

Seaquest Southwest is a marine citizen science and public participation project run by the Cornwall Wildlife Trust

# Seaquest Southwest

ANNUAL REPORT 2017





Cornwall has over 350 miles of diverse coastline, ranging from the rugged and wild north coast to the calm and beautiful south coast. The surrounding waters are home to some incredible marine wildlife, from the harbour porpoise, Europe's smallest cetacean, right up to the fin whale, the world's second largest marine mammal.

### Cornwall Wildlife Trust (CWT)

works tirelessly to protect Cornwall's marine wildlife and wild places for future generations to enjoy. The Living Seas marine conservation team at CWT coordinate a series of different projects within the county, all of which work towards achieving our three major aims; to collect data on marine ecosystems, to create awareness of the threats facing marine life and to campaign for a better protection of our marine habitats. Seaquest Southwest is one of these fantastic marine projects!



## Cornwall Wildlife Trust

*Protecting Cornwall's wildlife*

**Seaquest Southwest** is a citizen science marine recording project. For over 20 years we have been recording the distribution and abundance of our most charismatic marine wildlife; including dolphins, sharks, whales, porpoises, seals, sunfish and much more. Through educational activities and public events such as the Seaquest roadshow, evening talks and boat trips, we aim to increase people's awareness of these species and the threats they are under. The project incorporates sighting records sent in by the public with structured surveys conducted by trained volunteers, to better understand and monitor these species around the South West. Only with evidence-based records of occurrence, behaviour and ecology can we act to better protect and conserve these wonderful animals around our coasts.

▼ Photo by Katie Bellman



# Aims of Seaquest Southwest



1

To engage people with the marine environment.

2

To collect data on marine wildlife.

3

To better understand and conserve marine wildlife.

## Volunteer Support

2017 saw some unusual marine mega-fauna sightings around the coast of Cornwall, with regular sightings of a lone bottlenose dolphin known locally as 'Splashy' or 'Pierre' along the north coast and in Mount's Bay. Minke whales were seen all round the coast, with the main peak between July and August. The number of Risso's dolphin sighting reports are continuing to rise, with May and June being the key months in 2017

For the last 6 years, Seaquest has been run with the help of a volunteer coordinator. In 2016 and 2017 Katie Bellman took on this role to continue this great work, training and supporting surveyors, engaging with coastal users and members of the public and helping to run many fantastic events as part of the Seaquest Programme.

## Seaquest Southwest 2017 Key Facts and Figures

2,157

Wildlife sightings reported to Seaquest in 2017

15

Marine mammal species reported through 2017

24

Seaquest Public Sea Watches were run around the county

914

People engaged with the project including trips and surveys

548

People submitted sightings and/or survey data

31

Sites surveyed during Seaquest Surveys

124

Seaquest effort surveys conducted all around the coast

248 <sup>3</sup>/<sub>4</sub>

Hours of dedicated sea watching

7

Evening talks and training sessions over the winter.

71

New volunteers recruited and trained

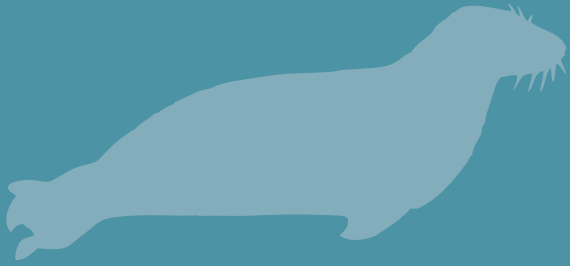
100

People attended the Marine Recorders Conference

9

Surveys conducted as part of National Whale and Dolphin Watch

# Seaquest Surveying



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Rather than relying solely on casual sightings records, a better understanding of marine and coastal wildlife is achieved through ‘effort-based’ surveys, either from land or from boats. These surveys are carried out by trained volunteers, and have been a key focus of Seaquest Southwest in recent years.

▼ *Common Dolphin by Jenny Simpson, Padstow Sea Safari*





To support the collection of ad hoc data, the Seaquest project encourages volunteers to head to their local sea-watch site and record marine wildlife seen over a dedicated (known) period of watch time. Volunteers are given formal training by Cornwall Wildlife Trust, and all follow the same survey protocols and methodologies. These surveys can be conducted on any day at any time, but one Sunday a month is set as a 'Seaquest Sunday' where as many volunteers as possible head to the coast at the same time in order to get a snap-shot of the marine wildlife from all around Cornwall. In addition, our public sea watch events also collate effort survey data as a key volunteer will lead on completing a survey form whilst others engage with the public. Data is then used to monitor populations, understand behaviour, highlight activity hotspots and make a real contribution towards effective protection and conservation for these species.

In 2017, 124 Seaquest effort surveys were undertaken by trained volunteers, Seaquest Coordinator and team, consisting of 248  $\frac{3}{4}$  hours of dedicated survey effort at 31 different location around the coast of Cornwall. There were 8 different, positively identified species recorded during 631 sighting positive intervals (15 minute survey time slots where an animal was sighted). We continue to encourage recorders to survey from National Coastwatch Institution (NCI) stations as

these are located at ideal vantage points with the extra level of safety offered by the friendly NCI volunteers, who continue to support and offer advice to Seaquest volunteers.

As has been the case for several years, St Agnes Head continues to be the most popular survey site for Seaquest surveys with 65 hours of effort. This is a favourite site for Seaquest surveyors due to the central location, easy access and excellent vantage point. This site has hosted 32 separate surveys including Seaquest Sunday surveys, public sea watches, volunteer training and a National Whale and Dolphin Watch surveys. Common dolphin and harbour porpoise are regularly seen in the area, travelling or feeding both inshore and further out. The Southwest resident pod of bottlenose dolphin can be seen passing the site, sometimes within metres of the cliffs as they travel past the headland.

