Decision Support Tool

**Step 1: Define the research question**

The [Decision Support Tool](https://meddle-scor149.org/decision-support-tool/) is a 3-step guide to help you plan your multiple driver research. Each step of the guide takes you through a different stage of the planning process: **(1) define the research question**, (2) identify responses, drivers and the design and (3) finalise the design. For more information see the complete resources for the *Best Practice Guide for Multiple Drivers Marine Research* on the [MEDDLE website](https://meddle-scor149.org/).

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| What is your research question? Be as precise as possible. |  |
| What are the objectives of your study?   * Provide a comprehensive list of what you aim to achieve. * Come back to this list at the end of Step 3 to double-check whether the objectives have changed, and whether you have addressed them all. |  |
| Why is your question relevant? |  |
| To whom is your question relevant? |  |
| Has anyone already tried to answer a similar research question?   * How did they do it? * Could it be improved? * How will yours be different to previous studies? (Note, there is great value in repeating studies on different populations / systems / regions). |  |
| Will this be a manipulative and/or observational study (or still unknown)? Are you interested in causality or associations? |  |
| Will this be a laboratory or a field study?   * What are the advantages and disadvantages of each approach? * What factors might you be able to manipulate? What factors will you not be able to manipulate? * How will this influence your question and your experiment? * Can the obtained data be used to generate conclusions about processes in nature, or are they limited to specific laboratory conclusions? |  |
| What are the environmental drivers that may affect your study?   * Brainstorm and prioritize relevant environmental drivers that may limit and co-limit your system. |  |
| What is the prerequisite biological knowledge for designing a study to answer your research question?  Is that knowledge already available?   * For manipulative studies, what are the biological requirements? * For successful husbandry, what are the food, current, temperature and light requirements? * For field studies, what are the approximate densities and depth / distribution ranges, time required to search for them, and natural variability? |  |

Next task: complete Step 2 of the [Decision Support Tool](https://meddle-scor149.org/decision-support-tool/).

