

A method to evaluate enrichments for Asian elephants in zoos



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By: Mary Holmgren

Supervisor: Mats Amundin

Background

- Zoo elephants usually have a poorer environment than wild ones
- Important to find the enrichments that are most valuable for the elephants

Aim

To find a method to evaluate if an enrichment has any value to zoo elephants

Conclusions

- Pilot study indicates that the max price paid concept can be used to test if a resource has any interest to an elephant
- A rope to pull on at mouth level suited best for lifting the weights
- When testing food it should be of a larger quantity e.g. hay and distributed in a non-disturbing way

Maximum price paid →
highest price an animal
pays for a single visit

Method

Two Asian elephants at Kolmården Animal Park, Bua and Saonoi

Max price paid:

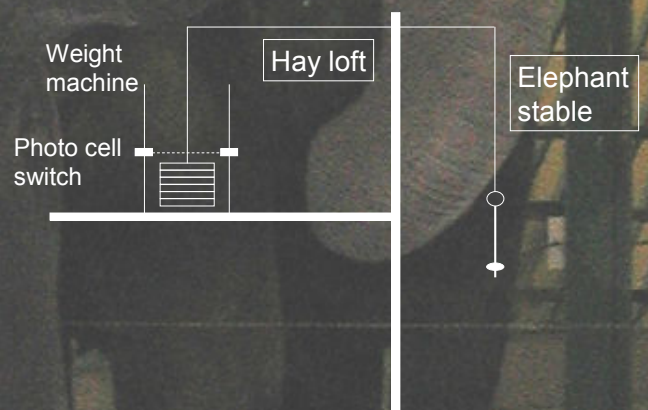
The elephants had to “pay” for access to food and lifting weights was chosen as the “price”.

Operant task:

Suitable object to pull on to lift the weights

What kind of food to use in the trials

Best way to distribute food



When the elephant pulls on the wire, the weights in the hay loft is lifted. Thereby a photo cell switch closes and the resource is released.

Results

A rope with a knot at the end worked best. 5 kg hay was motivating, while 0.5 kg pellets was not. To distribute the hay a tarp hanging from the roof was used.

The elephants did work for the hay, and the max they "paid" for it was:

Bua → 372kg

Saonoi → 227kg