

RATIONALE: WHY “NATIVE” IS NOT ENOUGH



This groundcover is periwinkle (*Vinca minor*),
an introduced exotic commonly found
surrounding abandoned home sites.



June 2010

Of those plants threatened or endangered today (that are not unique adaptations in harsh or inaccessible locations), most are small annual forbs. Yet besides exotic non-native plants, this image demonstrates a more insidious threat native annuals face, one that goes almost completely unnoticed because “it’s Natural.”



June 2010



All of these plants are native. Yet fire exclusion has prolonged succession toward perennial cover, which suppresses the expression of native annuals. As with our place, wide areas had gone so long without disturbance that most of the dormant seed of native annuals in the soil had long lost its viability. Hence, even if one disturbed the site specifically to find out what might be there, it is hard to know which species "should" be there if the seed is no longer viable, or if the exotics are so dominant that they cannot germinate.



June 2010, just down the road from us

In even-aged stands, forests often go through a phase called “exclusion,” in which density inhibits other competition. Although this process is described in the literature as natural, it is unlikely the condition was common under the fire-management of the aboriginal inhabitants. These trees are similar to the way most of ours once were, in that they started in dense brush and grew together, tall, slender, and unstable. Note also the vestiges of a cattle fence are still visible in the foreground. In the 1940s, this was a grassland.



June 2010



"Succession" is typically characterized (and grossly over-simplified) as a process in which forbs are replaced by grasses, then brush, and then broadleaf forest, finally stabilizing as conifer forest. In this region, the process persists as a matter of public policy in the form of fire-suppression to protect residential development. Note the red arrows indicating the new trees in this photo. Then imagine ALL of them as full sized trees in such a small area, along with those that would germinate between now and then. I thin them.



Musk Thistle and Cheat Grass, Mesa Verde National Park, July 7 2005
Photo by Steven Rich, Rangeland Restoration Academy

Inevitably, even purely native perennial habitat ends up being disturbed. Given enough time, fires, landslides, or floods are simply unavoidable. When that happens, the soil is open for anything that will grow. When that happens, whatever is in the seed bank, blows in, or is most aggressive takes over. Most often, what takes over is introduced weeds. If there are any native post-disturbance plants left, they usually cannot survive much less breed.

