

June 2012

Health Evaluation of Vishwamali (Mali), an approximately 38-year-old female Asian elephant (*Elephas maximus*), living at the Manila Zoo, Philippines, based on my inspection of her on 29 May 2012

By way of introduction: I have been providing care for captive wildlife, including elephants, for more than 40 years. From 1982 to 1984, I cared for 52 elephants at a drive-thru wildlife park in Texas. Forty of these elephants were newly imported orphans from the culls in Zimbabwe. The owners of the park were animal dealers who had brought the babies into Texas to break and train them for the performing-animal business. I know firsthand the physical and mental trauma captive elephants must endure. I was veterinarian for the Mountain Gorilla Veterinary Project from 1992 to 1993 and was project director for the Projet Protection des Gorilles, a lowland gorilla orphanage in Brazzaville, the Democratic Republic of the Congo, where I cared for orphaned gorillas and bonobos from 1995 to 1996. I have been a veterinarian at Seattle's Woodland Park Zoo and the San Antonio Zoo in Texas and have provided care for and/or evaluated the health status of more than 100 elephants in zoos, circuses, and sanctuaries.

On May 29, 2012, I visited the Manila Zoological and Botanical Garden to evaluate Mali for general well-being and fitness. There has been some concern over Mali's condition. I was met by John Chua, longtime special caretaker, who was accompanied by Dr. Heinrich P. Domingo and Dr. Marines Lagarto, both zoo veterinarians.

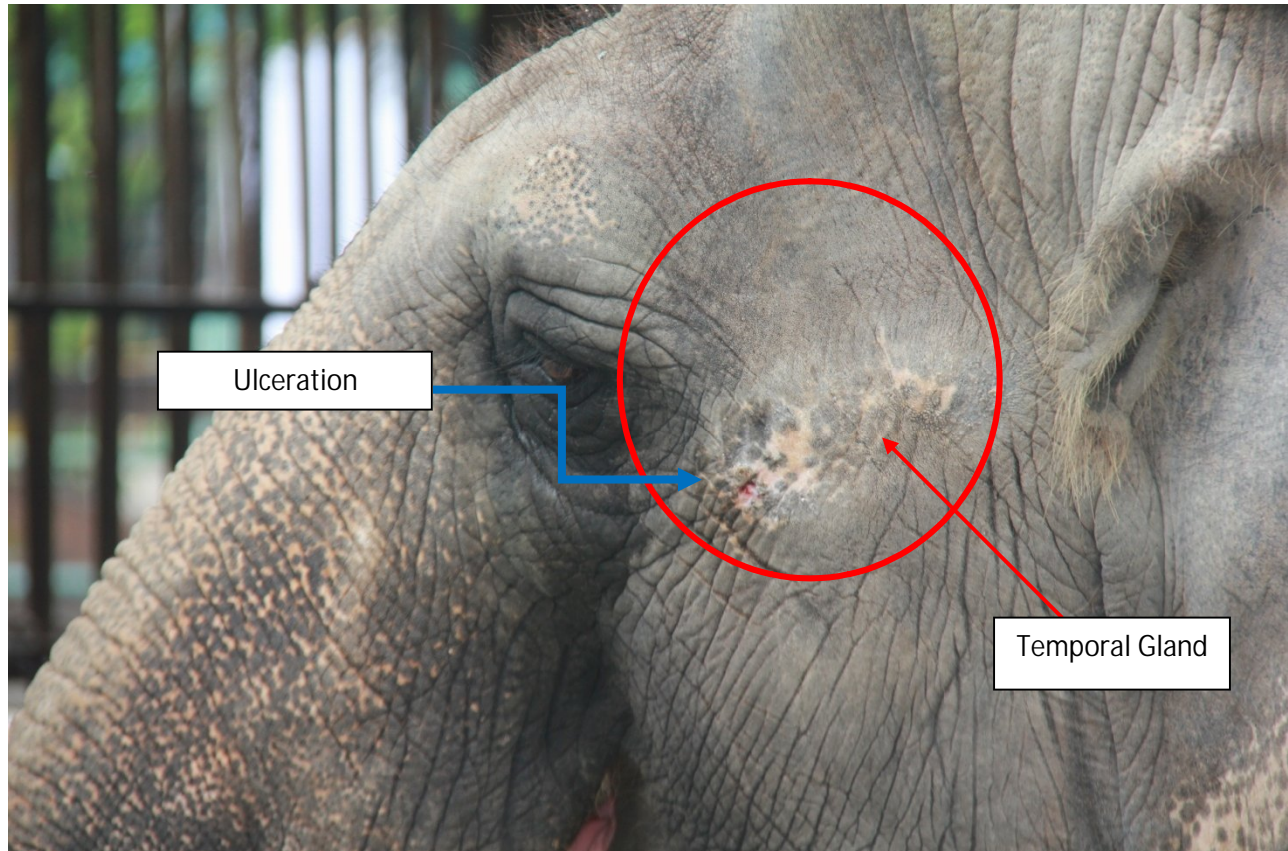
Mali's enclosure consists of two areas, her old original enclosure with a barn and the recent expanded area with a potential pool. The irregular shape of Mali's enclosures makes approximation of the size difficult, but I estimate her total useable space to be no more than 0.001 square kilometers. This small size and flat concrete substrate do not allow Mali to carry out normal elephant behaviors, such as walking up and down hills, digging in the dirt, wallowing in the mud, and swimming. I say "potential pool" because Mali would not enter the pool as built. The zoo was modifying the pool, removing the steps and building a ramp, hoping this would entice her into the pool. I fear the slope of the pool, the small size (no larger than a human soaking pool or large hot tub), and the narrowness of the "deep" end may still be problems. In Mali's night quarters, I observed several days' accumulation of feces and urine. All surfaces appear to be concrete. Other than the barn area, I saw little shade in her entire enclosure.

