

PATTERSON POINT PRESERVE: AN UPDATE TO THE FIRST DECADE



**PREPARED BY FRIENDS OF VILLA GRANDE FOR
THE SONOMA COUNTY AGRICULTURAL PRESERVATION & OPEN SPACE DISTRICT**

SUMMER, 2020

ANNOTATED CONTENTS

This document serves as a “time-lapse-photo” of the first decade of work at
Patterson Point Preserve by Friends of Villa Grande

PART 1:

A QUICK REFERENCE GUIDE TO THE “CONCEPTUAL RESTORATION PLAN FOR PATTERSON POINT PRESERVE” PAGES 15-32 OF THE “RESTORATION AND LAND MANAGEMENT PLAN” FROM 2011.

- We wanted a quick reference guide to the “Conceptual Restoration Plan” for use as an educational tool for our preserve tours; for our web site, and for new members interested in joining the board or the restoration committee.
- This document and an Addendum prepared by Harold Appleton in 2013 (along with an informal memo from Harold) have been our guiding lights to restoration these past ten years.
- Without diminishing any of these documents, we wanted to include our own practices and experiences.
- Hence, the Quick Reference Guide. It can appear a bit obscure at first glance, but here it is in a nutshell:
 - Information from the 2011 “Conceptual Restoration plan” is in **black**
 - Our 2013 “Addendum” and an accompanying “memo” is in **blue**
 - Our updates to either one or both are in **red**

PART 2:

A CURRENT PLANT MASTER LIST AND ITS KEY FOR PATTERSON POINT PRESERVE

- Our springboard for plants is from the three lists in the “Conceptual Restoration Plan” along with plants suggested in the Addendum.
- While the whole plant list is comprised of the original lists and what we’ve found in or added to the preserve in these ensuing ten years, we can also parse plants out into these as well as several different categories as the key illustrates:
 - Plant varietals (subspecies)
 - Native (plants appropriate for preserve habitats) and non-native plants
 - Several Miscellaneous categories
 - Plants that are primarily on our beaches (which can come and go yearly)
 - Plant “sources” such as the “Conceptual Restoration Plan” and plants identified by our volunteers & leaders.
- It should be noted that taxonomy is always in flux based on new gene research. Our plant list reflects current taxonomies but also includes older names to make sure we’re all on the same page.

A QUICK REFERENCE GUIDE WITH **A 2020 UPDATE OF FOVG PRACTICES AND EXPERIENCES (IN RED)** FOR:
 THE 2011 RESTORATION AND LAND MANAGEMENT PLAN (PP 15-32 IN BLACK), AND
 THE 2013 ADDENDUM WITH AN INFORMAL MEMO (IN BLUE)

GENERAL CHARACTERISTICS OF THE PRESERVE	Page
Approximately 1.8 acres in size, PPP Plant communities include: Open water river channel; Gravel/sand bars; Riparian forest & Alluvial redwood forest	15
PPP Landform Features include: Alluvial river deposits; Two sand & gravel bars at the north & west; Several east-west levees separated by swales	16
Alluvial Redwood Forest: 22 redwoods; Diameters 30-92 inches; This habitat is unique and scarce. One redwood fell in 2017 and is now a nursery tree.	16
GENERAL RESTORATION RECOMMENDATIONS	
The greatest single restorative act is hand-removal of invasives	21
For introduced species, the potential for invasiveness should be weighed against the removal costs (monetary & environmental) & other potential benefits that species might bring to the preserve	26
The single most important restorative action FOVG can take is the effective removal of the invasive non-native species	27
All non-native landscape plants rooted within the preserve should eventually be removed. If the plants are not aggressively invasive they have a lower priority for removal.	30
PLANT LISTS & GENERAL PLANT NOTES	
Plant list August, 2010 (natives & non-natives)	18-21
Plant list of natives with few individuals (it is recommended to add more of these species)	22
Plant list recommended for restoration planting	27-29
Tables 1, 2 and 4 recommend plants to add	2-3
As plants are discovered, they should be added to the list of to the list of plants in the preserve. Using all the above lists, we have compiled a comprehensive "master list" of preserve plants.	4
Having 25 species of native woody plants shows great diversity.	17
With looming climate change, it would be wise to expand our native plant lists from on-site or in watershed sticking to Sonoma and Mendocino counties or nearby.	Memo1
To help wildlife cope with climate change, find a mix of plants that flower at different times of year.	Memo1

