

Greetings from Asian Elephant Support!

Request for General Funds

Imagine a herd of elephants that has been raiding a village's crops incessantly for the past few weeks. This village is losing its source of income and ability to feed its people, but the elephants are just trying to survive in an area where more and more land is being converted for use by humans. Immediate action is needed before the situation spins out of control.



Next, imagine a bull going through musth, a period of heightened testosterone and aggression. He is a danger to himself and the humans living in the surrounding area. Someone needs to intervene before the situation gets worse.

These types of scenarios occur daily in Asian elephant range countries, and Asian Elephant Support (AES) often receives impassioned pleas for our assistance in mitigating problems related to elephants. Immediate assistance is extremely important because if too much time passes, the problem may escalate and the elephants or the people could be injured or killed. Other types of situations may also be life threatening. When an orphaned calf needed supplemental food and a big bull needed to be transported, AES was able to respond quickly to help save their lives. However, not every request is an emergency situation. By empowering the local people and supporting other organizations working in the same areas, we can help ensure a future for Asian elephants. To continue to be able to respond quickly to these and other types of situations, AES needs loyal supporters like you.

And now we have made it even easier for you to donate through our PayPal Monthly Giving option! All you have to do is determine the amount you wish to donate each month, choose which card you

want billed, and voila! PayPal will automatically deduct that amount each month. It's also easy to unsubscribe if monthly giving is no longer a viable option for you. Visit <http://www.asianelephantsupport.org/donate-with-paypal> for more information and further instructions for monthly giving.

It's hard to imagine how our everyday decisions affect the lives of elephants and people in Asia. Many of the struggles that Asian elephants face today, such as deforestation and habitat loss, are due to the effects of global trade. We must realize that globalization has far-reaching ramifications and we must take responsibility to help the Asian elephants, a species that is struggling due to our economic decisions.

We believe that it is possible for humans and elephants to coexist peacefully. With your support, AES can continue to be in a position to respond to the many challenges facing elephants throughout Asia.



Happy Halloween!



Help protect Asian elephant habitat simply by purchasing Halloween candy that uses sustainably-harvested palm oil.

Halloween is fast approaching and it's almost time to buy candy for those cute trick-or-treaters. However, some candy contains unsustainably harvested palm oil, which contributes to habitat loss for elephants and other species in Indonesia and Malaysia. Please use this guide to purchase candy that contains sustainably harvested palm oil, and you will also be helping elephants!!

Visit: <http://cmzoo.org/docs/halloweenGuide2012.pdf> for more information. For a quick reference, here are the brands that use sustainably-harvested palm oil:

Nestle -- Baby Ruth, Butterfinger, Crunch Bar)	Wonka -- Sweetarts, Bottle Caps, Laffy Taffy, Nerds
ConAgra -- Fiddle Faddle, Crunch & Munch, Poppy Cock	Kellogg's -- Rice Krispie Treats, Fruity Snacks, Pop Tarts
Kellogg's (Austin Crackers - all varieties)	Kellogg's -- All Keebler Brand Cookies
PepsiCo (Frito Lay) -- Cheetos, Doritos	PepsiCo -- Grandma's Cookies
Hershey's -- Twizzlers, Jolly Ranchers, Whoppers, Reese's Peanut Butter Cups, Almond Joy, Mr. Goodbar, Heath Bars, Milk Duds	Mars -- Snickers, Twix, M&M's, 3 Musketeers, Milky Way, Skittles, Dove Chocolates
Justin's -- Peanut Butter Cups, NutButter (All flavors)	Lindt and Spungli (Lindor Truffles (All flavors))
Ghirardelli (All flavors)	Kraft Foods -- Kraft Caramels, Cadbury Creme Eggs, Toblerone
Nabisco -- Nutter Butter, Chips Ahoy, Oreo	Walmart -- Great Value Brand products (Candy, Cookies, Crackers etc.)



Elephants and Tuberculosis

Tuberculosis (TB) in humans has been present for hundreds of years. However, due to the variety of symptoms, it was not identified as a signal disease until the 1820s. In 1839 it was given the name of Tuberculosis, by J. L. Schönlein, but was often referred to as “consumption” because of the weight loss associated with the disease. In addition to human beings, TB is found in other species and effective treatment is still very difficult. There are many unanswered questions surrounding TB in elephants. We believe it is important to have current and factual information so we would like to share this article on the task force meeting in Tulsa, Oklahoma that was held on July 9-10, 2012.

