Instructions for using the Buoy Zone Course Setter App see https://www.buoy.zone/
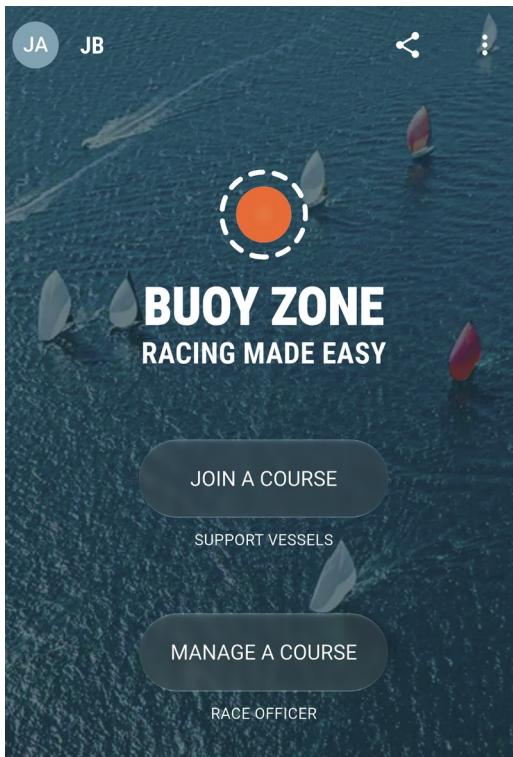

Download the app from the Play/Apple Store and get a trial subscription. Eventually we may get a club subscription, otherwise $50 per year if you share.

Click the three dots (top right) to enter your profile. Set the distance to meters and long distance to kilometers as shown. Click update.

Then click Manage a Course and your saved courses (if you have one) will be displayed as shown below. Note: You can set up the course at home, well before the event, and open it on race day at your 'home course' position at the bottom mark.
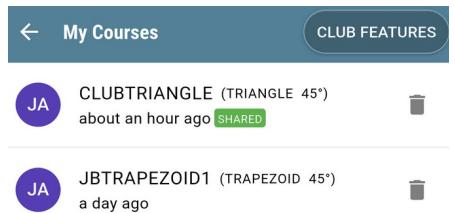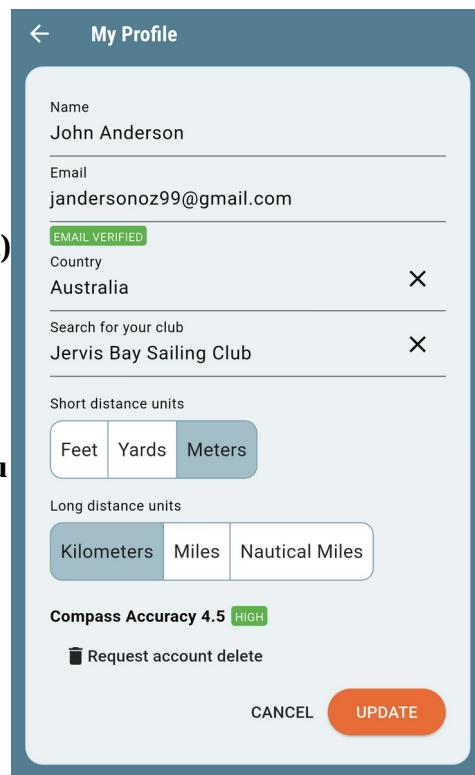
This shows your saved courses. As RO you can prepare the course well in advance. We may have club ones available shortly. On race day simple go to your home course position, where you want the bottom mark to be, for the wind direction and leg length on the day. See the map at the end of this article as a guide

  <= As a first time user click the "+" bottom to create a new course, and update its features.
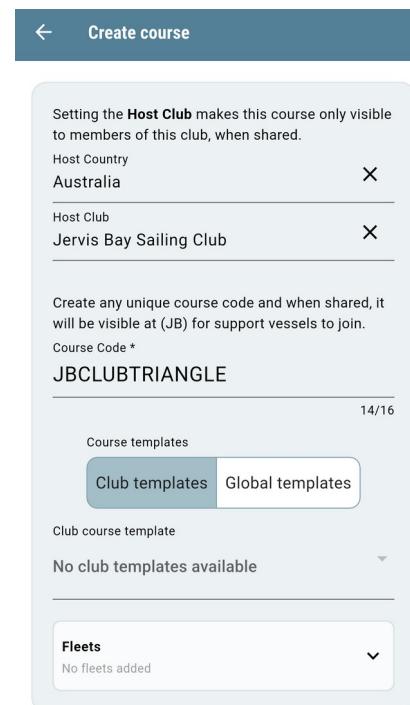
Give it an appropriate name. You don't need a template, or use any one of the Global ones and modify it.

