

**Environmental Enrichment For
Captive Orangutans
&
A Proposal On How Caregivers Can
Work Together To Provide Quality
Care**

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Environmental enrichment for captive orangutans

- Allows animals to perform normal species-typical behaviors
- It can help to reduce or eliminate stereotypical behaviors and reduce behavioral stress
- Structured plans allow for research to be conducted
- Helps to build a stronger relationship with the local community
- An environmental enrichment program should also promote foraging, activity and arboreal locomotion
- Enrichment should be incorporated into all caregivers daily husbandry routines



The AZA defines enrichment as:

- “a process for improving or enhancing zoo animal environments and care within the context of their inhabitants’ behavioral biology and natural history. It is a dynamic process in which changes to structures and husbandry practices are made with the goal of increasing behavioral choices available to animals and drawing out their species-appropriate behaviors and abilities, thus enhancing their welfare. As the term implies, enrichment involves the identification and addition to the zoo environment a specific stimulus that the occupant wants or needs but which was not previously present.”
 - The Association of Zoos and Aquariums (AZA)



Definition:



- “Environmental enrichment is a concept which describes how the environments of captive animals can be changed for the benefit of the inhabitants. Behavioural opportunities that may arise or increase as a result of environmental enrichment can be appropriately described as behavioural enrichment.”

-D.J. Shepherdson

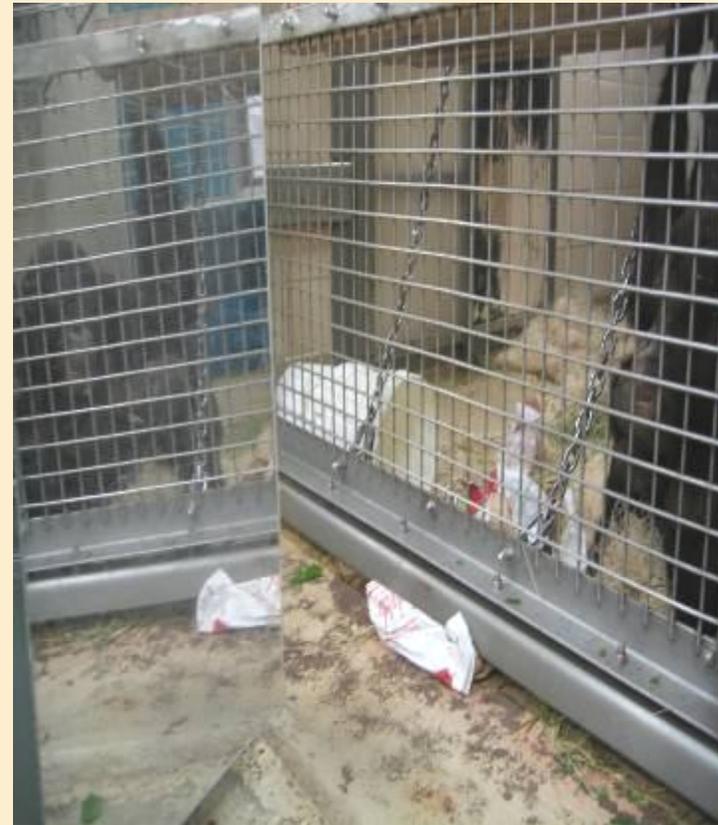


Social Environment

- Interactions with
 - Conspecifics
 - Other species in a multi-species exhibit
 - Animal care staff



Social stimulation for individual animals can come from visual, auditory & olfactory stimuli



Physical Environment

- Providing a combination of fixed objects and manipulable objects is highly recommended.
- Environmental enrichment programs that are appropriately planned and implemented can contribute to better animal health by creating opportunities for the animal to exert some level of control over its environment.



Enrichment is a means to facilitate animal visibility and thus contribute to an exhibit's recreational and educational potential

- Different methods of feeding animals on exhibit can also be employed to make them more visible by drawing them toward more ideal viewing areas.



Constraints on enrichment strategies

- Resource availability which includes social companions and materials from a natural habitat
- Animal health
- Aesthetics and acceptability to visitors
- Space
- Conservation mission
- \$\$\$\$\$

-Joy Mench



Husbandry Routine

- All orangutans should be provided with fresh nesting material on a daily basis.
- Encouraging a time budget closer to that of wild orangutans can help to reduce or eliminate the performance of abnormal behavior.



Devices designed to encourage activity



Your enrichment program





A key component to any enrichment program's success is the dedication of the caregiver staff and support of supervising personnel



By providing environmental enrichment, one must accept that the following tasks will be added:

- researching the species for which the enrichment will be given
- locating the materials to construct the enrichment
- fabricating the enrichment
- monitoring its use
- recording the effect of enrichment