The Rumps was the second most popular site for Seaquest surveys, with 37 hours of effort. This is due to the amazing efforts of a small number of surveyors as well as hosting a Seaquest public watch. Over the years, the Rumps is a key site for harbour porpoise sightings with one of the highest proportions of sighting positive intervals for harbour porpoise in Cornwall. Common dolphins are also a commonly sighted species at this site through Seaquest surveys as well as regular casual sightings being submitted to us. However in 2017, there were more sightings of common dolphin at the Rumps than harbour porpoise.

▼ Photo by Brenda and Adrian Tregunna



Dan Murphy

### Thank you to the Seaquest surveyors for all the survey effort in 2017:

Abby Crosby  
Annabelle Lowe  
Barry Pound  
Chris Weston  
Dan Murphy  
Dave Williams  
Ian Boreham

Kate Williams  
Katie Bellman  
Katie Drake  
Liz Clark  
Mac McKenzie  
Marion McKenzie  
Mike Taylor

Heather Taylor  
Newquay Marine Group  
Pauline McKeogh  
Richard Weeks  
St Agnes MCG  
Terry Carne  
Vic Hall



## Seaquest survey data from 2017

Seaquest Surveys	No. of Surveys	Total Survey Time	Rate of Sightings (%)	No. of species seen	Species
St Agnes Head	32	65:00	40%	6	Bottlenose dolphin, common dolphin, grey seal, harbour porpoise, ocean sunfish, dolphin species
The Rumps, Polzeath	16	37:00	45%	4	Common dolphin, grey seal, harbour porpoise, dolphin species
Towan Headland, Newquay	19	36:00	48%	9	Bottlenose dolphin, common dolphin, Risso's dolphin, grey seal, harbour porpoise, ocean sunfish, minke whale, cetacean species, dolphin species
Lizard Point	8	16:00	70%	3	Grey Seal, cetacean species, dolphin species
Boscastle	5	12:00	17%	3	Bottlenose dolphin, grey seal, harbour porpoise
Godrevy Point, Hayle	5	09:30	56%	2	Bottlenose dolphin, grey seal
St Ives Island	3	08:00	69%	5	Bottlenose dolphin, grey seal, harbour porpoise, barrel jellyfish, dolphin species
Pendennis Point, Falmouth	3	06:30	48%	2	Harbour porpoise, grey seal
Polruan, Fowey	3	04:45	26%	3	Bottlenose dolphin, grey seal, harbour porpoise,
Stepper Point	2	04:30	10%	1	Grey seal

**31** sites were surveyed in 2017, across the whole coast of Cornwall including Seaquest Sunday surveys and public sea watch events. The table above shows the top ten sites by total survey time and the sighting positive intervals as a percentage of the total time for each site. Because of the importance of these sites for grey seals, Lizard Point has been identified as one the locations with reliable sightings, with 70% of surveys being sighting positive, and St Ives Island following closely at 69% and Godrevy Point at 56%. Thank you to the efforts of Seaquest surveyors for dedicating so much time on the cliffs looking for marine mega-fauna. It is important to note that the rate of sightings will be affected by factors such as the number of surveyors present at the time of the survey and the mobility of the species being observed.

This is a brief summary of the data collected by Seaquest volunteers, and this data is available upon request to anyone interested in undertaking more detailed analysis.

**Please email [seaquest@cornwallwildlifetrust.org.uk](mailto:seaquest@cornwallwildlifetrust.org.uk) for more information and to request a copy of Seaquest Southwest data**



## Effort Sightings

There were at least 8 species of marine mega-fauna sighted and positively identified during Seaquest surveys in 2017; barrel jellyfish, bottlenose dolphin, common dolphin, harbour porpoise, Risso's dolphin, grey seal, minke whale, ocean sunfish, and cetacean or dolphin of unknown species.

Grey seals were the most commonly recorded species, followed by harbour porpoise then common dolphin. Grey seals were seen at most survey sites around Cornwall. Most sightings of harbour porpoise were from the North coasts, but other areas of note being Fal Bay/Roseland areas. Common dolphin mostly recorded on the North coast and Mount's Bay areas, and bottlenose dolphin mainly recorded along the North coast.

Common dolphin, grey seal and harbour porpoise were sighted year round in 2017, whereas bottlenose dolphin were not spotted during surveys between February and June. Ocean sunfish were only recorded between July and October, and Risso's dolphin in May and June, following what is expected from the seasonal movements of these species.

