

Fish species and quotas

What species are being reported and why?

West of Scotland cod, whiting and spurdog are currently being reported. This is because these species currently have scientific advice for zero catches in the west of Scotland. They are unavoidably caught in the mixed demersal fishery along with other species such as haddock and anglerfish.

How are fish quotas set?

Advice on how much of a given species should be caught is provided each year following scientific assessments of fish stocks by the International Council for the Exploration of the Seas. If stocks are perceived to be in very bad condition, then ICES might recommend a zero catch for a given stock. There are currently two species in the west of Scotland mixed fishery with zero catch advice, cod and whiting. These two stocks are currently deemed to be below safe biological limits.

How do the alerts work and what information do they contain?

How does the alert system work?

Alerts are generated automatically when the bycatch for a given haul is above an agreed threshold level. An automatic report is generated and sent to all vessels participating in the program. The alert contains details of where the catch was located, the date and time, and the total catch of the species that triggered the alert. This will be available to view in the alert section of the maps.

How do I read the information contained in the alerts?

Maps provide the user with the option of viewing active alerts for high bycatch of a given species. The user simply selects the alerts option and all active alerts are shown on the map. As with the catch option, these can be selected by species etc.

How do I read information about my other catches?

Catches are displayed on the map as a series of 'hexbins'. These hexbins are graded in colour to help visualise areas of low bycatch and areas of high bycatch.

The map also has a number of functions that allow the user to view their catch information in a range of different ways. The user can control the following elements:

- *Selection of individual species*
- *Zoom function to view catches at different resolutions*
- *The date range over which the catch can be aggregated and viewed (i.e. 1 day, 1 week, 1 month, etc)*
- *Depth filter to select catches at different depth ranges*
- *Vessel tracks allow the user to overlay their tow tracks through the catch hexbins*

What data are used, and who manages and stores it?

What data are contained in the alerts?

If the catch of a given species exceeds a threshold, an automated alert is generated and sent to all vessels participating in the program. This alert will only contain details of the catch of the species that triggered the alert and the position of that catch. Alerts will be anonymous and will not contain details of other species in the catch or the vessel that generate it.

How is vessel position data recorded?

Vessels are fitted with a Rockfleet position unit that operates in a similar way to existing VMS units. Position data pings are automatically sent at one hourly intervals.

What data are stored?

Data collected and stored will include vessel ID, haul date, shooting and hauling times and bycatch ranges. Additional data will be collected from a positional unit (similar to the current VMS) fitted to each vessel. Data from the positional unit will be used solely for BATmap and will not be accessible by any other organisations.

Where are the data stored?

The app and position units transmit data to a database server hosted in Amazon's "elastic computer cloud". Amazon maintains datacentres in the UK. This database server stores all catch and position reports. Both components of the system use industry standards for encryption of catch and position data at rest and during transmission. No data is written to disk in unencrypted form. All traffic to and from the server is encrypted using SSL.

Who can access this data?

Raw data for a given vessel stored in the database will only be accessible by the database administrator, that individual vessel and their respective PO.

Who is involved in BATmap?

Who is participating in BATmap?

BATmap is being piloted in the west of Scotland mixed whitefish fishery in 2020. Participation is voluntary and limited to vessels fishing with a codend mesh size of 120mm or greater. The fishing vessels participating in the pilot represent several different producer organisations including Scottish Fishermen's Organisation, North East of Scotland Fishermen's Organisation, Orkney Fish Producers Organisation and Aberdeen Fish Producers Organisation.

How do participants share feedback?

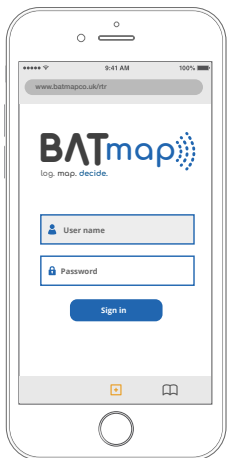
BATmap is still in the early stages of development and feedback on the functionality of the app and other aspects of the program are welcome and encouraged. Feedback can be provided via the dedicated Whatsapp group or by email to batmap@scottishfishermen.co.uk

How do participants stay in touch?

