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 and perennial herbs. Yet besides non-native plants, this image also demonstrates a more insidious threat the native plant *system* faces and therefore soils and the animal food pyramid, a threat that goes almost completely unnoticed because "it's Natural."

Wildergarten 4.0

There is a reason for this. This is a dynamic work that will be updated over time. I have no intention of defending conditions that no longer exist or explanations that have since been relieved of unintentional ambiguity or error.

Please, use a link. Thank you.

Revision History This book was originally produced under the name *The Responsible Party* for which there were two revisions, 1.0 & 2.0. Major revisions are for complete rewrites. Decimal revisions are for revised chapters or navigational changes and are not archived. Back revs are viewable by the numbered links below.

1.0 2.0 3.0 3.1 3.2 3.3 3.4 3.5 4.0

Vande Pol, Mark Edward, 1954 –

Other writings by Mark Edward Vande Pol:

Natural Process: That Environmental Laws May Serve the Laws of Nature, ©Wildergarten Press, 2001, 454pp, ISBN: 0-9711793-0-1, LOC Control #2001092201.

Shemitta: For the Land is Mine: ©Wildergarten Press, 2009. Contains**:** 217pp text, 980pp overall, 14 picture books, 2 tables, 963 photographs, 9 maps, 2 drawings, 2 charts, 145 footnotes, 358 citations, and 216 other source references, not including external Internet links. ISBN 978-0-9711793-1-8

Articles at Wildergarten Press**:** collected writings on Constitutional history and regulatory racketeering by tax-exempt “charitable” foundations

Wildergarten Press
P.O. Box 98
Redwood Estates, CA 95044-0098
www.wildergarten.com

Fire-exclusion has prolonged succession toward dense perennial cover, suppressing expression of early-successional native plants, particularly annuals. As with our place, this spot has gone so long without disturbance that most of the dormant seeds of native plants in the soil have long lost their viability. In this case, I can tell you for a fact that if this site burned what would come up would be almost entirely non-native French Broom *(Genista monspessulana)*. Our property was once considerably worse.

In this region, “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 a “climax” conifer forest. 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 tree seedlings in this photo. Then imagine ALL of them growing at once into full-sized trees, all in such a small area. It wouldn’t be healthy, would it?

It’s not. In even-aged stands, forests go through a phase called “stem-exclusion,” in which canopy closure, water competition, and leaf litter combine to inhibit other plants. "Preserve” it and this is what you get. Although this process is described in the literature as "natural," it was an unlikely condition under the fire-management of aboriginal Indians. This oak/madrone woodland is similar to the way most of ours once was, in that many trees started in dense brush together and grew without disturbance until the brush died and rotted, except that we had the entire understory had then been invaded by exotic French Broom. These trees are tall, slender, weak, and unstable. Notice also the vestiges of a cattle fence are still visible in the foreground. In the 1940s, this was a grassland.

This is a fuel bomb. None of these plants are healthy. In these mountains, succession run amok is doing more damage to the types of plants that provide wildlife with food than any other environmental factor, more than weeds and more than development. Wait long enough, and the post-disturbance system dies as the forest succeeds to conifers as it is doing here. What if we just let it do that?

Well, here you go. As the fir matures the redwoods invade. The fir keeps growing until water competition and shading by the redwood render it susceptible to bark beetles. The forest succeeds to redwood. Guess what the redwoods do?

Redwoods proceed to a dominant monoculture too! You see, the reason “old growth” forests were diverse is that the Indians burned them frequently to get productive understory vegetation going and reduce tree density before this happened. Wait long enough without disturbance, and the early post-disturbance system dies, period. So, what if we just let impacted forests burn?

