

Data Entry & Data Reporting

Accurate data entry is one of the most critical components of the sampling process. The Data Captain is responsible for data checking, data entry, and submission of data. All team members are encouraged to assist with these activities.

The first level of data checking is performed at the site immediately following the dive either on the boat or on the beach. The Data Captain must collect and review all data to ensure the datasheets are legible, and answer any questions while the data are fresh in everyone's mind.

Within 24 hours of returning to shore, all data must be entered into Reef Check California's Nearshore Ecosystem Database (NED) online Diver Portal. The Diver Portal will be used to enter, review, and submit survey information to Reef Check California. Directions for using the Diver Portal are listed below.

The Diver Portal can be accessed at:

<http://ned.reefcheck.org>

Using the Diver Portal

Browser compatibility: Because the Diver Portal includes features that are not universally supported by all web browsers, it is required that divers use the Firefox browser to enter and submit survey information. You can download the latest version of Firefox at <http://ned.reefcheck.org>

Passwords: There are two different passwords used in the Diver Portal.

Diver password - In order to log in to the Diver Portal, each diver who wishes to submit a survey, must be issued a diver password by RCCA administration. If you have not yet been issued a username and password, or if you have forgotten your username and/or password, please contact RCCA data administration at cadata@reefcheck.org.

Survey password - The survey password is specific to your current survey and will be issued automatically when you begin a new survey. Be sure to write your survey password at the top of your Site Description Report. You will need this password (along with the site name) to return to an incomplete survey or view a submitted survey summary. You should also provide this survey password to any other team member who will be reviewing the survey – they will need the survey password and the site name to access the in-progress survey. If you have forgotten your

survey password, please contact RCCA data administration at cadata@reefcheck.org.

1. Log In

From the NED homepage at <http://ned.reefcheck.org>, click on the “Diver Portal” button or click on “login” in the upper right-hand corner of the screen. Use your username and diver password to log in to the secure diver portal. If you have not yet been issued a username and password, or if you have forgotten your username and/or password, please contact RCCA administration at cadata@reefcheck.org.

After logging in, you will have three choices:

1. **Add new survey** – Use this option to start a new diver survey. Select your dive site and click *Create new survey* to continue. If you do not see your dive site listed, please contact your regional coordinator.
2. **Continue incomplete survey** – Use this option to continue an incomplete diver survey or to check over a fellow team-member’s existing survey before it is submitted to RCCA. Select the name of your dive site and enter the survey password. Click on *Edit survey* to continue.
3. **View completed survey** – You can view a summary of diver surveys only after they are completed and submitted to RCCA. To view a submitted survey, select the name of your dive site and enter the survey password. Click on *View survey* to continue to the survey summary (jump to the “Survey Summary” section below, for more information).

2. Data Entry

Data from the original survey datasheets should be entered directly into the online forms. Use the <TAB> key or your mouse cursor to move between data fields on each of the transect forms.



Two types of validations are preformed on the data:

1. General validations are performed while you enter the data to check for invalid data and unlikely values. For example, in the event that you mistakenly enter “2a” into a fish observation *Amount* field, an error message will appear, asking you to enter a number between 0 and 50. You should correct these value errors as you move through the data entry fields.
2. Species-specific validations are performed on the Review page at the end of the survey, prior to submitting the survey to RCCA Headquarters. This is a more thorough validation process that checks your entered value against RCCA’s expected value range for each individual species count. A value may pass the first round of general validations during data entry, but get flagged in the Review page species-specific validations – this is expected. You will have an opportunity to check and either correct or accept these values during the end-of-survey review.

For more information on species-specific validations, see the “Review Page” section below.

Site Description Form


The first page in the diver survey is the Site Description form. Fill out all site information listed on the page. Yellow fields cannot be directly edited.

Click on the calendar icon  next to the *Start Date* and *End Date* fields to select the starting and ending dates for the survey. For help in converting temperature and depth/distance units, open the Unit Converter popup by clicking on the Popup converter icon .