Club courses and templates may be available soon.

<= Click Next

Course settings
Jervis Bay Sailing Club

Basic Settings

Course axis (°M)	Course size (kms)
0	0.93
Start-line length (m)	Start pin bias
60	0°

Start boat location
Update with my current location

BASIC ⬤ ADVANCED

CANCEL   SET COURSE

This shows the default basic settings with Course Axis (wind direction) set to 0 degrees (magnetic North), and leg-length set to 0.93 km. Check that it is Km and not Nm (nautical miles). If Nm change the settings in your profile. The start line length and start pin bias are not relevant for club races. Leave the 'Update with my current location' option as is. This sets the course based on your current location. [The other option is a fixed location with an enter grid location (lat longs)]. Initially, this means that the course will be set at your residential location. But on race day you proceed to where you want the bottom mark to be and the app will place it at you location on the bay with this option.

<=== Move the slider to 'Advanced' and the details shown below will be displayed for editing. Wait until all the details are correct as shown below before clicking 'Set Course'.

Course settings
Jervis Bay Sailing Club

Advanced Settings

Course Type
Triangle

Course Direction
| Port | Starboard |

Mark 1 Setting
| Mark | Gate |

Add 1A Mark
| No | Yes |

Add Extra Top Mark X1
| No | Yes |

Reach Angle
| 45° | 50° | 55° | 60° | 65° | 70° |

Add X2 mark
| No | Yes |

Mark 3 Setting
| Mark | Gate |

Mark X3 Setting

<=== Set Course to 'Triangle'

<== Set to Port, Mark, No 1A, No Extra Top Mark

<=== Set to 60 degree for 60-60-60 triangle

<== Set to 'No' for X2 Mark; and to 'Mark' for Mark 3

Advanced Settings Continued ………...

Course settings
Jervis Bay Sailing Club

Mark X3 Setting

| Gate | Mark | None |

<== Set Extra Mark X3 to 'None'

Mark 4 Setting

| Gate | Mark | None |

<== Set Mark 4 (an extra mark) to 'None'

Start-line location
Below bottom mark(s)

Finish-line location
Same as start

<== Set Start line location to 'Below bottom mark' even though you will be setting up 1/3 to ½ way up the first mark. This is important as you won't use the tool to position the start line for club races. However, this means that the 'home position' for setting the mark will be 50m downwind of the bottom mark (buoy 3), which is better for positioning course in the bay. So on race day you proceed to where you want to set the bottom mark and the course will be set at this 'home' location. See map below for a guide to these positions.

Finish distance

| Auto | Manual |

Finish-line length (m)
30
2/4

Gate width (m)
20
2/4

Gate/bottom mark offset (kms)
0.05
4/4

<= set this to 0.02 km (20 m) so the location for the bottom mark is virtually at your current location.

Race Officer Settings
Start vessel name *
Signal
6/20

☐ Sync to MarkSetBot?

☐ Set as a club template?

☐ Shared with club

**<== Ignore the remaining fields**

CANCEL   SET COURSE

<== Click 'Set Course' - The course will be saved using the name you gave it. The app will show this course at the location where you are at present with the features shown below.

JA CLUBTRIANGLE (TRIANGLE 45°)
about an hour ago SHARED 🗑

JA JBTRAPEZOID1 (TRAPEZOID 45°)
a day ago 🗑

＋

< == On Race Day you go to the home location for the bottom mark. Open the app and click on your saved course. The app will automatically set up this course at you current location. To change the course for wind shifts => Close the app. Go to the new home location and click on your saved course to start afresh.
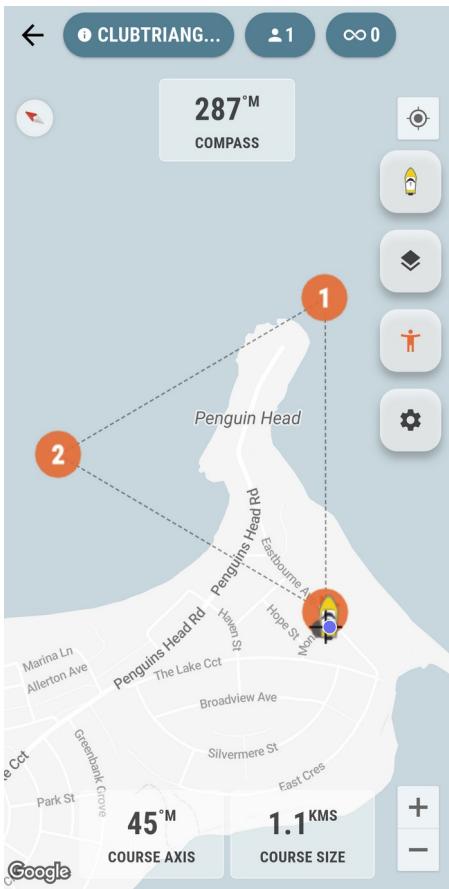
This will show your Course displayed after opening your saved course at your 'home location' in Hare Bay. It defaults to where you are now.

