Table 1. Overview of studies inferring LCC as a valid proxy to assess stress and welfare in animals.

Species	Context	Change in LCC	Remarks	References
Badger (*Meles meles*)	Capture, transport, handling	↓ Transport	Transport was identified as additional stressor prior to handling	(76)
Scandinavian brown bear (*Ursus arctos*)	Capture via helicopter, surgery	↓ Capture	Variation in LCC was best explained by social status	(83)
		↑ During anesthesia	Bears in better body condition coped better with capture and handling	
Water vole (*Arvicola terrestris*)	Captive housing, social stress	↓ Group size	Individuals held in large groups showed greater declines in LCC	(101)
Bank vole (*Clethrionomys glareolus*)	Trapping and short handling	↓ Handling	Even a short period of 20 s of handling induces a decrease in LCC	(102)
Wood mice (*Apodemus sylvatikus*)			Note: potential bias by the use of isoflurane during handling	
Water vole (*Arvicola terrestris*)	Captive conditions, handling,	↓ Captivity	Indoor-housing caused a greater decline in LCC compared to outdoor- conditions	(103)
	Radio collaring	↓ Indoor housing	Continuous decrease of LCC over the entire experiment (6 weeks)	
		↓ Collaring	LCC of collared individuals decreased more within the first week of the exp.	
European roe deer (*Capreolus capreolus*)	Capture and handling	↓ Prior to handling	LCC levels were negatively correlated with the time of human presence prior to the handling procedure prior to the handling	(84)
House sparrow (*Passer domesticus*)	Capture and handling	↓ Capture, handling	Capture induced a decrease in LCC	(51)
		↑ During confinement	LCC of birds kept in a cotton bag recovered during a 30 min period	
		↓ Females	Females showed significantly lower LCC levels in response to the stressor	
Rhesus macaques (*Macaca mulatta*)	Captive conditions	↓ Caged housing	Caging system caused significantly lower LCC responses compared with open rooms	(104)
Kulan (*Equus hemionus*)	Capture for reintroduction	↓ In agitated indiv.	Suggests LCC has the potential to identify high risk candidates	Huber et al. this study
European Roe deer (*Capreolus capreolus*)	Long-term anesthesia monitoring	↑ Until 80 min and ↓ thereafter	Suggests LCC as a useful tool for anesthesia monitoring	Huber et al. this study
		↓ In winter	Marked seasonal difference in LCC with lower levels in winter	
Cattle (*Bos taurus*)	Ring castration	↓ Ring castration	Lower LCC in ring castrated calves during the degenerative phase of scrotal tissue	(105)

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