RESEARCH DESIGN

RMC Mate Compatibility Workshop

MAIN PROBLEM

In no more than two sentences, list the main problem you're investigating as developed from Weeks 1 & 2 of this Workshop.

SOLUTION

In no more than two sentences, describe the solution you've developed to solve this problem from Weeks 1 & 2 of this Workshop.

HYPOTHESIS

State your testable hypothesis. This should cover your educated prediction (e.g. We predict that females given a choice between two males will breed better with the preferred male as defined by >60% of affiliative behaviors directed towards that male).

METHODS:

EXPERIMENTAL SETUP

1. Please draw a 2-D representation of your experimental setup with a detailed key describing physical attributes of the enclosure that will be important (e.g., adjoining enclosures, mesh barriers, standardized perches/feeding stations). *You can sketch the drawing below after printing the completed form, or provide it as a separate document.*

2. Please list your subjects (#Males.#Females):

3. Will you be investigating male choice, female choice, or both?

   Male
   Female
   Both
   Not Applicable

4. Please select the type of choice you will be offering (Select all that apply):

   Sequential
   Dichotomous
   Trichotomous
   Quadripartite
   Lovers Lane
   Free

5. What time will feeding of the animals occur to avoid interference with behavioral observations?

6. Between what hours will cleaning of the enclosure occur to avoid interference with behavioral observations?

7. Please list the factors that will be controlled between enclosures (e.g., heating elements, placement of food, placement of perches).

BEHAVIORAL OBSERVATIONS

8. Select when you will perform behavioral observations (Select all that apply):

    Courtship/Pre-breeding Period
    Breeding Introductions
    Post-breeding Period
    Offspring Rearing

9. How long will each observation period be?

10. At what time will each observation period be performed?

11. What behavioral scoring method will be used?

    Focal Ad libitum
    Focal One-Zero
    Focal All Occurence (just frequencies)
    Focal Scan
    Focal Continuous (frequencies and durations)

Group Ad libitum
Group One-Zero
Group All Occurrence (just frequencies)
Group Scan
Group Continuous (frequencies and durations)

12. How many observers will be trained?

13. How many observers will be recording during each observation period?

14. Use the following space to write step-by-step instructions for observers from preparation for observation through the end of observation.

15. Where will behavioral data be stored and collected?

16. How will data be converted to digital form (if applicable)?

17. What will the record naming convention be for video or data collection files (if applicable)?

18. Will video be retained and stored for the future?

19. What will the record naming convention be for original files?

20. Will there be formal data analysis at the end of the research periods?

21. Check the data that will be collected for each observation log outside of the behavioral data (Select all that apply):

        Observer Name
        Date of recording
        Start Time:
        Enclosure Location: the location according to your enclosure naming convention
        Name of Focal Animal
        Sex of Focal Animal
        ID of Neighbor 1
        Pen locations and IDs of all relevant neighbors or groups

22. Please list any additional data that will be collected for each observation:

BREEDING INTRODUCTIONS

23. What safety precautions will be taken for the breeding introductions?

24. How many hours/days will animals have breeding access?

25. How many times will breeding introductions be attempted (if applicable)?

26. Use the following space to write step-by-step instructions for breeding introductions for observers from preparation for observation through the end of observation.

27. Check the data that will be collected for each breeding introduction:

        Male and female who is first to enter when giving breeding access
        Male/female weight (indicate how often you want data collection, e.g. before breeding season, before breeding)
        Body measurements (both right and left if you're interested in symmetry)
        Male/female age
        Number of days housed next to each other over the last year

Previous mating success of pair (Yes / No)
Previous offspring production (Yes / No)
Personality measurements/survey
Measure of nest quality (if applicable)
Pair Kinship
Distance from other breeding pairs
Total hours/days pairs have "Howdy phase" before breeding is started.
Total hours/days pair have breeding access

28. Please list any additional data that will be collected for each breeding introduction: