# Feeding Behavior in Cats, Dogs, and Grey Parrots

by Casey Weaver

<table>
<thead>
<tr>
<th>Felis catus</th>
<th>Canis lupus familiaris</th>
<th>Psittacus erithacus</th>
</tr>
</thead>
</table>

![Cats](image1.png)
![Dogs](image2.png)
![Parrots](image3.png)
**The Cats**

- **Cat 1 (C1):** The Dark Lord Mr. Licorice
  - 2 years old
  - All Black, DSH
  - Male, Neutered
  - 12 lbs
  - Ad libitum*

- **Cat 2 (C2):** Princess
  - ~16 years old
  - Black & White, DLH
  - Female, Spayed
  - 12.5 lbs
  - Ad libitum*

*Both eat Purina® Kit & Kaboodle®*
The Dogs

- **Dog 1 (D1): Duffy**
  - 10 years old
  - Wheaton, Scottish Terrier
  - Male, Neutered
  - 40 lbs
  - 3 meals a day:
    - Totaling 1 ¾ cup + 3 Tbsp of chicken*
  - *Both Duffy and Mack eat Hill's Prescription Diet w/d Digestive/Weight/Glucose Management Chicken Flavor Dry Dog Food

- **Dog 2 (D2): Mack**
  - 10 years old
  - Black, Scottish Terrier
  - Male, Neutered
  - 30 lbs
  - 3 meals a day:
    - Breakfast+Dinner: ¾ cup & 1 Tbsp chicken
    - Lunch: ¼ cup & 1 Tbsp chicken*

- **Dog 3 (D3): Fiend**
  - 10 years old
  - Australian Shepherd/Husky mix
  - Male, Neutered
  - 52 lbs
  - Science Diet:
    - Totaling 2 ¾ cups a day + 3 Tbsp of chicken
    - Breakfast+Dinner: 1 cup & 1 Tbsp chicken
    - Lunch: ¾ cup & 1 Tbsp chicken*
The Grey Parrot

- Parrot 1 (P1): Tiki
- 23 years old
- African Grey Parrot
- Female? (We think)
- Handful of Zupreem FruitBlend or Fiesta Parrot Food; with seeds. Two times a day (Morning & Night)
Cat feeding

- Cat 1 ate for 1 min 56 sec.
- He did not drink water before or after the meal.
- Cat 2 ate for 2 min 16 sec.
- $C_2$ ate $\frac{1}{8}$th cup
- $C_2$ did not drink water before or after
- $C_2$(But she does drink a lot of water typically)
# Cat Feeding Ethogram

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Description</th>
<th>% shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licking</td>
<td>Licking the food</td>
<td>16.4%</td>
</tr>
<tr>
<td>Lip licking</td>
<td>Licking of the lips</td>
<td>12.1%</td>
</tr>
<tr>
<td>Tongue flicking</td>
<td>Tongue shaken outside of mouth</td>
<td>6.9%</td>
</tr>
<tr>
<td>Chewing</td>
<td>Breaking down food inside the mouth with teeth</td>
<td>25.9%</td>
</tr>
<tr>
<td>Prehension</td>
<td>Casting food into mouth with tongue and teeth</td>
<td>27.6%</td>
</tr>
<tr>
<td>Surveying</td>
<td>Looking in the area around himself</td>
<td>4.3%</td>
</tr>
<tr>
<td>Moving</td>
<td>Moving head to a different position to attain food</td>
<td>23.3%</td>
</tr>
<tr>
<td>Crouching</td>
<td>Down on all four paws with elbows completely bent</td>
<td>100%</td>
</tr>
</tbody>
</table>
Dog feeding

- **Dog 3**: ¾ cup for lunch + 1 tablespoon of chicken: 1 min 46 sec
  - 1 cup for dinner + 1 tablespoon of chicken: 2 min 15 sec
  - He didn’t drink water before or after either meal

- **Dog 1**: ¼ cup for lunch + 1 tablespoon of chicken: 1 min 12 sec
  - He drank water after this meal: 1 min 15 sec

- **Dog 2**: ¼ cup for lunch + 1 tablespoon of chicken: 2 min 48 sec
  - He did not drink water before or after
## Dog Feeding Ethogram

