
Translating Good Ideas Into a Working Environmental Enrichment

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The Primate Foundation of Arizona is home to 80 chimpanzees (*Pan troglodytes*). Our chimpanzee Wellness Program (detailed in Fritz and Howell 1993) was initiated in 1970 and became a formal written Program in 1991. Environmental enrichment, a cornerstone of the Program, has the general aim of encouraging species-typical behavior. The Program is not static. It is updated as new information becomes available, such as the results of tests on the enrichment potential of new devices.

Ideas originate from all staff members. While some facilities depend on an Enrichment Technician to develop new ideas, we utilize ideas received from all Care and Research Staff. To translate these good ideas into workable processes or the use of devices, we use an INITIAL PROPOSAL FORM to prompt staff members to think through all of the aspects of a new idea. It also allows documentation that a new device or procedure was proposed.

The Research Department also provides information relative to its efficacy as enrichment and any potential for detrimental effects. If information is lacking, and where appropriate, the Research Department designs and implements studies to document the effects and use of the new device or procedure. Devices or procedures may be incorporated into the Program following evaluation and approval by the Staff Veterinarian and Colony Manager. If the device is rejected or the procedure is unworkable, the form also includes the reason for rejection. We keep accurate records of what works, what doesn't, and why.

The INITIAL PROPOSAL FORM can be completed by any staff member (the idea originator). The form prompts you to provide the following information:

1. Description of the enrichment device and its potential use.
2. Explanation of how this device will enrich the life of the chimpanzee.
3. Whether or not this device will be appropriate for all animals, or specific animals. (if specific animals, please explain)
4. How many of these devices are proposed?
5. Where will these devices be installed?
6. Detailed description of the exact installation and requirements, including any modifications to existing structures (including ceiling, walls, floors etc...)
7. Listing of any potential health or safety concerns for the chimpanzees.
8. Listing of any potential health or safety concerns for the carestaff.
9. Listing of any possible stress points or weaknesses in the device.
10. Listing of any possibilities of damage or wear to the enclosure.
11. If a prototype is necessary, exact costs and installation methods should be secured (including at least two sources when pricing out the costs of the materials):
 - Cost and list of materials for prototype.
 - Cost and list of materials to fasten prototype to enclosure (if applicable).
 - Cost and number of labor hours to assemble prototype.
 - Cost and number of labor hours to install prototype.
 - Total cost prototype.
12. Detailed costs for the total number of devices needed (include at least two sources when pricing out the cost of the materials).
 - Cost and list of materials for actual device.
 - Cost and list of materials to fasten device to cage.
 - Cost and number of labor hours to assemble device.
 - Cost and number of hours to install device.
 - Total cost.
13. Name and date.

The INITIAL PROPOSAL FORM is submitted to the Staff Veterinarian and Colony Manager. They carefully consider health and safety issues, as well as cost/benefit ratios. If their initial review is unfavorable, the reasons are discussed with staff members, documented on the form, and the form is kept on file for future reference. If their initial review is favorable, the INITIAL PROPOSAL FORM is transferred to the Research Department for literature review.

The Research Department is responsible for providing any available literature regarding the efficacy of new devices, observing individuals prior to and following the test use of any new device, and summarizing the results of the findings for review and later publication. The INITIAL RESEARCH REVIEW FORM includes the following:

1. Name and description of proposed enrichment device.
2. Have any other facilities done a study on this type or similar device; if so, what facility and where?
3. What problems or benefits were found by their study?
4. How will PFA's study differ from other studies?
5. What is the desired long range effect/benefit of this device?

If the use of a particular device has not been well-documented in the literature, a prototype test may be proposed. This is a test on a single device, with a small number of subjects, and addresses the following issues:

1. Placement of devices to be tested (inside, outside, etc...).
2. Any foreseeable viewing problems for the observer with this device.
3. List which individuals, or which groups, will be observed during initial device testing.
4. Why have these individuals been specifically chosen to test the device?
5. What method of observation will be used?
6. How much time will be needed for daily observation of each individual or group?
7. How many observations will be needed daily per individual or group?
8. List starting and ending dates, and number of observations needed for the baseline study.
9. List the date(s) the device(s) should be installed.
10. List the starting and ending dates, and number of observations needed for the study with the device present.
11. List the completion date of the study.

Information is compiled and, along with the INITIAL PROPOSAL FORM, is submitted to the Director for initial testing approval. If granted, initial testing is coordinated between Care and Research staff. Results of the test data are provided to the Colony Manager, Staff Veterinarian, and Director for review, and posted in the employee lunchroom for staff review. If review is favorable, the device may be approved for colony use. If the review is unfavorable it is documented, and kept on file for future use. In this way, we also use science for the benefit of the animals in our care. Care and Research Staff ideas are well-thought out prior to use of any new devices, and all staff participate in the provision of environmental enrichment to the chimpanzees in our care.

REFERENCES

Fritz, J. and Howell, S. Psychological wellness for captive chimpanzees: An evaluative program. Humane and Innovative Alternatives 7:426-434, 1993.

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