Management and Research Priorities of Tuberculosis for Elephants in Human Care
2nd Stakeholders Task Force Meeting Summary
July 9-10, Tulsa, OK

**** Reprinted with the Permission of the Elephant Manager’s Association ****

“This meeting was organized and supported by the American Association of Zoo Veterinarians (AAV), the AZA Elephant TAG, the International Elephant Foundation (IEF), the Elephant Managers Association (EMA), Feld Entertainment, Inc., and hosted by the Tulsa Zoo. This invitation only meeting included elephant managers and veterinarians, researchers, state veterinarians, and human infectious disease experts. These individuals were gathered in a collective effort to continue the discussions and work from the first Stakeholders Task Force Meeting in Fort Worth, in August 2011.

The meeting began with an update from each of the four discussion groups from last year's meeting in Fort Worth. These groups focused on the following topics: the epidemiology and risk factors of TB in elephants; public health risks and the occupational health concerns for staff working with elephants exposed or infected with TB; the various methods of TB diagnosis; and current and suggested methods for TB treatment.

Group 1 – Epidemiology:

A better understanding and a science-based definition of "exposure" is needed to differentiate high risk transmission situations from those with little or no risk, and to assist in management decisions affecting the housing and management of elephants that are TB infected, or exposed to TB infected animals. There is a gap in knowledge about these factors and more data is needed. To address this topic, an epidemiological survey of all elephants in the U.S. was proposed at the Fort Worth meeting. This survey is now being developed by Drs. Michele Miller, Sharon Deem, Francisco Olea-Popelka, Dennis Schmitt, and Ramiro Isaza, and aims to identify risk factors for TB in elephants. To avoid bias and concerns with confidentiality, and to increase responses, this will be a blind survey (individual elephants and facilities will be assigned a number). The survey targets each individual in the elephant population in the U.S., and will look at a variety of potential risk factors (i.e. past medical history of the individual and herd, staff health, facility design, geographical location, etc.). The survey also includes questions about TB

diagnostic and treatment history. The survey is a first step and further research may be needed to better understand the epidemiology of elephant TB.

Group 2 – Occupational health:

A retrospective study of the occupational health risks for elephant handlers working with TB infected elephants was extensively discussed at the Fort Worth meeting. This study, led by Dr. Ramiro Isaza, is now in progress and preliminary results should be available by the end of 2012.

An important topic that the group worked on in Tulsa is the need to create a clear distinction between occupational health and public health statements in regards to TB and elephants. There was discussion about the need for public health veterinarians to survey attitudes/knowledge of people who work with primates and elephants. Additionally, a position statement on safety recommendations targeting animal workers was proposed.

Group 3 – Diagnostics:

There is an urgent need to develop improved diagnostic tests for TB in elephants. The sensitivity and specificity of the elephant StatPak and MAPIA serology tests have been validated only at the extremes of known non-infected and known late stage infected animals; however for all other animals the sensitivity, specificity, and predictive value have not been determined. Despite these inadequacies, the test results for this non-validated population are being used for regulatory purposes. This imposes economic hardship on the industry and regulatory agencies, and may needlessly expose elephants to treatment with significant adverse effects.

The goal of any new TB test is three fold:

- To identify sick elephants in need of life saving therapy
- To identify infectious elephants so that measure can be taken to decrease the spread of TB to other elephants and minimize potential human exposure
- To accept a test that would satisfy normative standards for diagnostic testing.

The group proposed several action items including a formal request to USDA-APHIS requesting that data from the current USDA mandated elephant TB serology testing (via StatPak and MAPIA) be independently analyzed and published in a peer-reviewed journal. Requests to other entities regarding the feasibility of testing trunk wash samples will include developing a proof of concept pilot study for alternate TB testing (i.e. rapid b platform flow cytometry for mycobacterial organisms). Additionally it was suggested to maintain ongoing communication with human and veterinary TB immunologists so that advances in the field can be rapidly communicated.

Group 4 – Treatment:

There is a need for a more detailed list of adverse effects to elephants from TB treatments. Dr. Ellen Wiedner, who collected data with Dr. Dennis Schmitt in this regard via a 2007 survey, will add and compile current data and submit a paper for publication in early 2013.

Some of the other issues discussed by this group include the need to improve parameters for identifying pathologies due to adverse drug effects, administration of medications, and the need for better parameters than drug level measures. It was proposed to post treatment forms on relevant websites (i.e. AAZV, EMA, AZA TAG) to collect more data, and to maintain open communication on developments in human TB treatments. A new pharmacokinetic study of the drugs used in treating tuberculosis in elephants is currently underway at the University of Florida.

