

USER GUIDE TO ENTERING HUMAN IMPACT DATA INTO THE SALTMARSH APP

Data from both organised 2 ha or fixed-route surveys
and incidental observations can be recorded here.

(see last page for details of the three methods)



TO ENTER HUMAN IMPACT DATA INTO THE SALTMARSH APP:

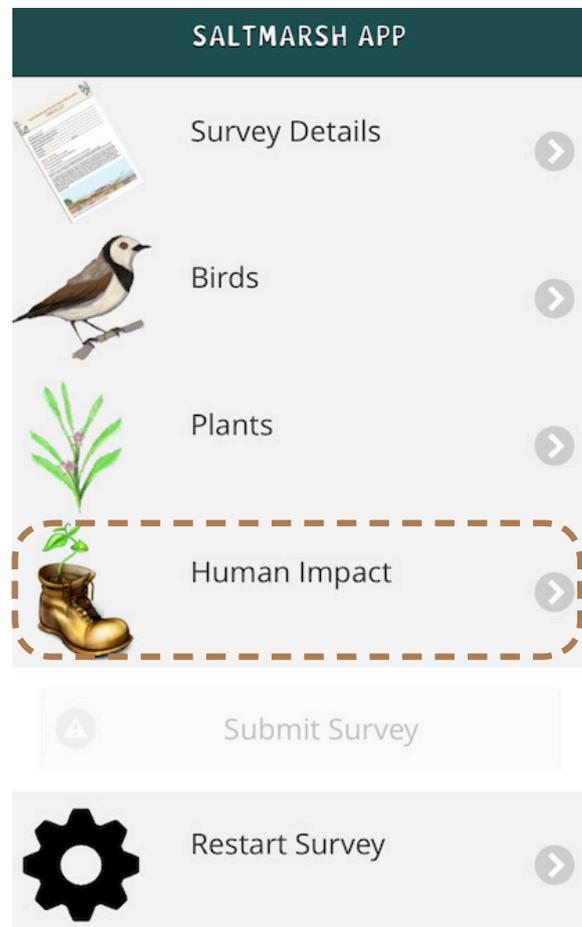
STEP 1

Access the "Saltmarsh App" at saltmarsh.eskmapping.com.au or download the free app on the App Store.

STEP 2

Select the 'Human Impact' heading from the app homepage.

Note: The Birds and Plants sections do not have to be completed to submit human impact data only.



STEP 3

The Human Impact page has seven sections. These sections can be completed to different extents depending on the observations or surveys undertaken.

Note: Before commencing the survey, please familiarise yourself with what is assessed as all sections may need to be considered simultaneously.

Select each section heading to reveal a drop down menu for data entry. Re-click on each section heading to close (or re-open) the section upon completion.

Back Human Impact

- + **Extent of Fringing Vegetation**
Presence / Absence Survey

- + **Condition of Fringing Vegetation**
Adjacent to Saltmarsh Site

- + **Livestock Disturbance**
i.e. Animals raised in agricultural setting

- + **Feral Animal Disturbance**
(Vegetation removal, soil disturbance, tracks, ...)

- + **Major Development (Land-Use Co...**
Major developments are a significant concern...

- + **Other Disturbance**
Inappropriate Habitat Disturbance Features

- + **Algal Blooms**
Nutrient enrichment / eutrophication

STEP 4

Select the 'Extent of Fringing Vegetation' section to enter data for both the Lateral Extent and Width of Fringing Vegetation.

Note: Identification of fringing vegetation areas and estimation of their size from Google Maps (or a similar mapping application) prior to visiting the site is recommended.

Back Human Impact

- **Extent of Fringing Vegetation**
Presence / Absence Survey

Lateral Extent of Fringing Vegetation - Within a 100m buffer from the edge of the saltmarsh towards upland, measured along the perimeter of the saltmarsh

% Estimate from Google Maps

% On-Ground Assessment

STEP 5

Click on the grey bar below each question and select a suitable option from a drop down list of five potential options.

