

Agonistic Behavior in *Betta splendens*

Assignment: Literature Search

A **literature search** is an organized search for published material on a selected topic. Reading about previous research in your area can help you learn

- what is already known about your area of interest
- why your research is important and relevant.
- what questions still need to be addressed in this area.

Always use databases that retrieve academic sources of high quality and reliability.

1. Decide on a search topic

An effective literature search takes an organized approach:

With your team, formulate a question to narrow and define the topic.

For example:

- **Idea:** You wish to determine the effect of an opponent's size on a male *Betta's* display.
- **Question:** "Does agonistic behavior in male *Betta splendens* change in response to a change in an opponent's size?"

2. Use appropriate keywords to use in your search

Identify important keywords. In the example above, you might include "*Betta splendens*, agonistic, size, aggression," or other related terms.

- Use broad terms first, then narrower terms to refine your search
- Use synonyms for your keywords to find every possible variant of the vocabulary used in the research on this topic.
- Use dictionaries to check spelling and find keyword synonyms
- Use online encyclopedias (e.g., Wikipedia) to find initial background information that might help you refine your search or choose an area for your research topic.

3. Choose a Database

[GoogleScholar](#) is an excellent place to start, but there are other databases available through the UM library system that you may wish to use.

4. Perform your Search

- Use **Boolean operators** (always use them un upper case) to combine search keywords.
- Truncate (shorten) your keywords to make your search broader.
- If you are not sure how to spell a keyword, use **wildcards**.
- To narrow your search, use phrases enclosed on quotation marks. For example, "opponent size effect on agonistic display".

- Use the database to search for keywords in different places, such as “title” or “abstract”.
- If you find a useful article by a particular author, search that author’s name to find papers on the same topic.
- If you find a useful article, search its Literature Cited section to find additional, related sources.
- Make sure the literature you are citing is recent and current.
- Make sure the literature you use is from a peer-reviewed, scientific journal.
- Make sure to identify whether your source is a journal article, a book, a thesis, etc.

5. Determine the availability of the material you wish to reference.

If a paper you wish to read is not available online, you may be able to get a copy by contacting the Richter Library Help Desk. If our library does not have the paper you need, they may be able to get it via interlibrary loan.

6. Submit your literature search assignment.

A [literature search template is linked to the online syllabus](#).

Each student is responsible for finding three publications (relevant to your model) from refereed scientific journals. Read each one completely and analytically.

Your assignment is to submit to your instructor

- **the completed literature search template**
- **an electronic copy of each of your three relevant publications.**

Your instructor will give you specific details about this assignment, and will tell you when and how you are expected to turn in your assignment.

