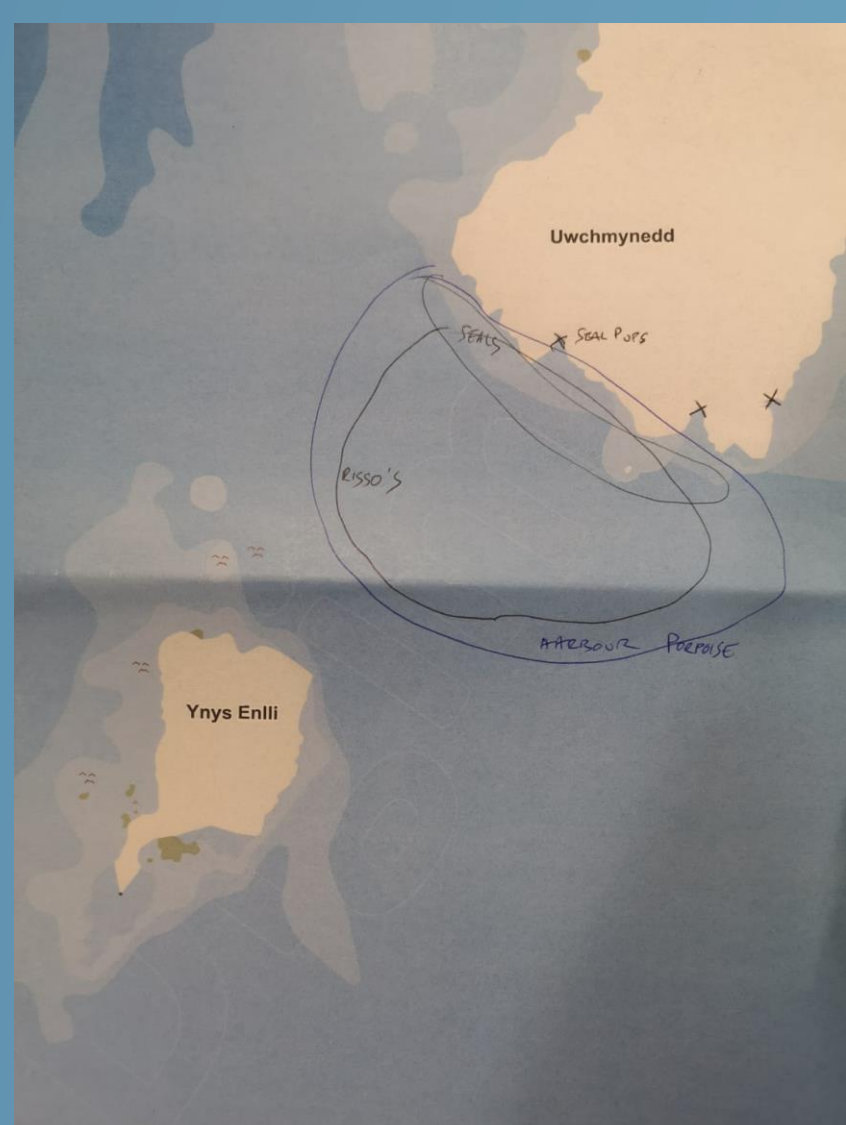


# SEACAMS: Can citizen science and local knowledge provide robust Evidence in consenting marine developments?

**AIMS:** To compare traditional surveys and novel approaches to data collection on marine mammals and their value to the consenting process

**RATIONALE:** Knowledge gaps in our understanding of how marine mammals will interact with underwater energy devices has led to delays in consenting marine renewable energy developments. Traditional approaches to marine mammal surveys may not always be suited to answer these key questions. Alternative methods to data collection may offer further insight into the fine scale use of an area by marine mammals. This project focuses on Bardsey Sound as a case study to explore novel approaches to data collection.

## Local expert questionnaires



**Part A Background information**

1. What is the main activity you do in and around Ynys Enlli that means you see marine mammals?

Commercial fishing     Boat operator     Walking on the coast path  
 Recreational fishing     Marine mammal surveys     Kayaking  
 Scientific research     Sailing  
 Other.....

