

Somerset and Exmoor Sea Watch

2020 Report

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Somerset and Exmoor Sea Watch continued into 2020 but unfortunately due to the Covid-19 pandemic six of the joint Sea Watch Foundation and Somerset Wildlife Trust survey events were cancelled along with the planned face-to-face training days.

Despite the disruption we had a good year of sightings; increasing from 67 in 2019 to 79 in 2020, and although we aimed to complete more effort surveys, 28 were completed, just one less than in 2019. In addition we had a significantly higher number of people recording casual sightings from just 5 in 2019 to 28 in 2020, which is most likely attributed to the increase in members of the [Somerset & Exmoor Marine Mammal Sightings](#) Facebook sighting group.

In July, we were able to continue with an online training day in time for the Sea Watch Foundation's National Whale and Dolphin Watch (NWDW) annual event. Unfortunately this was the only training day completed for 2020 and moving forward we still would like to aim to provide more training to increase the number of regular observers, which are currently 5.

Despite the restrictions in 2020 a total of 10 different locations were surveyed from, with seven new locations not previously surveyed before for Somerset and Exmoor Sea Watch. During the four joint Somerset Wildlife Trust events that were able to continue, just one sighting was recorded at Battery Point, Portishead at the beginning of March. A grey seal was spotted repeatedly popping up in the area for 45 minutes before eventually swimming off. NWDW surveys were more successful. Three regular observers were able to complete 9 effort surveys at 7 different locations for NWDW this year with sightings of 15 harbour porpoise and a common seal at Hurlstone Point.

Both casual and effort sightings continued to be recorded throughout the year from the sightings hotspot at Hurlstone Point, with 17 effort surveys completed here throughout the year. Special thanks to Peter Burns, Lucy Wood and Jillie Leonard for continuing to regularly survey at Hurlstone point and helping to monitor the harbour porpoise population at this location.

The first recorded sightings of harbour porpoise were observed at Ladye Bay and Salthouse Bay, by the marine lake in Clevedon as well as from Watchet harbour. Other notable sightings throughout 2020 included 2 harbour porpoise sighted in the River Avon by Hotwells in Bristol! They were spotted at Sea Mills and Shirehampton too as they headed back into the Severn estuary. In November, a young male grey seal, named by the locals as Jeff, decided to rest on the slipway of Minehead harbour. We were advised from BDMLR and the Cornwall Seal Group that the pup was in good condition and needed to be left to rest, asking anyone to keep their distance of at least 100m. The pup was in its post weaning dispersal phase and although fully functioning it had not learnt to fear humans or find suitable safe places to visit yet. After a few days Jeff moved on and his photos were placed in the Cornwall Seal Groups ID catalogue so he may be recognised again elsewhere!

Thank you so much to everyone who has submitted a sighting and volunteered their time to survey in 2020. I am looking forward to continuing to work in partnership with the Somerset Wildlife Trust as part of their Somerset's Brilliant Coast project in 2021 and thank them for all their support.

2020 sightings data has been included in this report from the counties of Somerset and North Somerset and also from the Exmoor coast which includes Somerset and North Devon. All these locations will be referred to as 'region'.

Overview 2020

| | | |
|--|---------------------------------------|--|
| 79 Sightings reported | 2 Cetacean species Reported | 3 Marine mega-fauna species reported |
| 28 Effort surveys completed | 56.25 Effort survey hours | 1 Training day |
| 32 People submitted sightings and/or effort data | 10 Effort survey locations | 9 NWDW surveys |

Effort Surveys

A better understanding of marine mammals is achieved by collecting robust data through effort based surveys. These surveys are carried out by trained regular observers following Sea Watch Foundation survey protocol. They are timed surveys; for a minimum of two hours, where environmental data as well as sightings data is recorded every survey interval of 15 minutes. Even when no species are seen, it is important to have a measure of effort in order to interpret sightings more effectively.

The information collected not only gives us a snap shot of what is out there but can inform us of any areas of the coast which are important for their survival such as feeding, resting or calving grounds. It can also provide an insight into their seasonal and annual changes in abundance and distribution, which can all contribute towards effective protection and conservation for these species.

In 2020 a total of 28 effort surveys were completed by five regular observers, consisting of 56.25 hours of effort. Surveys were completed at 10 different locations; as shown in Figure 1. There were 3 different species sighted during the effort surveys: harbour porpoise, grey seal and common seal, with harbour porpoise being the most abundant.

