# The Seahorse Trust

### British Seahorse Survey Special

**NEWSLETTER** 

Please find our latest newsletter and thank you to all for your incredible support. You and the volunteers are the backbone of the charity, without you we could not do so much.

The British Seahorse Survey was set up in 1994 following a picture sent to trust founder Neil by underwater photographer Sue Daly who was then living in Jersey.

This picture of a female Short Snouted Seahorse (*Hippocampus hippocampus*) led to a 30-year (so far) quest to find out more and understand the seahorses of the British Isles.

The survey has developed over the 30 years and become a massive database, a multiple site underwater survey with a massive team of volunteers, and has now grown into the World Seahorse Database, covering over 50 countries.

When Neil started the survey he contacted fishermen, museums, natural history societies, dives clubs, in fact anyone who might have seahorse records, to gather as much information as he could.

Each sighting gave him more information and crucially more context about the seahorses here in the UK, which for a long period were thought to be just accidental visitors to our shores.

However, the sheer number and crucially the distribution of the records, far and wide around our shores could only mean that seahorses were native to, and breeding here in the UK. The more information and data we had, the more we began to understand these amazing animals.



red charity

The original picture by Sue Daly (copyright) that started the British Seahorse Survey



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#### Database

The National Seahorse Database was set up in 1994 when the British Seahorse Survey was formed and is now the most comprehensive database of its kind in the world. Whenever a seahorse record is sent to The Seahorse Trust it gets put into the database, which is made up of several parts. Firstly, the Excel sheet where the data is recorded and then separately a folder for maps, a folder for photographs and a third folder for reports. In the excel sheet there are hyperlinks to connect to the map, pictures and report for each sighting, making the database interactive.

#### **Legal protection**

The information from the database has been used for a wide variety of purposes, such as creating Marine Conservation Zones in Torbay and many other areas, and crucially Studland Bay in Dorset.

Importantly, following on from the setting up of the British Seahorse Survey, Seahorse Trust founder Neil, submitted both Seahorse species for protection under the Wildlife and Countryside Act 1981. All the data and information were submitted in 2002 and it took 6 years for the 2 British Seahorse Species to firstly be recognized as indigenous to British waters, and then given full protection under the Wildlife and Countryside Act 1981 as amended and they are listed as Schedule 5, Section 9.

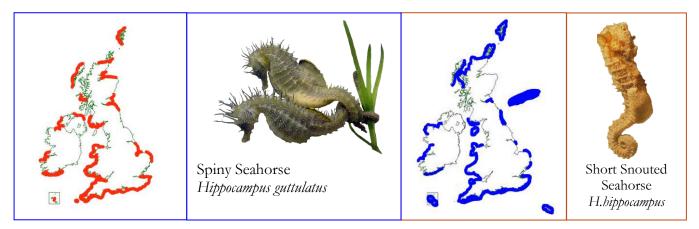


#### Distribution

The database has been running for 30 years so far, and this has allowed us to understand the distribution of the 2 seahorses species around the UK and Ireland.

The maps below show an approximation of where the two species are found, however, where there are no records does not mean there are no seahorses, it just means that no seahorses have been found yet. It has taken some time to build these maps and there is a strong chance that where we do not have records, in time evidence will be found.

Bear in mind that a cryptic species like a seahorse is incredibly hard to find, and so we are reliant on accidental findings where there are no targeted seahorse surveys.



Seahorse records come from a wide variety of sources, such as beach walkers, children fishing for crabs, divers, snorkelers, fishermen and people just out and about in nature.

Every record is valuable and as they say a picture can say a thousand words and so any record that comes with a picture tells us so much. Below is a tiny selection and thank you to the photographers.



#### **Studland Bay**

Our research work at Studland Bay started when some local divers told us about the seahorses they had seen at Studland. Little did we know then that these few sightings would lead to such a long-term study, that has built into a world-renowned project, which has now set a high standard in seahorse and marine conservation.

The study at Studland Bay and at our other sites, including Malta, has been supported by large numbers of amazing volunteers over the years and without these incredible people giving up their valuable time we would not know so much. A special mention should go to Kim, Paul, John, Eva, Chris, Chloe, Ken, Jenny, Ali, Martin, Kirsty-Jo, Susie, Martin and others in the core team.



Copyright Kim Maidment

When we set off to study the seahorses at Studland Bay it was to just do that study them, understand them, get to know individual seahorses, monitor their breeding patterns and so much more. They allowed us to confirm without any doubt that seahorses were a native, indigenous species that bred here. By following individuals through our facial recognition project, we knew exactly when seahorses gave birth, where they lived and interesting we even made the discovery that seahorses migrate, twice in a year.

They move inshore in the spring, we think stimulated by the lengthening daylight, timing their arrival into the seagrass with a build up of their food, shrimps, and with the seagrass growing, allowing them to hide away in it. At the end of the season when the first storms hit our shores they move offshore, into deeper waters where they are safe in the relative calm.