PLANT LISTS & GENERAL PLANT NOTES (CONT.)	Page
Sudden Oak Death: Because of this disease and leaf tip necrosis on bays, neither Tan oaks nor Bay laurels (SOD intermediate) are on our plant lists. Our tan oak died in 2013 & fell over in 2019. Bays: we prune, remove suckers & pull seedlings.	30
REMOVAL OF NON-NATIVE PLANTS	
It is recommended to either use contractors to remove exotic vegetation or to do it ourselves as volunteers. We do both.	22-23
FOVG seeks to minimize the use of herbicides during restoration because it is on a river. Herbicides should be used only by a state licensed pesticide applicator. The use of herbicides is mentioned in relation to removal of specific non-natives on pages 23-26. It is the preference of the current Restoration and Management of the Preserve committee (RAMP) NOT to use herbicides because we are on a river.	23-26
Target Invasive Species: The removal techniques for each of these species should be followed without the use of herbicides.	23-27
Armenian blackberry (<i>Rubus armeniacus</i>) Learn to differentiate between this & native California blackberry (<i>Rubus ursinus</i>). On-going.	23-24
Acacia (<i>Acacia dealbata</i> or <i>A. melanoxylon</i>) Removed in 2010; has not reappeared, but we keep an eye on seed pods from the Acacias across the river from the preserve.	24
German/English Ivy (<i>Hedra helix</i>) This is our most serious threat. Educate the neighbors about it. Remove [ivy] roots to a reasonable depth (2' max) & yearly weed patrols are needed. On-going.	24-25 Memo1
Plum rootstock (<i>Prunus sp.</i>) Trees have been removed. Suckers are removed yearly. Trunks Some trunks remain to prevent erosion & have been girdled.	25
Elegantine Rose (<i>Rosa eglanteria</i>) Giant reed (<i>Arundo donax</i>) Spiderwort (<i>Tradescantia fluminensis</i>) Periwinkle (<i>Vinca major</i>) We work on these plus <i>Lamium</i> yearly.	25-26

REMOVAL OF NON-NATIVE PLANTS (CONT.)	Page
Aggressive follow-up removing any regrowth of non-natives is very important. On-going.	21-22
Future invaders: Wind, birds, people's shoes & floods (water-born seeds) WILL invade. Check for & remove these. On-going.	27
CARE OF NATIVE PLANTS & PLANT ADDITIONS:	
Allow the existing seed reservoir to naturally regenerate for two years before planting. Due to drought, compacted soil & some impatience on our part, we now clear and replant at the same time unless it is obvious that natives are already growing (like on the 2nd hummock). We are trying to follow the Memo suggestions of: If there are empty areas > 40 square feet, plant container plants or transplants. Seed Molate fescue with mulch alone or with plantings.	21 Memo1
Propagate or transplant plants growing in the preserve or surrounding parcels as it is critically important to preserve as much of the genetic material on the site or closeby as possible. We do this plus use plants from up the hill; we also purchase plants from Cal Flora Nursery in Fulton checking their source.	21
Plants can be contract grown at local nurseries. We have done this through Cal Flora Nursery in Fulton.	27
Plantings should be largely confined to the forb, vine & shrub layers, but 15 trees are recommended for planting. We have planted trees and are now working on a tree-planting policy.	21 22 & 27-29
Species not adapted to episodes of flooding & heavy siltation will not persist in the lower elevations of the preserve for long.	27
New native seedlings and plantings should be protected by mulch & other natural materials.	21-22 29
The seedlings of desirable native perennial & woody species will benefit from occasional summer watering in the 1st & 2nd yr. This also applies to purchased plants. We follow a watering plan from Las Pilitas Nursery with yearly weather adaptations.	22
MISCELLANEOUS	
Preserve Work Season: We work in and have work done in the preserve from Sep to Feb to protect nesting birds. [We] have a bird survey done before undertaking work if we have to work outside of our Sep-Feb work season.	1