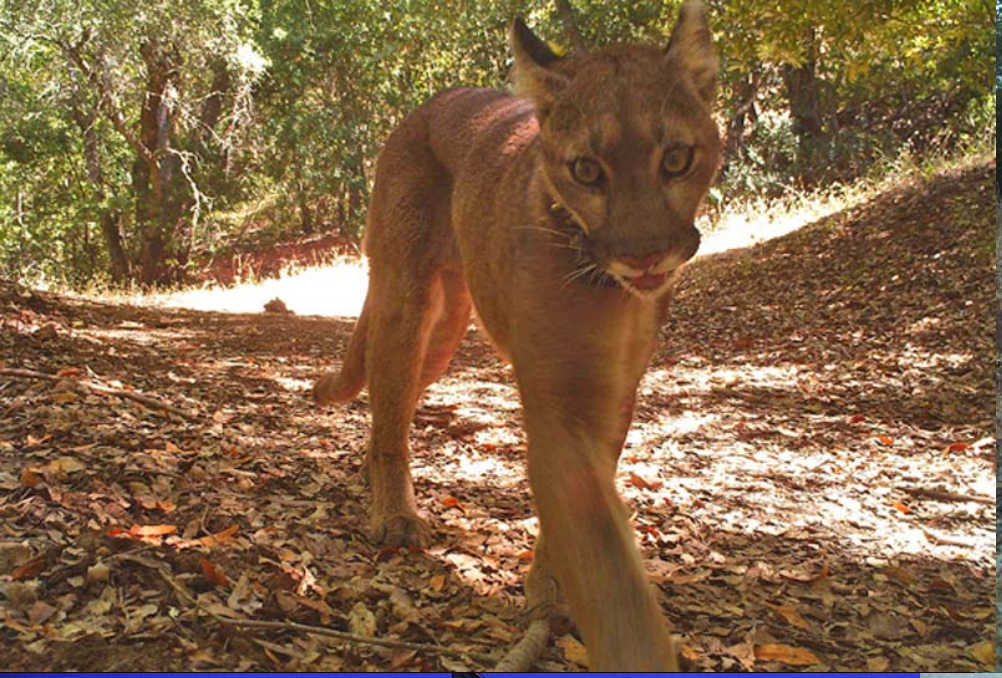
August 2014 – Star thistle invading what is still a catastrophic fuel load.
Leave it as dry standing fuel and the next fire will likely be hotter.

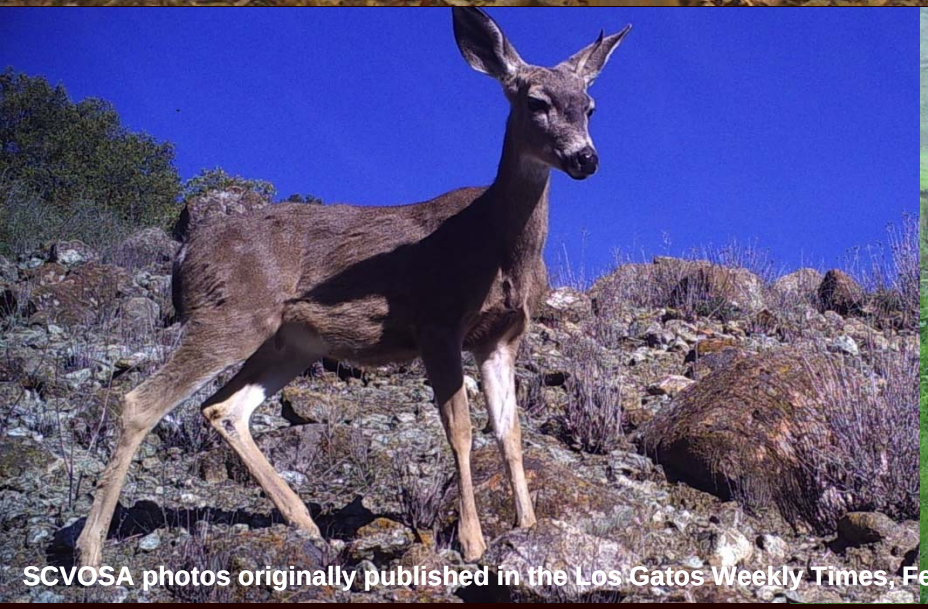
The US Forest Service bought that “Natural” idea, effectively adopting the Sierra Club’s “let it burn” fire policy holding that fires, landslides, or floods are simply “inevitable.” While partly true, it is possible to mitigate the severity of the fuel load so as to improve the outcome, which of course the Club would not allow. Accordingly, after the catastrophic Rim Fire (above) near Yosemite, the weeds sprouted along the road, with neither the USFS nor the Sierra Club stopping them. Whatever they might do from here will cost much more and be much more damaging. Repeating disturbance with weeds present usually helps them spread.