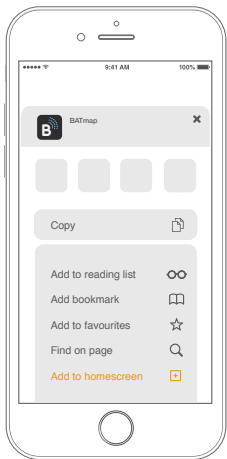
A dedicated Whatsapp group has been formed to share information and updates for the program. It also provides skippers the opportunity to share experiences, questions and comments on how the program is operating as well as proposals for future development.

How do I install BATmap on my phone?

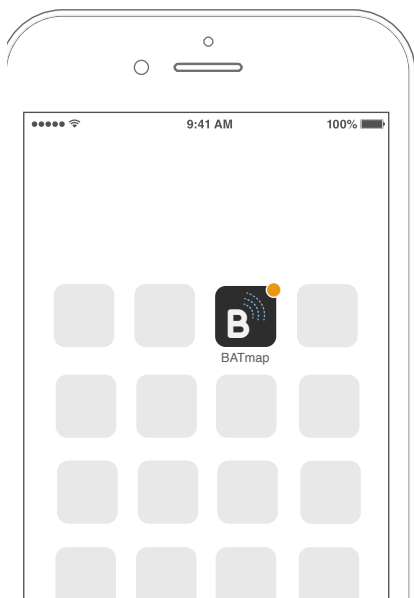
BATmap can be used through any internet browser. The following are instructions for downloading and installing the app for an iPhone.



1. Go to <http://www.batmap.co.uk/rtr>
2. The page shown on the left opens in the browser.
3. Click on the box the bottom of the screen. *(see orange button in image on left)*



4. A new window pops up from the bottom of the screen. *(see image on left)*
5. Scroll up to reveal the list of options.
6. Select 'Add to Home Screen'.
7. This adds an icon for the app on your phone.
8. Close browser.



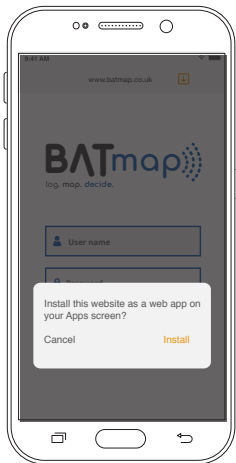
9. Check home page for the 'BATmap' app icon *(see image on left).*
10. The app can now be accessed directly from this icon.

How do I install BATmap on my android phone?

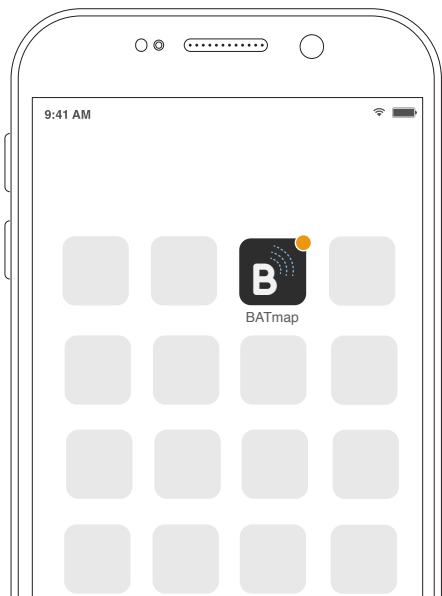
BATmap can be used through any internet browser. The following are instructions for downloading and installing the app for an android.



1. Go to <http://www.batmap.co.uk/rtr>
2. The page shown on the left opens in the browser.
3. Click on the box at the top right of the screen. *(see orange button in image on left)*



4. A new window pops up from the bottom of the screen. *(see image on left)*
5. Select 'install'.
6. This adds an icon for the app on your phone.
7. Close browser.



8. Check home page for the 'BATmap' app icon *(see image on left).*
9. The app can now be accessed directly from this icon.