MISCELLANEOUS (CONT.)	Page
Provide effective erosion control: Most active erosion is on the river bank. In 2019 the flood carved aay the Sandy Beach; human access carved out the bank. With advice from Harold Appleton, we're leaving it. (2020)	29
There is erosion where the trail drops near the large bay trees. During the 2019 flood, there was more erosion in this area. We plan to install a "living filler" to halt the erosion. (2020-21 season)	
Mulch will help prevent erosion. It should be applied before Oct 15 as well as after removal of invasive plants. We apply to the trails; more is needed on plants.	
The "T" is unnecessarily wide. We have not changed the width since the this width is needed to turn boats being carried to the beaches. It has not caused problems.	29
The trail above the gravel beach needs to be decommissioned. Once the trail is gone, sprig trees & put in barrier plantings. We have blocked the path yearly, & in 2019 the STRAW project (Students and Teachers Restoring a Watershet) cleared, planted & sprigged trees in what is proving to be a successful effort to remove this liability. STRAW will maintain through 2023.	29 2
Trails: Fallen redwood limbs up to 8 inches in diameter should be used to edge trails. On-going since they float off in floods!	30
Fire Prevention: It was recommended to dismantle debris piles in the preserve close to residences for fire prevention. Done yearly.	30
Removal of Human Structures: A staircase in the swales. This was removed in 2011. Floods deposit debris in the preserve and on the beaches. Removal is on-going as-needed.	31
Annual Photo Documentation is recommended. On-going.	31
Prune ash trees over the Sandy Beach. Done.	1
Remove ivy above Sandy Beach. For 2020-21 season.	
Weed & re-plant in the Swales. In process.	3
Create a hedgerow 6' wide minimum. In process.	3-4
Sprig Ninebark. Done in several areas.	Memo2
Boundary Survey of the Land: Conducted in 2013. There are red-and-green metal posts that now delineate our boundaries.	31, 3
Workbook: PPP LMP UPDATE 11X8.5.xlsx Worksheet: Print	

**KEY TO PATTERSON POINT PRESERVE
PLANT MASTER LIST**

V	✓	Variety or sub-species or race of plant.
N	✓	Native plant appropriate for Patterson Point Preserve habitats
M	1	Miscellaneous: Plant has issues to discuss
M	2	Miscellaneous: A plant the committee might like to add or add back into the preserve after research
M	3	Miscellaneous: This plant has or should have a committee policy
M	4	Miscellaneous: This plant has basically been removed from the preserve (be alert that it doesn't return)
M	5	Miscellaneous: This plant needs to have its identity verified
B	✓	The plant is found primarily on the Beaches ; this includes sunny parts of the gravel beach path
L1	✓	Restoration and Land Management Plan (LMP), 2011, pages 18-21 plants found in PPP from an August, 2010 survey
L2	✓	Restoration and Land Management Plan (LMP), 2011, page 22 plants recommended to add more of these
L3	✓	Restoration and Land Management Plan (LMP), 2011, pages 27-29 candidate plants for adding to PPP
A	✓	Addendum , 2013, to the LMP; pages 2-3 have plants recommended for restoration projects
VW	✓	Plants found in or added to PPP by Victoria Wikle 2011-2018
LH	✓	Plants confirmed in PPP from a plant survey conducted by Lisa Hug in May, 2019 (2 plants to add were suggested)
2020+	✓	Plants found in or added to PPP beginning in 2020 and onward

