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Dear Mayor Sargsyan and Representatives,

**A COMPREHENSIVE ASSESSMENT OF BUNKA THE ELEPHANT AT THE YEREVAN ZOO IN ARMENIA
EVIDENCED HIS PHYSICAL AND PSYCHOLOGICAL DETERIORATION**

**THE REPORT AUTHORS AND FRIENDS OF BUNKA RECOMMEND MOVING HIM TO A NATURAL ENVIRONMENT
IN A SANCTUARY**

The [Pro Elephant Network](#) (PREN) consists of a significant international community of diverse individuals and organizations, comprising specific expertise, related to wild and captive African and Asian Elephants, including but not limited to the fields of science, health, conservation, welfare, economics, community leadership, social justice and the law.

Bunka is an Asian bull Elephant, he was born in captivity at the Tbilisi Zoo, in Georgia. His mother, Malka, was captured from the wild in 1997 in Laos and arrived at the Tbilisi Zoo as a calf in 2000. Malka gave birth to Bunka when she was only ten years old. Bunka's father, Bacho, of unknown origin arrived at the Tbilisi Zoo in 1999, where he died prematurely in 2009. Malka was separated from Bunka in 2014 when he was sent to the Yerevan Zoo. Elephants have strong social bonds and suffer tremendously when separated from family members.

PREN wrote a [letter of concern](#) to the Administrator of the Yerevan Zoo on the 21st of September 2021 after it was alerted about Bunka the Elephant's solitary life in the zoo. PREN members requested access to Bunka in order for experts to assess and establish his health and well-being and offered assistance to the zoo administration.

The [Friends of Bunka](#) organisation, a member of PREN, has subsequently attracted significant global support for Bunka, this includes a [petition](#) signed by 78,000 conservationists and concerned members of the public, who are calling for his safe release from captivity.

The undersigned members of PREN are grateful that Mark Stratton and Tina Papadopoulou, from the Friends of Bunka organisation and a team of Elephant specialists, comprising Dr Marion Garaï, Ingo Schmidinger, Brett Mitchell and Tenisha Roos, were granted access to Bunka in order to conduct a comprehensive, physical and behavioural assessment of him at the Zoo in November 2022.

The results of this expert assessment have been published in a well-referenced [Report](#) which includes the following important concerning information:

1. Concern for life-threatening physical well-being, in particular, Bunka's feet which indicate the presence of an abscess and cracked nails;
2. Concern that Bunka is malnourished;
3. Bunka's eyes are visibly inflamed which is an indication of poor health and below-standard living conditions;
4. Bunka exhibits extremely dry skin;
5. Abrasions on his tusk which could be an indication of self-harm;
6. Concern for the abnormal behavioural indications for example stereotyping, his repetitive behaviours such as walking in circles, the exhibition of pathological boredom and depression.



1. Crack and abscess, left forefoot

2. Cracked nail, right hindfoot

Credit: Friends of Bunka, Assessment Asian male Elephant Bunka

The Report reveals that of the many defined behavioural contexts for wild Elephants that form part of their repertoire, Bunka only presents Feeding. He is otherwise exhibiting Boredom and Stereotyping behaviours.

“Neither Boredom nor Stereotyping behaviours are observed in the wild. He spends most of his time, waiting for the next food to be given, or looking for something to do, and this is hour by hour, day by day, month by month, and year by year. Given that for over 17 hours per day during winter Bunka is locked up in a concrete room, it is surprising he has not become aggressive or shown more aberrant behaviours. No amount of enrichment, even if there were any, can adequately provide the mental and physical stimulation or relief from suffering for Bunka.”

It is the opinion of the experts that the Yerevan Zoo does not comply with international zoo guidelines, in particular:

1. The general environment and hard flooring/substrate in the inside barn and outside yard are highly inadequate;
2. No bedding is supplied, as a consequence, Bunka cannot rest in recumbency;
3. Indoor insufficient space, including insufficient height;
4. No floor heating;
5. Total lack of enrichment and stimuli;
6. Inadequate variety of food and drinking water provision; no food is provided at night
7. No water in the pool;
8. No sand-bath area;
9. Poor ventilation/ poor air quality in the barn;
10. For such a social species it is not acceptable for Bunka to be kept in solitary confinement for over 7 years.

The Report indicated that *“The enclosure does not meet the minimum size requirements for captive bull Elephants, it does not provide adequate opportunities for stimulation (minimal enrichment available) nor does it support natural behaviours (no water bathing, sand dusting, grazing opportunities etc). Furthermore, owing to Yerevan’s climate which is incompatible with the needs of a tropical species, in the winter Bunka spends unacceptably long periods (17 hours) inside a small barn with unsuitable flooring, lighting, ventilation, lack of enrichment and without options for Bunka to rest in recumbency.”*



View of the inside Barn – Credit: Assessment Report Asian male Elephant Bunka

Size Requirements:

A 2022 Report by Drs Rob Atkinson & Keith Lindsay entitled [Expansive, Diverse Habitats Are Vital For The Welfare Of Elephants In Captivity](#) concluded that Elephants evolved to live in spaces 1,000 to a million times bigger than even a large zoo enclosure of 10 hectares (24,7 Acres).

Bunka’s inside barn, where he spends about 17 hours per day in winter consists of a 150 m² large area, whilst his outside yard (including the Elephant pool) is 1.070 m² large, for a total area of 1.220 m² (0,3 Acres).