The course shown on the map is initially not compass orientated. Click on the ==small compass symbol== on the top left to aligns it via your phone's compass. [see below]. ==This is very important for tracking.==
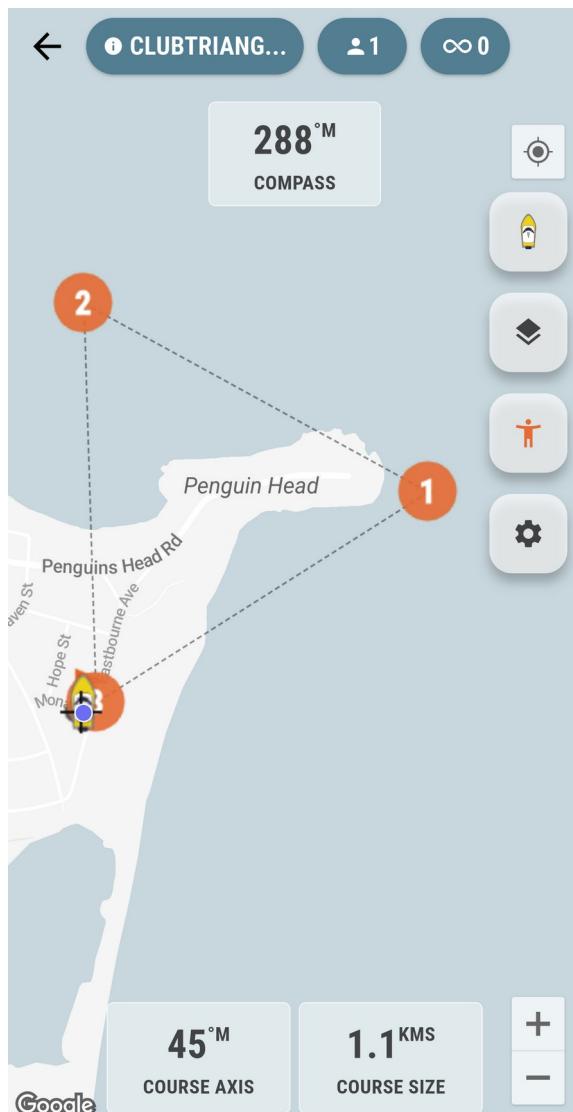
This is the 60-60-60 triangle course aligned to the NE with 1.1 km leg lengths. Buoy 1 is the top mark, Buoy 2 is the wing mark and Buoy 3 is the bottom mark, partially obscured by the course boat located just below it

<== This is the location of the course/start boat, initially 50 m downwind of the bottom Mark (Buoy 3)

<== This is for some map options

<= This is for course alerts such as man overboard etc.

<== This provides full details of the course that can be changed.

<== The blue spot is you current location

<= The course axis is 45 deg for a NE course with 1.1 km leg lengths.
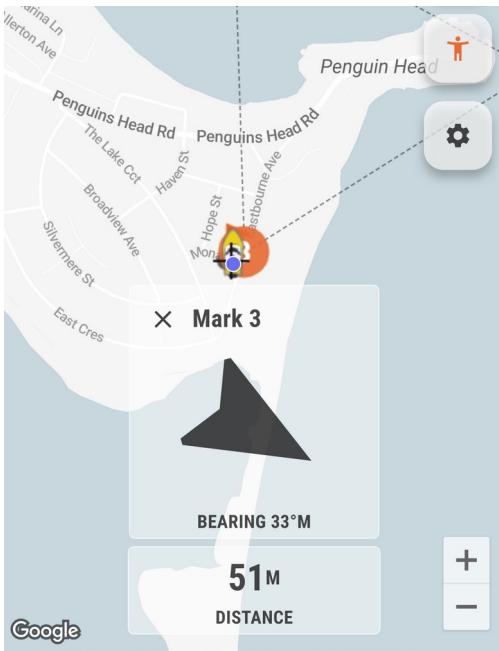
To Set the Course

