verification studies was too small for all parties to have confidence in the results.

In order to increase the amount of data available to verify the model, INCA was commissioned by Natural England to repeat the tern verification surveys for the stretch of the River Tees between Tees Barrage and Seaton Channel. With generous assistance from PD Ports, who provided a vessel, INCA undertook a further three surveys of the entire length of the tidal Tees as far as the Barrage. In addition to repeating the previous year's survey, which focused on tern numbers and activity, the INCA surveys also gathered some data about whether existing operational activities on the river were causing disturbance to terns.

The surveys demonstrated that the river is used by a significant proportion of the common tern population. The terns were using the whole of the river, but within that there were clearly some hotspots such as at Tees Barrage. Crucially, the surveys also found nothing to indicate any disturbance or displacement of terns due to current industrial activities.



Common Tern

"Common terns are known to forage widely over coastal waters"

INCA and development

Standing around in a disused graveyard in the middle of the night or forming a cordon around a hospital at dawn aren't behaviours that you would normally associate with INCA, but don't worry... we're not a covert society of vampires! Instead we offer the slightly less unusual explanation that we were out looking for bats.

In 2016 INCA continued its core activity of providing advice to members about the potential impacts of development on wildlife, as part of their membership benefits. Bats are always a consideration when undertaking ecological assessments on members' sites, but given the nature of the structures on most industrial sites it is usually quite straightforward to rule the animals out as being unlikely to be present. However, should resources be available beyond commitments to members, our expertise about wildlife in the Teesside area is also available to non-members on an occasional basis. Two of INCA's staff members are licensed bat workers and this year INCA spread its wings a little and undertook some bat work for non-members, with our clients including the NHS and the Church Commissioners.

Bat work and sleep aren't particularly well suited as bed fellows and in some cases the best time to start bat work is several hours before dawn.

The bats themselves often seem as if they have been designed to be as difficult as possible to survey, being strictly nocturnal, highly mobile, very flexible in where they roost and technically difficult to tell apart. Nevertheless they are a fascinating group of animals to work with and it's very rewarding to see them. Bats receive the highest level of statutory protection, which extends not just to the bats themselves but also to the places that they use for roosting, regardless of whether or not the bats are home. Therefore it is essential to know not just whether bats are present on a development site but also how they are using that site and how any harm to them might be avoided. Following the winter's welcome hibernation period to catch up on their sleep, INCA staff are hoping to deploy their bat skills again soon.



Brown Long-eared bats roosting

Teesmouth Seals

Monitoring for the Tees Seals Research Programme, which has been managed by INCA since 1992, and which runs from June to September each year, demonstrated that the overall population of seals in the estuary continued its gradual increase into 2016.

Harbour seals, which give birth on Seal Sands, only showed a marginal increase in overall numbers this year so were in line with the previous two years. The number of successfully-weaned harbour seal pups was 18, a figure which has now been the same since 2014. Time will tell whether this means that the harbour seal population has reached a plateau at Teesmouth.

Grey seal numbers however have clearly increased in number in the estuary this year. The mean number for each of the four months monitored was higher than the corresponding month in 2015 with the mean for September being the highest monthly mean for grey seals ever recorded on the Tees.

This year the highest number of individuals hauled out for both species (115 harbour seals and 66 grey seals) occurred

on the same day (21 August) so we know that there were a minimum of 181 seals present at that point in time. Taking into account that some seals would be elsewhere in the river and so not counted and that not all seals would be hauled out, this means that the total number of seals in the Tees Estuary will almost certainly now exceed 200.

Outside of the formal Tees Seals Research Programme, a series of casual counts of seals collated by INCA showed that both harbour and grey seals continued to be present at Greatham Creek and on Seal Sands throughout the year.



Common & Grey Seals at Greatham Creek

Little Tern

No two years are alike where little terns are concerned, and so it proved once again in 2016. The season began rather later than normal with the first birds not being recorded at the Crimdon colony until 5 May, well after fence installation which was completed on 27 April. Incubation was first noted on 22 May, and the first chicks were seen on 14 June. Long periods of low temperatures accompanied by strong northerly and easterly winds characterised much of May and early June, inhibiting breeding activity and causing havoc with blown sand burying numerous nest scrapes. Indeed, a minimum of 33 clutches of eggs were lost in the first week of June alone.

Undaunted, our tenacious little terns redoubled their nesting attempts, such that by 11 June 65 active scrapes were present. The season's maximum tally of 84 active nests was recorded on 20 June. Sadly the successful breeding by a pair at South Gare in 2015 was not repeated this year.