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

The National Park Service thinks fire is “Natural” too. Well, in this case it’s not, at least neither the way we usually define the word “Natural,” nor is this the way Indians managed fuels for the last 10,000 years. Indians had no concept for “wilderness”; the land was their home that they cared for. Nor did the Indians have hundreds of species of exotics to deal with (of which you see but two here).

Forests, brush, rangeland, it doesn't matter**:** After a disturbance, if exotics are present in the seed bank (and they usually are) the weeds typically make gains, which you can witness today with Yellow Sweet Clover *(Melilotus officinalis)* in Yellowstone National Park.





SCVOSA photos originally published in the Los Gatos Weekly Times, February 2015

These candid photos are from the Santa Clara Valley Open Space Authority, published in the local paper, because they were the best they got in ten years they were so proud of them. Do these animals look healthy? Note the emphasis upon predators. Look at the forage; it is either weeds or non-existent. Most of the animals listed as “endangered” got that way because of one of two factors**:** lack of food and/or over-predation. In either case, the native herbs and shrubs that once provided food for this system are in bad shape.

August 2008 – Six years after the Croy Fire on land belonging to the Mid-Peninsula Open Space District

So, if there is a disturbance that reverts succession and the vegetation is native, is *that* good enough? Well, this fits that description. Do you see biodiversity here? Do you see yummy forage for wildlife? If it burns again, will it just "clean things up, or will you get another carpet of pine trees ready to blow again? "Nature" doesn't care what happens if we ignore the problem and just walk away.

If weeds are present, after repeated cycles of disturbance, they usually win. Eventually, the system reaches the point that the natives will no longer breed, even if their seed is still viable. Eventually, the native seed dies and the native plant is then extinct. With annual disking, the dominance of exotic mustard in this orchard is total. Disturbance is not the only answer.

July 2010 – The base of the Hamilton Range north of Paradise Valley, NV.
The brown areas on the hillside are exotic cheat grass *(Bromus commutatus)*.

To recap, “leave it alone” and, even if it is native, succession runs amok, depressing germination of native post-disturbance plants until there is a catastrophic disturbance. Then, if exotics are present or in the seed bank (which they usually are) the weeds make gains, which you can witness today even where stringent standards are in place (above). Repeat the cycle and the natives eventually go extinct. But is this just some hand-wringing theory on my part? Well, let’s take a quick look at our experience here at the Wildergarten.

When we started, exotic acacia and eucalyptus trees dominated nearly a quarter of the property. Native brush was nearly dead and gone. Oak woodland had succeeded what once were grasslands and were themselves impacted, going decadent, and being displaced by conifers. Exotic French broom bushes dominated 70% of the property, 10 acres of understory and what once were grasslands. There was no groundcover to speak of. In total, there were perhaps 60 visible plant species.

According to the 1964 *Flora of the Santa Cruz Mountains,* by John Hunter Thomas, there were 5 native annuals found within less than a mile of here, to which CalFlora.org adds another 5. Of those 10 species, I have never seen any anywhere within 3 miles of here in 25 years. The blue *Gilia achilleifolia* –(above) is not among them, yet Gilia was once a dominant spring annual on Bay Area hillsides. This was only the second time I had ever seen any in the area. Altogether, there are 16 local annuals in our immediate area that have not been recorded here since 1953. Most are probably locally extinct, but, as I said the situation is still at least somewhat savable.

Yerba buena, honeysuckle, blackberry, and mountain sweet cicely, mixed in with various annuals.

Among the 145 native dicot herbs on our species list, only 5 were still reproducing (barely) on our property when we moved here. As our project progressed, an estimated 23 species came up from the seed bank and 86 immigrated (a subjective determination) and are now reproducing here today. Over fifteen years I found and relocated 6 more here locally. I'd like to find the other 30 someday, but 8 have not been seen here since at least 1953, and all but two of those not since 1914. Most are probably locally extinct.

Among the 32 native shrubs on our species list, 15 were still here, of which 6 were almost gone (of which two are above).
Once I thinned the forest and got our 10-acre French broom infestation under control, 10 more came up or in on their own.
It took me a decade to find the next four. I'd like to find the other 7 someday but none have been recorded here for over a century.

