Can We Please Stop Killing Our Forests?

A single tree provides a bubble of humidity around it, cooling the environment and nurturing its soil and its biota. The action of the roots and the soil biota provide paths for the assimilation of rainwater back into our ground water storage.

A forest of trees provides a climate for the region, including the cooling effects as well as the passage of moisture, fog for example, through its body. Redwoods, especially, depended upon this 'fog siphon' to sustain redwood forests in inland valleys far from the coastal influence. And their shade helps keep streams and other bodies of water cool, supporting our fish and amphibian populations. A healthy forest rarely burns to the point of loss.

When forests become fragmented, even by the occasional fields and vineyards, the retention and passage of moisture begins to diminish, altering the climate of that region. The more fragmented the forest becomes, the more stressed and disease prone it becomes, and the drier the region becomes. Additionally the soils dry (and die) and groundwater retention suffers. Lastly, animal habitat also becomes fragmented in the process, leading to more human encounters.

Although drought is a phenomenon on a larger scale than the forests we are speaking of, the fragmentation and loss of forests exacerbates the impacts of cyclical droughts. And the drying of forests and their soils brings the wildfires so characteristic of the recent years.

In fighting the intrusion of fire into our urban-wildland interface we look to the removal of trees for the fuel they provide. The reality is that the primary fuel of an urban-interface wildfire, once ignited, is the body of petroleum-based materials in our homes. This occurs through the process of gasification and the fuel cloud it creates can sustain a fire for a considerable distance.

Rather than continue to push the widespread removal of native trees and shrubs in their totality from around structures, we need to focus resources (and responsibility) on the hardening of the dwellings built there. For the cost of a couple of trees removed we can cover a structure with cementatious siding. A couple more pays for a metal or other fire-resistant roof. And the cost of vent replacement with blocking or self-sealing vents another half tree.

But such areas of human habitat and associated dwellings also need to have open lands preserved that can serve as a buffer and place to fight such fires when they develop; and this is a land use issue that needs to be addressed by those with urban-wildland interface oversight.

To restore the benefit of the forests we need to restore large contiguous blocks, especially those extending from the coasts, to moderate future climate shifts in our region. These must also include consideration for wildlife passage between large blocks of land critical

for their survival. In other words we need to find a balance between those living in the wildlands and wildland interfaces to ensure that firefighting resources are used wisely. Otherwise within a decade or so these hills will become widespread grasslands degrading into desert-like ecosystems and the potential for wildlife and agriculture will be lost.

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