Committee = The Restoration and Management of the Preserve (RAMP) committee

PPP = Patterson Point Preserve

Workbook: PPP PLANT MASTER FILE.xlsx

Worksheet: Key to Master List

**PATTERSON POINT PRESERVE
PLANT MASTER LIST IN GENUS ORDER 2020**

GENUS	SPECIES	V	COMMON NAME	N	M	B	L1	L2	L3	A	VW	LH	2020+	COMMENTS--Page 1
Acacia	dealbata		Acacia		4		✓							Removed in 2010. Page 24 LMP
Acer	macrophyllum		Big-leaf maple	✓			✓	✓				✓		
Acer	griseum		Paperbark maple		4						✓	✓		Removed in 2020
Acer	negundo	✓	Box elder	✓			✓	✓				✓		Variety: californicum
Adiantum	jordanii		CA maidenhair fern	✓			✓					✓		
Adiantum	aleuticum		Five finger fern	✓									✓	Found near dead Tan oak 2020
Allium	triquetrum		Three corner leek								✓			Look like green onions
Alnus	rubra		Red alder	✓	1		✓	✓						Cannot find in PPP as of 2019
Anaphalis	margaritacea		Pearly Everlasting	✓		✓								See Everlasting sp. from LMP1
Angallis	arvensis		Scarlet pimpernel								✓	✓		
Aralia	californica		California aralia	✓	2						✓	✓		On 1st hummock 2017; gone after 2019 flood
Aristolochia	californica		Dutchmen's pipevine	✓			✓	✓				✓		Six Pipevine butterflies in May, 2019
Artemisia	douglasiana		Mugwort	✓			✓					✓		
Arum	maculatum		Arum cuckoopint								✓	✓		Come up in winter (Dec-Jan) remove
Arundo	donax		Giant reed		4						✓			Removed; keep an eye out
Asarum	caudatum		Wild ginger	✓				✓			✓	✓		Recommended & planted, doing nicely
Athyrium	filix-femina	✓	Common lady fern	✓							✓			Variety californicum may equal cyclosoram
Atropa	belladonna		Nightshade								✓			
Baccharis	pilularis		Coyote brush	✓	3					✓				Not desired in PPP. Needs a policy
Baccharis	salicifolia		Mule fat	✓		✓					✓			Found in 2013; can't find in 2019
Barbarea	orthoceras		American wintercress	✓									✓	On the beaches, looks like mustard
Bidens	frondosa		Devil's beggarticks	✓		✓					✓			2018 Native per Cal Flora now gone
Brassica	nigra		Black Mustard			✓	✓					✓		
Briza	maxima		Rattlesnake grass			✓							✓	
Calycanthus	occidentalis		Spicebush	✓			✓	✓	✓	✓		✓		Nice plantings by STRAW
Cardamine	californica		Milkmaids	✓	2									Recommended by 2019 plant survey
Cardamine	oligosperma		Western bittercress	✓		✓					✓			On the beach; shoots seeds; have photos
Carex	barbarae		Basket sedge	✓							✓	✓		Found & added above sandy beach
Carex	obnupta		Slough sedge	✓		✓	✓		✓					On beaches & softer than Basket sedge
				N	M	B	L1	L2	L3	A	VW	LH	2020+	

**PATTERSON POINT PRESERVE
PLANT MASTER LIST IN GENUS ORDER 2020**

GENUS	SPECIES	V	COMMON NAME	N	M	B	L1	L2	L3	A	VW	LH	2020+	COMMENTS--Page 2
Chenopodium	album		Lamb's quarters			✓						✓		Couple of plants near path at gravel beach
Claytonia	pertoliata		Miner's lettuce	✓							✓	✓		Synonym <i>Montia pertoliata</i>
Clematis	lingusticifolia		Virgin's bower	✓			✓		✓			✓		Lots especially at front
Conium	maculatum		Poison hemlock				✓							Removed; keep removing
Convolvulus	arvensis		Bindweed			✓	✓							Looks like morning glory
Cornus	sericea	✓	Stream dogwood	✓			✓		✓	✓		✓		Variety: sericea. Sprigged 2019
Corylus	cornuta	✓	Hazelnut	✓					✓		✓	✓		Variety: californica. Suggested and added.
Crocosmia	species		Fire lily								✓			Always some to pull up and remove bulbs
Cynodon	dactylon		Bermuda grass			✓	✓							Keep removing
Dicentra	formosa	✓	Pacific bleeding heart	✓							✓	✓		Variety: formosa
Digitalis	purpurea		Common foxglove								✓			
Ehrharta	erecta		Panic veldt grass				✓							
Epipactis	helleborine		Broad-leaved hellebore								✓			
Equisetum	telmateia	✓	Giant horsetail	✓			✓	✓				✓		Variety: braunii. Hedgerow
Erigeron	sumatrensis		White horseweed		5						✓			Canadensis species is native CHECK ID
Erythranthe	guttata		Yellow monkey flower	✓		✓							✓	Native on beaches; have photos (variable)
Euthamia	occidentalis		Western goldenrod	✓							✓			Found 2013; blooming 2019 on beach path
Festuca	rubra	✓	Red fescue molate	✓						✓				Variety: molate. STRAW spread seeds 2019
Foeniculum	vulgare		Fennel			✓	✓							
Fragaria	vesca		Wood Strawberry		5						✓			Above fallen redwood; check if native
Fraxinus	latifolia		Oregon ash	✓			✓		✓			✓		
Galium	aparine		Bedstraw								✓	✓		There may be a tiny native version?
Geranium	robertianum		Robert's geranium								✓	✓		
Geranium	disectium		Cut-leaved cranesbill											
Gnaphalium	sp.		Everlasting	✓		✓	✓							Same as Anaphalis margaritacea
Hedra	helix		German/English ivy				✓					✓		LMP p. 24 removal techniques
Heracleum	lanatum		Cow parsnip	✓	3					✓	✓	✓		Found 2013 & added by STRAW 2019
Heteromeles	arbutifolia		Toyon	✓						✓	✓	✓		Hedgerow; from addendum (added)
Hydrillia	verticillata		Waterthyme			✓					✓			Along river's edge

