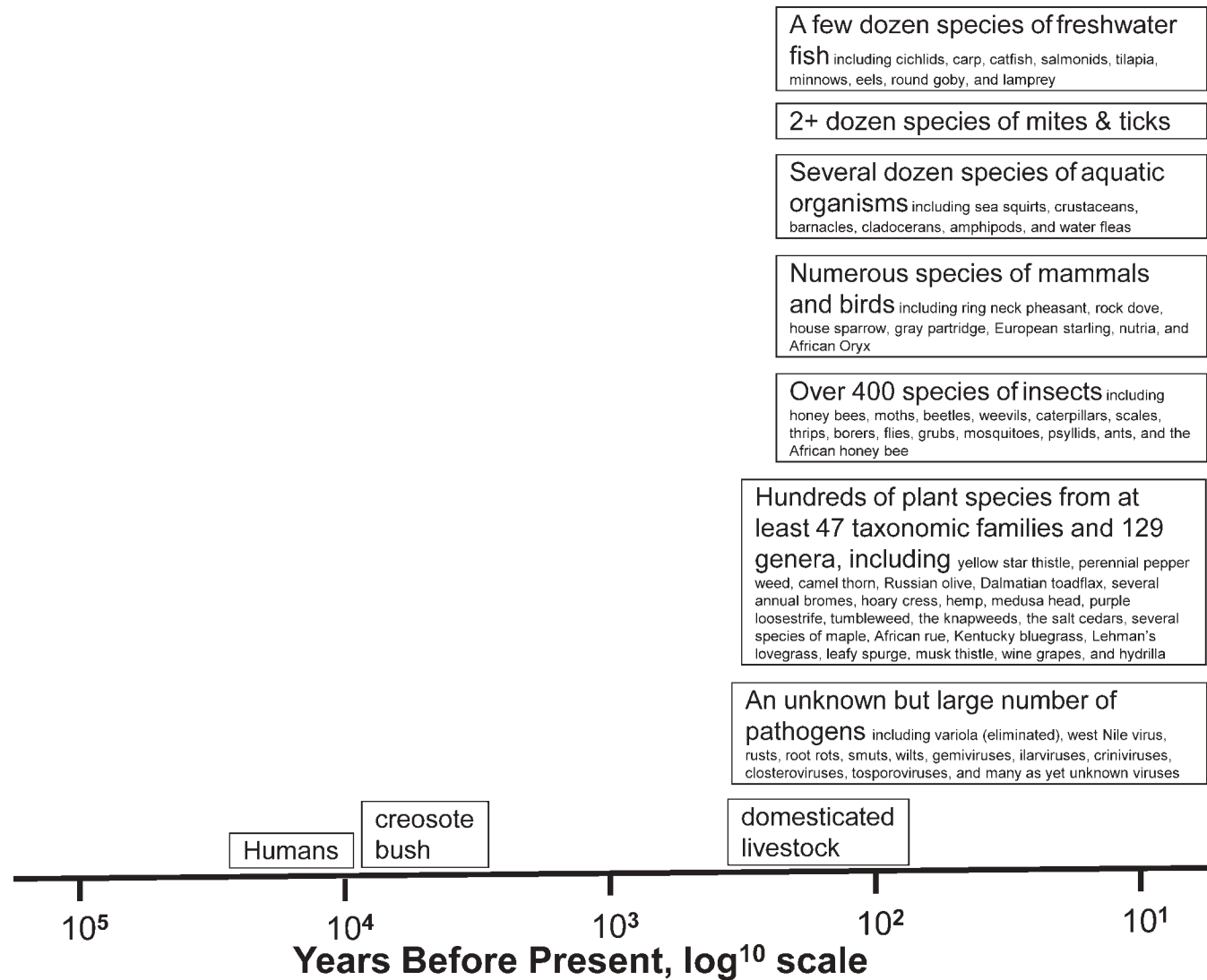


# Essays of a Peripheral Mind

## Invasions of the Landscape Snatchers

By K. M. Havstad



As of the end of 2009, this figure illustrates an incomplete list (drawn from numerous sources) of organisms that have been introduced either intentionally or inadvertently to North America and are within about a three-day drive (arbitrary distance) of my home in southern New Mexico. The "invasions" are placed along a log scale time line since humans possibly arrived on this continent about 13,000–15,000 years ago.

Yikes! Look at what followed us.

Literally thousands of species have invaded this continent over recent centuries/millennia. Some, such as creosote bush, have been here so long we do not even think of them as exotic. Others, such as Kentucky bluegrass, pheasants, and wine grapes are so imbedded in our native or cultivated landscapes that they are regarded as naturalized. In fact, the collapse of one, the honey bee, has created real concern and caused considerable resources to be mobilized in an effort to recover this exotic species. Some, such as hemp, that were brought here for certain purposes have taken on different dimensions and create a certain madness that won't recede until we view them in a more mature and balanced light. One, the variola virus that causes smallpox, has been eradicated in response to a globally organized effort. Some are relatively benign. At this time only a few dominate our thinking and our energies. In reality, one of the values of governments and government-sponsored research is the ability to coordinate and mobilize efforts across political boundaries. Today, our capacities to contend with the real threats of exotic origins, such as new viruses, the Asian citrus psyllid sweeping into the southern United States, and the round goby threatening the Great Lakes, require this blending of scientific, management, and policy strategies and tactics across our artificial boundaries that don't constrain these species. Without this coordination, these species introductions, which this time line history teaches us are inevitable in many regards, can have severe and unacceptable impacts beyond our capacities to either mitigate or adapt. The truth is, we are still learning and working to mitigate and adapt elements of our own exotic behaviors that we introduced to these environments.