Overpopulation, Cruel Indeed.

find it ironic that we propose managing wild species when we have failed to manage our own. Since my first safari to Kenya in 1977, the human population has doubled, while the wildlife population has been cut in half.

Around the Maasai Mara, there are 26 per cent more people, with an increase from 4.6 million to 5.8 million in only 13 years.

With more people come more livestock, settlements and fences. The number of *shambas* (farms) increased by more than 20 per cent since 2010. There was a whopping increase in sheep and goats (276.2%) and livestock do not stay outside of protected areas, a plus for the fence at Nakuru.

But in the Maasai Mara, sheep, goats and cows are going in. Livestock paths were visible up to 5km and further inside. This illegal grazing reduces food for the wildebeest migration that draws so many paying visitors. From 1977 to 2016, illegal incursions into the Maasai Mara National Reserve by cattle increased by 1,053 per cent and by sheep and goats by 1,174 per cent.



DELTA WILLIS, the author of The Hominid Gang and publicist for Audubon, Earthwatch, and the Survival Anglia TV documentaries.

Illegal livestock grazing in the reserve competes with the wildebeest migration which draws travelers, providing employment and income for many people in the local communities.

The problem is not confined to Africa. Take my own American backyard for example. In the Arkansas Delta, biodiversity flourished in great cathedrals of bottomland forests that harbored the Ivory-billed woodpecker. In wetlands near the Arkansas and White Rivers, 500 year-old cypress trees measured 12 feet in diameter at their base. When European settlers arrived, wetlands covered about 9.8 million acres. Today, fewer than 1.5 million remain. Rice fields, sucking the White River and local aquifers dry, dominate the eastern side of the Arkansas River, where prairie chickens once thrived in grasslands, as did bison. Hedgerows were sacrificed, leading to the demise of the Bob White quail. Teenage pregnancy is among the highest in the nation.

Every environmental problem on earth is exacerbated by human over-population. Even climate change would be less of a threat with 1/3 the numbers, reducing emissions. But the impact of global warming is measurable, with extreme weather on both continents. Is it too late?

Few dare speak directly about human overpopulation. Ted Turner was vilified for his

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remarks, Prince Charles did not enjoy much respect for his, and many fear offending religious beliefs. Yet in 2012, David Attenborough was blunt. "We are a plague on the Earth. It's coming home to roost over the next 50 years or so. It's not just Climate Change; it's sheer space, places to grow food for this enormous horde. Either we limit our population growth or the natural world will do it for us...."

"Just 50 years ago, we finally ventured to the moon;" the famous narrator begins each episode of *Our Planet* (now on Netflix.) "For the very first time, we looked back at our own planet. Since then, the human population has more than doubled." Freed from restraints at the BBC, the 93-year-old delivers a sage warning. "For the first time in human history, the stability of nature can no longer be taken for granted."

In a 1995 book, Richard Leakey predicted a Sixth Extinction, echoed by Louise Leakey in 2017: "We are undoubtedly the cause of the sixth mass extinction event that the planet has seen in its history."

Yet there are spots of hope. You wouldn't think a country ravaged by 16 years of civil war would qualify. When fighting in Mozambique ended in 1992, more than 95 percent of the country's large mammals had been slaughtered for food and weapons. But in Gorongosa National Park, mammals have been reintroduced, along with jobs and education for locals. In a remarkable success story documented by Kenya's Bob Poole for National Geographic, we learn how Greg Carr transformed this landscape. In a nutshell, when people ask Greg Carr how to protect African

Anne Kent Taylor (center) helps girls stay in school in communities around the Mara.

DID YOU KNOW

Human population and climate change are directly linked. In its landmark 2018 report, the International Panel on Climate Change specifically identified high population growth as a "key impediment" to hitting the critical target of limiting global warming to 1.5DC. "Population growth is straining the Earth's resources to the breaking point, and educating girls is the single most important factor in stabilizing that." - Al Gore Populationmatters.org wildlife, he replies, "Girls in school."

"It's the No. 1 thing we will do for this planet." Gorongosa supports girls clubs in approximately 50 local schools, trains female scientists with a master's in conservation biology, and employs women as scientists, administrators and park rangers.

Here are a few other things you can do, thanks to Nature Kenya.

- · Save the forests we have.
- Plant and nurture more trees.
- Save the wetlands we have.
- Stop using plastics.

Most vital, think of the Big Picture, the enormous value of natural resources such as clean water. The Flamingos that Roger Tory Peterson called the "greatest bird spectacle in the world" have moved to Lake Bogoria and Lake Elementaita because the lake in Nakuru National Park is polluted. Jackson Raini of the Flamingo Lakes Conservation Network attributes this to human activity. A sewage treatment plant borders the park, plus fertilizer and pesticides from nearby farms seeped into the lake. Nakuru National Park risks its status as a UNESCO heritage site, but KWS is on the scene, as of June 2019. Whether they find it necessary to reduce the number of buffalo by translocation or culling, we need to zoom up from this microcosm, and hear the words of David Attenborough and Greg Carr. The #1 thing we can do for the planet: girls in school. You can help by supporting Amboseli Trust for Elephants, and The Anne K. Taylor Fund which helps keep girls in schools near Amboseli and the Mara, respectively.