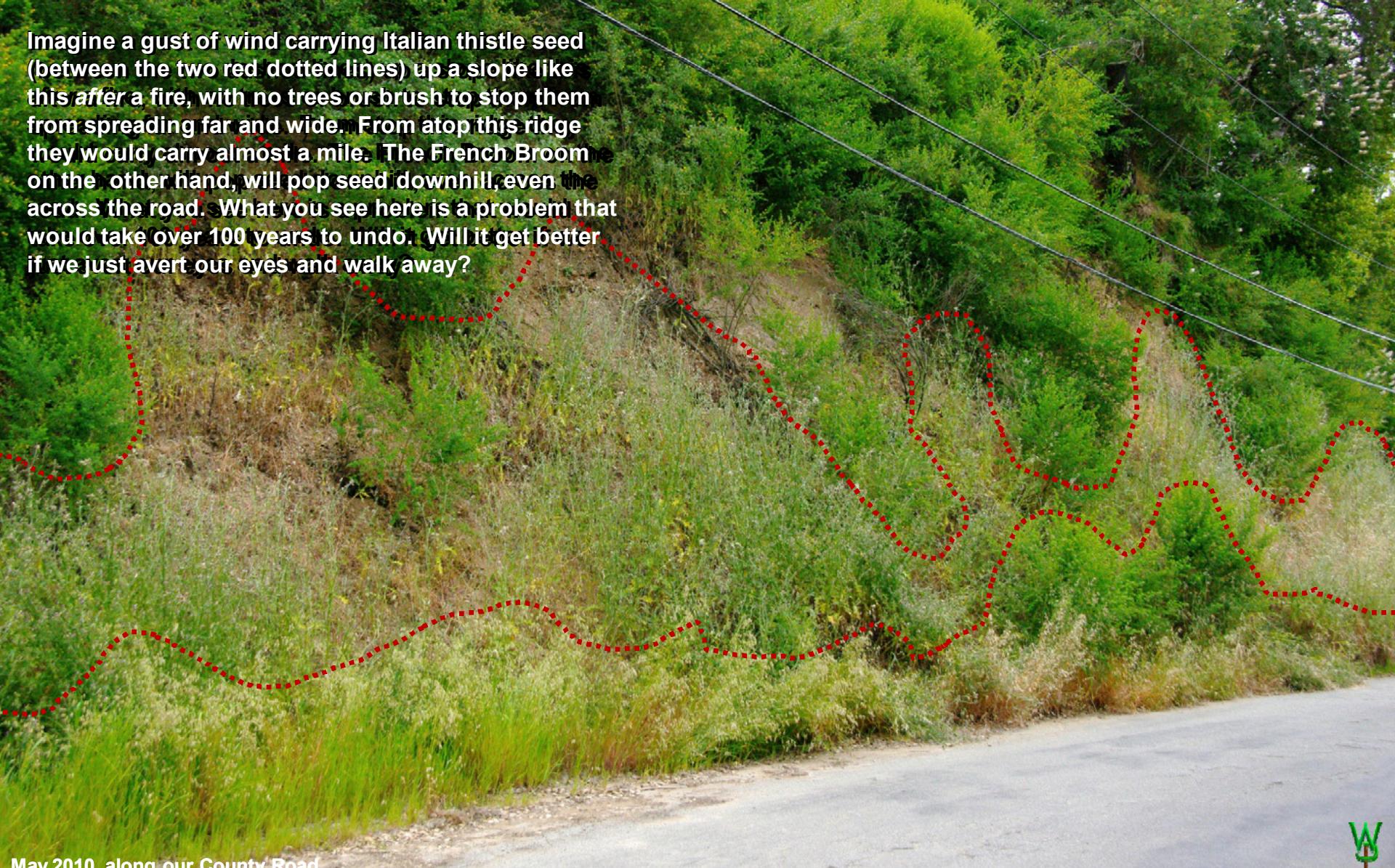


April 1989, Larga Vista Dr., Los Gatos, CA



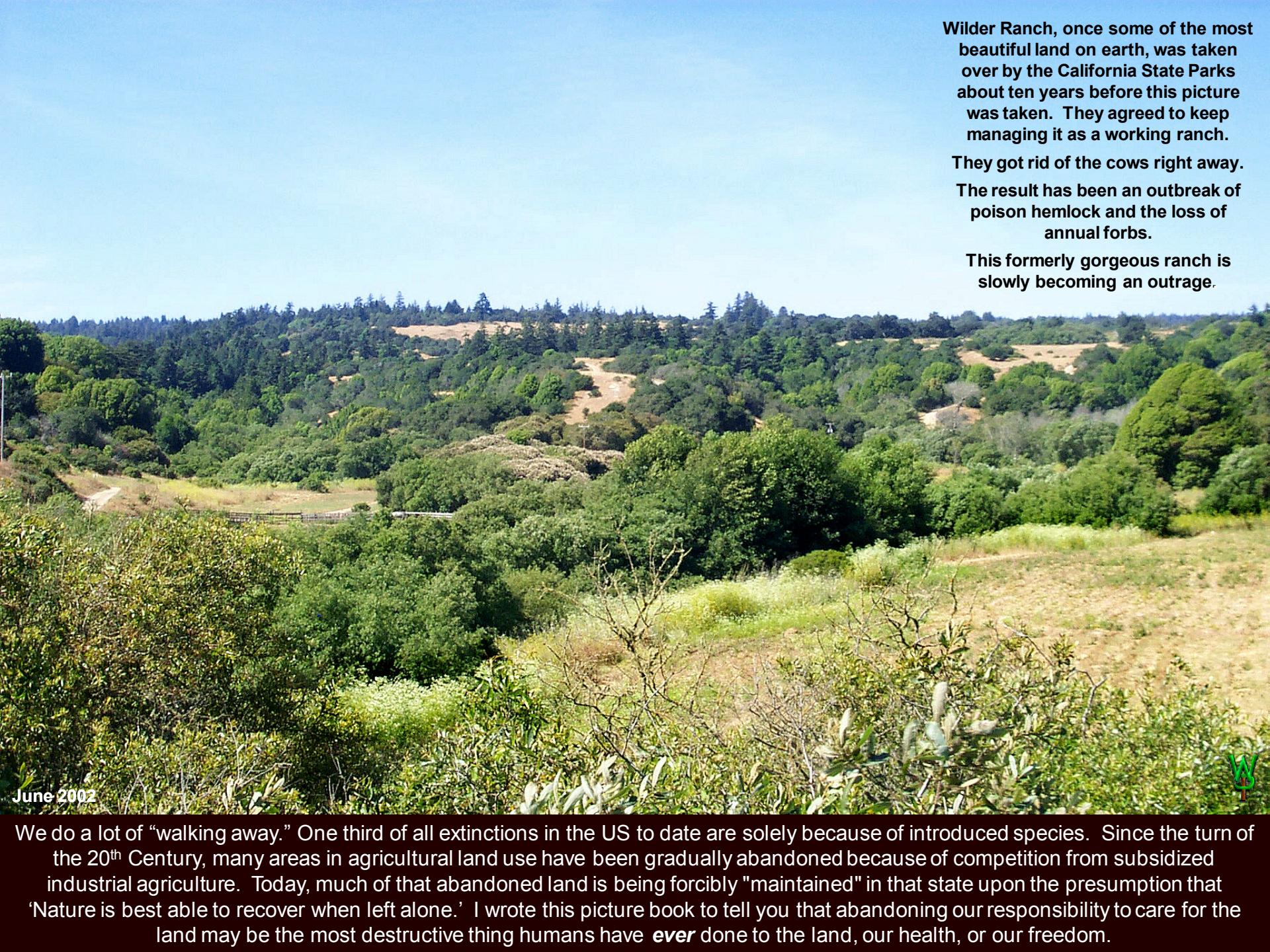
After repeated cycles of disturbance, the weeds win and the natives will no longer breed, even if their seed is still viable. Note that the mustard above has *intensified* its dominance with the annual disturbance of disking this orchard. Eventually the native seed dies.

