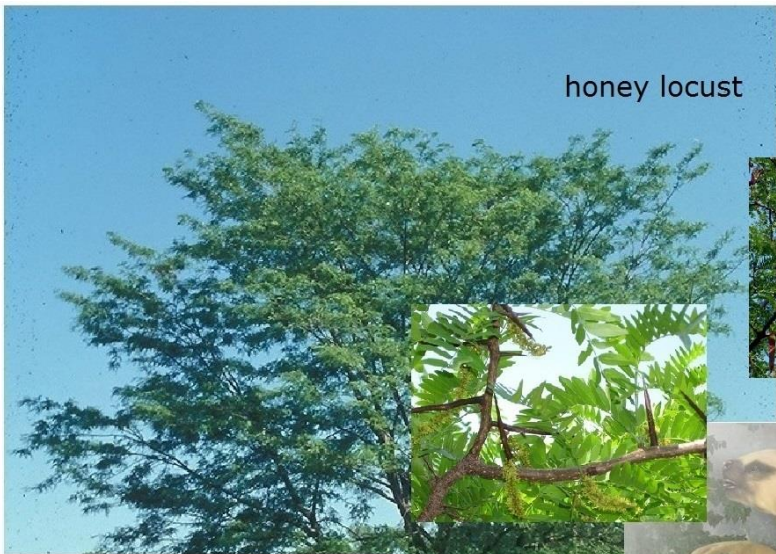


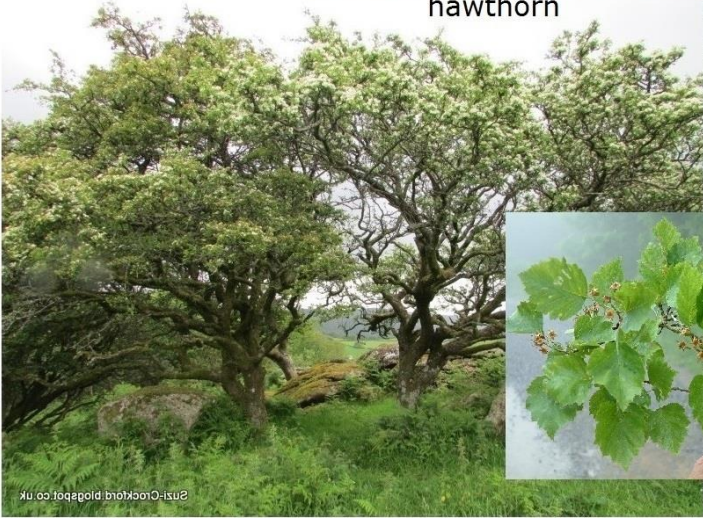
Why are the thorns on these trees too long, too far apart, or too high in the tree to prevent their only current potential threat, a white-tailed deer, from browsing the foliage?



honey locust



hawthorn

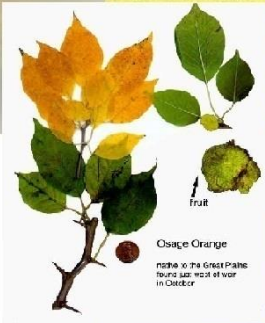


Why are the fruits of the honey locust and the Osage orange too tough and too high up for any current species to eat and disperse the seeds naturally?

Over two thirds of American megafauna went extinct 13,000 years ago after the arrival of humans.



osage orange



Osage Orange  
Fruit is the largest I have  
found and most of year  
in October

These features speak of **ecological ghosts**.

The pronghorn has no natural enemies. Only extinct cheetahs that once hunted the plains of North America could catch a running pronghorn. Large or dangerous species go extinct whenever tool-making humans show up. This is a consistent feature of the fossil record. (The process in Africa has been much more gradual, for it started with *Homo erectus* two million years ago, allowing time for a small fraction of megafauna to adapt.

Until now.



Can this trend be changed by appealing to Love of Nature, or to Fear of Lost Resources? So far the prospects don't look good.



The **Extremophile Choice** is about unsentimentally examining the relationship between technological intelligence itself, which seems to be accelerating in power, and the much slower intelligence of gene-regulated evo-ecology. The question then becomes: What is technology for? Our answer to this question will surely have profound consequences for both Man and Nature.