N M B L1 L2 L3 A VW LH 2020+

**PATTERSON POINT PRESERVE
PLANT MASTER LIST IN GENUS ORDER 2020**

GENUS	SPECIES	V	COMMON NAME	N	M	B	L1	L2	L3	A	VW	LH	2020+	COMMENTS--Page 3
Juglans	californica	✓	No. CA black walnut	✓			✓	✓	✓			✓		Variety: hindsii. Volunteer saplings as well
Juncus	patens		California Gray Rush	✓		✓					✓			Sandy beach 2018
Juncus	effusus		Soft bog rush	✓		✓					✓			Found in 2016
Lactuca	serriola		Compass plant								✓			On Tortuga path
Lactuca	saligna		Willow lettuce			✓	✓							
Lamium	album		Dead hedge nettle								✓			Encroaching from neighbors
Lapsana	communis		Nipplewort								✓	✓		Like bee plant but yellow flowers
Lemna	species		Duckweed	✓		✓					✓			In the water only; 9 types
Lithocarpus	densiflorus		Tan oak	✓	3		✓					✓		Dead from SOD; see page 30 LMP
Lonicera	involucrata		Twinberry	✓			✓	✓				✓		
Ludwigia	species		Water primrose		3	✓								Beaches; probably <i>L. peploides</i> ; a scourge
Lunaria	annua		Money plant								✓			At the front
Lythrum	salicaria		Purple loosestrife			✓								Sandy beach
Magnolia	species		Tulip magnolia		4						✓	✓		Removed 2020
Maianthemum	racemosum		False Solomon's seal	✓					✓		✓	✓		Also called <i>Smilacina</i> LMP p. 29
Marah	oregana		Wild cucumber	✓			✓	✓				✓		Also called Manroot
Medicago	minima		Little bur-clover			✓								Have photo. On beaches non-native
Melilotus	albus		White sweetclover			✓	✓							
Melissa	officinalis		Lemon balm				✓							Looks like mint; on path to gravel beach
Metasequoia	glyptostroboides		Dawn redwood		4		✓							Removed all three in 2012
Myosotis	scorpioides		Forget-me-not								✓	✓		
Myrica	californica		Pacific wax myrtle	✓	3					✓	✓	✓		Hedgerow; 2017 2 died; 2 planted 2019
Oxalis	oregana		Redwood sorrel	✓			✓					✓		
Oxalis	pres-capre		Sour grass								✓	✓		At least 1 other non-native type of Oxalis
Pentagramma	triangularis		Goldback fern	✓	2		✓	✓						Found on Starrett Hill; were along the path
Persicaria	amphibia		Water knotweed			✓					✓			Polygonum = Persicaria
Persicaria	lapathifolia		Common Smartweed	✓		✓					✓			Polygonum = Persicaria; 2019 gravel path
Physocarpus	capitatus		Ninebark	✓			✓	✓		✓		✓		
Pipatherum	miliaceum		Smilo grass								✓			