All of my comments on Mali's health are based on a visual inspection only. Mali is a good-natured elephant, but a complete health evaluation requires hands-on physical manipulation and examination of all four feet, as well as blood sampling for inflammatory processes and infectious diseases. While Mali is not trained to allow a more thorough exam, having consulted and cared for hundreds of elephants over the years, many of whom I could not physically examine, I am confident in my assessment of her current welfare and needs. The lack of a preventative foot-care program is putting Mali in jeopardy of severe foot disease with accompanying pain and

suffering. Under the current management, Mali's health remains at risk, until she is trained using "protected contact" methods to allow proper care of her feet.

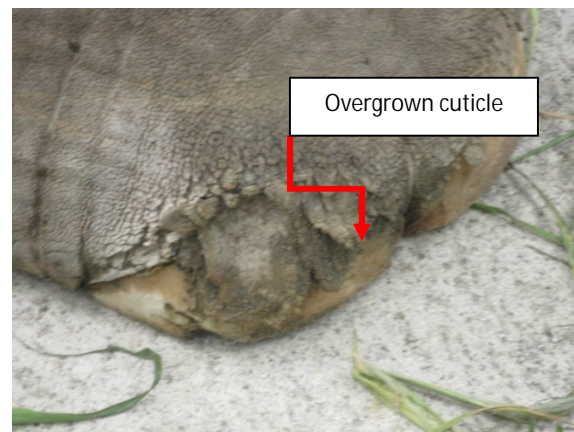
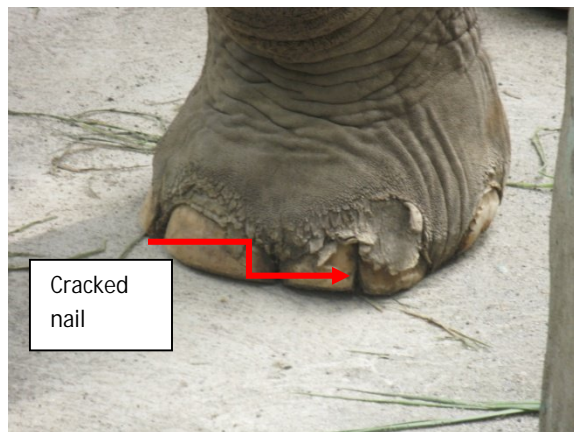
Mali's body condition was relatively good, although she is slightly overweight. This can be attributed to lack of adequate space available to exercise. From what I could tell, her diet seemed adequate. I would recommend the milk in her frozen treats be discontinued and replaced with fruit juice. Elephants do not need milk, especially cow's milk, once they have been weaned.