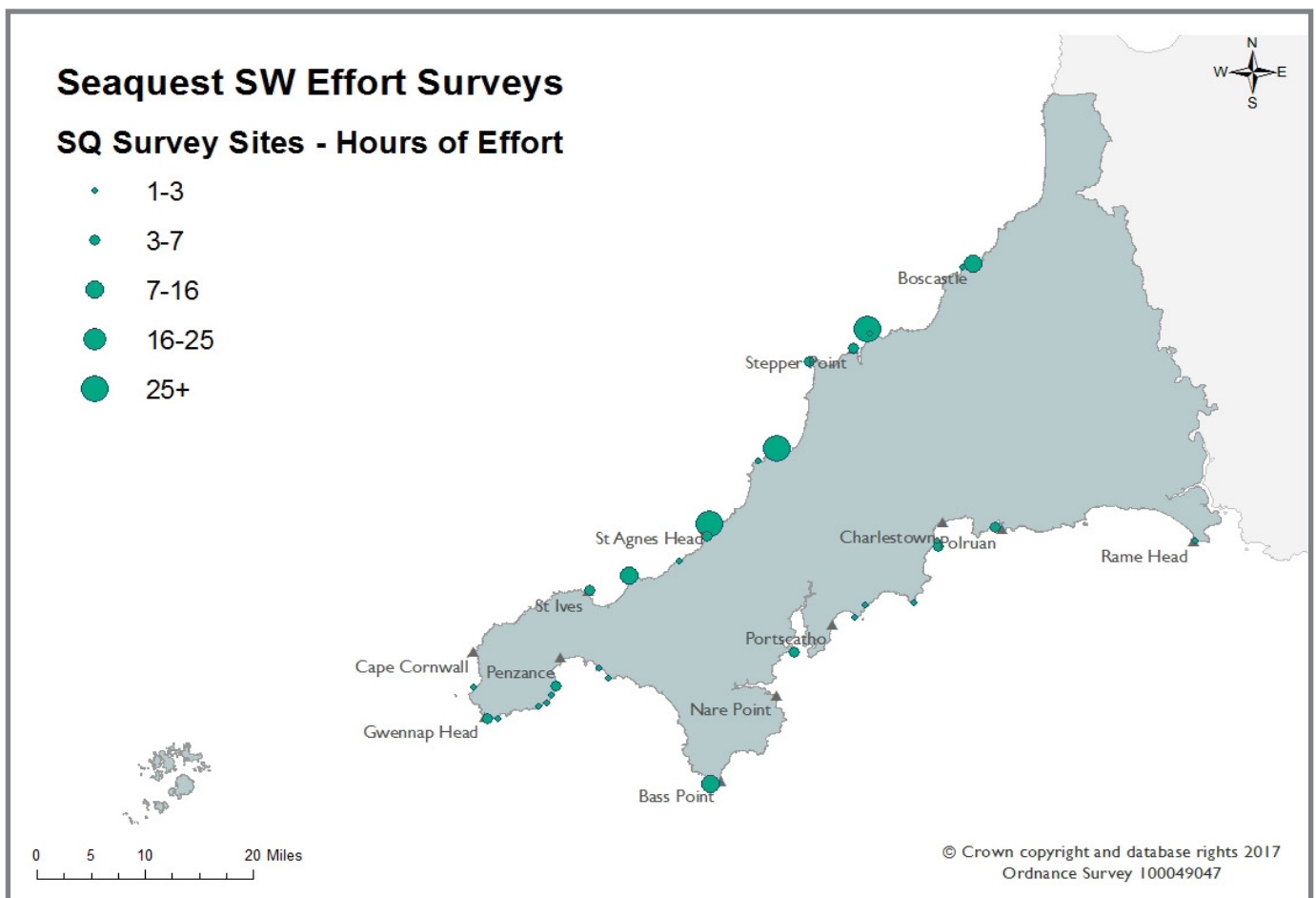
This year there has been a fantastic spread of survey all around the coast, from Boscastle to Rame Head. We aim to continue this spread and build our relationships with the community groups in these areas.

The success of these effort-based surveys has remained fairly constant over the years. These surveys help us monitor marine mega-fauna and play a significant role in the conservation of Cornish mega-fauna.

During 2019 we hope to see more volunteers taking to the cliff tops in order to help build up the picture of when and how these fantastic animals use our coast. So dust off those binoculars and get out onto the cliffs, there's plenty out there to see: you just need a bit of time, your sea watching skills and a splash of good luck!