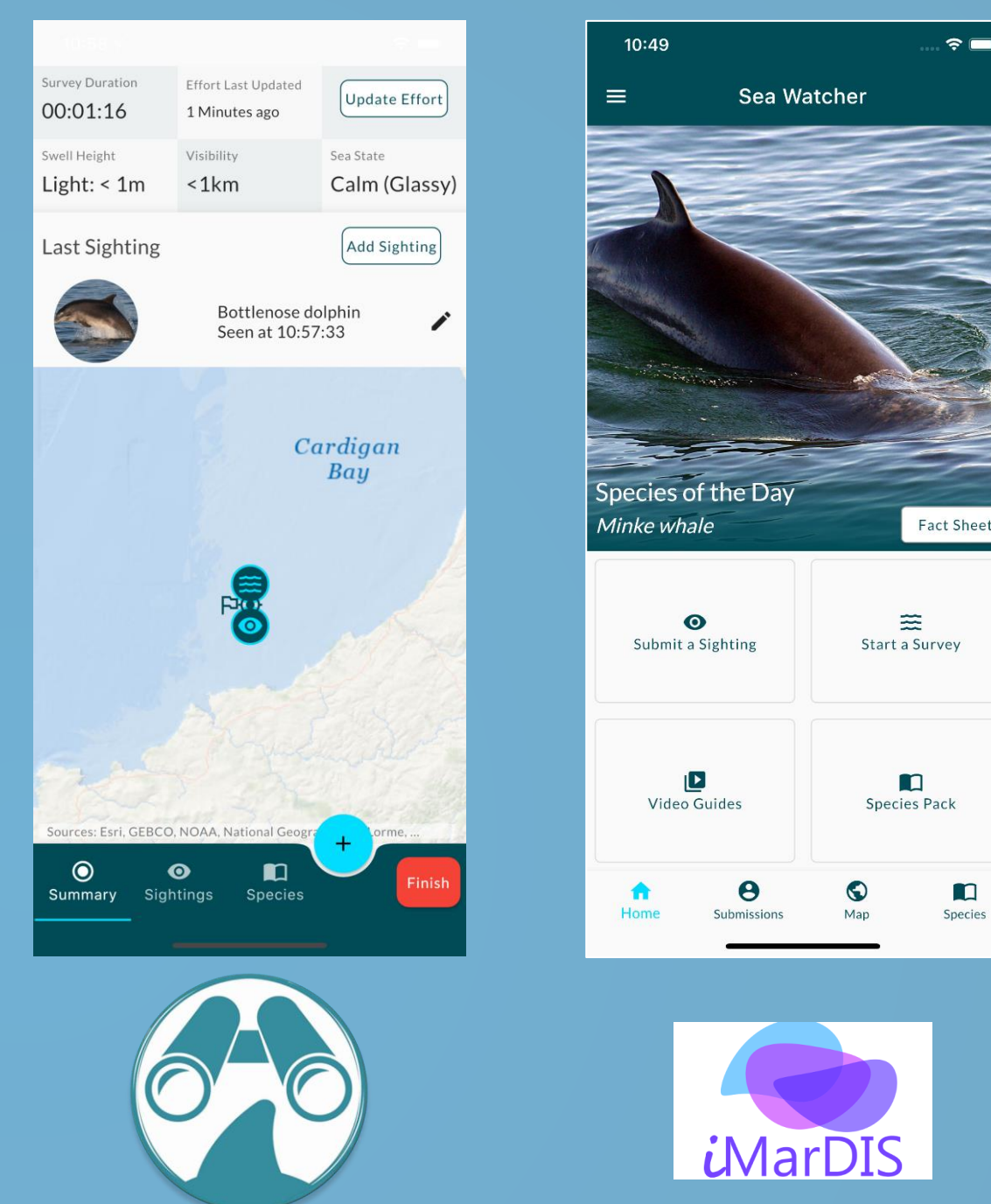
2. Which months of the year are you undertaking this activity?