Ten years ago and after five years of looking, at last I found a patch of some canyon gooseberry bushes still alive *(Ribes menziesii)*, about 1.5 miles from our place. They were spindly, with sparse leaves and no fruit, obviously not doing well because the canopy was so thick. I transplanted a couple into cages and they did fine until the deer found them, after which they died (scarcity focuses browsing pressure on those few individuals that are left, just as depleted prey species can be caught in a “predator pit” unable to breed sufficiently to maintain a sustainable population). Given that I failed, had I done the right thing? I went back there this year to see if there were still any left alive. No. Since then, broom, bedstraw, South African veldt grass *(Ehrharta erecta),* and forget-me-nots have started invading the area. The latter two will assure that the *Ribes* never gets another chance. This forest is a fire bomb.

Just because a plant is there, doesn't mean things are OK. These are mules' ears *(Wyethia helenioides)* on a neighbor's property, the only such plant in the neighborhood. It usually spreads by rhizomes, but has not done so in 10 years. Obviously it makes lots of seed, so I tried to propagate it, but failed. Of the seed I sampled, none were fertile (the achenes were empty). Some plants need to be in sufficient numbers to reproduce because they require another plant for fertilization. Others require sufficient and/or particular pollinators to breed. Soil infertility too can induce empty seeds. I suspect that weed competition is also a factor.

May 2015 - Bulbs, grasses, and herbs growing together at Wildergarten

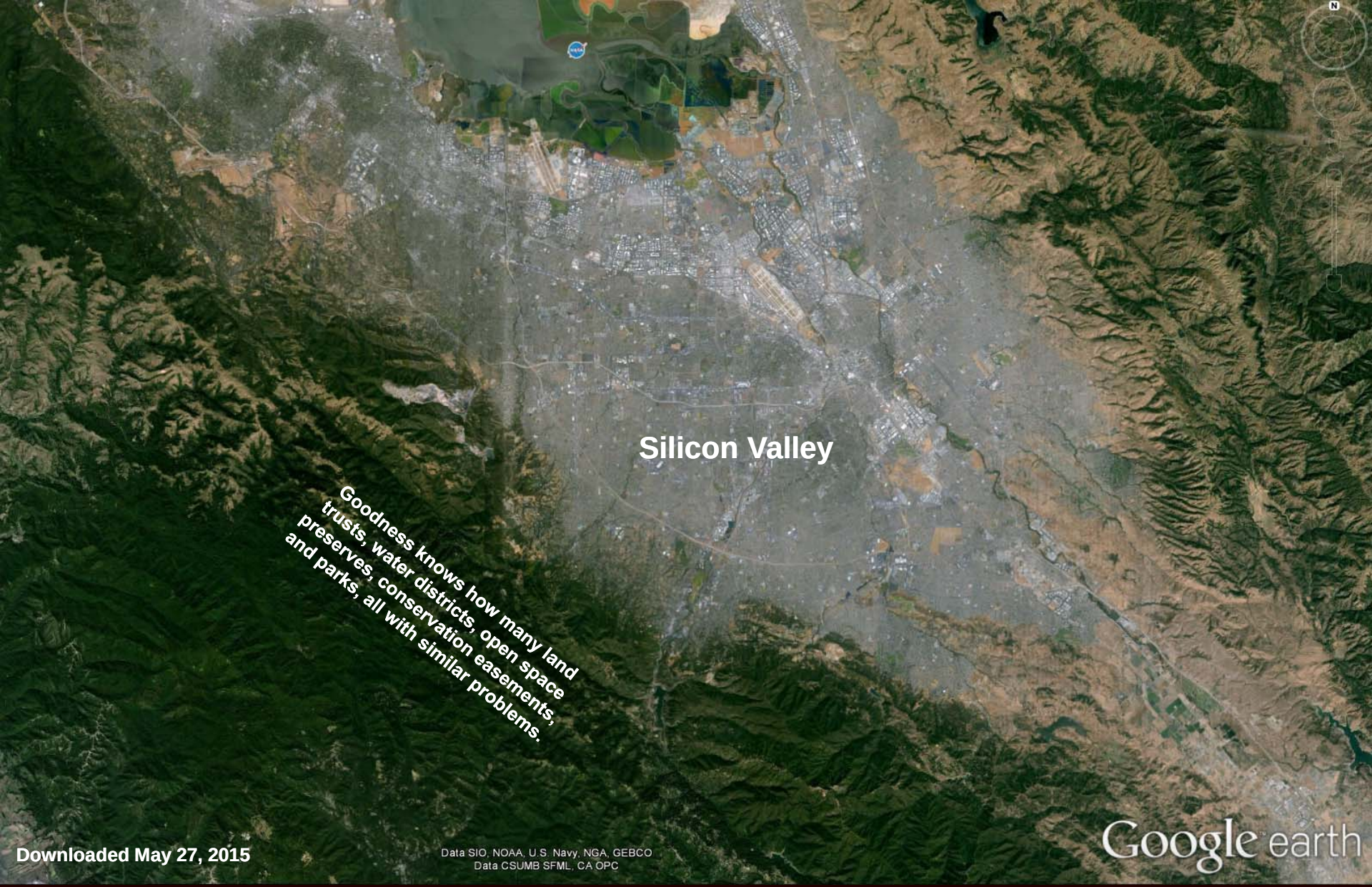
Grasses are early successional species too. Together with forbs, grasses once dominated most of the inhabited part of California. Among the native monocots (grasses, lilies, sedges, and the like) listed for this immediate area, I don't recall ANY grass species of any kind that was still here and reproducing when we bought the property (although I can guess at a few). There were no sedges or rushes. There were possibly a few iris, but that would be it. Today, we have 34 native grass, rush and sedge species, with another 12 other monocots such as lilies. Of the 28 exotic grasses that were either in the seed bank or came in since, 7 are eradicated and the rest are either culled before breeding or are very close to that. Seed is mobile. If it is native, we make a place for it to live and breed.

