

Behavioral Observations: Lucky and Boo, San Antonio Zoo

Joyce Poole, PhD, Co-Director, ElephantVoices

December 4, 2010



The following are my observations of the behavior of Lucky and Boo, based on my review of short video clips that are linked and were filmed on 13th and 20th November. It is my opinion that Lucky and Boo do not have a healthy relationship. Lucky is being terrorized by Boo. This kind of persistent bullying is not seen in the wild because elephants have other activities with which to occupy themselves, and because they can remove themselves from conflict, if need be. In my opinion, the primary cause of this undesirable situation is that the elephants have too little space.

The closest I have seen to this sort of behavior is the prolonged and targeted aggression between musth males competing for an estrous female, where a higher-ranking male monitors and controls the movements of a lower ranking male in relation to the female he is guarding. Yet, this behavior has a biological purpose, (to ensure a male's reproductive success), it is short-lived, and the lower-ranking male can remove himself from the situation if he chooses. I have not observed this sort of prolonged bullying in the wild between females. Boo is bullying Lucky repeatedly and Lucky has no recourse, other than entering the pool. If Lucky and Boo are to remain together they need a far larger space that would allow them the choice of spending time together or apart. My prediction is that unless the two of them are able to sort this out relatively soon, Lucky is going to get hurt. She has already injured herself against the wall and is clearly distressed. In the meantime, the zoo must monitor this situation closely to prevent Lucky from being injured and to find ways to alleviate the situation.

Definitions of all of the behavioral terms (e.g. "Advance-Toward") used below are given at the end of this document and can also be found, together with relevant photographs, on ElephantVoices Gestures Database at <http://www.elephantvoices.org/multimedia-resources/elephantvoices-gestures-database.html>

13 November 2010, 2:37 p.m.

<http://www.youtube.com/watch?v=coW92iJymyl&feature=related>

The video clip starts in the aftermath of Boo chasing Lucky. "Running-After" is an escalated form of "Advance-Toward" (see below). Boo is larger than Lucky and is "throwing her weight around" and bullying her. For the next two minutes Boo follows Lucky wherever she goes and blocks her path. Boo is exhibiting aggressive behavior. Lucky vocalizes – trumpets and roars – and raises her tail in alarm (e.g. 1:11 – see "Tail-Raising" below). Boo basically controls her movement. Lucky retreats into the pool (2:32), and only when Boo moves away, does Lucky come out (9:01).

20 November 2010, 9:53 a.m.

http://www.youtube.com/watch?feature=player_profilepage&v=RcT8h0j8pV0

At 0:32 Boo turns to look at Lucky, which is a mild threat (see "Turn-Toward"). Lucky turns and walks backwards her (1:03) - an appeasement gesture used when approaching a dominant elephant ("Back-Toward" gesture).

Lucky does what we refer to as “skirting around” (2:45) (see “Skirt-Around”) – avoiding confrontation by taking a wide arc – this is seen in the wild when subordinate elephants are trying to avoid aggression from higher-ranking animals.

Boo pauses in what she is doing to monitor Lucky (“Monitoring”) – note the “Listening” posture. At about 2:55 she turns and walks rapidly toward Lucky in an aggressive manner (“Advance-Toward”). Lucky tries to get away by running left (“Run-Away”), but is cut off by Boo. Lucky then turns right and tries to escape, but with no space to move she crashes into the wall and screams in distress (3:07). Boo stands by and Lucky avoids her by walking away and looking over her shoulder (“Look-Back”) at Boo. She goes to the pool to escape.

Note that this interaction may have been about access to food – As, afterwards, Boo seems to stand over at the wall eating something. But at 3:34 Boo is already “Monitoring” Lucky again. Boo follows her (4:11) and Lucky goes into the pool for safety and trumpets. And roars.