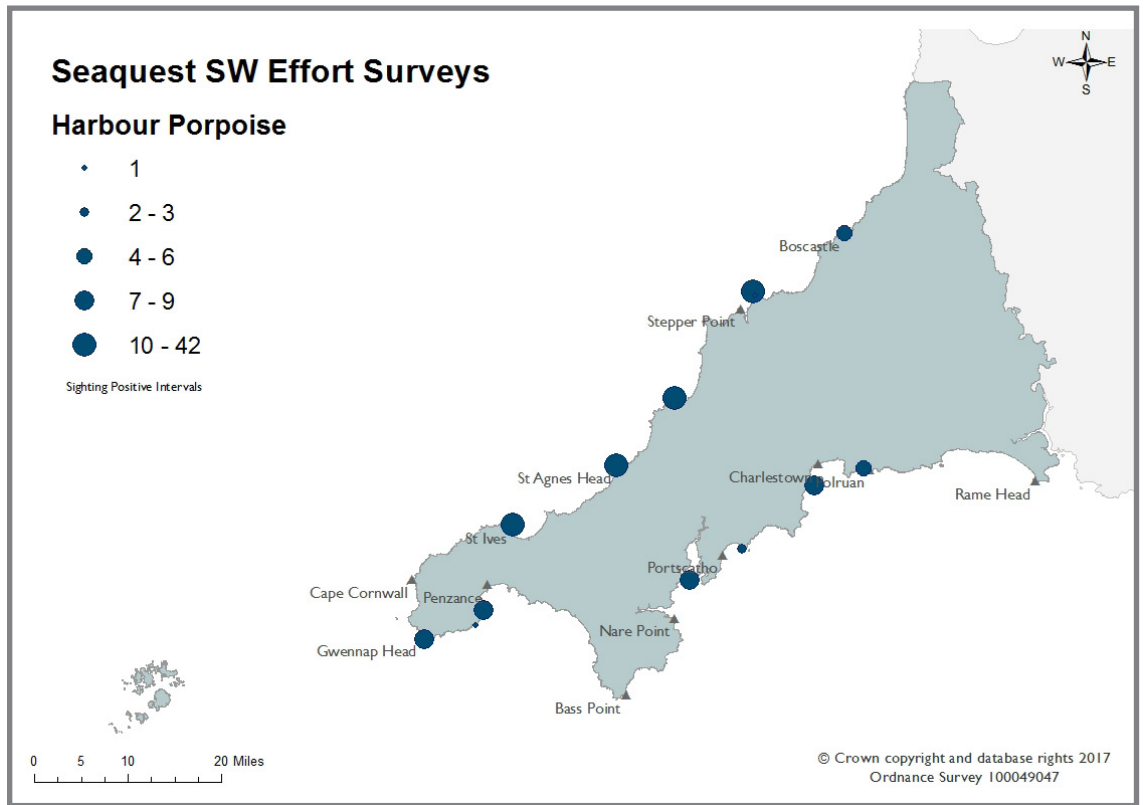


Map: Sightings per hour at Seaquest survey points ▼

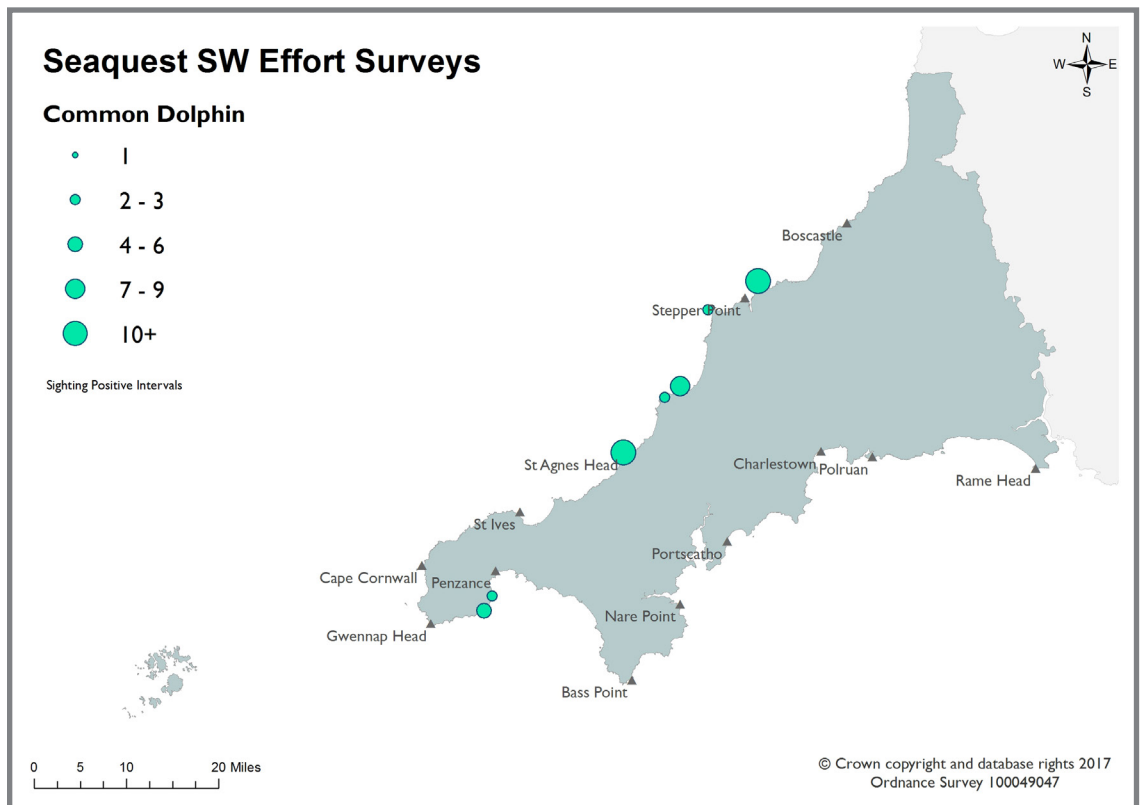




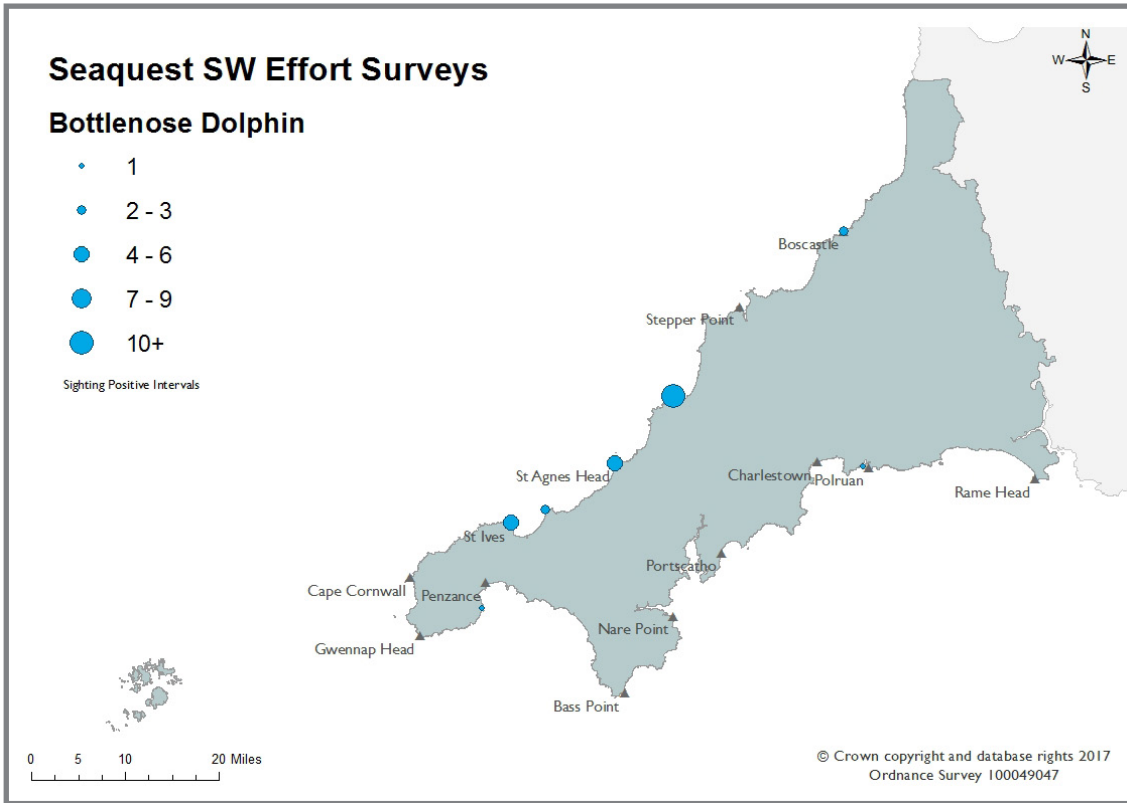
# Sightings Map Harbour Porpoise



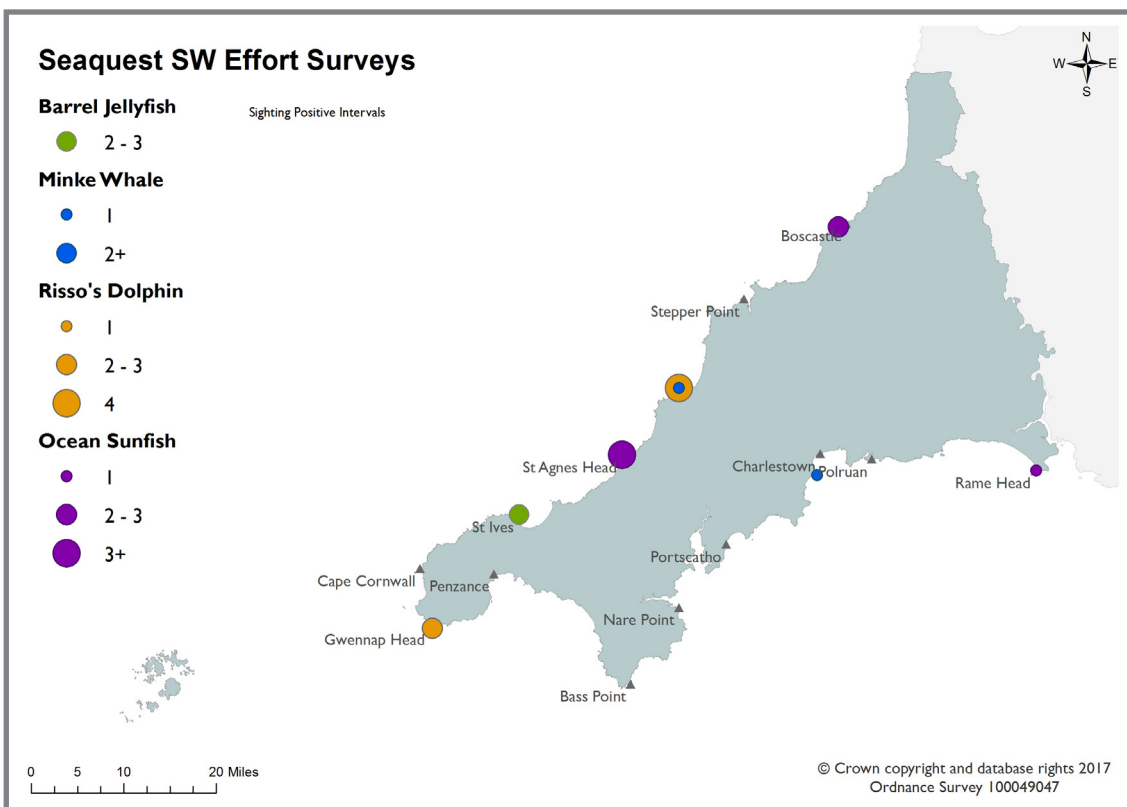
# Sightings Map Common Dolphin







## Sightings Map Bottlenose Dolphin



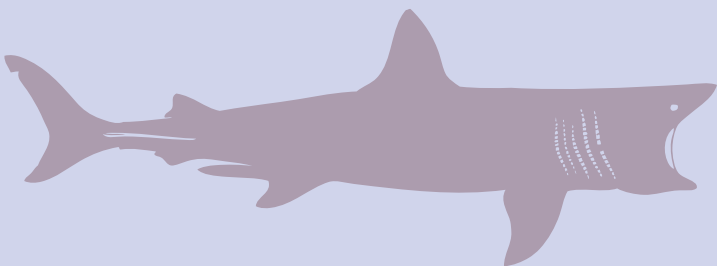
## Sightings Map Other species

# Seaquest Sightings



▲ Bottlenose dolphin by Martin Mitchell

‘Ad-hoc sightings’ are casual records of marine life, reported as-and-when animals are observed to Seaquest by volunteers and members of the public. This is in contrast to ‘effort-based’ data which comes from trained volunteers conducting surveys over a specific time period to actively search for the animals.



