

Essay: Are Tigers Here to Stay? *by John Williamson*

WELL, YES AND NO. This writer believes that yes, they will survive, but not in the wild that has supported them in large numbers for thousands of generations. Instead, they will probably flourish only by further adapting to well managed captivity. Their numbers may reach worldwide limits in the neighborhood of tens of thousands because they are charismatic and well loved by large numbers of potential and able caretakers throughout the private sectors of industrialized countries. These conclusions were reached after examining voluminous amounts of hard data, scientific papers, and informed projections. What follows is only a very brief summary of key factors shaping the near term future.

Tigers will most likely become functionally extinct in the wild within twenty-five years as a result of the confluence of several clear, rapidly spiking global changes strongly affecting their ecological niche. While poaching of Tigers is generally considered the major short term threat to them, little interest has been shown in the truly monstrous threats to come. Perhaps one reason is that, to the problems that are beyond the present political and physical reach, there are no worthy answers. Meanwhile, those problems barely touched on here are relentlessly converging like the waves of the *perfect storm*, moving to engulf the fragile Ark now supporting Tigers.

Human population growth throughout wild range areas: Barring a cataclysmic collapse of human population through war, disease, or famine, the rate of population growth is alarming. It is not linear with time but exponential, especially in the under developed countries which contain the most wild range. Most of the forest based ecosystems are being stripped simply to provide crude energy for human sustenance. The balance provides building materials to global markets. Needless to say, without an ecologically intact habitat, larger animals cannot long survive, especially the specialized carnivore such as Tigers at the top of the food chain. It's not much consolation to realize that humans will have many difficulties themselves surviving the destruction of these ecologies.

Carbon dioxide increases in the atmosphere: Global warming resulting from the impact of human activities such as carbon dioxide and other gaseous emissions is also increasing dramatically. While it is not clear yet what the effects will be over the next decade or so, extreme climate changes are perhaps the most benign results to be expected. They will interact with known natural cycles in ways we can't imagine, leaving the flora and fauna of any given region little or no time to adapt. Tigers, for example, have not fully adapted from their cold climate evolution to the present heat and humidity of their tropical ranges.

Loss of biodiversity: This may, in the end, be the worst of the Tigers' worries. The process proceeds unnoticed except by a few scientists who are directly concerned. It's now estimated that the world is losing about 50,000 species of plants and animals a year and the rate is increasing. This is literally an unprecedented rate of loss, perhaps never seen for many millions of years. There is no way to truly estimate the threat this holds for higher life forms. We only know that entire ecologies will suddenly disappear. What does a wild Tiger do when its food chain collapses? It dies, of course, along with its peers,

mates, and offspring. In other words, the species is extinguished like the rest it was dependent on.

Ability to Sustain: As ecosystems erode, they are unable to sustain their dependent members. Demands on them increase to the point where they simply collapse and can provide no more support. This too is a quiet process until one day, in human terms, there is no more food in the pantry and none in sight. This can happen in many ways, both macro and micro. It has become apparent that the ability of the earth to sustain many of its present ecosystems is rapidly waning, forming another spike within the same time frame of the others. What are the consequences? Mass extinction of many more species than has currently been logged, and ever increasing negative impact on life as we and our wildlife know it.

Endocrine Disrupters: The ever increasing production and use of the various long lived endocrine disrupters into the global environment is reaching alarming proportions. These ubiquitous chemicals reach almost every area on earth, affecting the hormonal, the immune, and the reproductive systems of higher mammals. Not only do they invade the life processes dramatically, they are subtle and have been virtually undetectable until recently. They enter the fragile food chains at all levels and degrade very slowly, accumulating and concentrating in the body tissue of the top mammals.

Make no mistake, all life on earth is facing serious and potentially fatal threats within this millennium. We humans will not escape, but as a result of our being able to change and adapt faster than most animals, we will no doubt survive otherwise cataclysmic events. Our ability to develop and use technology both to survive, even thrive, in the face of disaster will play a major factor in our lives. Technology also gives us an enormous edge toward slowing or even reversing some of the major threats we all face. Whether we extend our advantages and abilities toward saving endangered wildlife in captive settings is an unanswered question at this point. It's one that must be addressed before it's too late to act.

There are growing signs, fortunately, that there are many who will do everything in their power to bring this about with plans and effort to implement the obvious. It's the least we can do in our role as caretakers of our own biosphere. And hopefully, this awareness will grow as time uncovers the deeper truth of life.