January     April     July     October  
 February     May     August     November  
 March     June     September     December

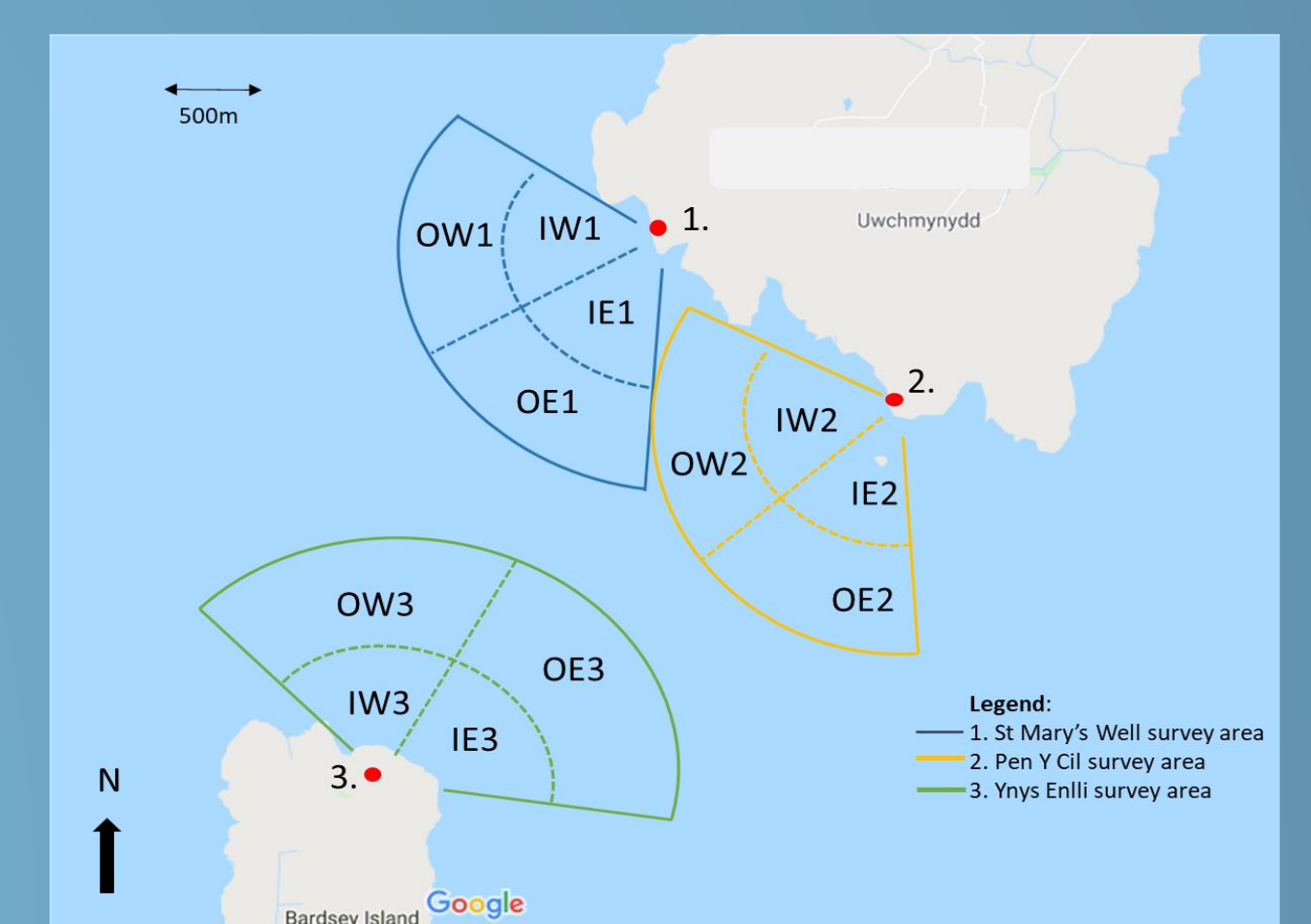
3. How often do you undertake this activity?

Daily  
 Weekly  
 Twice a month  
 Once a month  
 Less than once a month

## Sea Watcher app



## Vantage point surveys



## METHODS:

Data collection on marine mammals sighted in Bardsey Sound was approached using three methods: vantage point surveys; citizen science input via the Sea Watcher app and local expert questionnaire surveys. The data is currently being explored and initial analysis shows some interesting comparisons between the different approaches to data collection. Over the next few months, we will be able to assess how robust citizen science and social science approaches may be for consenting bodies in the context of marine renewable energy developments.

## OUTPUTS:

The development of the Sea Watcher app has proved a huge success with 1000's of sightings being recorded over 12 months, which will continue to provide a valuable data set to the research community. The outputs from this project will include analysis of all data sets, a final report as well as recommendations for marine mammal survey for consenting purposes.