TRANSECTS COMPLETED

All transects should have been completed during your dive. However, if you were unable to complete one or more transects, please indicate by selecting “No” at the appropriate transect. If there are any known errors in your survey, select “Yes” in the *Errors* field and describe the error(s).

IMPACTS

For definitions of each impact, open the Definitions for Impacts popup by clicking on the Popup definition icon . If your dive site is a protected site, be sure to list which activities are banned to the best of your knowledge.

TEAM INFORMATION

In the *Submitted by* field, select your name. In the *Checked by* field, select the name of the person reviewing this survey (should be someone from your dive team). In the *Team Members* field, select all divers who contributed to this diver survey. To select multiple names, hold down the Ctrl button on your keyboard while you click on each name. If one of your team members is not listed, enter his or her name in the *List additional divers* section. You must include a phone number and/or email address for each additional diver. This will allow RCCA to validate their diver credentials.

Click on *Save & Continue* to begin entering data on the first transect.

If you are starting a new survey: After clicking on *Save & Continue*, you will be given a survey password. **Write this password on the top of your Site Description Report.** You will need this password to access your survey later. If you forget this password and need to access your survey, please contact RCCA data administration at cadata@reefcheck.org.

Navigation

The main navigation setup for the diver portal is located at the top of each transect form:



The screenshot shows the top navigation bar of the Diver Portal. The bar has a red header with "NEARSHORE ECOSYSTEM DATABASE" on the left and "DIVER PORTAL" on the right. Below the header is a row of tabs: "Site Info", "Fish", "Inverts", "Abalone Size", "Seaweed", "UPC", "Urchin Size", and "Review". The "Seaweed" tab is highlighted in green. Below the tabs is a dropdown menu for "Seaweed" with three options: "Transect 1" with a green checkmark, "Transect 2" with a red X, and "Transect 3" which is grayed out. To the left of the dropdown are two buttons: "Save & Exit" and "Exit without saving". To the right is a button: "Save & Continue >>".

You should primarily use the *Save & Continue* button to page through the diver survey. This will ensure that all information is properly saved and you do not miss any transects. To save your entered information and return to the diver menu, click on *Save & Exit*. To return to the diver menu without saving any entered information, click on *Exit without saving*.

To jump to a particular transect entry form, move your cursor above the appropriate transect type (e.g. "Seaweed"). A dropdown will appear with a list of transects. Click on a transect number to jump to that transect.

Transects marked with a green checkmark indicate that the form for that transect is complete (*please note that this does NOT mean the information is correct, only that information has been entered. It is up to the dive team to ensure data accuracy*). Transects marked with a red X indicate that the form for that transect contains errors and needs to be revisited. Transects that are grayed out indicate that no information has yet been entered for that transect.



IMPORTANT: After filling out a transect form, you must click on *Save & Continue* to save your information. Jumping to a different transect using the dropdown menu will erase the data you just entered.

Alternatively, click on *Save & Exit* if you wish to exit the Diver Portal and complete the survey at another time. Use your survey password to log in later and complete the survey.

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Fish Transect Forms

The system will automatically select the Southern Fish Form or Northern Fish Form depending on your dive site location. However, if you used a different form other than the one shown, use the dropdown at the top of page to switch forms. As a rule, check this dropdown prior to entering any new fish transect information to ensure you are using the correct form. New information is *not* saved when you switch forms.

Fill out all transect information. For help in converting visibility from feet to meters, open the Unit Converter popup by clicking on the Popup converter icon . Click on the calendar icon  next to the *Date* field to select the date you surveyed that transect.

Fill out the number of fish in each size category for each species listed. Click on the *No Data* checkbox next to the species *only if you did not search for that particular species*.

Click on *Save & Continue* to continue to the next transect.

Invertebrate Transect Forms

Fill out all transect information. The information in the yellow fields is carried over from the associated fish transect and cannot be directly edited on this page.

Fill out the *Amount* values for each species listed. The default distance value is 30 so you should change that number only when you have subsampled for abundant organisms. Click on the *No Data* checkbox next to the species *only if you did not search for that particular species*.

Click on *Save & Continue* to continue to the next transect.