Outside Yard and view on the empty pool – Credit: Assessment Report Asian male Elephant Bunka

Elephant range in zoos: 1.6 to 10 acres
Elephant range in the wild: 2,470 acres (minimum)

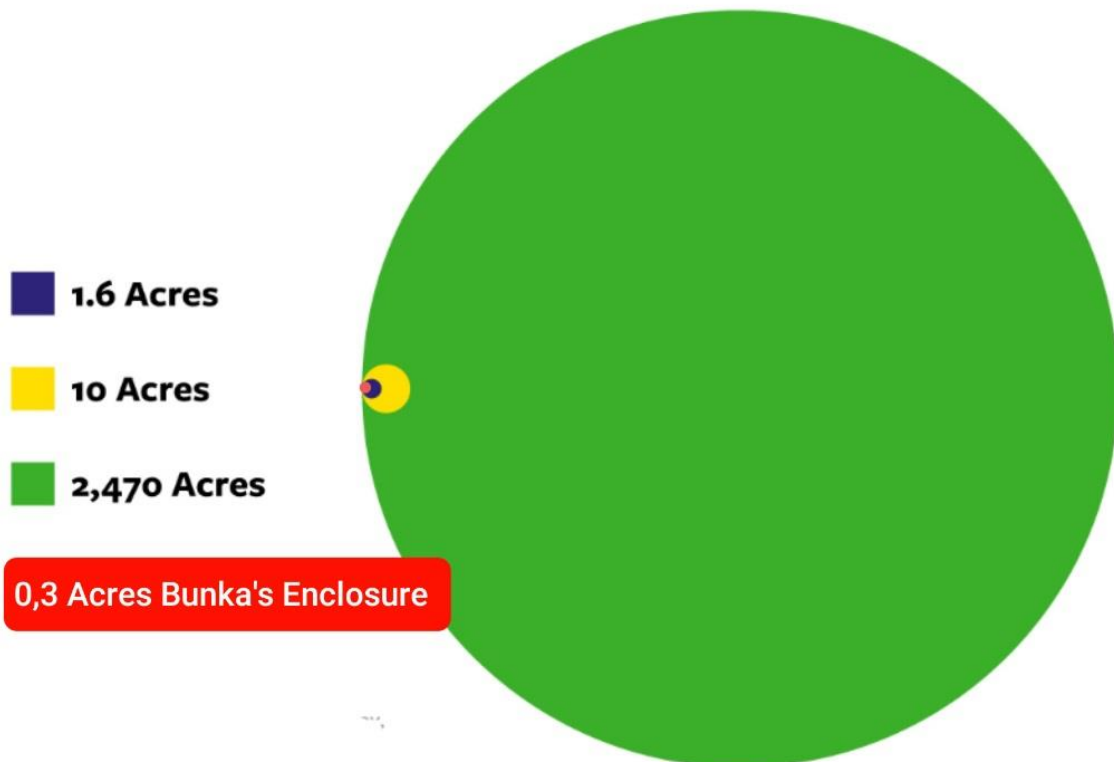


Diagram from Drs Rob Atkinson and Keith Lindsay Report *Expansive, Diverse Habitats are Vital to the Welfare of Elephants in Captivity*, adapted to show the size of current Bunka’s enclosure, in red.



The Bunka Expert Assessment Report highlights that an estimated 50% of Elephant deaths in captivity are caused by a lack of mobility.

Zoo guidelines from the following zoo organisations including WAZA, EAZA, AZA, BIAZA recommend that zoo enclosures must allow all-natural behaviours to be possible, this includes *movement* for Elephants.

Bunka's enclosure is particularly small and barren. *"With such limited space and no incentive to walk, Bunka is deprived of any above behaviours and deprived of any cognitive stimulation. Exercise has been shown to be a vital factor not only for muscle and joint development and maintenance, but also to stimulate neural growth, improve learning and mental performance and promote brain plasticity. This is corroborated by the latest findings, that the brains of captive Elephants are greatly impoverished, to the degree that different levels of the cerebral cortex are affected: decrease in cortical thickness, smaller capillary diameter, decreased soma size and fewer glia cells per neuron, less complex dendritic branching, fewer dendritic spines, and less efficient synapses."*

Climate:

Climate and long winters (Yerevan average temp -7°C to 34°C) are inadequate for Asian Elephants if you consider their average tropical temperature of 27°C in their native areas. The Report concluded that *"even if the Zoo will find the funds to expand the Elephant enclosure, no amount of extra space will relieve an unsuitable environment for Asian Elephants, where winter temperatures can drop down to minus 20°C,"* such as in Armenia.

Social interactions:

The suggestion made by the Zoo administration to import a female Elephant to keep Bunka company is not an acceptable or appropriate solution. The content of the Report indicates, *"Elephants are not monogamous, nor do they have a social structure of male and female pairs. Females need female company and males need male company; however, the sexes also need to socialise for mating at times. Males will walk from female group to female group in search of oestrus females and remain only as long as to ensure that he is the sole breeder."*

The report concludes that:

"Bunka is experiencing visible detrimental physical and psychological effects due to the conditions of his captivity. Based on evidence from similar captive environments, his condition is very likely to escalate and lead to further physical deterioration and problematic behaviours if no drastic action is taken. The inadequate physical and environmental conditions compound Bunka's observable psychological stress, loneliness, and boredom. With such limited space and no incentive to walk, Bunka is deprived of any cognitive stimulation."

Recommendations:

Members of PREN and other Elephant conservation organizations have participated in the successful relocation and reintegration of solitary Elephants into natural environments.



Armenia and the Yerevan Zoo would gain global recognition and publicity if the administrators were to take the decision to engage with the experts of the Pro Elephant Network and the team involved so far and negotiate a release plan for Bunka.

The Bunka Assessment Report has been delivered to the Zoo administrators. Members of PREN eagerly await a positive response.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Stefania', with a checkmark at the end.

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