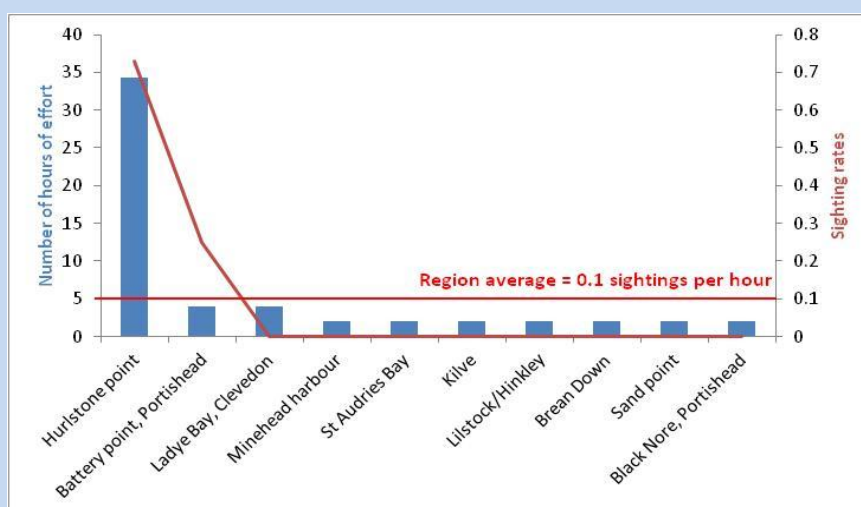


Figure 1. Number of hours of effort and sighting rates at each effort survey location

The regions average sightings rate per hour is 0.1 i.e. 1 sighting for every 10 hours of survey (Figure 1). However this is not an accurate representation of abundance of marine mammals in this region as at most locations only 2 hours were spent surveying compared to 34.25 hours at Hurlstone Point. All the sightings, except one were also recorded at Hurlstone Point.

| Species | Average group size | Number of sightings | Sightings rate | Number of individuals |
|------------------|--------------------|---------------------|----------------|-----------------------|
| Harbour porpoise | 2 | 22 | 0.4 | 46 |
| Grey seal | 1 | 3 | 0.05 | 3 |
| Common seal | 1 | 1 | 0.02 | 1 |

Table 1. Quantitative description of effort sightings per species during 2020

Harbour porpoise were the most commonly sighted species, with 22 sightings recorded from June to December (Figure 2). February 2020 was the wettest on record which meant there were few opportunities to survey in optimal conditions and the scheduled Somerset Wildlife Trust survey event was cancelled. The Covid-19 restrictions meant that no or very few effort surveys were able to be completed in April and May, but once restrictions were eased during the summer months regular observers were able to complete surveys again. Table 1 shows the sightings rate for harbour porpoise was 0.4 for the whole year i.e. 4 harbour porpoise sightings every 10 hours of effort, an increase from 0.29 in 2019. There were low numbers of grey seals recorded throughout the year but they were sighted at both Hurlstone Point and Battery Point.

Figure 2 shows the highest sightings of harbour porpoise were in June and July, with a sightings rate of 0.7 i.e. for every 10 hours surveyed there were 7 sightings of harbour porpoise. There were lower sightings rates in August of 0.1 despite higher effort compared to June and compared to a sightings rate of 0.9 for August in 2019. However the weather conditions were more unsettled due to two consecutive storms; storm Ellen and storm Francis in August 2020. The highest numbers of casual sightings of harbour porpoise were in June

and July also (Figure 5) and 65% of casual harbour porpoise sightings were from Hurlstone point during these months.

Seasonality comparisons need to take into account weather conditions and surveyor bias to survey during summer months. However, due to the Covid-19 restrictions throughout the year seasonality differences for 2020 sightings are also biased towards when travel restrictions were eased from 1st June which allowed you to travel to outdoor spaces no matter how far from your home. In addition NWDW took place at the end of July resulting in more effort surveys being completed.

Hurlstone Point consistently presents as an important area for harbour porpoise. In the summer harbour porpoise mother and calf pairs are recorded, with 10 pairs sighted in 2020 suggesting it is of special importance as a calving and nursing ground. Sightings are, however recorded all year round; in 2019 the highest number of casual sightings was in January with the most recorded behaviour associated with feeding.

