



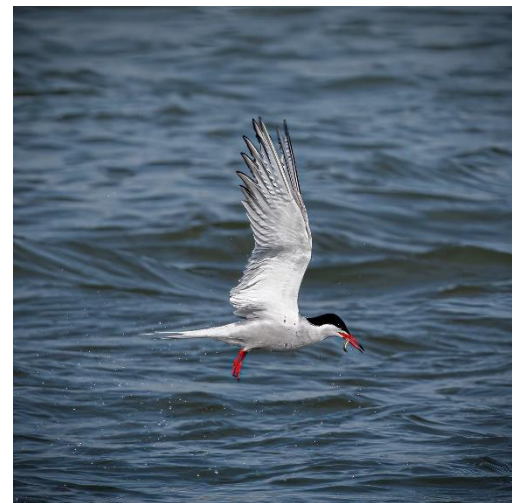
## Return of the Tern 2021/2023

The Return of the Tern project is a partnership nature recovery project between the Friends of Chichester Harbour and Chichester Harbour Conservancy, which has delivered a series of projects to assist the population of little terns and common terns in Chichester Harbour.

In 2021, Natural England published a Condition Review of Chichester Harbour SSSI (Site of Special Scientific Interest) and classified it to be in “unfavourable declining” condition. Terns were identified within this review as being in long term decline and this project includes a number of recommendations from that report. In the wake of the report, Friends of Chichester Harbour secured funding for this project from the Green Recovery Challenge Fund, the UK Government’s £40 million fund to help the nation build back greener from the coronavirus pandemic. Once the funding was confirmed, a Project Manager was recruited for the project and work began at the Conservancy on the series of objectives to support tern populations in the Chichester Harbour.

### The objectives of the project include:

- Provide shingle recharge at appropriate sites in the harbour to enhance tern breeding habitat.
- Build upon the Conservancy's work deploying tern rafts around the harbour to support nesting pairs in the breeding season.
- Increase our understanding of how terns use the harbour and what they feed on, by conducting fish population surveys.
- Creation of a draft Nature Recovery Plan for a Southern Coastal Plain Nature Recovery Area.



### Introduction

The Return of the Tern project has been an exciting and unique project for the Friends of Chichester Harbour and Chichester Harbour Conservancy. The impact of the project is being measured against our project plan and original bid to the Green Recovery Challenge Fund. Both the Friends of Chichester Harbour and Chichester Harbour Conservancy are excited by the development of the project and are satisfied the project is achieving the desired outcomes.





## Shingle recharge

This aspect of the project was looking to enhance the naturally occurring nesting habitat we have in the harbour. Naturally occurring tern nesting habitat in the harbour has been significantly declining in the last 20 years. Most sites are washed out on a high spring tide, resulting in a rapid decline in fledging chicks. Stakes Island was identified as a potential site for recharge as it is mostly inaccessible for predators and has no public access.

This work aimed to raise an area which would remain dry on our highest tides. The planning and consenting process for the works was time and resource heavy. The time window to complete the works was also very limited. To avoid disturbing summer nesting birds like the terns, and also the winter wader birds, we had to complete the work in one of two short windows.

In October 2022, the shingle recharge work was completed. Using 500 tonnes of shingle, an area of Stakes Island was raised to ensure it was not washed over on a spring high tide. Walcon Marine were the successful contractors for the work, and we worked closely with them to ensure the work was in line with all our consents and health and safety regulations. We communicated with local communities and users of the harbour to help mitigate any disruption.

Stakes Island will be monitored over the coming months and years to see how the shingle migrates and the impact it has on nesting terns and other birdlife in the harbour. It is likely that due to sea level rise and more extreme weather predictions, we will need to top up the shingle at some point in the next 5 - 10 years.

This shingle recharge work is the first time this type of habitat restoration work has been completed on this scale in the harbour, and there is a lot of interest from the local community and other organisations on the impact this work could have as well as the potential future works which could be completed.





