

BPA Imperiled and Invasive Species Pre-Proposal Guidelines

BPA requires the submission of a pre-proposal, to help your consultant determine whether basic aspects of the research plan are ready for a full proposal. Pre-proposals should address each item in the spaces provided. For information and definitions, consult the Call for Proposals (P2.1), the description of proposal sections (P2.2), and your experimental design worksheet (P2.3), also available at the website. Space is limited; descriptions should be concise but thorough.

The **pre-proposal online form** should be **completed in MSWord** and all responses must be typed within the boxes given. **Do not alter the form or type outside of the boxes.**

Pre-proposals must be submitted by email no later than Tuesday @ noon using this filename: “genus lastname preproposal.doc” (genus of your focal species, your last name).

I. Abbreviated background and justification

- A. **Justify** your plan to carry out this research by describing briefly what was known about the topic that motivated your research plan and how the information gained will advance our knowledge about the target species in a way that is relevant to conservation issues. Your justification should move from general to specific, including:
- the *general problem* that involves your focal species,
 - *background* from previous research that supports the need to address this problem,
 - the *specific piece of the general problem* that your work will attempt to address.

II. Questions and Predictions

- A. What is the **research question** that will be asked in the proposed work?
- B. What is the **critical prediction** that will be tested by the treatments in your experiment? A critical prediction can often be usefully composed as an **If... then...** statement.

III. Methods

- A. Provide key details about your experimental design, including:
1. What are the experimental **subjects**? Should define subjects, where and how collected, number included in the study.
 - 2a. Describe each **treatment** that will be applied to subjects in your experiment.
 - 2b. Describe **non-variable conditions** that will be held constant across treatments.
 - 2c. Describe the method that will be used to **apply treatments to subjects**.
 - 2d. Describe the **response variable(s)** (outcome measurements) that will be measured, how and when measurements will be taken, including instruments.
 - 3a. Describe **how specific comparisons of treatments will answer specific questions**.
 - 3b. Explain how the comparisons will provide a **test of your critical prediction**, and how you will **interpret alternative results**.
- B. Explain other aspects of your experimental design:
1. Summarize the location, timing, and duration of experiments.
 2. How does your design minimize **bias**? Describe how randomization will be achieved.
 3. How does your design reduce **measurement variability**? Describe use of replication.
 4. Explain briefly how the proposed experiment complies with **ethical standards**.

IV. Significance. Give a high-impact summary of how your study will definitively contribute a significant piece of information to an important issue (and therefore should be funded).

Sketch: Attach a scan (or alternatively, bring to class on Wednesday) of a sketch that helps to explain your concept and experimental design. See the article by Ainsworth et al. for ideas.