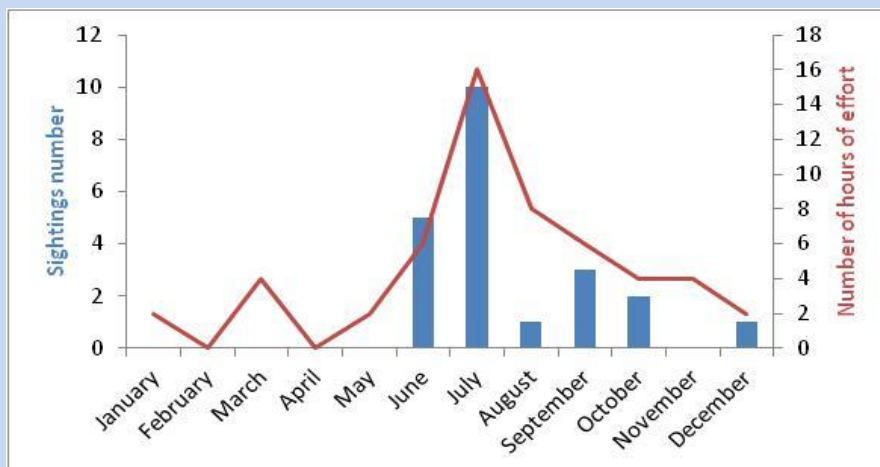


Figure 2. Seasonality of harbour porpoise effort sightings numbers and number of effort surveys per month in the project region

Despite completing one less effort survey than in 2019, harbour porpoise sightings have increased from 17 in 2019 to 22 in 2020 (Figure 3) and although sightings have fluctuated over the past 7 years, so have the number of effort surveys. Therefore it is important to maintain a high number of effort surveys,

as well as the same number of hours each month at every survey site to determine more accurate seasonality comparisons and abundance estimates.

The joint events with Somerset Wildlife Trust in 2020 have provided a great baseline for volunteer participation (Figure 4) and were a great opportunity to try out new survey locations. Hopefully we shall see an increase in volunteers as well as sightings as we continue this project in 2021.

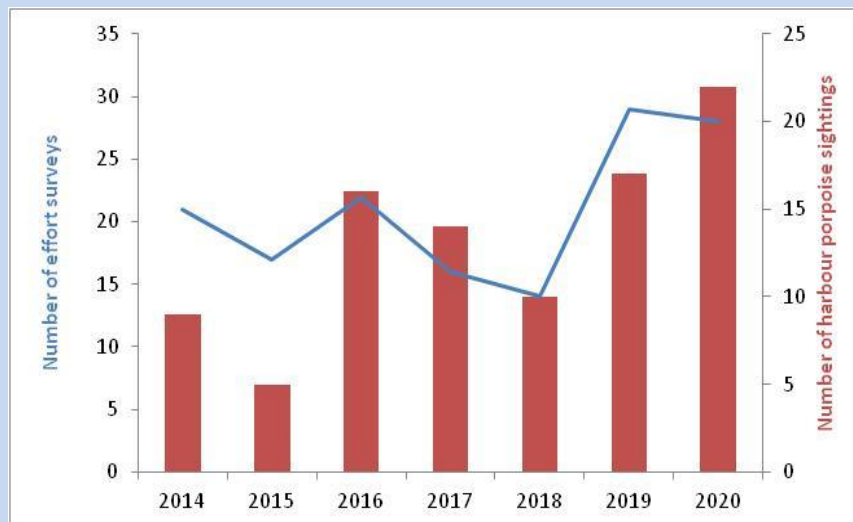


Figure 3. Number of harbour porpoise sightings and effort surveys from 2014 to 2020.

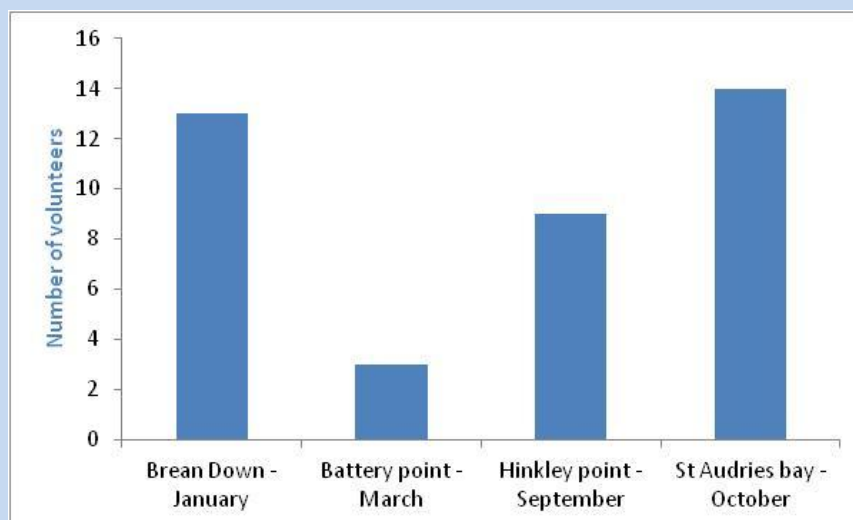


Figure 4. Number of volunteer participants in joint Somerset Wildlife Trust survey events

Casual Sightings

Casual sightings are those as-and-when sightings of animals when volunteers and members of the public are out and about and not actively searching for marine wildlife within a set timeframe.