<table>
<thead>
<tr>
<th>Behavior</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Chewing</td>
<td>Breaking down food inside mouth</td>
<td>5.2%</td>
</tr>
<tr>
<td>Licking</td>
<td>Licking the food</td>
<td>52.6%</td>
</tr>
<tr>
<td>Prehension</td>
<td>Casting food into mouth with tongue, or biting food</td>
<td>45.2%</td>
</tr>
<tr>
<td>Lip licking</td>
<td>Licking of the lips</td>
<td>5.9%</td>
</tr>
<tr>
<td>Moving</td>
<td>Moving head to a different position to attain food</td>
<td>26.7%</td>
</tr>
<tr>
<td>Surveying</td>
<td>Looking in the area around himself</td>
<td>3.7%</td>
</tr>
<tr>
<td>Standing</td>
<td>Up on all four paws, elbows not bent</td>
<td>100%</td>
</tr>
</tbody>
</table>
Grey Parrot Feeding

- Parrot 1 ate for 46 min. 47 seconds
- Parrot 1 drank water for 25 seconds, 13 min 20 sec. into her meal
- Handful of pellets and seeds

Another eating method ->
# Parrot Feeding Ethogram

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<thead>
<tr>
<th>Behavior</th>
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<th>% shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foraging</td>
<td>Moving food around in bowl with beak, searching for food</td>
<td>3.6%</td>
</tr>
<tr>
<td>Adjusting</td>
<td>Moving food around her beak with the tongue to get a better angle</td>
<td>8.7%</td>
</tr>
<tr>
<td>Prehension</td>
<td>Picking up food with beak</td>
<td>25.97%</td>
</tr>
<tr>
<td>Chewing</td>
<td>Breaking down food inside of a mostly closed beak</td>
<td>51.9%</td>
</tr>
<tr>
<td>Cracking</td>
<td>Breaking seeds open with beak</td>
<td>10.6%</td>
</tr>
<tr>
<td>Standing</td>
<td>Standing on both legs</td>
<td>100%</td>
</tr>
<tr>
<td>Drinking</td>
<td>Putting beak into the water, and consuming water</td>
<td>.89%</td>
</tr>
</tbody>
</table>
## Results

### Comparing Feeding Behaviors

<table>
<thead>
<tr>
<th></th>
<th>Cat</th>
<th>Dog</th>
<th>Parrot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prehension</strong></td>
<td>27.6</td>
<td>25.97</td>
<td>25.9</td>
</tr>
<tr>
<td><strong>Chewing</strong></td>
<td>25.9</td>
<td>5.2</td>
<td>51.9</td>
</tr>
<tr>
<td><strong>Moving/Foraging</strong></td>
<td>23.3</td>
<td>26.7</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Cat 2 ate 1/8 cup of food, which is a perfect small meal for her. In the wild, cats eat about 12 small meals a day, their diet is comprised of rodents (12 mice = 3 rats) (Houpt, 2011).

I was unable to find the tongue flicking motion that Cat 1 was making anywhere in the literature. I believe he is either biting his tongue or dislodging stuck pieces of food.
Literature on Dog Feeding Behavior

- Dog 3 ate his food rapidly, not taking time to chew. This relates to competitive eating. Alpha wolves get to eat first, then younger wolves have to compete for the remaining food. (Bradshaw, 2016)

- “Rapid feeding may also be an adaptation to scavenging during the early stages of domestication.” (Coppinger, 1995)

- Dogs that have 24 hour access to food tend to eat a bunch of small meals. (Houpt, 2011)

- The increase of animals in a house can increase the dogs interest in the food. (Houpt, 2011) Dog 3 was visiting my house (2 dogs, and 2 cats), from a house with 1 cat. Dog 3 was observed eating faster than normal.
Parrot 1 ate for about 46 min. 47 sec. and I found in the literature that Grey parrots average feeding time is 47 ± 18 min. (van Zeeland, Schoemaker, Ravesteijn, Mol & Lumeij, 2013)

I observed that when P1 drinks she sticks the tip of her tongue in the water first, and rapidly taps it on the roof of her beak. “Water is collected with the tip of the parrot’s tongue. The parrot swallows it by pressing its tongue onto its palate.” (Schmid, Doherr & Steiger, 2006)

A behavior I wasn’t able to observe during this feeding was beak cleaning, the action of wiping her beak on her perch/branch, but I have observed her do it in the past. I have also observed her clean her beak with her claws. “Bill care: this takes place most of the time after the parrot has eaten, by performing wiping movements against a branch. When residual food sticks onto the beak, parrots raise a foot and try to use it to remove the bits of food with rubbing movements.” (Schmid, Doherr & Steiger, 2006)

“Parrots have taste buds on the roof of the mouth, and no saliva on their tongues.” (Athan & Deter, 2009)
References


