

PROJECT OVERVIEW



This chapter concludes Part I, a contextual overview to this project: its rationale, setting, history, accomplishments, and goals. The actual project content is covered in Parts II-IV. The book concludes with a contextual discussion in Part V.



WILDERGARTEN 4.0

Wildergarten, ©2014 by Mark Edward Vande Pol & Wildergarten Press, All rights reserved. All photos and illustrations except as noted are by Mark Edward Vande Pol.

You are permitted to download the public portions of this book without charge for your personal education. You may not edit, or otherwise alter its content in any way. Fair use quoting is considered one page of text and must include reference to the source URL. Content may not be copied, reposted, republished, or transmitted without written permission.

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





June 2015

This Overview is to lay out how the project information is organized in the 18 chapters to come in the next three parts: Forestry, Grasslands, and Miscellaneous (subjects that didn't fit the other two).



June 2015



November 1989



Each of these subjects developed over many years, therefore each involves overlapping timelines. Worse (from the standpoint of organizing a book), the subject matter overlaps as well; there were no grasslands to begin with, there are now grasses in forests, and trees found in grasslands. Hence, extracting the project into a linearly-organized book is a challenging matter. Designing an architecture such that the presentation can develop in the future without reconstructing it repeatedly was also a necessary challenge.

PROJECT OVERVIEW

Variations on the graph on the next page will be offered occasionally in this book. It is not quantitative in nature. It is meant to show the relative time commitment amid the constraints shown in the colored bars in the background. The point is to both impart how I arrived at various decisions and how physical reality governed those choices. Actual time spent on any one project is constrained by the “commitment” line at the bottom governing each line. Engineers call the combined result a “convolution” :-). The pink bars on that line represent the seasonal contributions of my two daughters, who for several years weeded in the spring instead of getting a summer vacation. They were educated here. Obviously, one can only devote parts of weekends or vacation time to this kind of work when one is an engineering R&D project manager with responsibilities on multiple continents. Included in those responsibilities were the usual time commitments to commuting, daycare, and childrearing. Effectively, the first decade of project time here was devoted to those commitments, broom, forestry and infrastructure, house, broom, kids, broom, and writing *Natural Process*.

The subjects were encountered more or less sequentially because the reality of this kind of work is that things are usually so far gone that conditions as developed from the site history dictate the course of action. When we bought the place it was a fuel bomb, so I started with reducing fuels. There were no grasslands to manage. Instead, there were 10 acres of broom, occasional huge eucalyptus trees, and monoculture stands of acacia trees. Effectively, “weed removal” started as clear-cutting whole stands of exotic trees and brush. It was a twofer, weeds that were fuels! Yet to do anything with weeds as big as eucalyptus I had to fix roads, etc. Once that was done or close to it, I had to deal with what comes up after a clear-cut and pushing dirt around, which at first was primarily broom. Get rid of broom and up came rip-gut brome grass. So from the perspective deriving priorities, the way it started out, while it may have been a big job, it was very simple to prioritize, but harder to organize as a book.

Once I had the house built, I wanted to build a garden etc. for which redwood was an obvious material. Yet I never logged with the idea of what I needed. I did what the forest needed and took what I could get from that. There has always been more than I could use. The rest I gave away because I could not legally sell it.

The decision to focus on grasslands was a fundamental one. Between the horror of our experience with cat’s ear and the commitment I had made in *Natural Process*, there was no other choice. Yet grasslands required so much time that I had to dial back the forestry I did to thinning a series of annual of +/- 1 acre patches, during which I learned a great deal about how the system responded. “Phased Forestry of broadleaf stands (next chapter) grew out of that learning process.