A total of 53 sightings of marine mammals were recorded in 2020, consisting of 5 different species; harbour porpoise, grey seal, common seal, common dolphin and sunfish. There were also two sighting reports of unidentified cetacean species, one in Porlock Bay and one from the RNLI station in Minehead.

| Species | 2018 | 2019 | 2020 |
|-------------------------------|------|------|------|
| Harbour porpoise | 34 | 41 | 37 |
| Grey seal | 7 | 4 | 5 |
| Bottlenose dolphin | 2 | 0 | 0 |
| Common dolphin | 2 | 0 | 1 |
| Unidentified cetacean species | 0 | 2 | 2 |
| Common seal | 0 | 0 | 2 |
| Sunfish | 0 | 0 | 2 |
| Unidentified seal species | 0 | 0 | 4 |

Table 2. Number of casual marine sightings between 2018 and 2020

Overall in 2020 there was an increase in casual sightings recorded and a significant increase in casual recorders from 5 people in 2019 to 28 people in 2020 from varied locations across the projects region. There were a slightly lower number of harbour porpoise casual sightings in 2020 compared to 2019 (Table 2) which could be attributed to the Covid-19 lockdown restrictions. However, this is not a concern as effort surveys show an increase in sightings, albeit at one location. In addition casual and effort sightings combined have steadily increased every year since 2017 (Figure 6.). 20

Casual sightings were recorded from a total of 21 locations across the project region highlighting the importance of casual data in confirming presence of species in certain areas. The most sightings of harbour porpoise were in June and July (Figure 5), with 65% of these sightings recorded from Hurlstone point. Locations of other sightings can be seen in Figures 8 and 9. Higher sightings

rates in summer 2020 most likely reflect favourable weather conditions and the fact that the Covid-19 restrictions were eased at this time.

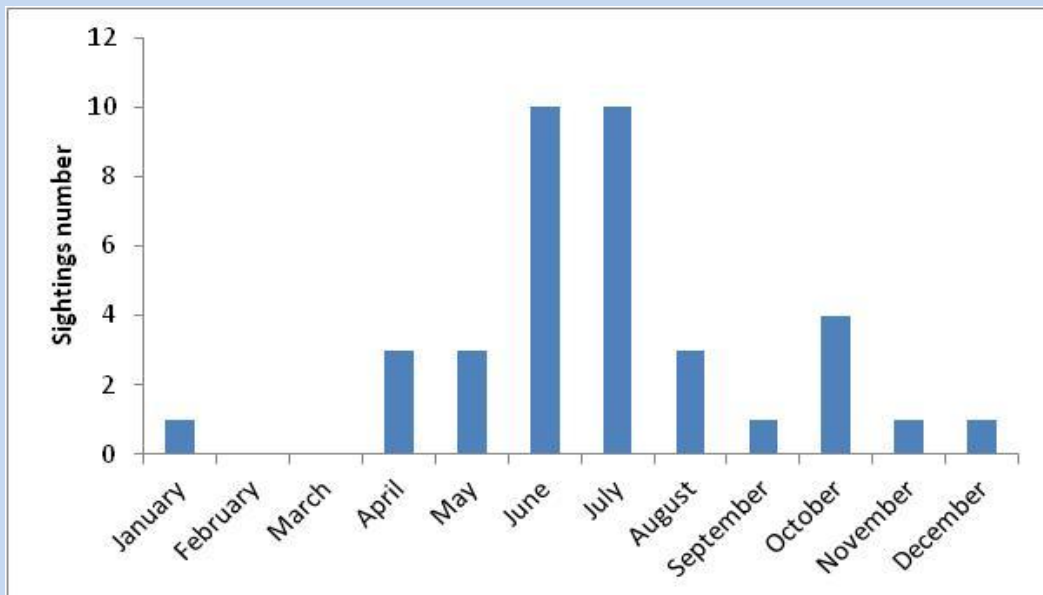


Figure 5. Seasonality of harbour porpoise casual sightings

There was not a significant increase in harbour porpoise sightings in 2019 to 2020, however there is still a steady increase since 2017 (Figure 6). There is not a great difference in Grey seal numbers from year to year. Four sightings in 2020 were recorded as seals, unconfirmed as either a grey or common seal so there are no concerns of any negative trends since 2014.

