

Appendix 2.

Indicators of elephant welfare identified by focus group participants

Behavioural	Natural behaviour		Digging	
			Drinking	
			Exploration	
			Feeding	
			Foraging	
			Interaction with substrate	
			Manipulating objects	
			Mud wallowing	
			Object play	
			Scratching or rubbing	
			Sleep or lying rest	
			Swimming (immersed)	
			Use of pool (excluding immersed swimming)	
			Abnormal behaviour	
	Non-stereotypic	Self-directed		
	Stereotypic	Foot lifting		
		Head banging		
		Head bobbing		
		Locomotory (eg pacing)		
		Rocking		
	Demeanour			Alert
				Attitude
				Ear position
				Facial expressions
				Posture
				Guilty looks
				Looking happy
People and training			Relaxed	
			Trunk position	
			Change in responsiveness	
			Cooperation with keepers	
			Interaction with keepers	
			Interaction with public	
			Response to training	

Behavioural (cont.)	Social interactions	Affiliative behaviours
		Aggression
		Allomothering
		Avoidance
		Change in social interactions
		Compatibility
		Consistency of association
		Displacement
		Dominance
		Excessive aggression
		Food sharing
		Low or decreased social interaction
		Play
		Proximity
		Support
	Synchrony within group	
	Trunk contact	
Vocalisation	Rumble	
	Trumpet	
Physical		Able to get up and down
		Body condition score or weight
		Condition of teeth
		Eyes
		Fluidity of movement
		Foot condition
		Gait
		Injury
		Lameness
		Muscle tone
		Skin condition
Tusk growth		
Physiological		Cortisol and stress hormones
		Oestrous cycle
		Temporal gland draining