Re-lion on Behavior
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African Lion Biology

- Reside in Africa, south of the Sahara Desert
- Habitat: Savannas, open woodlands
- Males are distinguished by their manes
- Females typically hunt, while males protect the pride
- Females typically birth 2-3 cubs
- Lions typically consume 8-9 kg/day
- Largest African Carnivore
- Weight range is between 125-227 kg
- Ability to run at speeds up to 58 km/hour
- Hunt wildebeest, impala, antelope, giraffe, wild hogs and zebras
- Prides consist of one dominant male and females that are typically related, they are a polygamous species
- When a male attempts to overtake a pride, he will commit infanticide

Lions at the Buffalo Zoo

- Four females, one not present at time of observation
- Three males, one father and his two cubs
- The males and females are rotated each day in the exhibit
- They are not typically housed together, despite living in prides consisting of males and females in the wild
- They are given bones of horses on Sundays for them to chew and consume the bone marrow present in the bones
- For simulations, scents may be spread around the exhibit and bones may be hidden

Methods

Table 1: Definitions of behaviors observed.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Chewing (C)</td>
<td>Chomping on a bone</td>
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<tr>
<td>Sleeping (S)</td>
<td>When they are in a temporary unconscious state with eyes closed</td>
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<tr>
<td>Resting (R)</td>
<td>Lying down with eyes open</td>
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<tr>
<td>Playing (P)</td>
<td>Engaging in activity with each other or toys in the exhibit</td>
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<td>Grooming (G)</td>
<td>Licking one's fur</td>
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<td>Pacing (PA)</td>
<td>Walking from one point of the exhibit to another at a consistent rate for a period longer than two minutes</td>
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<td>Roaring (RO)</td>
<td>A noise of calling</td>
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<td>Spraying (SR)</td>
<td>When one marks objects with urine</td>
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- Group Scan was performed
- At each ten-minute interval, the behavior of each lion was recorded
- One lion cannot perform more than one activity per interval, but each lion can perform its own individual task
- Any abnormalities present at the time of observation were recorded

Results

Figure 2. Percentage of 10 minute intervals each behavior was recorded for female lions (4 hours of observation and 3 females).

Figure 3. Percentage of 10 minute intervals each behavior was recorded for male lions (6 hours of observation and 3 males).

Conclusions

- Females are the main hunters of the pride in the wild, thus, my observations of females spending less time sleeping is consistent with their behavior in the wild where they sleep for 20-21 hours per day (Figs. 8-9).
- Both males and females demonstrated limited spraying, roaring, and playing in captivity.

Bibliography