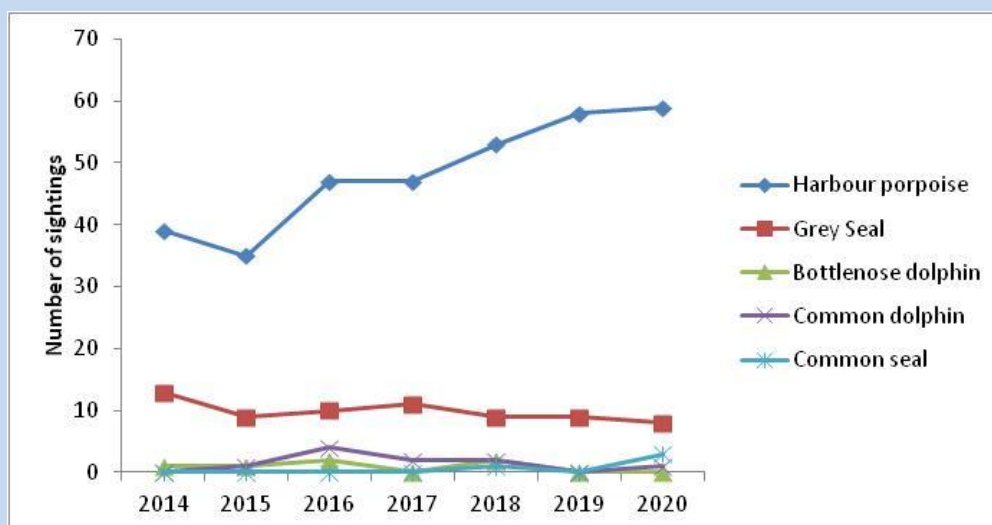


Figure 6. Marine mammal casual and effort sightings numbers

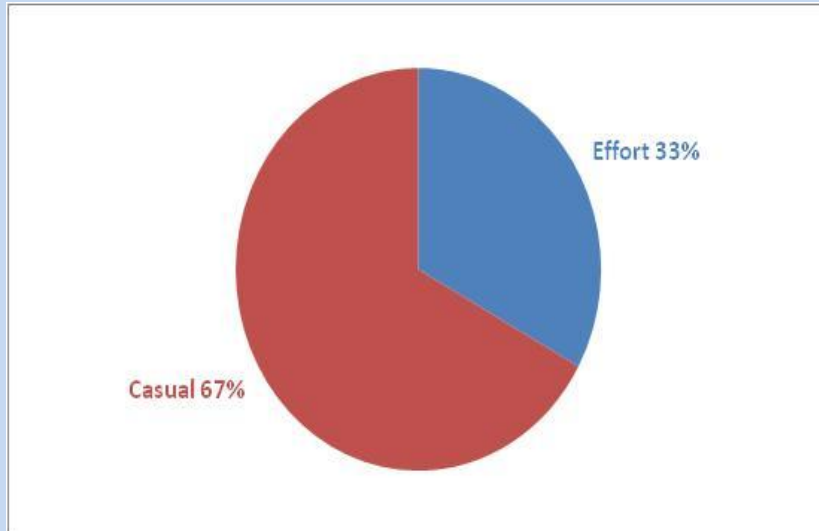


Figure 7. Proportion of effort related sightings (33%) and casual sightings (72%) (total number=79) recorded during 2020

The Sea Watch Foundation have developed a [Sea Watcher app](#) with species identification and a 'Walking Survey' feature which casual recorders can use to record their walks along the coast and easily record any sightings they have. This will be a great tool to improve the accuracy of casual sightings. The app also can be used for 'Fixed Point Surveys' (timed effort surveys) and sea surveys, ensuring all the relevant data is recorded easily and effectively.