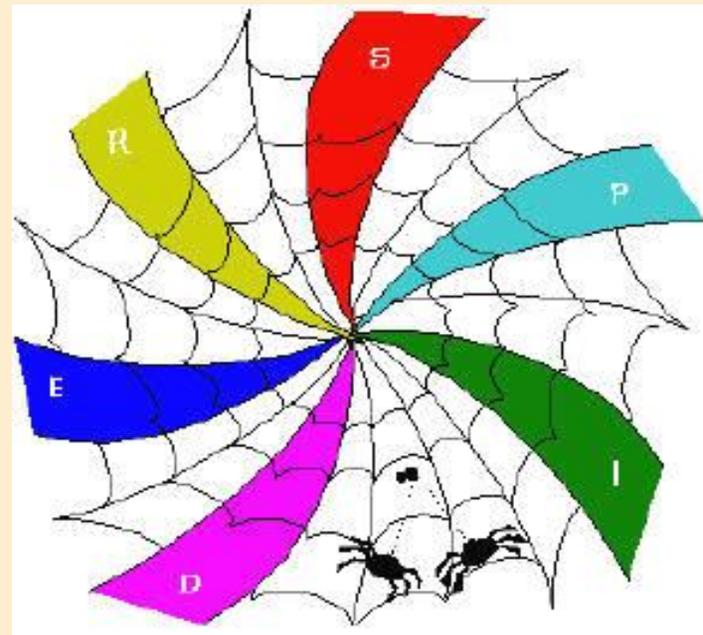
"A formal written enrichment program is recommended which promotes species-appropriate behavioral opportunities for appropriate taxa. [AC-39]

Explanation: It is recommended that an enrichment program be based on current information in behavioral biology, and should include the following elements: goal setting, planning and approval process, implementation, documentation/record-keeping, evaluation, and subsequent program refinement."



S.P.I.D.E.R. framework

- Setting goals
Planning
Implementing
Documenting
Evaluating
Re-adjusting



Source: <http://www.animalenrichment.org/>



You can ensure that the physical and psychological needs are met for each animal by allowing them to:



- Perform highly motivated behaviors
- Respond to environmental conditions using evolutionary adaptations
- Develop and use cognitive abilities
- Effectively cope with challenges in the environment



- For an explanation on the S.P.I.D.E.R. framework and how to use this model to develop and sustain a successful program at your institution see:

www.animalenrichment.org/introduction/whyframework.htm.



Environmental enrichment devices

- Social
 - Contact
 - Non-contact
- Occupational
 - Psychological
 - Exercise
- Physical
 - Enclosure
 - Accessories
- Sensory
 - Visual
 - Auditory
 - Olfactory, tactile, taste
- Nutritional
 - Delivery
 - Type



Bloomsmith et al. (1991)



Browse

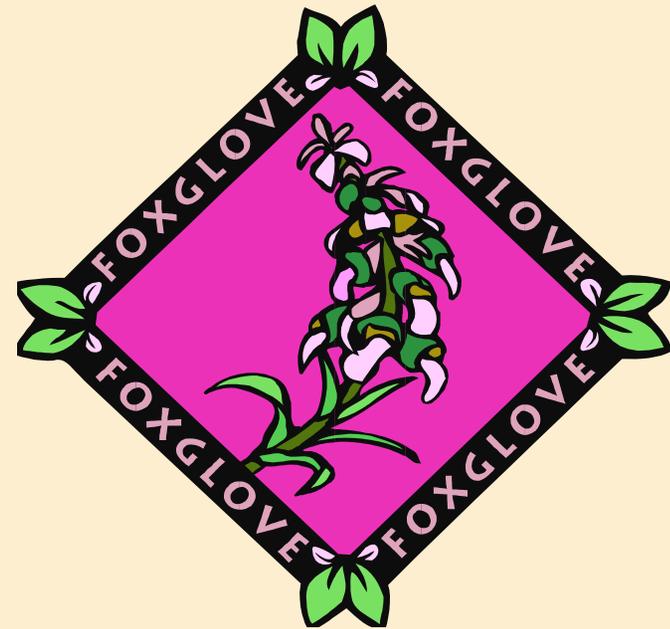


- By offering browse to orangutans on a regular basis as part of your enrichment program you will be providing nutritional supplements to their diet, stimulating natural behavior activities as well as helping to decrease unwanted or stereotypic behaviors.



Plant species must be approved by a veterinarian prior to use

- Before offering an animal any type of browse material, it is imperative that each plant species be researched for the poisonous potential of all aspects of the plant.
- For more information on toxic plant species consult this database:
www.library.uiuc.edu/vex/toxic.htm
- Go to www.brookfieldzoo.org/ohm chapter "Orangutan Browse List" for a list of approved plant species at 36 different institutions worldwide.



Novelty

- Studies show that enrichment programs that offer novel items result in a reduction in lethargy of orangutans.
- Avoid boredom by rotating enrichment devices and food items.
- Daily record keeping is important to a successful enrichment program.
- Be creative!!!



Challenge!

- Enrichment lists will be put into the proceedings of the workshop.
- Master list will be generated.
- Idea sharing across all institutions.
- Point person for an institution.
- Utilize your list servs like [redapekeepers](#)
- Contact me:
dafogart@brookfieldzoo.org



Finally...

- Caring for an orangutan's psychological well-being is equally as important as caring for their daily physical needs.
- The Orangutan Species Survival Plan© encourages every institution that houses orangutans to develop their own enrichment program.
- The Orangutan Species Survival Plan© believes that environmental enrichment is a crucial aspect of captive orangutan management.
- Caregivers working together to improve their enrichment programs through sharing ideas will undoubtedly help to improve the quality of our animals lives.



For more information:

- www.brookfieldzoo.org/ohm

Replaces “Behavioral Enrichment”