***Bromus carinatus* grasslands in mid-June 2015, a drought year.**
You won't find open grasslands green like this anywhere else around here this time of year.

Succession suppresses germination of post-disturbance plants; disturb the system, and weeds will win UNLESS somebody kills them. It's really that simple. Here at the Wildergarten, this system was dying but we have pulled most of it back from the brink, maybe. There appear to have been some permanent losses, but things do continue to get better, here.

Summit Ridge
August 2008
Mid Peninsula
"Open" Space District

But at this point one must ask**:** Why does the entire regulatory leviathan, supposedly dedicated to protecting the environment, act upon the presumption that the "no action alternative" is in fact benign? Why does the "precautionary principle," which assumes that the risks of no action are preferable to risks of taking action… Why does this philosophy have any scientific legitimacy at all? Look around you. The people pushing this urban myth of preserving Nature have money and power. It's human nature to want more.



If one confronts the real estate transactions in big chunks of land over the last 50 years, it has been about regulating resource landowners (farming, ranching, forestry, mining…) out of business into two primary uses: residential construction and poorly maintained tax-exempt land entertainment. I wrote a long and deeply philosophical book documenting the economics of the process and the criminal fraud often involved. The book observed that "the push" (where resource land was converted to housing) was to be followed by "the squeeze," in which residents would be chased out of the hills and back into cities.