Imagine a gust of wind carrying Italian thistle seed (between the two red dotted lines) up a slope like this after a fire, with no trees or brush to stop them from spreading far and wide. From atop this ridge they would carry almost a mile. The French Broom is on the other hand, will pop seed downhill, even the across the road. What you see here is a problem that would take over 100 years to undo. Will it get better, if we just avert our eyes and walk away?



May 2010, along our County Road

Succession and the spread of exotic species are the two key reasons why this paradigm of "environmental preservation" is so terribly ecologically destructive. Even if the cover is native and perennial and weeds are not visible, this is NOT "restoration." If there is a disturbance, and there are aggressive weed seeds present in the soil or nearby (usually right along the road), native post disturbance plants, the foundation of the successional system, eventually lose. When that happens, the native system is done, for good, unless somebody refuses to walk away. Weeds don't stop by themselves. The process continues until the natives are gone.



Wilder Ranch, once some of the most beautiful land on earth, was taken over by the California State Parks about ten years before this picture was taken. They agreed to keep managing it as a working ranch.

They got rid of the cows right away.

The result has been an outbreak of poison hemlock and the loss of annual forbs.

This formerly gorgeous ranch is slowly becoming an outrage.

June 2002



We do a lot of "walking away." One third of all extinctions in the US to date are solely because of introduced species. Since the turn of the 20th Century, many areas in agricultural land use have been gradually abandoned because of competition from subsidized industrial agriculture. Today, much of that abandoned land is being forcibly "maintained" in that state upon the presumption that 'Nature is best able to recover when left alone.' I wrote this picture book to tell you that abandoning our responsibility to care for the land may be the most destructive thing humans have **ever** done to the land, our health, or our freedom.



Every year



By writing this book, it is my hope to inform you of the challenges we face and their terribly misunderstood causes, to convince you that “Nature takes care of itself” simply does not work, not for people, not for native habitat, and not for wildlife. I will show you what we did about it, why, and the results. My hope is to inspire you to discover more about how things work in your own back yard, no matter how small or urban. ***I am not asking everyone to do things the way we did.*** Every situation is unique; people’s values and capabilities are different. That is the beauty of individual freedom, because by trying different things and sharing what happens we all learn more to do the best we can and to free ourselves from this mass-psychosis about Nature; learning that how things work really is in our hands.