**A**d-hoc sightings of marine wildlife are always encouraged, and can be sent to Seaquest Southwest via the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) website at ORKS (Online wildlife Recording for Cornwall and Scilly) [www.ORKS.org.uk](http://www.ORKS.org.uk). Alternatively the information can be emailed to [seaquest@cornwallwildlifetrust.org.uk](mailto:seaquest@cornwallwildlifetrust.org.uk)

Where possible, we ask that photos be included with sightings as they help to confirm species identification.



Seaquest is also very lucky to receive sightings data from local boat operators including **Marine Discovery Penzance, Padstow Sea Safari and Newquay Sea Safaris and Fishing** as well as from our Seaquest volunteers, biological recorders and members of the public.

In 2017, 2,157 reports of marine-mega fauna were submitted to Seaquest from all around the Cornish coastline, including dolphins, whales, basking shark, seals, and sunfish. There has been a slight decrease in the number of sightings reported to us in 2017 compared to 2016, and 100 more than in 2015. This slight decrease from 2016 is due to one of our key partners not being able to share their sightings with us this year. But even taking this into account, 2017 has been a fantastic year for sightings of Cornwall's 'Big Six' (bottlenose dolphin, common dolphin, harbour porpoise, Risso's dolphin, grey seal and minke whale).

Sightings of basking shark remain low, following the trend we've seen over the last 5+ years with only occasionally sightings through May and early June. Other parts of the UK and Ireland have been

experiencing good seasons for basking shark so it is thought that the basking shark are travelling past Cornwall and continuing north for the summer season. This could be part of an inter-annual cycle, or could be linked to the effect of climate change on their favourite prey species; *Calanus* spp. (a tiny shrimp-like plankton).

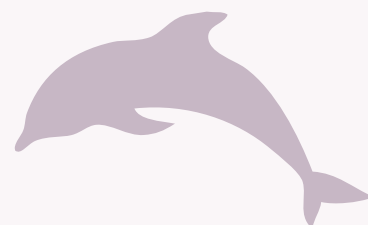
One remarkable series of sightings in 2017 was of the lone male bottlenose dolphin locally known as 'Splashy' or 'Pierre'. Please read the Supporters accounts below for more information about Splashy/Pierre.

In 2017, research coordinated by the SW Bottlenose Dolphin Consortium used photo ID to demonstrate that there is a distinct resident pod of bottlenose dolphin in the Southwest inshore waters. The pod is confirmed to be about 28 individuals. We continue to ask for reports and photos of these dolphins to help with ongoing and future research in this pod, the only resident pod of bottlenose dolphin in England.

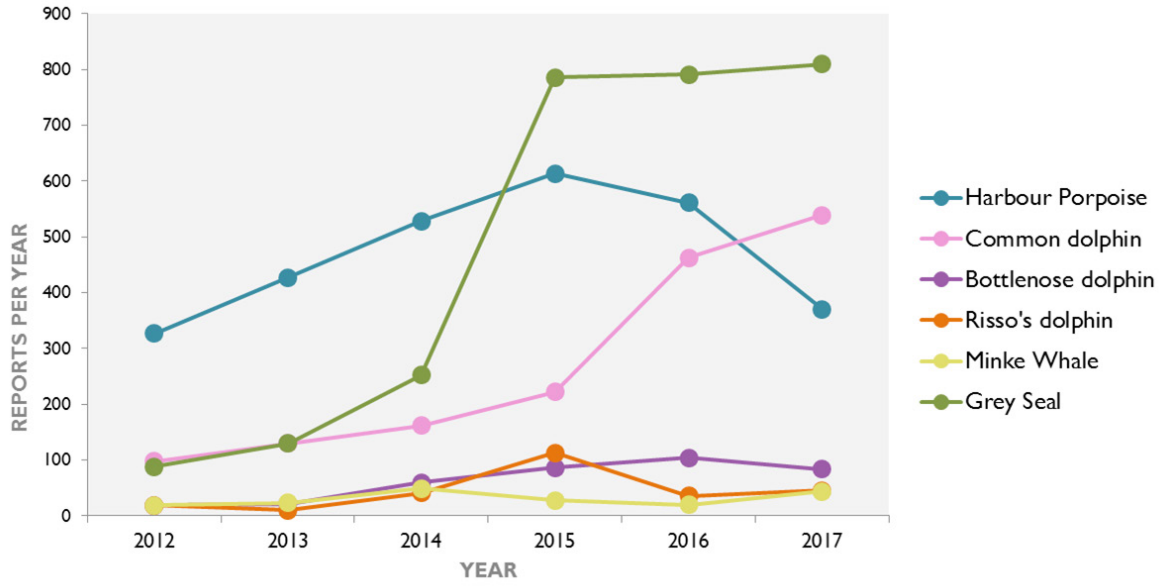
**Table: Numbers of ad-hoc marine sightings reported to Seaquest between 2015 and 2017**

Species	2017	2016	2015
Bottlenose Dolphin	84	104	86
Common Dolphin	539	463	221
Harbour Porpoise	370	561	614
Risso's Dolphin	46	36	113
Minke Whale	44	20	28
Humpback Whale	1	11	6
Grey Seal	810	791	786
Harbour Seal	4	5	2
Basking Shark	17	29	35
Ocean Sunfish	223	165	119
Leatherback Turtle	1	5	1
Blue fin tuna	4	4	11
Other species	14	27	31
<b>Total</b>	<b>2157</b>	<b>2221</b>	<b>2053</b>