## Tern rafts

Tern rafts are artificial nesting platforms used to provide secure shingle habitat for birds like terns to nest on, thus increasing nesting space within the harbour. The rafts were first launched on Thorney Island in 2019 and have had a huge impact on the common tern population in the harbour. As part of the project, we commissioned a local company to create 5 purpose-built rafts that are double the size of the original rafts, and which also sit higher in the water. The table below shows the number of common terns nesting in the harbour between 2019-2022. The increase seen over the past few years of tern populations is promising and shows the benefit of using tern rafts to create more habitat for nesting around the harbour. Unfortunately, both in 2022 and this current season, the tern populations have not escaped the effects of Avian Influenza. Luckily, the outbreak caused no known casualties in 2022 and whilst it has led to a number of suspected casualties this season, it has not wiped out the whole colony. Working with DEFRA (Department for Environment, Food & Rural Affairs), Conservancy staff have done everything in their power to reduce the spread of this disease and hopefully this has led to as many tern chicks fledging this season as possible.

Table showing tern numbers on rafts at Thorney Deeps between 2019-2022			
Year	No of rafts	Common tern pairs	Fledged young
2019	1	9	20
2020	2	33	48
2021	3	34	15
<b>2022</b>	<b>8</b>	<b>42</b>	<b>54</b>





## Small fish survey

The aim of the small fish surveys was to increase our understanding of how both nesting and visiting terns in the harbour use the area as a feeding ground. Working in partnership with Sussex Inshore Fisheries and Conservation Authority (IFCA), we conducted 4 surveys at 2 sites in mid-June 2022, which is in line with when terns are feeding their young, and a further 2 surveys in October 2022. As a result of being able to purchase all the necessary equipment through the Return of the Tern project and the support of partnership organisations, the fish surveys have been able to continue this year and over the next few years we can begin to develop a more informed picture of the small fish populations we have in the harbour.

Table showing initial results of 4 surveys in Chichester Harbour June 2022		
Common name	Scientific name	Abundance
Herring	<i>Clupa harengus</i>	1860
Sprat	<i>Sprattus sprattus</i>	1200
Bass	<i>Dicentrarchus labrax</i>	1
Wrasse-Corkwing	<i>Symphodus melops</i>	5
Blenny-Shanny	<i>Lipophrys pholis</i>	5
Sand eel	<i>Ammodytes tobianus</i>	3
Goby- Rock	<i>Gobius paganellus</i>	2
Goby-Sand	<i>Pomatoschistus minutus</i>	5
Goby-Common	<i>Pomatoschistus microps</i>	22
Goby-Black	<i>Gobius niger</i>	6
Goby- Two spot	<i>Gobiusculus flavescens</i>	1
Pollock	<i>Pollachius pollachius</i>	2
Lesser sand eel	<i>Ammodytes tobianus</i>	2
Wrasse- Ballan	<i>Labrus bergylta</i>	5
Goby-painted	<i>Pomatoschistus pictus</i>	2
Unidentified wrasse	<i>Labridae</i>	1
Unspecified dragonet	<i>Callionymus</i>	1





## Nature Recovery Plan

Although the majestic tern was the flagship species of this project, the overarching theme was nature recovery. Thus, part of the bid was to create a draft nature recovery plan for Chichester Harbour AONB. This piece of work has been in progress over the past 18 months and the draft is being finalised. With support from Natural England, the AONB Team is collating relevant spatial data and producing maps for use within the plan. The aim is that the draft Nature Recovery Plan will be published by the end of 2023.

## Communication and Engagement

The project has worked with the Conservancy Education team to engage with approximately 100 young people, providing lessons focused on nature recovery and the tern species we have in the harbour. Students from Year 4 through to college age got involved in supporting the project by making tern decoys for the rafts and helping us to raise awareness of the threats which terns and other wildlife in the harbour face.

The success of the project has been promoted through a range of channels, including the Friends of Chichester Harbour social media, where one video received over 26,000 views. Jessica Vagg, Project Manager, has presented to numerous community groups and been interviewed by local press about the project.



## Conclusion

The Return of the Tern project has been a unique and exciting project for the Friends of Chichester Harbour and Chichester Harbour Conservancy. The project funding from the Green Recovery Challenge Fund came to an end on the 31<sup>st</sup> March 2023. However, there are many legacies of the project which will continue, and the hope is that this is the first of many similar projects for Chichester Harbour.