< > Done

Less than 5%

5 - 30%

30 - 70%

Greater than 70%

100%

STEP 6

Each section contains a series of percent (%) estimate questions and a space for comments.

Note: See illustration below of the difference between Lateral Extent and Width of Fringing Vegetation.

Width of Fringing Vegetation - Adjacent to the saltmarshes within a 100m buffer from the edge of the saltmarsh towards upland, measured along the perimeter of the saltmarsh

% Estimate from Google Maps

Less than 5% ▼

% On-Ground Assessment

Less than 5% ▼

Mostly cleared land



The Lateral Extent (x) and Width (y) of Fringing Vegetation are both recorded in the Human Impact survey to provide a two dimensional overview of the nature of buffer zone surrounding the saltmarsh.

The estimate of the Lateral Extent (x) of Fringing Vegetation is based on the % of the landward boundary of the saltmarsh abutted by non-saltmarsh vegetation including trees, shrubs and grasses.

The estimate of the Width (y) of Fringing Vegetation is based on the % of the landward boundary of the saltmarsh abutted by non-saltmarsh vegetation including trees, shrubs and grasses - to a width of 100m or more.

STEP 7

Note: Any sections or questions where you are uncertain may be left blank, you do not need to complete all sections/questions to submit the survey.

After the Extent of Fringing Vegetation, move on to the next section on the 'Condition of Fringing Vegetation' (i.e. either native or exotic/introduced)

Entering comments is recommended. To record comments, click on the 'Comments' box and type in your comments.

Condition of Fringing Vegetation Adjacent to Saltmarsh Site

Native Vegetation Composition -
Relative to introduced species
within a 100m buffer (as above)

Greater than 70%

Mostly native except for
ground cover weeds

STEP 8

Information on disturbance caused by livestock can be entered in the section on 'Livestock Disturbance'. Livestock includes animals raised in agricultural setting such as cattle, sheep, horses, pigs, deer, goats, alpaca, rabbits etc.

Note: Please make a note in the Comments box if there is no evidence or likelihood of any livestock disturbance.

Livestock Disturbance i.e. Animals raised in agricultural setting

Grazing WITHIN the saltmarsh
(apparent vegetation removal, soil
disturbance, livestock tracks,
droppings or other forms of
disturbance)

Less than 5%

Grazing ADJACENT to the
saltmarsh (apparent vegetation
removal, soil disturbance,
livestock tracks, droppings or
other forms of disturbance)

Less than 5%

Site is peri-urban and not in an
agricultural setting



STEP 9

Information on disturbance caused by feral animals can be entered in the section on 'Feral Animal Disturbance'. Feral animals includes any introduced animal living in the wild, especially rabbits and cats (and pigs in the case of Flinders Island).

— Feral Animal Disturbance (Vegetation removal, soil disturbance, tracks, ...)

Impacts WITHIN the saltmarsh (apparent vegetation removal, soil disturbance, livestock tracks, droppings, or other forms of disturbance)

Less than 5%



Impacts ADJACENT to the saltmarsh (apparent vegetation removal, soil disturbance, livestock tracks, droppings, or other forms of disturbance)

Less than 5%



STEP 10

Information on major developments from land clearing (e.g., houses, buildings, playing fields, tip sites, farms constructed over saltmarshes) can be entered in the section on 'Major Development (Land-Use Conversion)'.

Note: Identification of possible areas and estimation of their size from Google Maps (or a similar mapping application) prior to visiting the site is recommended.

— Major Development (Land-Use Co... Major developments are a significant concern...

Any major development WITHIN/ON the saltmarsh that has replaced the original habitat (e.g. houses, buildings, playing fields, tip sites, farms constructed over saltmarshes)

Less than 5%



Any major development ADJACENT to the saltmarsh that has replaced the original non-saltmarsh habitat (e.g. houses, buildings, playing fields, tip sites, farms constructed over non-saltmarsh habitats such as woodland, grassland, freshwater)

Less than 5%



STEP 11

Information on other inappropriate habitat disturbance features from human use can be entered in one of the six classes/questions under the section on 'Other Disturbance'.