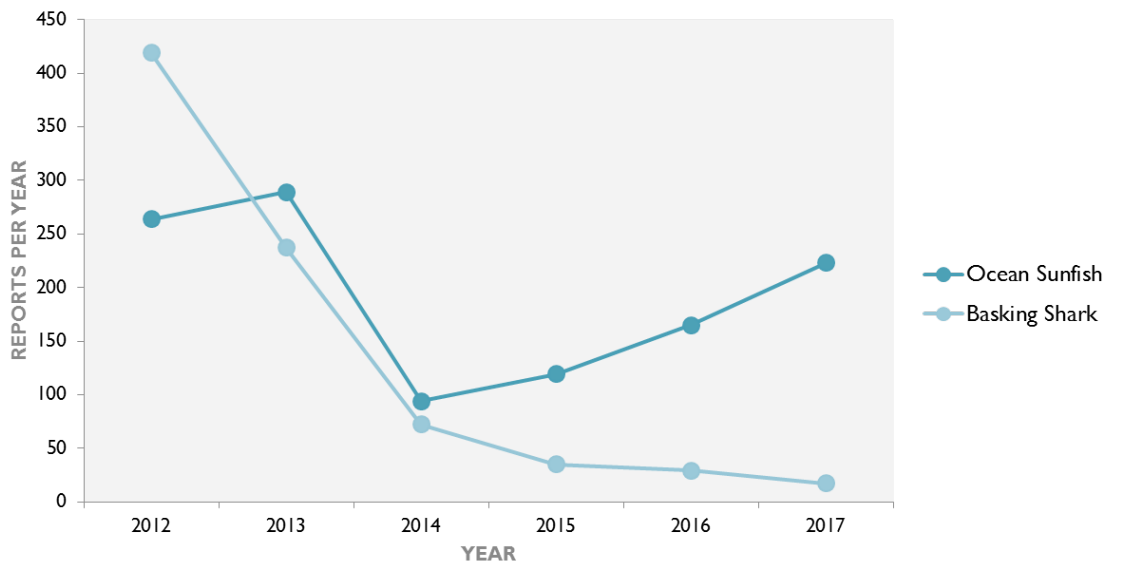
▼ Photo by Abby Crosby



## Reports per year of marine mammals



## Reports per year of bony fish





# Cornwall Seal Group Research Trust

## CSGRT

Cornwall Sea Group Research Trust are the expert on grey seals in Cornwall and beyond. To ensure that we present a current and accurate picture of the grey seals in Cornwall, we've included an update directly from CSGRT.

CSGRT's photo ID work makes the seals in Southwest England some of the most intensively studied grey seals in the world. A total of 24 photo ID reports were compiled by CSGRT in 2017 along with at least seven student dissertations who were supported by CSGRT on seal related projects from Exeter, Falmouth, Plymouth and Portsmouth Universities. 10 north coast systematic marine life and human activity boat surveys were undertaken in 2017 funded by Patagonia (4); Tesco's Bags of Change (3); Sea-Changers (1) and CSGRT (2). 10 systematic Looe Island surveys were also completed funded by participant volunteers.

In 2017 alone, CSGRT received 3945 seal records from 285 different recorders and four systematic organised survey teams across 271 different sites across Devon, Cornwall and the Isles of Scilly making CSGRT the main record holder for seals in Cornwall. This includes detailed data from at least 45 individual systematic repeat surveying citizen scientists.

Our 11th Cornwall seal census was completed in April bringing the mean number of seals observed on these surveys to 282 seals with 89% of seals hauled out at 18 of the 32 sites where seals were seen and most seals (71%) were seen at just three sites of the 44 sites surveyed. Where aged and sexed, 72% of seals observed were adults and 48% of these were males with 35 individual seals being photo identified (including one common seal).

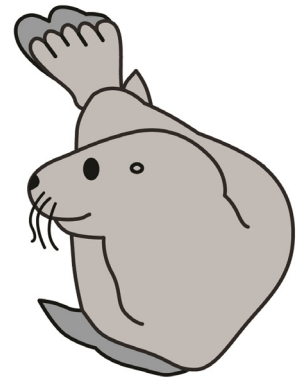
## Research outcomes

Common seals were recorded 38 times with 11 different individuals sighted at seven different locations. Two common seals were repeatedly recorded on the south Cornish coast.

Seal data collected was used to inform advice input to at least 14 different organisations - globally (World Animal Protection, the Global Ghost Gear Initiative, the Pinniped Entanglement Group) and in the UK (ABPmer, Cornwall Council, Cornwall and Isles of Scilly Local Nature Partnership, DEFRA, Marine Management Organisation, National Trust, Natural England, RSPB, Surfers Against Sewage, Wave Hub and Whale and Dolphin Conservation). Presentations were made at seven conferences (AONB, CWT Sequest, CWT MSN Forum, Marine Ecology Conservation Network, Society of Marine Mammology (Halifax Nova Scotia) and SW Marine Ecosystems).

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Cornwall  
**SEAL**  
Group  
Research  
Trust



# Public Engagement

Increasing public participation and educating a wider audience in the importance of our marine environment is key to achieving the aims of the Seaquest project. During 2017 Seaquest Southwest organised a whole host of public events, evening talks, boat trips and social events to engage with people of all ages and abilities.

Seaquest Southwest relies upon public participation to encouraging new volunteers, to submit sightings, and to spread awareness of the project. Public events played a big part in Seaquest in 2017 and as a result the project now has a huge number of new participants for next year.

## Public Sea Watches

We ran 24 public sea watches in 2017. These attracted lots of volunteers and provided a chance to engage members of the public with the work of the Seaquest Southwest project.

