# **Methods for processing survey data**

Question 2: Are you involved on behalf of one or more organizations?

Issue 1: People who said they were working as individuals may have interpreted the distinction between ‘work on behalf of’ and ‘work with’ differently than the majority of other participants. If respondents said that they **did not** work on behalf of an organization, but then exclusively listed volunteer-led or citizen science organizations, I **added** the first listed alter as **an ego**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Match type | Reef Check or G2KR? | Number of alters | Number of respondents (out of 9) | Edited? |
| NA | 0 | 1 | 6 | N |
| NA | 0 | 2+ | 1 | N |
| NA | 1 | 2, 3 | 2 | Y |

Issue 2: Some individuals listed affiliations with organizations that they later named as collaborators.

If respondents worked on behalf of **one** organization that they also listed they work with, I **removed the alter** if it was an exact match to the ego *and* that individual identified 2+ plus alters (so that they aren’t excluded from the social network data by removal of the alter).

Otherwise, I didn’t change anything.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Match type | Reef Check or G2KR? | Number of alters | Number of respondents (out of 127) | Edited? |
| exact | 0 | 15 | 1 | Y |
| exact | 1 | 1 | 15 | N |
| exact | 1 | 2-5 | 12 | Y |

If respondents, worked on behalf of **two or more** organizations that they also listed they work with, I used the following steps to filter ego / alter organizations

* I **removed the alter** if: the **first** organization the respondent works on behalf of was also listed as an alter, without specifying a different individual or unique group / project team at that organization

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Match type | Reef Check or G2KR? | Number of egos | Number of alters | Number of respondents (out of 63) | Edited? |
| Exact – remove the alter only | 0 | 2 | 3 | 1 | Y |
| 1 | 3,2 | 1 | 2 | N |
| 1 | 2 | 2 | 1 | Y |

* I **removed the ego** on a case-by-case basis. First, I looked at wherever the **second plus** organization the respondent works on behalf of was also listed as an alter.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Match type | Reef Check or G2KR? | Number of egos | Number of alters | Number of respondents (out of 63) | Edited? |
| Exact – remove one alter and one ego |  |  |  |  |  |
| Exact – remove the ego only |  |  |  |  |  |
|  |  |  |  |  |  |

\*\*For assigning survey respondents to administrative areas, I **did not use the adjusted data set which had ego** organizations **removed.** I allowed individuals to be involved on behalf of an organization *and* list that organization as a collaborator – this really only affects a subset of survey respondents who said they worked on behalf of multiple organizations.

\*\*For building the social network, I use all edited responses to avoid duplicates in the network.

Question 4: How are you involved in kelp forest-related issues?

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary** | **N** | **Responses** | **Edits** |
| If “other” text response includes urchin culling or urchin removal, add or extend 'harvesting or fishing or growing' answer | 4 | purple urchin removal, all sizes, Caspar, Calif.  Urchin Culling  Urchin culling  culling urchins | Harvesting or fishing or growing:Urchin removal |
| If “other” text response involves citizen science, volunteer diving associated with ReefCheck (but does NOT mention urchin removal), add or extent ‘Research’ | 6 | citizen science  Data Collection  RC volunteer Diver  Citizen science  Surveys as citizen science  kelp forest surveys  NA\*\* | Research:CitSci Kelp Forest Surveys |
| If “other” text response involves teaching, education, etc. add or extend “Advocacy or outreach” answer | 5 | Education  Teaching  outreach docent  Film, photography, media  Media film | Advocacy or outreach:… [extra text provided] |
| If “other” text related to policy, governance, add or extend “Environmental management” | 2 | Science-to-policy; policy development  Government | Environmental management:Policy development  Environmental management:Government |
| Individual response adjustments | 6 | Supporting restoration diving operations  Otter research  Involvement as related to sea otter research  Mitigation monitoring  Data collection  Experimental Restoration | People management:Supporting …  Research:Otter research  Research:Otter research  Research:Mitigation monitoring  Research:Data collection  Research:Experimental restoration |
| Keep “other” text as a unique response | 5 | Volunteer  Volunteering in kelp restoration  ex situ preservation of kelp gametophytes (biobanking) Restoration  Restoration and Stewardship | Volunteer (NGO)  Restoration volunteer (NGO)  Kelp gametophyte bio-banking  Restoration  Restoration and Stewardship |

\*\*R\_7upUSPV19KS9FVh is a ReefCheck volunteer who is routinely involved in kelp forest-related issues. They selected Environmental Management / Other (Donations), but in their answer to question 9 they put that they directly observe conditions and collect or analyze data. I added ‘Research:CitSci Kelp Forest Surveys’ to their response.

\*\*R\_61dpMIWMs89lZLY is a Giant Giant Kelp volunteer who is routinely involved in kelp forest-related issues. They selected only Other (supporter), but in their answer to question 9 they put that they directly observe conditions and collect or analyze data. I added ‘Research:CitSci Kelp Forest Surveys’ to their response.

Explanations for where I kept “other” text as a unique response:

* Volunteer: Reef Check volunteer, did not report collecting data or observing conditions
* Restoration volunteer: collaborates with Giant Giant Kelp and is occasionally involved in kelp-related issues. In their answer to question 9 they put that they directly observe conditions, but did not report collecting or analyzing data. I suspect that they conduct urchin removal, but cannot confirm from the survey.
* Restoration / Restoration and Stewardship: this may encompass some or all of the activities listed, helpful for SEN to know that they participate in restoration activities

Question 11: In the past year, which organizations and individual operators have you

worked directly with on kelp forest-related projects or programs??

How I treated non-specific answers, or collaborative projects. This is all within the function `clean\_org\_names(collab=TRUE)`

|  |  |
| --- | --- |
| **Response** | **Output** |
| "none","Other credible kelp scientists","kelp farmers", variations of “many others” | NA |
| Commercial Divers | Commercial Urchin Diver |
| Recreational Divers | Volunteer Divers |
| Many Kelp Restoration Divers, Urchin removal, Urchin removal diver | Urchin Divers |
| CCCoP | CCCoP |
| PISCO | Partnership for Interdisciplinary Studies of Coastal Oceans Oregon State University Stanford University - Hopkins Marine Station University of California Santa Barbara University of California Santa Cruz |
| Kelp RISES | University of California Davis - Kelp Restoration as an Integrated Socio-Ecological System University of California Davis: Marissa Baskett University of California Davis: Tyler Scott University of California Davis: Mike Springborn University of California Davis: John Largier University of California Santa Cruz: Carrie Pomeroy University of California Santa Cruz: Mark Carr California State Polytechnic University Humboldt: Sean Craig California State Polytechnic University Humboldt: Laurie Richmond |