After achieving full protection for the seahorses in 2008 this

meant that all our work is now done under license from the Marine Management Organisation (MMO) (a legal requirement when looking for seahorses). We have helped them shape and tighten the license

so that seahorses do not get disturbed when surveyors, snorkelers and divers go in search of them.

One of the many discoveries we have made in our research is that seahorses can get stressed if underwater explorers do not take care, which in the long term can lead to death and so we devised with MMO, protocols, and terms and conditions that make sure the seahorses will be here forever.

We are really pleased to say that in 2024 the Studland Bay Seahorse Survey is expanding, and Dr Ken Collins from Southampton University is overseeing all the



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surveys with a large group of over 50 volunteers under The Seahorse Trust license. It is so exciting to see

the Studland Seahorse Project expand and with the installation of almost 100 ecomoorings on the site and the designation that it is now a Marine Conservation Zone, the project has developed beyond what we ever dreamed or hoped it would become.

#### **Studland Bay Marine Partnership**

Here at The Seahorse Trust, we are proud that we cofounded the Studland Bay Marine Partnership, which is a group of individuals and organisations that have come together to oversee, enhance and further the work at Studland Bay.

It is brilliantly chaired by David Brown from the National Trust and day-to-day administration is done by Sara Parker from Dorset Coastal Forum, with her infectious enthusiasm.

There are three elements of the SBMP, the steering committee, communications group and the science and education group. We have a representative in the communication group, and we sit on the science and education group. This is crucial because the whole project has and is based on science and the future work of the group's decisions will be based around science and education.

Special thanks to Boatfolk and the Agena Group for their amazing input in making so much happen.

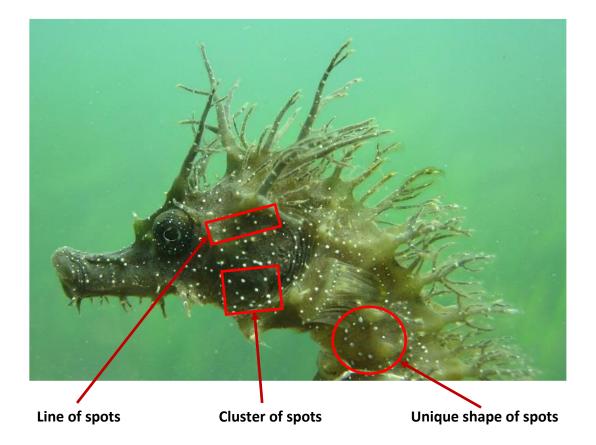


#### **Facial recognition**

When understanding seahorse behaviour, it is helpful to identify individual seahorses, the first stage is quite easy because male and female seahorses are easy to identify because of the absence or presence of the brood pouch. Once you have done this you then need to find a way of identifying individuals and one way of doing this is a facial recognition system we have developed based on the dots and lines that make up a 'fingerprint' on each side of the seahorse's head.

It is very important to try and get a picture of either side of the head because you might only have one on file.





These differing types of marks on the head show which seahorse you are working with; we have even identified individuals from 2 years previously.

We are working with colleagues to use Artificial Intelligence (AI) to identify individuals from photographs, however, this is a long-term development project and so not in use yet.

We are also working with colleagues to ensure we have a computer-driven method of accurately measuring the seahorses, this is ongoing but very exciting.

All of these projects are furthering the science and our understanding of seahorses in the wild and a massive thank you to everyone taking part and making it happen.

#### Five sites in the British Seahorse Survey

With the expansion of the British Seahorse Survey, we now have 5 sites with hopefully a sixth in 2024 or early 2025. This joining together of the sites allows us to expand our knowledge and understand more about seahorses and the various habitats they live in.

The expansion of the sites is only possible with our incredible volunteers and working in partnership with others.



#### Eco course

To be able to train our volunteers and others around the world we run a Seahorse Survey course and a Seahorse Ecology Course. Beccy our amazing Director of Education kindly runs these courses for us and please email us on <u>theseahorsetrust@gmail.com</u> to find out more.

#### Adoption and membership scheme online

Don't forget we are doing an adoption and membership scheme to help raise funds for our seahorse research, education, and conservation work. It is simple to do and can be set up online in minutes. Once you have set it up, we then send out your information pack and send you newsletters electronically a couple of times a year.

Sadly, due to costs we can no longer send out newsletter by post.



#### **Seahorses Environmental Communications**

For all press and media enquiries please contact Matt at <u>Seahorse Environmental Communications</u> on <u>info@seahorseenvironmental.co.uk</u>





#### **QR Code**

Thanks to Ellen at Seahorse Communications, we now have a QR code if you want to donate to our work.

Just point your camera at the code on the QR code to the right and click the web link and it takes you to our PayPal site, where you can donate. You don't have to have a PayPal account as you can make the donation by debit or credit card.

The scalars

As a very busy charity making a massive difference to the marine environment, we are reliant on the generosity of others to be able to keep all our projects going.

If you love what we do and love seahorses like we do, please donate. THANK YOU.

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## These amazing organisations below and so many others support us in so many ways.

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