We engaged with an amazing 356 people at these events and travelled throughout Cornwall to both NCI stations and key cliff-top vantage points.

## Seaquest Sundays

The first Sunday of each month is 'Seaquest Sunday' when we ask our trained volunteers and linked local marine groups from the Your Shore Network to run a dedicated Seaquest watch from their local or favourite watch point.



## The Seaquest Lectures

Throughout the winter, when the weather is rough and the days are shorter, Seaquest ran a series of evening lectures in 2017.

- Blue Fin Tuna by Tom Horton

- Seaquest Social and Talk

- Basking Shark Tail by Colin Speedie

- Sea Watch Foundation Talk and Training

We engaged with 245 people during these Seaquest Lecture events





▲ Seaquest at Towan Headland

## The Annual Seaquest Marine Recorders Conference

The conference took place in November this year, and was hosted by The Rockpool, Gwithian. We had a full house with over 90 people attending the evening. The conference offered an evening of talks from Seaquest on recent sightings, CSGRT, Natural England, The Cornwall Marine and Coastal Code Group (CMCCG), and special guest Paul Naylor on the amazing lives of common marine animals.

## Seaquest Training

We ran a number of Seaquest Training sessions to recruit new volunteers onto the project. During the 4 training sessions, 71 new volunteers were trained up as Seaquesters.

One training session was delivered as part of the Your Shore Beach Rangers project.

**Cornwall Wildlife Trust**  
Protecting Cornwall's wildlife and wild places

**CORNWALL COLLEGE**

**NATIONAL LOTTERY FUNDED**

**OUR BRIGHT FUTURE**



## Special Thanks

Seaquest Southwest has to say a special big thank you to all of the people and organisations that have contributed to the project in 2017. Without people submitting data, hosting events, and supporting the project, Seaquest couldn't possibly do all the work it does. Aside from our superb volunteers, Seaquest would like to say a huge thank you to the following:

- Newquay Sea Safaris and Fishing, Padstow Sealife Safari and Marine Discovery Penzance for sharing their ad hoc sightings data with us.
- The Rockpool in Gwithian for hosting our annual marine recorders conference.
- St Agnes Marine Conservation, National Trust Wildlife Watch Point and Newquay Marine Group for coordinating surveys on their patch
- Cornwall Seal Group and the Newquay Marine Group, St Agnes Marine Conservation and Polzeath Marine Conservation Group for boat survey sightings.
- NCI Coastwatch Stations for sightings data and support and a friendly face during our public events.
- ORCA and Seawatch Foundation for partnership sharing of data.
- Anyone and everyone who has sent Seaquest their sightings in 2017!

**Thank you!**



# Spotlight on Supporters



## Marine Discovery Penzance

2017 was a remarkable year for wildlife sightings in Mount's Bay, particularly cetaceans. After a settled start to the season in April, ten days in June and the August bank holiday weekend, the weather was notably awful. Low pressure after low pressure dominated, with associated challenging southwesterly sea conditions. However this brought an abundance of cetaceans to our shores. Common dolphin numbers were very high – we recorded them most days (and on most trips) between July and October, as well as harbour porpoises. At the start of August a period of feeding started which involved thousands of Manx shearwaters, sooty, Great and Cory's shearwaters, minke whales and fin whales, which was very exciting. We recorded more rorqual whales than in any previous season. Bluefin tuna were also present, creating big feeding frenzies with associated gannet activity. In September and October we witnessed hundreds of thousands of Portuguese Men of War inshore – they even flew over the prom during Hurricane Ophelia. Bottlenose dolphin encounters were down on previous years, but at the end of the season we very regularly encountered the lone male "Pierre" AKA "Splashy". Grey seal numbers hauled out at St Clement's Island continue to increase and it seems this site is increasing in importance as a "shelter" site for grey seals around the Land's End area.



## Padstow Sealife Safaris

2017 saw the first confirmed sightings of minke whale for Padstow Sealife Safaris with 5 sightings throughout the month of April. Around this same time, we also had a handful of sightings of the "ghost porpoise", the leucistic harbour porpoise that occasionally gets spotted around Cornwall, even getting some photos by crew and passengers. We had very high numbers of common dolphin sightings throughout the season, with April being particularly high, seeing pods of commons daily. We had very few bottlenose dolphin sightings and none of the inshore pod, only four sightings of "Splashy" the lone bottlenose dolphin, spotted around the Rumps and the mouth of the Camel Estuary in the early summer (June/July). On one of those sightings, he was spotted surfacing in amongst a pod of common dolphins feeding at the end of the river which prompted the commons to race out of the area rapidly upon his arrival. July and August saw high numbers of ocean sunfish spotted with regular sightings on an almost daily basis. The end of October provided daily sightings of harbour porpoises around the Rumps and Stepper Point. Usually sightings of porpoises are infrequent for us but the arrival of the herring to the mouth of the Camel gave us some fabulous views of them. One last memorable sighting was early November where we were surprised and delighted at the sight of a thresher shark breaching vertically out of the water – something we had never seen before and a truly spectacular sight!

## To all our Seaquest Volunteers!!

Thank you to all the Seaquest volunteers who got involved and supported the project in 2017! Your dedication and time at events and surveys and enthusiasm are what make this project a success. We look forward to working with you in the years to come!!

A massive thank you to Katie Bellman who has been volunteer coordinator for Seaquest Southwest for almost 2 years. She has been a fantastic member of the team and has been invaluable to the success of Seaquest - organising and leading watches, events and talks over 2016 and 2017, and data analysis for this report!

**Thank you!**