I questioned the staff members about any stereotypic rocking, swaying, or pacing. Stereotypies are defined as repetitive nonpurposeful behaviors. They said that they had observed no swaying or rocking but that she paces a lot. Pacing can be stereotypical in nature. These stereotypical behaviors are a clear indication an elephant is suffering. They are considered to be a self-soothing behavior. While I saw no fresh wounds or signs of trauma due to chains or bullhooks (I was assured she has never been worked with chains or hooks), I did see areas of chronic pressure sores from lying down and sleeping on concrete. Both hips and both sides of her face had chronic pressure sores. These areas can become infected and become chronic abscesses. The pressure sore on her left temporal area is ulcerated and open to contamination. The accumulation of feces and urine mentioned above becomes more of a concern and serves as a source of possible infection of these sores. See photo below.



Of major concern is the lack of a foot-care program at the Manila Zoo. As the pictures below illustrate, Mali has cracked nails, overgrown cuticles, smooth pads, and cracks on her pads. All of these are a direct result of living on hard concrete instead of the dirt, sand, grass, rivers, and ponds of her natural habitat. These cuticles will harbor bacteria and set up the potential for abscesses. Her cracked nails and pads can allow bacteria to enter the sensitive connective tissues of her feet and are known to lead to infections of the bones of the toes. This is all the more significant considering the accumulation of feces and urine in her night stall. John and Dr. Domingo freely admitted they were not able to trim her cuticles. John is aware of Gail Laule's work teaching elephants and staff about the benefits of protected contact training, using positive rewards to gain the cooperation of the elephant for foot care and veterinary procedures, including blood draws. I suggested the Manila Zoo contact Gail Laule, who lives in the Philippines, right away.

Dr. Murray Fowler in *The Elephant's Foot* states, "Non-resolvable foot infection and arthritis are the major reasons for euthanizing elephants."



I voiced the opinion to John and Dr. Domingo that—based on the limited data (no blood evaluation) obtained—Mali appears to be in reasonably good condition. My major concern is that Mali is alone. Female elephants in their natural habitat never leave the herd. They are in constant communication with the other members of their family. Mali's social and psychological needs are being neglected at the Manila Zoo. Even the best intentions of John and her keepers (who all clearly care about Mali's well-being) cannot replace these needs, which can only be met by the companionship of other elephants. In my experience, even elephants who have been alone for more than 20 years integrate well with other elephants when moved to a sanctuary.

I've watched over the years as many zoos have realized that, even when well-funded, they can't properly care for elephants. Eighteen zoos have closed or plan to close their elephant exhibits. Eleven zoos, including the Detroit Zoo, the Greater Vancouver Zoo, and the San Francisco Zoo, have placed a total of 14 elephants at the two U.S. elephant sanctuaries. While the Manila Zoo does the best it can with what funds it has, it just isn't sufficient, and in the case of elephants, good intentions are not good enough, as I think it is now well understood.

I understand that Mali has been offered a place at a sanctuary in Thailand with 14 other rehabilitated elephants. This sanctuary is experienced at introducing elephants to each other. Mali will be introduced slowly and will be allowed time alone if she wants it. I was asked if she is fit enough to be transported. I believe Mali is mentally and physically capable of making such a trip, with the only provision being that the transportation and move must be carried out by people with solid experience of transporting adult elephants, which would be my recommendation for any elephant making the journey.



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