Abalone Size Forms

All transect information at the top of the abalone size form is carried over from the associated invertebrate transect and cannot be directly edited on this page.

Fill out the *Size* values for each of the abalone listed. The number and type of abalone listed on this page are based on the data you entered in the associated invertebrate transect. Therefore, you cannot record any abalone sizes until you have entered the number you observed on the corresponding invertebrate transect.

Click on *Save & Continue* to continue to the next transect.

Seaweed Transect Forms

Fill out all transect information. The information in the yellow fields is carried over from the associated fish transect and cannot be directly edited on this page.

Indicate which (if any) invasive species were present along the transect by selecting “Yes” in the appropriate field.

Fill out the *Amount* and *Distance* values for each species listed. Click on the *No Data* checkbox next to the species **only if you did not search for that particular species**.

The Giant Kelp *Distance* field default is 30m. You should change this number only if you sub-sampled giant kelp at which time you would enter the distance you surveyed. In the *Stipes* fields, enter the number of stipes counted on each kelp plant. If you counted fewer than 70 kelp plants, leave the remaining *Stipes* fields at zero. If you counted more than 70 kelp plants, please make a note of it in the *Transect Comments* field.

Click on *Save & Continue* to continue to the next transect.

UPC (Uniform Point Contact Benthos Sampling) Transect Form


Fill out all transect information. The information in the yellow fields is carried over from the associated fish transect and cannot be directly edited on this page.


Fill out the Count values for each item listed. Click on the *No Data* checkbox at the top of each UPC section **only if you did not record data in that section**.

Each UPC section must add up to a total of 30 samples. If you did not count exactly 30 samples for any of the three sections, please make a note of it in the *Transect Comments* field.

Click on *Save & Continue* to continue to the next transect.

Urchin Size Survey

Fill out all transect information. Click on the calendar icon  next to the *Start Date* and *End Date* fields to select the date range during which you recorded the urchin size survey.

Fill out the Amount value for purple and red urchin at each size listed. If you need, use the calculator icon  to add up urchin counts. Click on the *No Data* checkbox at the top of each section only if you did not record sizes for that urchin type.

Click on *Save & Continue* to continue to the Review page.

3. Review Page

The primary intent of the Review Page is to ensure that your survey is ready for submission to Headquarters. This page checks each of your transect and species observation values to ensure that they do not lie outside of RCCA's predefined standard ranges. If one or more values lie outside the standard range for that field, you will receive an error message in red.

To correct any errors, use the navigation menu at the top of the page to jump to the offending transect.

IMPORTANT: While on the transect form, you must click on *Save & Continue* for your changes to be saved! Jumping back to the Review Page or to a different transect using the dropdown menu will not save your information.

If the error has been adequately corrected, the error message will disappear from the Review page. If the error message refers to a value that lies outside the standard range but that you know to be correct*, check the checkbox next to the error message to indicate that value has been verified and that you wish to submit the survey anyway.

***Example:** If you enter 13 small grass rockfish in a fish transect form, an error message will appear indicating that this value is outside the standard range of 0-2. If you are sure you counted 13 small grass rockfish along this transect, check the box next to the error message to indicate that you verified the value.

4. Submitting the survey to RCCA

After you have checked all errors that appear on the Review page and allowed another diver to review the entered information, you are ready to submit the survey to Headquarters. Click on *Submit Survey* at the bottom of the Review page to submit the survey. (The *Submit Survey* button will be grayed out and you will not be able to click it until all errors have been checked.)

IMPORTANT: Survey submission may take a couple minutes to complete. During this time, do not click the *Submit Survey* button again as this will result in an error.

You will be redirected to a new page once the survey has been completed.

5. Survey Summary

Once your dive survey has been submitted to RCCA, you will have the opportunity to print a summary of the survey. Click on *View Survey Summary* to view the survey summary page for your selected survey. Use *File > Print...* at the top of your browser to print the page.

6. Log Out

When you are finished entering survey information, please log out of the diver portal. Failure to log out means that someone else could tamper with your diver survey.