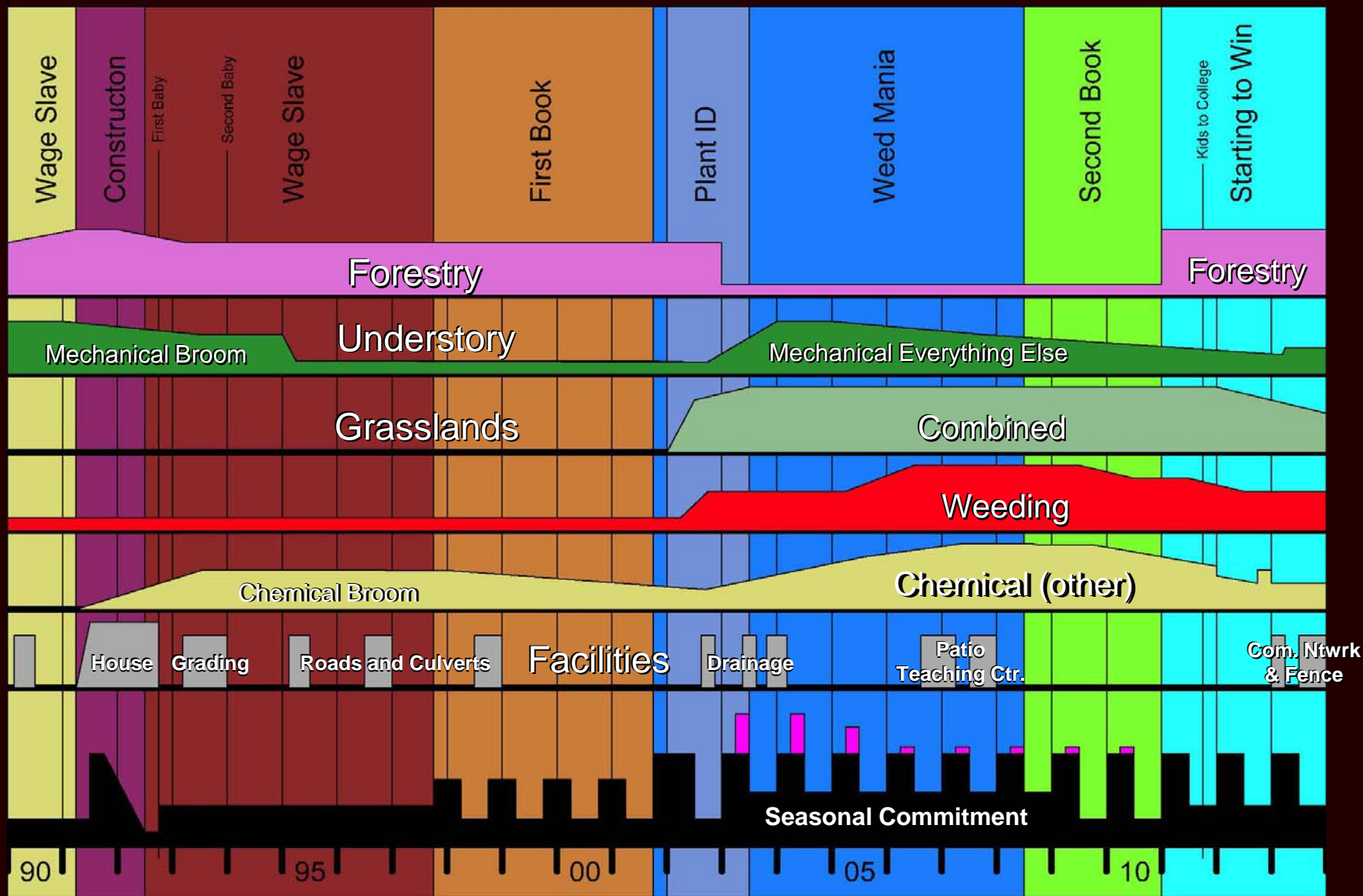
In essence, the project was about forests first, then grasses, and then returned to forestry.

As the grassland restoration came to fruition and I learned that no one had ever got this far before, I realized that I had a responsibility to discharge upon having acquired unique research experience. Hence a new commitment was writing and photography for this book. Once the grasslands came under control, I could return to forestry. So it goes.



PROJECT OVERVIEW

Further explanation is on the next slide



DISCUSSION OF THE GRAPHIC (PRIOR SLIDE)

To recap: the first priority was a fire-safer place to live and fixing roads and drainage to maintain the land while I worked at an engineering career. A simultaneous goal was eliminating French broom. The third was exotic trees. As I was writing *Natural Process*, (unknown to me) cat's ear destroyed what native grassland had begun to develop after I took out the broom while bedstraw and then hedge parsley made a mess of my forests. Yet the situation was a lot worse than that.

Starting out, I was working from my childhood recollection of "what belongs here." My biggest problem was uncertainty re what was native and what was not. I bought books, took pictures, and studied photographs online (which were pretty sparse back then). Once I had done what I regarded as due diligence, I asked for help and got it from Dr. Grey Hayes of the Elkhorn Slough [Coastal Training Program](#). He came, I pointed, he told me what it was, and I took notes, saying things like "it's dead," or "good, I don't have to worry about that any more." Over the ensuing years, I sent dozens of photographs to botanists by email, bought more botany books, and started to get grip on what's what. The [species list](#) grew to what it is today. Yet even the experts have been wrong upon occasion, as you may have learned in [the second chapter](#), and in my opinion, bedstraw was just such a case.