After the updates about the groups formed at the Fort Worth meeting, participants were randomly assigned to new groups to discuss the recent (2010 and 2012) revisions to the Elephant TB Guidelines which were both developed by an Elephant TB Subcommittee of the U.S. Animal Health Association (USAHA) with no input from elephant stakeholders such as USDA licensed facilities or experienced elephant managers and veterinarians. Some state veterinarians are currently using these new revisions in a regulatory manner, yet the revisions are not evidence-based and did not follow proper procedures for development of guidelines. Interestingly, only one member of this 6-person USAHA subcommittee accepted the invitation and made the effort to participate in the Tulsa meeting, although the presence of the entire subcommittee had been requested.

All four groups came to the same conclusions with both the 2010 and 2012 revisions, with the main problems outlined as: the revisions are not science-based, there are many inaccurate and/or poorly referenced statements, and more importantly, revisions are premature as several studies are underway that will provide better data to make evidence-based suggestions and potential changes to the Elephant TB Guidelines. There was also concern that while the USDA officially follows the 2008 Elephant TB Guidelines, some USDA staff is telling state veterinarians to use the 2010 revisions.

The USDA has not yet implemented the 2010 revisions to the Guidelines for the Control of Tuberculosis in Elephants, and currently these revisions are moving through the internal USDA process. Meeting participants unanimously agreed to request of USDA that the 2008 Guidelines remain in effect with some clarifications. It was agreed to also request that USDA not implement the 2010 or 2012 revisions to the Elephant TB Guidelines until changes can be made that reflect some of the recommendations from both the Fort Worth and Tulsa stakeholder meetings, and until further studies are completed.

A steering committee of stakeholders was formed, and the EMA is represented in this committee. Deadlines were set for action by the steering committee on topics discussed during the meeting.

Some points of interest discussed during the Tulsa meeting:

- The use of the serological tests StatPak and MAPIA as accurate indicators of active infection of elephant TB is inconclusive. To date, the USDA has not provided data or results from their one-year initial testing (March 2010-March 2011). Serology test results alone should not serve as a basis for initiating treatment or restricting travel without other indicators present (i.e. TB culture results). In fact, a 2011 World Health Organization (WHO) report on the sensitivity of similar serology tests in detection of active TB in humans indicated that they are not accurate or consistent predictors. Following the WHO directive, in June 2012 India became the first country to ban the use of TB serology testing for humans due to inconsistent results.
- Dr. Ramiro Isaza (University of Florida) gave a short presentation about incorrect information in the literature (e.g. Mikota & Maslow 2011) regarding the prevalence of TB in elephants. It has been stated that 18% of the U.S. Asian elephant population is infected with TB. However, this is a cumulative figure that does not use accepted epidemiological calculations because it includes elephants that have died, while also failing to retroactively exclude elephants that have been "cleared" of active TB infection post treatment. As of January 1, 2012, the prevalence of TB in Asian elephants in the U.S. is no more than 5%. There have been no significant changes in the number of newly culture positive animals on an annual basis over the past decade, and this number corresponds to about one new case per year. Percentages calculated from limited data sets incorrectly skew perceptions and understanding of the actual prevalence of active TB infections in elephant populations.

- More research is needed on transmission of TB from elephant to elephant, as well as from humans to elephants and vice versa. There is still no conclusive evidence to show the direction of TB transmission between humans and elephants. In humans, mycobacteria tuberculosis is not transmitted via contact with fomites (objects such as feed tubs), and it seems unlikely that this form of transmission occurs in elephants. In human medicine, it is well understood that the disease spreads exclusively through aerosolization. Furthermore there have been no documented cases of members of the public becoming TB infected from an elephant; it appears that elephant TB is a very low public health risk.

A full report of the 2nd Stakeholders Task Force Meeting in Tulsa, along with the recommendations and proposed action items discussed during the meeting will be transmitted to the USDA and to all elephant stakeholder groups.”

THANK YOU

We at AES wish to extend a very sincere thank you to each donor who has voted their support with a financial gift. We value that confidence and will always do our best for the animals we all care for so deeply.

Please visit our website (www.asianelephantsupport.org) and follow us on [Facebook](#) (Asian Elephant Support). If you have questions, please [contact us](#). We appreciate your support. Please consider a [donation](#) to help Asian elephants and those who care for them.

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