

Excerpt from *Elephant Speak* by Melissa Crandall (Ooligan Press, March 2020):

Medium Copyedit

Two hundred years ago, the population of wild Asian elephants was estimated at 200,000. By the turn of the twentieth century, reports from across the thirteen range states (Bangladesh, Bhutan, India, Nepal, Sri Lanka, Cambodia, China, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, Thailand, and Vietnam) placed the number at 39,500–43,500 animals, plus an additional ~~fifteen to twenty thousand~~ 15,000–20,000 in captivity worldwide. Other estimates quote a much lower number, suggesting ~~that there are~~ less than 35,000 total. By 2015, the population of Sumatran elephants, the smallest of the Asian species, had dwindled to less than ~~three thousand~~ 3,000. A degree of uncertainty shadows these numbers because of difficulty obtaining a census due to dense vegetation, difficult terrain, and sometimes outmoded survey techniques, but the indisputable fact remains: elephant populations are steadily declining worldwide. The three greatest threats to elephants are habitat loss and fragmentation, human–elephant conflict, and predation. The root cause of all three is ~~humankind~~.

Intensive logging, the clearing of land for agriculture and livestock, and the rampant spread of human settlements have steadily eaten into land that once belonged to the elephant, breaking and blocking ancient migratory routes. The resultant separation of herd from herd, and wandering bulls from receptive females, hinders the passage of knowledge and expertise ~~from older animals to younger~~ to younger animals and creates a crippling loss of genetic diversity. It adversely affects the socialization of young elephants, leaving them bereft and clueless. Without guidance through the long years of maturation, they may end up looking like an elephant, but they’ll never achieve the greater measure of what it means to *be* an elephant. In one instance, a

Commented [OR1]: I’ve changed some of these numbers to numerals for consistency, per *CMOS* 9.7.

Commented [OR2]: This adjustment prevents any issues with gender-biased language.

herd of teenage male African elephants, survivors of a ~~cull~~, was moved to a new location.

Commented [OR3]: Not all readers will be familiar with this term, so it might be helpful to define it here.

Without the presence of older, more experienced bulls to influence and teach them, the young males went on a rampage, attacking and brutally killing the local rhino population. They entered full musth ten years earlier than usual, and simultaneously, ~~—~~ something never documented before. When adult males were eventually introduced to the area, the killings stopped. This proved ~~the importance of that~~ older bulls in elephant society play an important role beyond the breeding imperative: ~~∴~~ younger bulls need them as role models.

Elephants cut off from their annual passage to areas of plentiful food quickly over-browse an area. In search of sustenance, they raid cultivated fields. The loss of revenue to large agricultural ventures is estimated to be in the millions of dollars. Small-scale farmers have watched elephants wipe out their entire livelihood ~~be wiped out~~ in a single night.

Attempts to protect arable land with ditches or high-voltage fencing have failed because elephants will fill ditches with dirt and branches in order to walk across them, or push trees onto electric wires and clamber over the fallen trunks. Since ivory doesn't conduct electricity, bulls (and cows, in the case of African elephants) use their tusks to tear out fences, holding their trunks out of the way. Their spongy feet are also poor conductors of electricity, which allows the elephants to simply trample fences.

Desperate for survival, the farming families, ~~(~~ many of ~~which~~ whom belong to cultures that revere the elephant, ~~);~~ may attempt to drive the marauders away by lighting fires, making noise with drums and other implements, setting off firecrackers, or shooting guns into the air. Even when these methods work, ~~it's~~ they're usually nothing more than a temporary fix. The elephants soon return, at which point the farmers, ~~—~~ unwilling to choose an elephant's life over that of their

child or ~~to~~ sink into an even deeper well of poverty, ~~—~~ see no alternative but to kill the problem animals, sometimes as many as one hundred annually.

Conflicts between people and elephants can turn deadly for humans, too. In India alone, elephants kill roughly one hundred people each year; some years, the count may be as high as three hundred. Half of those deaths are the result of ~~a~~ chance encounters.

Innocent animals living apart from human settlements, or as far afield as they can get, suffer as well, hunted for their meat, hides, and ivory. Herds are sometimes culled to free up land for agriculture or to capture calves for black-market wildlife sales. ~~Some poachers, l~~ured by the call of easy money, ~~some poachers~~ prey on the very animals that are interwoven into their ~~tribal~~ culture. In 2012, poachers armed with grenades and AK-47s slaughtered more than three hundred elephants in a single day at Bouba Ndjida ~~n~~ National Park in Cameroon.

The more Roger learned, and the better he came to realize that elephants could actually disappear from the earth in his lifetime, the more determined he became to do something. He wasn't sure how he could help wild elephants ~~to~~ survive, but in Portland he could fight to give ~~them~~ zoo elephants the best and longest ~~lif~~elives possible.

Commented [OR4]: Since *tribal* can sometimes have derogatory connotations, this may not be the best word to use here. One possible reformulation would be "interwoven into their cultural traditions."