The graph shows that although the whole restoration process encompassed 25 years (2014), it was only maxed out for 7-10 months per year for about 7-9 years from about 2003-11. As the grasslands have come under control, I had more time to do other work, particularly research and writing (including this book). As I introduce more disturbance into the system by bringing the forest to where it can support more understory life, that may yet change, but for now, things have been clearly getting easier until late last year when I first learned that the botanists at the universities had made another mistake to be discussed later. Even so, I now believe that what we accomplished might have been done in half the man-hours I put in. It might even require significantly less than that if the experiments upon which I am now embarked prove out.

Needless to say, that does not mean I believe one could do this in three or four years. The way weeds suppress germination of others governs how fast one can purge that "weed bank" which, for now, must be done a "layer" at a time (there may be ways to accelerate that). With new efficiencies, one could do other work, handle more acreage, or some combination of the two, which is the "good news" message in this book.

The central role played by herbicides is obviously glaring. Does it mean I sprayed a lot of material? No. It means that it was a big part of our success. Was it necessary? At this point I must say, yes, it absolutely was. Does this mean you should worry that a bunch of people will follow my lead and go out hosing the landscape with tons of chemicals? If that's all they do, then they will fail. **In every case I have always followed spraying with rigorous hand-weeding.** Weeding is so much work and takes so long that you should have no worry at all about large numbers of people following my lead. So I ask that for now readers suspend their condemnations about chemicals until having seen the photographic evidence. Now, on to the next graphic.



DISCUSSION OF THE GRAPH

This has been a multidisciplinary project encompassing botany, biology, horticulture, arboriculture, road and drainage construction, and the skills to build and maintain specialized equipment involving carpentry, plumbing, welding, masonry, electrical, and electronic manual skills. Toss in metrology, diagnostic, statistical, written, and visual communications and it becomes a discipline demanding a very broad range of intellectual, manual, and technical abilities. Importantly, those skills must be acquired when one is young enough to accomplish something within the life of a project spanning 30-50 years. In other words, habitat restoration is a profession where one must know a great deal about many things, but is by no means an expert in any one of them.

Accordingly, I wish to add this caveat: This is a report, not a series of recommendations. This is about what I did, what I learned, what I face, and what I am trying to do about it, not what I am suggesting *you* do. I am not providing specifications or advocating any particular approach or method, although I will certainly tell you my preferences for what I did. Every situation is unique. The degree to which what we did here is applicable to you and or your situation is your own conclusion and responsibility.

OK, enough of the legal disclaimer. Let's get to discussing what this took and how it was done.

THIS IS THE END OF THE BEGINNING

You have just completed all of Part I, the introductory part of this book.

This picture book suggests two alternative paths:

1. Read this book linearly, going through the remaining 24 chapters, OR
2. Jump to Part V, the Project Context, indicated with the “Globe” icon on the next page. These are five chapters discuss contextual issues regarding how this project survives while inundated with weeds resulting from the current public preference for politically-determined “environmental protection.”

This project progressed through time while the book’s chapters are arranged by topic. When possible, the topics in the detailed section are arranged in temporal order because our emphases changed over time according to what was learned and progress that was made. To avoid redundancy, the detailed path presumes that you have read each chapter in order.

Navigation


1. There is a Table of Content the end of every chapter (next page).
2. Each line in the Table of Content is a link that opens the corresponding chapter in a new file.
3. The Wildergarten Press logo  on any page is a link that takes you to the Table of Content at the end of that chapter.

TABLE OF CONTENT

Part I - Introduction

1. This is Wildergarten
2. Going "Native"?
3. "Native" Is Not Enough
4. A Site History Like No Other
5. Repeat Photography, Before & After
6. Proof: Pure Germination of Native Annuals
7. Project Overview

Part II – Forestry

1. Phased Thinning of Broadleaf Forest
2. Conifer Forestry – Thinking Really Big
3. Drainage – When Hill Goes Downhill
4. Roads – From Curse to Blessing
5. Making WOW! - Restoration of Forest Understory
6. Aerial Photography over 25 Years

Part III - Grasslands

1. "The Onion": Weed Management by Species
2. Colonization Behavior of Native Annual Forbs
3. Sand Hills as a Model Post-Disturbance Habitat
4. Grassland Variety in Meadows & Forests
5. Grassland Restoration and Soils Rehab
6. Comprehensive Weed Management
7. Vegetative Identification & Weeding Technique
8. Pre-Emergence Selection for Native Germination
9. Drought Tolerance in a Pure Native Grassland

Part IV - Miscellaneous

1. The Vegetable Garden as a Research Tool
2. Pollinators and Native Forbs
3. Fungi (not yet)
4. Specialized Tool Development

Part V – Project Context

1. Periodic Disturbance and Feed-Forward Stability
2. Weeds: A Tragedy of the Commons
3. Control Boundaries: Fragmentation Is Your Friend
4. Central Planning
5. Our "Ownerless" Backyard

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](#)

Next