N M B L1 L2 L3 A VW LH 2020+

**PATTERSON POINT PRESERVE
PLANT MASTER LIST IN GENUS ORDER 2020**

GENUS	SPECIES	V	COMMON NAME	N	M	B	L1	L2	L3	A	VW	LH	2020+	COMMENTS--Page 4
Plantago	major		Common plantain			✓					✓			
Polypodium	californicum		California polypody	✓							✓	✓		Found east of bays 2015; on paths (fern)
Polypodium	glycyrrhiza		Licorice fern	✓							✓			
Polypogon	monspeliensis		Rabbit's foot grass	✓		✓	✓							"Furry flowers" on beach
Polystichum	munitum		Western sword fern	✓			✓	✓				✓		
Populus	fremontii	✓	Fremont Cottonwood	✓	1				✓					Variety: fremontii. Recommended.
Prosartes	hookeri		Fairy bells	✓			✓	✓						
Prunella	vulgaris	✓	Mountain selfheal	✓							✓			Variety: laceolata. Herbaceous wildflower
Prunus	species		Plum root stock				✓					✓		LMP p. 25; removed large one in 2016
Pseudotsuga	menziesii		Douglas Fir	✓	3						✓			1 tree dead in PPP; succession forest; policy
Pteridium	aquilinum	✓	Bracken fern	✓			✓					✓		Variety: pubesens
Quercus	agrifolia		Coast live oak	✓						✓	✓	✓		Hedgerow
Raphanus	sativus		Wild radish		3	✓	✓							Non-native but is Pipevine butterfly food
Rhamnus	californica		Coffeeberry	✓						✓	✓	✓		Hedgerow in Addendum
Ribes	sanguineum	✓	Pink-flowering currant	✓					✓		✓			Variety: glutinosum. Suggested; added
Ribes	divaricatum		Black gooseberry	✓	2						✓			Found 2014; added but died
Rorippa	palustris		Bog yellowcress	✓		✓					✓			
Rosa	californica		California wild rose	✓			✓	✓	✓			✓		STRAW added more
Rosa	eglanteria		Eglantine Rose				✓					✓		LMP p. 25
Rubus	armeniacus		Armenian blackberry				✓					✓		In LPM p. 23 but not on list pp. 18-21
Rubus	ursinus		California blackberry	✓			✓		✓	✓		✓		Taking over in various areas
Rubus	parviflorus	✓	Thimbleberry	✓			✓		✓			✓		Variety: parviflorus
Rumex	crispus		Dock			✓	✓							
Rumex	acetosella		Sheep sorrel			✓					✓			
Salix	lasiolepis		Arroyo willow	✓			✓		✓			✓		
Salix	exigua		Sandbar willow	✓			✓		✓	✓		✓		
Salix	lasiandra	✓	Pacific/Yellow willow	✓			✓		✓			✓		Variety: lasiandra. Was named S. lucida
Salix	lavigata		Red willow	✓			✓		✓			✓		
Sambucus	mexicana		Blue elderberry	✓			✓		✓			✓		1 in PPP & 1 from Victoria's yard in 2013

N M B L1 L2 L3 A VW LH 2020+

**PATTERSON POINT PRESERVE
PLANT MASTER LIST IN GENUS ORDER 2020**

GENUS	SPECIES	V	COMMON NAME	N	M	B	L1	L2	L3	A	VW	LH	2020+	COMMENTS--Page 5
Scrophularia	californica		Bee plant	✓			✓	✓				✓		Spring up in lighter areas
Sequoia	sempervirens		Coast redwood	✓	3		✓		✓			✓		Has a policy to revisit
Solanum	laxum		Potato vine								✓	✓		Mostly removed 2019
Stachys	byzantina		Lamb's ear			✓	✓							Also known as Hedge nettle
Stellaria	media		Chickweed			✓					✓			Have photo
Symphoricarpos	albus	✓	Snowberry	✓			✓		✓			✓		Variety: laevigatus
Taraxacum	officinale		Dandelion			✓					✓	✓		
Tellima	grandiflora		Fringe cups	✓			✓	✓				✓		Doing very well
Tetragonia	tetragonoides		New Zealand spinach			✓								
Toxicodendron	diversilobum		Poison oak	✓	3		✓					✓		Sanctioned patch above Sandy beach
Tradescantia	fluminesis		Wandering Jew				✓					✓		LMP p. 25 removal techniques
Trifolium	hirtum		Rose clover			✓							✓	
Trillium	oatum		Western trillium	✓	2				✓		✓			Added in 2016; lost in 2019; LMP p. 29
Umbellularia	californica		Bay laurel	✓	3		✓					✓		Page 30 LMP carries SOD & has leaf necrosis
Utrica	dioca	✓	Stinging nettle	✓	3		✓			✓		✓		Variety: gracilis
Vaccinium	membranaceum		Wild huckleberry	✓							✓			Added
Verbascum	thapsus		Great mullein			✓					✓			
Veronica	sp.		Blue water speedwell			✓								On beaches have photo
Vinca	major		Periwinkle				✓							LMP p. 26 removal techniques
Viola	glabella		Stream violet	✓			✓		✓			✓		Confirmed early-on (possibly 2011 spring)
Viola	sempervirens		Redwood violet	✓	2				✓					Not in PPP; in forest; found on Starrett hill
Vitis	californicus		California wild grape	✓			✓		✓			✓		STRAW added more
Whipplea	modesta		Modesty	✓	2									On Starrett Hill
Xanthium	strumarum		Common cocklebur	✓	3	✓					✓	✓		Sometimes removed due to stickers (burrs)
				N	M	B	L1	L2	L3	A	VW	LH	2020+	

Excel

PPP Plant Master File Workbook

Master Print Worksheet