Note: Please consider all six questions as part of the survey. Although not all questions have to be answered in order to complete the survey.

Other Disturbance Inappropriate Habitat Disturbance Features

Rubbish debris (e.g. plastics, glass, metal)

Less than 5%



Dumping of rubbish (e.g. old tyres, building waste, garden waste)

Less than 5%



Roads / walking tracks within

5 - 30%



STEP 12

The seventh and final section of the Human Impact survey is titled 'Algal Blooms'. This section relates to nutrient enrichment/eutrophication as evidenced through the presence or absence of algal blooms and/or 'rotten spots' in the saltmarsh.

Algal Blooms Nutrient enrichment / eutrophication

'Rotten spots' on the saltmarsh - Nuisance algal blooms on the saltmarsh platform (on plants or pools in the saltmarsh)

5 - 30%



'Rotten spots' in tidal areas - Nuisance algal blooms in tidal channels or tidal flats both within and adjacent the saltmarsh

Less than 5%



Comments (Please make a note in the comments if there is no

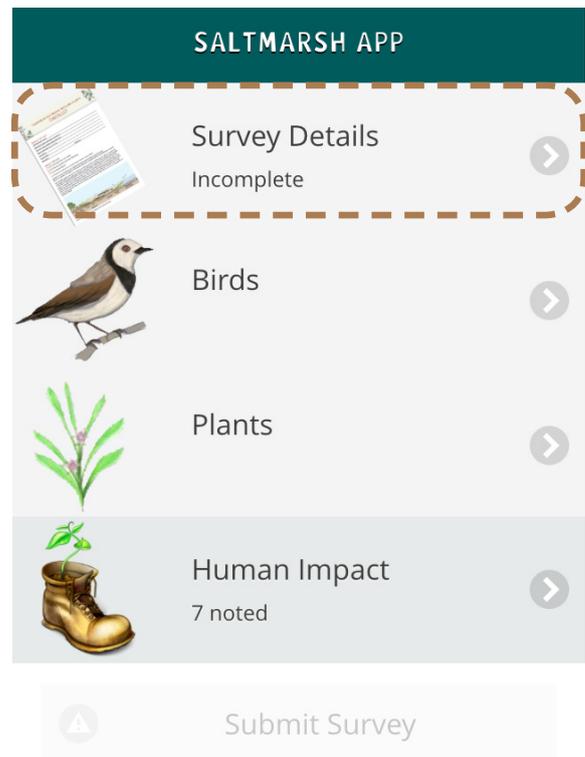


STEP 13

After all observations have been entered, select 'Back' button at the top left hand corner of the Human Impact page to return to the homepage where you started (titled SALTMARSH APP). Under the 'Human Impact' heading, it should now show how many records you have entered.

Select the 'Survey Details' heading from the app homepage, click on each box below each title and either select one option if a drop-down menu appears, or type in your details.

After your survey details have been entered, click on 'Save Survey Details and Enter Survey Data' at the bottom of the page. You will be returned to the homepage (titled SALTMARSH APP).



Site Name:

Clarence Plains Rivulet Marsh

Coastal Complex:

Derwent Estuary

Cluster Name:

Clarence Plains Rivulet

Location Details:

Along the track to the back of the marsh

STEP 14

If you would like to add observations on Birds or Plants, refer to the instruction steps for these sections.

When all your observations have been entered, click on 'Submit Survey' (located below the 'Human Impact' icon) to submit your data to the Saltmarsh App database.



