

Wyoming Tribune Eagle of September 28, 2016: "Is end to the 'human experiment' in sight?"

Perhaps you are familiar with the 24-hour clock that renders a compressed history of our planet. Having calculated the moment of the Big Bang as 15 billion years ago, scientists determined that, ten billion years later, a cloud of gas split off from a bigger cloud—our sun—to shape itself into inorganic matter. That's when Earth's 24-hour clock begins its ticking.

From midnight until late afternoon, all is geology: erupting volcanos and torrential rains. At five o'clock P.M., the first tendrils of life reach for existence, single-celled organisms that drift in the oceans' primordial soup. Slowly, aquatic life evolves, ever adapting, ever gaining in complexity. Then come the dinosaurs. Mammals do not appear until 11:30 P.M. When does life adopt the human form? At one second to midnight.

If we take our one-second history and expand it into another 24-hour clock, we discover that, until two o'clock P.M., humans roamed Africa in small groups. Then we migrate, hunt prey to extinction, congregate in settlements like Catalhöyük. As six minutes to midnight the Buddha arrives, followed by Jesus of Nazareth and Prophet Mohamed.

Put another way, humans reached modern life forms a mere 50,000 years ago. By then, crocodiles had persisted for hundreds of millions of years. So had cockroaches. Today's accelerating destruction of wildlife habitat will likely render crocodiles extinct in a few generations. That does not mean, however, that humans are better survivors than crocs. Cockroaches may well outlive us—try a we might, we've been unable to eradicate them.

Catalhöyük was a neolithic settlement excavated in Turkey. It thrived some 9,000 years ago, when it was home to between 3,000 and 8,000 people. Their houses contain exquisite wall paintings depicting scenes of hunting and bull-baiting. The bulls were aurochs, wild cattle now extinct that were the precursors to today's domesticated cattle..

The practice of bullfighting that survives in Spain and South America may have originated in the hunting games of Neolithic humans. "Bullfighting is torture — not art or culture," shout today's protesters.

The inhabitants of Catalhöyük raised goats and sheep. They farmed lentils and wheat. These activities, however, are not reflected in the paintings. It's as if the paintings represented imaginary returns to the "good old days."

Equally astounding, archeologists have found no evidence of group organization, as in comparable settlements. No communal grain storage existed. No plaza for gatherings, rituals, and feasts. No elder or group of elders presided. Here, each household remained autonomous, though there must have been some organized activities on behalf (or for the benefit) of all. All in all, however, it seems, the inhabitants were satisfied to maintain the loosely egalitarian interactions of the nomadic life.

From the Old Testament we know that ancient Egypt contended with plagues of insects that spelled disaster. Likely a similar story of agricultural pests evolved in Catalhöyük. To this day, farmers pit their efforts against the insects that ravage their fields.

Neolithic hunting was dangerous; success, sporadic. Weeks or months went by before hunters returned to the group, triumphantly displaying the meat they'd harvested, often at the cost of serious injury. During lean times, the clan survived on the nuts, roots, and birds' eggs gathered by women and children. As prey diminished, bull baiting may have been devised to sustain commitment to the hunt.

Farming, the solution to dwindling prey, was tedious work, yet domestication encourages large families: Many small hands are needed to pick caterpillars and insect eggs off precious plants. Family growth makes for cramped quarters, stinking refuse, raging epidemics, and, more often than not, empty bellies. When rains arrive late or not at all, priests are needed to propitiate the gods. Soldiers must protect the fields from marauding nomads. Thus society stratified, which engenders inequality. The farmers of ten thousand years ago may well have remembered their former life as less burdensome, even if abbreviated by hunting calamities.

With the advent of agriculture, humans have had to wage wars against insects. Texts from ancient China to medieval Europe abound in accounts of extraordinary battles with insects. Magic and religious ritual was an early, if inadequate, solution. Today's chemical efforts are no less problematical, yet, having opted for agriculture 12,000 years ago, there's no going back to a life of hunting and gathering. Their unlimited capacity to adapt enables insects to exist from African deserts to frozen tundras and ice floes.

Neolithic soldiers have given way to arsenals of horrific effectiveness. Toxic chemicals sustain agriculture. Societies have evolved in which the many are dominated by the few, and all of us are ever in danger of losing ground. Like the Red Queen, we run just to remain in place. Meanwhile the geological clock keeps ticking. Is it heralding an end to the human experiment?