June 2010 – Expensive homes along Hutchinson Rd., Santa Cruz Mountains

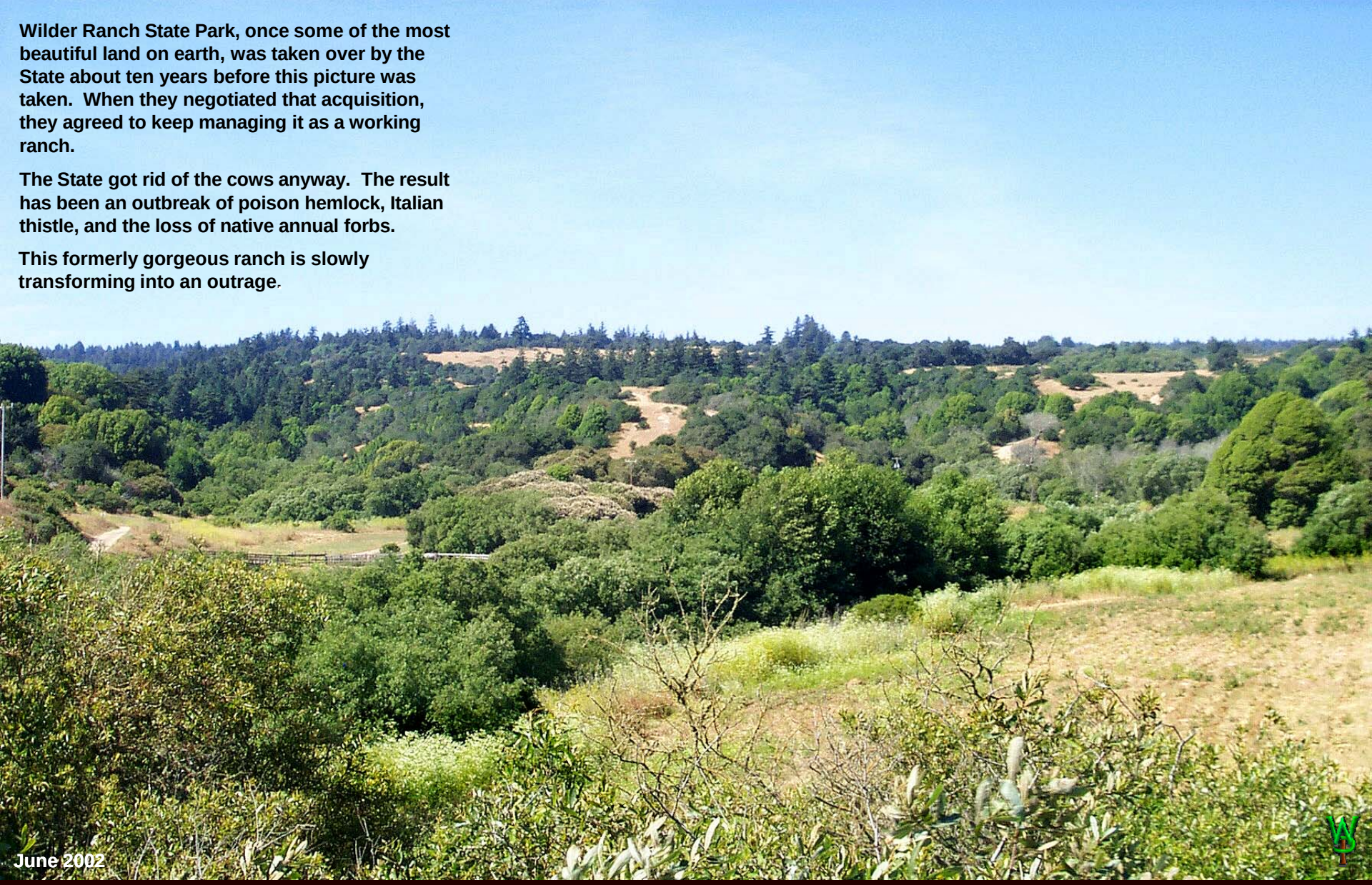
"Burned out" would be more apt. Do these houses and this landscape look "fire safe" to you? These are conifers succeeding a dying oak woodland and decadent chaparral. This was probably once mostly a diverse grassland with lots of food for wildlife interspersed with shrubs and sparse trees confined mostly to the gullies. From an Indian perspective, this is too steep to be a prime acorn or hazelnut production area. So, if it does burn like this, how is that I know what will happen?

The roadsides up here are lined with tinder, usually weeds. Imagine a gust of wind carrying Italian thistle seed 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 rains would carry the broom seed down to the road, combine it with the rattlesnake grass, head out the nearest culvert and down the hill. French broom seed can remain viable for a century. Will it get better if we just avert our eyes and walk away?

Wilder Ranch State Park, once some of the most beautiful land on earth, was taken over by the State about ten years before this picture was taken. When they negotiated that acquisition, they agreed to keep managing it as a working ranch.

The State got rid of the cows anyway. The result has been an outbreak of poison hemlock, Italian thistle, and the loss of native annual forbs.

This formerly gorgeous ranch is slowly transforming into 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, but if we go on with this “preserving Nature” ethic, we may yet exceed that rate of destruction. Since the turn of the 20th Century, many areas in small private agricultural land use have been gradually regulated to death and abandoned because of competition from subsidized industrial agriculture. Today, much of that abandoned land is being forcibly "maintained" in that preserved state upon the presumption that ‘Nature is best able to recover when left alone.’ The problem is, that those in charge are blinded by ideology.