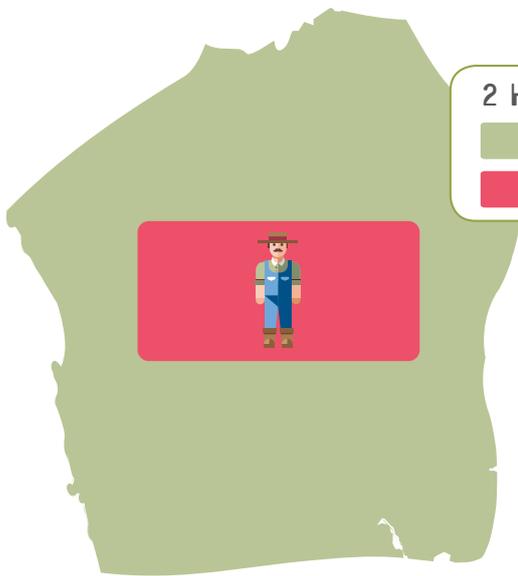
Hitting the submit button below will send your survey observations to our central server.

Please ensure that you're in a location with reception / data connection.

Submit

2 HA METHOD

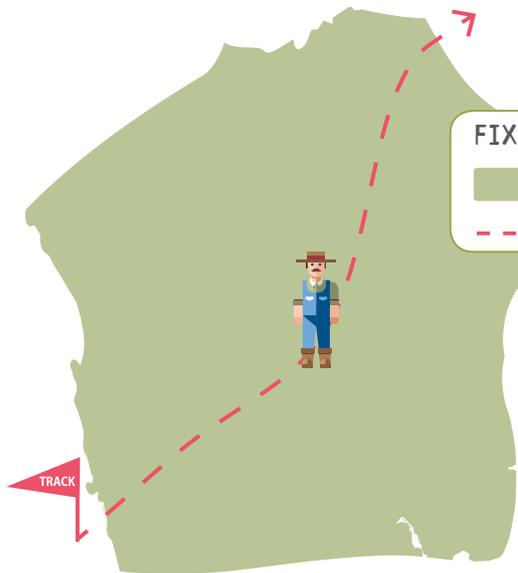
-  Saltmarsh extent
-  Survey area



The 2 ha area search is the recommended survey method. The survey area can be a rectangle of 100 x 200 m (as shown here) or a circle of 80 m radius, or some other configuration. The survey effort is limited to 20 minutes. Any plants observed either outside this time, or outside the 2 ha survey area, must be excluded from the survey or recorded separately as incidental observations (see below).

FIXED-ROUTE SURVEY

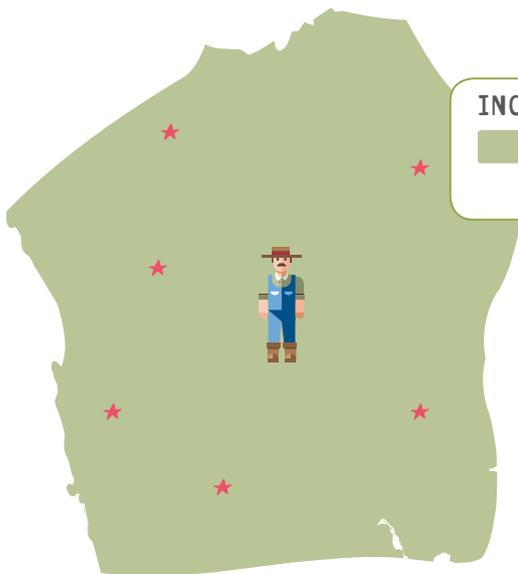
-  Saltmarsh extent
-  Track



This method is suitable for larger marshes where a suitable walking route (or formed track in some cases) that covers over 50% of the marsh area can be established. All plants seen along the route must be counted. Include start and end time in survey details to indicate timing and effort. Repeat surveys could then replicate the same timing and effort.

INCIDENTAL OBSERVATION

-  Saltmarsh extent
-  Incidental Observation



This method is suitable for incidental one-off sightings of plants that do not follow one of the two methods above. When a plant is recorded on nearby habitats, a comment must be made to identify this.