In contrast to the situation in 2015 there was little evidence of food shortages, while tidal flooding within the colony area was only recorded on a couple of occasions, and then only to a limited extent. As far as predators were concerned, kestrels remained mercifully scarce in and around the colony, so much so that on 29 May the warden made reference to the first kestrel hunting the dunes for three weeks! Other aerial predators such as sparrowhawk and carrion crow were also rarely recorded. However, on 22 July a young stoat entered the colony, and stoat predation was subsequently cited as the main cause of what felt like slightly disappointing little tern productivity.

The peak count of 58 fledged juveniles was made on 23 July, but this figure was still very close to the mean number recorded over the preceding decade (59.8) and three times greater than the corresponding figure for the period 1985-1995 (17.8). Despite quite regular breeding failures – mostly as a consequence of predation – these figures suggest that our little tern population is currently in a healthier state than it was twenty years ago, a situation for which INCA, the EU Life+ Project and our dedicated warden Trevor Stephenson can all take a measure of credit.

Biodiversity

The industrial landholdings on Teesside are among the most important areas for wildlife in the Tees Valley and a key element of INCA's role is to work with industries to monitor the wildlife and enhance the habitats on their sites. In particular a number of INCA's members have specific Biodiversity Action Plans for their sites which they implement with INCA's assistance.

Habitat enhancements can be quite simple, yet still be highly effective. For example we installed several nesting boxes for Tree Sparrows for SABIC which were immediately used, and in another case removed some bramble in SITA's biodiversity area which allowed Bee Orchids to flower. On a much larger scale Wood Group used subsoil that had been excavated to facilitate a new amenity block to create a large mound to benefit

Common Hawker Dragonfly



butterflies and other invertebrates. The material was stacked in a corner of their biodiversity area where the bare, sandy substrate it provided is already supporting specialised insects such as solitary bees which have subterranean burrows. INCA will continue to monitor how the mound is colonised by plants and insects over the coming years, so as to learn lessons that can be applied elsewhere for what is a much more sustainable and cost effective use of such material than sending it to landfill.

Surveys by INCA on members' land again found some very significant examples of wildlife. As part of a regional survey for a national conservation priority species - dingy skipper butterfly - we showed that the Seal Sands industrial estate continues to be of regional importance for this species. Perhaps the most exciting discovery, however, was of small pearl-bordered fritillary butterfly on a meadow in ICL's biodiversity area at Boulby. This strikingly-marked butterfly is found on the North York Moors but as far as INCA is aware this is the first record for Cleveland in modern times.

Sometimes negative results from surveys can also be good news. A new technique has been developed called 'environmental DNA', which can, among other things, detect the presence or absence of great crested newts from small samples of water taken from a pond. INCA used this technique for the first time this year on a pond on one of our member's sites that would have been almost impossible to survey using traditional techniques.

Another aspect of INCA's role is the promotion of the work that our members do for nature conservation. This year we led a guided walk for the Loftus ACCORD walking group to show them the wildlife that can be found in ICL's landholdings. A completely new venture this year was a bat and moth night that INCA held on Johnson Matthey's biodiversity area. The event was open to staff and their families from both Johnson Matthey and the neighbouring Lucite factory and proved very enjoyable as well as adding to the list of bats and moths for the site.



Small Pearl Bordered Fritillary

Forward Look

INCA's core priorities in 2017 are:

- To develop the skills of our staff to meet the ongoing needs of our membership.
- To continue to uphold our reputation as the reliable, responsive, one-stop provider of ecological services to our members and clients.
- To continue to provide value and integrity in the service that we provide.
- To provide a key input to the Tees Estuary Partnership.
- To promote the benefits of synergies between nature and industry wherever they exist among our membership.
- To represent our members' interests at various fora within the Tees Valley sub-region and, where appropriate, nationally.



Great Crested Newt

Current Members

Industrial/Commercial

Able (UK) Ltd
Air Products
Anderson Barrowcliff LLP
Augean PLC
BOC Ltd
CATS Terminal (Wood Group PSN)
Canal and Rivers Trust
CF Fertilisers UK Ltd
ConocoPhillips Ltd
Exwold Technology
Fine Organics Ltd
Huntsman Pigments
Huntsman Polyurethanes
ICL UK (Cleveland Potash)
Inter Terminals Seal Sands Ltd
Johnson Matthey
Navigator Terminals North Tees Ltd
Navigator Terminals Seal Sands Ltd
Lotte
Lucite International UK Limited
nPower Cogen
PD Teesport Ltd
px Limited
SABIC UK Petrochemicals
SembCorp Utilities UK Ltd

Suez Recycling & Recovery UK Ltd
Tees Pilots
Univar
Vertellus

Nature Conservation

Royal Society for the Protection of Birds (RSPB)
Tees Valley Wildlife Trust
Teesmouth Bird Club
Teesmouth Field Centre
Teesside Environmental Trust

Statutory Authorities

Natural England
Redcar & Cleveland Borough Council
Stockton-on-Tees Borough Council

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Further information can be obtained from the INCA website
www.inca.uk.com

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