Boo comes over and stands above her (4:26), basically guarding her aggressively. Lucky appears to feel safer in this lower, subordinate position. She stays in the pool. Lucky consistently flaps her ears and then shakes her head in agitation (5:02)

At 5:26 Boo turns and walks off and feeds on hay some distance away; and Lucky is able to access some hay near the pool. At 6:33 she moves to get out of the pool, but as soon as she shows intention of doing so, Boo comes around rapidly as if to guard her and keep her in the pool (6:32). Lucky gives up and stays in the pool. Boo comes to the pool edge and towers over Lucky. Lucky backs toward (“Back-Toward”) her in an appeasement gesture, again. Putting her vulnerable, least threatening side toward Boo (7:04); she ear-flaps in agitation. Boo eats the hay that Lucky had been eating (7:09). Boo reaches out to touch her. Lucky comes out of pool (8:59).

Boo seems to be friendly toward Lucky so long as Lucky stays in the pool where she cannot access much food and is in a highly disadvantaged position.

20 November 2010, 11:19 a.m.

http://www.youtube.com/watch?feature=player_profilepage&v=QdsJrSf6j_Y

The clip starts with Lucky backing toward Boo (“Back-Toward”) acting submissive again. Boo “Advances-Toward” Lucky (aggressive gesture) and Lucky moves rapidly forward (“Retreat-From”) and then backs up again toward Boo while ear-flapping and trumpeting. Boo moves toward her in a controlling manner, but then they greet and Boo allows Lucky to move off.

Some of the behavior seen:

Advance-Toward Purposeful, directed walking toward another elephants or toward a predator with hostile intent that may result in avoidance behavior or counter threat. Sometimes all it takes is one step, in direction of the other, to cause a reaction. Advance-Toward may be associated with other aggressive postures such as Head-High, Ear-Spreading, or Ears-Folded etc. Advance-Toward with Ear-Spreading and Standing-Tall may be directed at predators.

Tail-Raising Raising the tail. Fearful, highly playful or intensely excited elephants may be observed to raise their tails. When extremely excited the tail may be raised in an almost vertical position, while at low-intensities the tail may be raised to near horizontal and wrapped around the hip to one side or the other.

Turn-Toward Reorientation of body to look at an opponent in a threatening manner, for example with Head-High.

Back-Toward Turning to present posterior and backing in toward another, usually higher-ranking elephant. This display is typically seen in the context of a greeting ceremony or when joining a resting group. It may be used to avoid triggering an aggressive response by a larger elephant, as an appeasement gesture or, within families, as a sign of respect. (41a) Strangely this behavior is also seen when elephants are approaching dead elephants, perhaps also as a sign of respect.

Skirt-Around In the presence of high-ranking individuals (at a fallen tree, or in company of an estrous female), lower ranking individuals (most often young males) may often be seen making a small arc or "skirting around" the group to try to establish a better/safer position.

Monitoring An individual who is monitoring an event, situation or interaction or contemplating a sound, smell or object exhibits a constellation of displays including: Listening, Eye-Opening or Eye-Blinking, and J-Sniffing. The very tip of the trunk is usually curled under and around to face the object of interest. He or she may consider by looking at, listening to or sniffing, the object or subject of interest. Elephants often Monitor or contemplate an experience already ended almost as if reliving the sensations. Monitoring may be observed when an elephant contemplates its own interactions, during Object-Play, the actions of elephants nearby, human conversation or considering the bones of an elephant, for example.

Run-Away Running away from a threatening individual. This display is typically seen in response to a Run-After.

Look-Back Standing or walking away while looking back over the shoulder. As an elephant Looks-Back it may flatten an ear against its body in order to see what is behind it. This is primarily observed in a Retreat situation (see Conflict Defensive - Retreat) although depending upon the context and the facial expression it may also be a Threat, as in "Watch it - I can see you!" Look-Back may also be associated with the Waiting posture (see Social Integration-Departure Signal).

Retreat-From Walking away from a threatening elephant. The individual may adopt a Head-Low posture and Look-Back warily. An individual may also Retreat-From by Backing-Away.

A handwritten signature in black ink, appearing to read "Joyce H. Poole". The signature is fluid and cursive, with the first name "Joyce" written in a larger, more prominent script than the last name "Poole".

Joyce H. Poole, PhD

ElephantVoices