Figure 8. Map of casual sighting locations in North Somerset and Bristol



Figure 9. Map of casual sighting locations in Somerset and Exmoor

Vision for 2021 and beyond

Unfortunately there is uncertainty moving into 2021 as to how the Covid-19 restrictions will impact on volunteer survey events and training days. However, moving forward we still aim to increase the number of regular observer volunteers contributing effort data, which currently is 5 volunteers. This will be achieved by providing more online training opportunities and organising face-to-face training days when restrictions are eased, at least 4 times throughout the year. In addition, we aim to continue monthly public survey events at different locations throughout 2021 when possible and 2020 has set a baseline for volunteer participation (Figure 4). This will provide opportunities for volunteers to practice their survey skills, and also ensure we are covering the whole of the region for volunteers to have access to sites within their local area. This is key for this region because only 33% of sightings are from effort surveys (Figure 7.).

Secondly we want to ensure there continues to be several different locations used to provide effort survey data; despite all the disruptions we were able to complete survey events at 4 sites in 2020 as well as 6 more locations for NWDW. For 2021 we aim to achieve this by including a few synchronised survey events where trained volunteers will survey independently at different locations along the project regions coastline at the same time on the same day. Before these events we will provide a comprehensive training opportunity so that volunteers are more confident with completing a survey independently. Unfortunately the regular observer at Lee Bay moved away from the area so we did not receive any effort data from this area. It would be good to extend these synchronised survey events into the North Devon area of Exmoor as well as Somerset and North Somerset. The synchronised survey events will enable it to be possible to draw more general long-term trends in abundance and distribution of a species as well as any status changes.

Thirdly we aim to maintain the number of effort surveys recorded at Hurlstone Point, which was a total of 17 surveys in 2020. Both casual and effort sightings have predominately been recorded from Hurlstone Point and it is here where

the most species have been sighted. Hurlstone Point consistently presents as an important area for harbour porpoise all year round, with the most common behaviour observed associated with feeding. Also mother and calf pairs have been recorded at Hurlstone point during the summer, with a total of 10 of these sightings in 2020, indicating an importance of this area for calving and nursing grounds.

Lastly we will aim to publish a 2021 report by the end of February 2022 and disseminate the findings to as many relevant organisations as possible so that this can be used by the wider scientific community and ensure it is accessible to the general public.



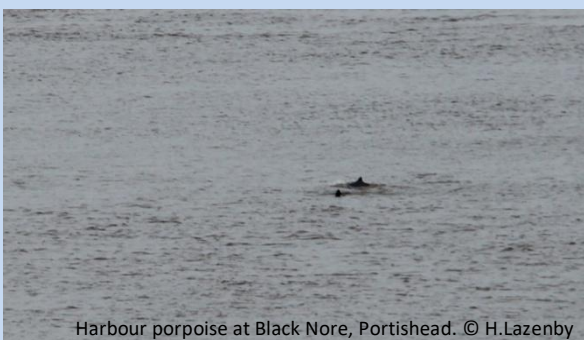
Ladye Bay survey with rainbow over Clevedon pier © V.Lloyd



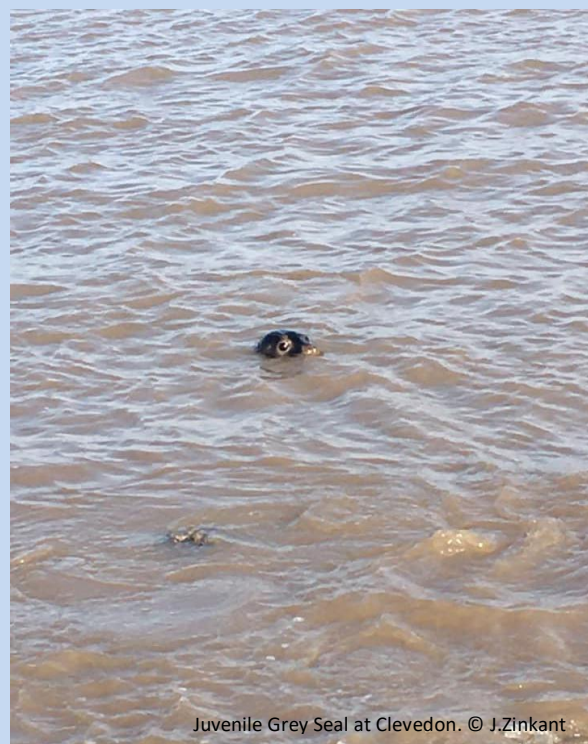
Harbour porpoise at Hurlstone Point © B.Gibbs



Sunfish at Minehead harbour. © D.Roberts



Harbour porpoise at Black Nore, Portishead. © H.Lazenby



Juvenile Grey Seal at Clevedon. © J.Zinkant