Click on Buoy 3 (the Bottom mark). The popup window showing an arrow for the heading from your current location and the distance (50 m to windward of your 'Home' location). You can set it to 20 m so you are virtually there. As you move the app will track you progress to the location to drop the buoy. When distance gets close to Zero => Drop Drop Drop

× Mark 3

BEARING 33°M

51M
DISTANCE
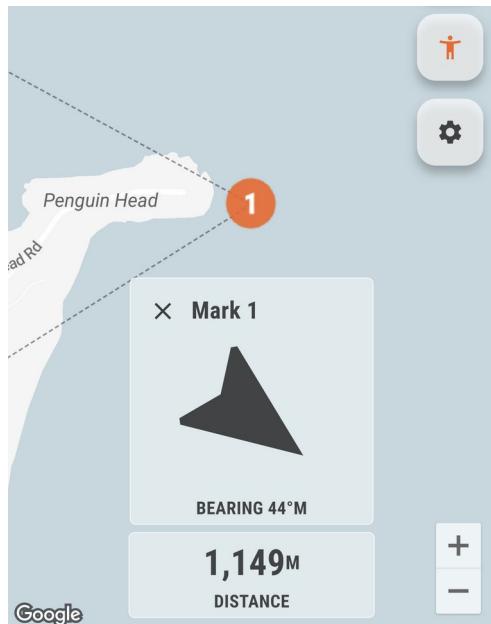
Then click on Buoy 1 (the Top mark). Following the compass heading to its location and then drop the top mark buoy.

× Mark 1

BEARING 44°M

1,149M
DISTANCE
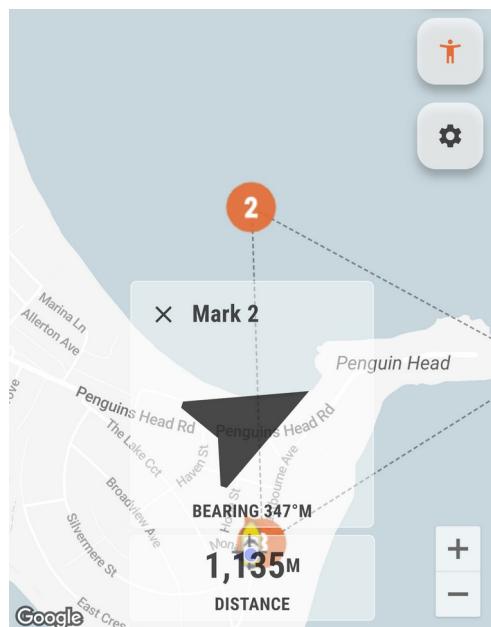
Then click on Buoy 2 (the Wing mark). Following the compass heading to its location and then drop the top mark buoy.

Use a compass to double-check the course using back-bearings to the bottom and top marks to verify the course is OK.

Then proceed to the position chosen for the start line (part way up the first work) and set the start/finish line ready for start. Disengage the app as it can be quite demanding on the phone battery.

If there is a wind change. Go to the 'home' position for the new start. This can be the bottom mark if there is enough room to fit the revised course into the area. Press Set Course again and reset the buoys in their new locations. You can pick up the buoys on the way as the tracking will cope with this wobbly path.

× Mark 2

BEARING 347°M

1,135M
DISTANCE

The Buoy Zone Club Subscription covers all courses shared for your yacht club - as "Host Club" for regular and regatta race. This covers as many courses and as many Race Officers as required, as long as your club is the "Host Club" / club of record for the course being shared. **Club Features** also become available exclusively under a Club Subscription via a form on the website.

Clubs with an active Club Subscription can add key details to their map for all those who join to see. These features include Marker buoys, Beacons, Lighthouses, rocks as well as marks and way-points specific to club activities. In addition, clubs ca add course areas (circles) and completely free form shapes (Polygons) to build any shape required. So we could add the Marine Park Buoys, the two red hazard buoys (Brolga and peninsula) and show the 'no boat anchor' and 'no buoy disk weight' zones.

Locations for bottom mark positions in Hare Bay, under various winds for a max leg length of 1.3 km.
The squares show the 'course home position' for the bottom mark under various wind conditions. These locations allow a course with leg lengths of about 1.3 km to be set, avoiding hazards and 'no go' areas. Note: You cannot anchor the start boat in the Sanctuary Zone (East of the line from Red Rock to the NS line of the Yellow Park Buoys). You cannot position a course mark (wheel hub) in the designated sea grass protection area => East of the line from Red Rock to the first Yellow Park Buoy (8C) and from 8C buoy to the Green Point Marker (aligned with Cabbage Tree Point). The Buoy Zone system or other GPS based tools are probably essential with leg length greater the 1.3 km, when visibility and accuracy is compromised for hand held compasses.