June 13, 2014 – Almost all of what you see here in this grassland is non-native.

This is a philosophy taught by the best and brightest. This is the world famous Stanford University Jasper Ridge Biological Preserve, where soils are undisturbed, trace minerals are adequate, and the 2014 operating budget was over $1 million, not including research grants. This is where Dr. Paul Ehrlich saw to it that the Bay Checkerspot butterfly *(Euphydryas editha bayensis)* was “protected.” This is where it went extinct. Dr. Ehrlich is now working with lawyers to “protect” those few places where the Bay Checkerspot can still be found. In a place infested with exotic plants like this, “preservation” can be deadly to biodiversity.

These are native grasses two days later here at the Wildergarten. This is where sandy soils were wrecked with bulldozers. This is where key trace minerals are virtually nonexistent. This is where the budget came out of a nurse's paycheck with two kids in college. The weather is hotter here too, as Jasper is in a marine climate near San Francisco Bay, nor did we get more rain in 2014.

Communications Hill, San Jose, CA. This is "Sustainable Development" with an ecological wasteland at its doorstep. The corporations such as SummerHill Homes that build these "communities" cash in on "the squeeze" while touting their environmental standards.

This myth that "Nature" means "no people" blinds the experts and leaders who abet this disaster. Not only is it a philosophy that is logically delusional and observably destructive to the land, it feeds a real estate and financial racket that is ruining the economy. We do have options besides "suburban sprawl," but only if imagination is freed from the chains of ideology, bureaucracy, and corruption.

***Galium parisiense* – Wall bedstraw is one of the most annoying and destructive weeds we have left here, but there's less of it every year.**

The point of this little data dump and diatribe was not an esoteric concern about some obscure "endangered species." Our area is a microcosm of the functional decay of whole systems across the entire continent. Everywhere I go I see the same problems: Environmental protection (effectively mandated neglect) allows uninterrupted succession and growing weed infestations to slowly abet mass extinctions of locally adapted plants, sight unseen, and therewith the bugs and animals that depend upon them. Once the plants are gone, how much longer the associated symbiotic soil biota will last is anybody's guess. Experiments here indicate that there may be cause for concern, but that there may be time to fix it. It's up to us to do something about it, ourselves.

Have you ever heard *anyone* talking about that? Heck no, most people *advocate* "environmental protection"! Yet in reality this is a hugely profitable racket for its corporate sponsors, because it puts their smaller competition out of business. To landowners, resource businesses, and their employees, it's been a disaster. To its dependents in government, it means a job, but only as long as there is a problem to justify it! Having researched this process for twenty years, watching activists, academics, contractors, bureaucrats, and lawyers do the witless bidding of these plutocrats, what none of them seem to get is that preventing mercantilist tyranny is why the authors of the Constitution instituted limited government in the first place. They had had quite enough of corporate corruption from the companies of their former European rulers. These are not intrinsically bad people driving this, but it doesn't have to be this way. The productive alternative is actually more profitable!

People built the ecosystems we all want to save. People are the answer, not the problem. This is not about "right answers," simply because land and the needs people put on it are so varied that the answers will be varied too. Nor do we really know enough about native systems to be making such prescriptions. We must *learn* how to fix this situation, using the tools of greatness: experiments, tests, publication, patents, and contracts, because this is about managing competing risks among many unknowns. Here at the Wildergarten, we're trying. Want to join us? Just head out the back door and get started! It is best to start small, because at this point, nobody really knows how to make it happen. It can be frustrating, painful, and expensive, but it is immensely rewarding work.

In writing this book, it is my hope to inform you of the real challenges we face and their terribly misunderstood causes, to convince you that “Nature takes care of itself” simply does not work, for people, for native habitat, or 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. ***I am not asking everyone to do things the way we did.*** Every situation is unique; people’s values and capabilities are different and over time, we all do learn. That is the beauty of responsible liberty, because by trying different things and sharing what happens we all learn more to do the best we can, to free ourselves from this mass-psychosis; learning that how things work really is in our hands.

Table of Content

Next

Each line in the TOC is a link that opens the corresponding chapter in a new file

These are LARGE files; they do take time to load

Please offer suggestions and comments **HERE**