

**POINT REYES FIELD TRIP IB 102 – April 14, 2008, Dean G. Kelch & Abigail Moore  
Including Samuel P. Taylor State park, Mt. Vision, Tomales Bay Marsh, North Beach, Drake's  
Beach**

**Samuel P. Taylor State Park**

Our first stop is a Redwood Forest, a subtype of the North Coastal Forest plant community. Dominant plants include *Sequoia sempervirens* and some of its competitors, *Pseudotsuga menziesii*, *Umbellularia californica*, and *Lithocarpus densiflorus*.

**Dennstaedtiaceae:**

*Pteridium aquilinum*

**Dryopteridaceae:**

*Dryopteris arguta*

*Polystichum munitum*

**Polypodiaceae:**

*Polypodium calirhiza*

**Pteridaceae:**

*Pentagramma triangularis*

**Taxaceae:**

*Torreya californica*

**Cupressaceae:**

*Sequoia sempervirens*

**Pinaceae:**

*Pseudotsuga menziesii*

**Sapindaceae (Aceraceae):**

*Acer macrophyllum*

**Anacardiaceae:**

*Toxicodendron diversilobum*

**Apiaceae:**

*Heracleum lanatum*

*Osmorhiza chilensis*

*Sanicula crassicaulis*

*Torilis arvensis*

**Asteraceae:**

*Adenocaulon bicolor*

*Cirsium vulgare*

*Cotula australis*

*Madia madioides*

**Betulaceae:**

*Alnus rubra*

*Corylus cornuta* var. *californica*

**Boraginaceae:**

*Myosotis latifolia*

*Nemophila* sp.

**Brassicaceae:**

*Cardamine californica*

*Cardamine oligosperma*

**Caprifoliaceae:**

*Lonicera hispidula*

**Caryophyllaceae:**

*Stellaria media*

**Convolvulaceae:**

*Calystegia* sp.

**Cucurbitaceae:**

*Marah oreganus*

**Cyperaceae:**

*Carex* sp.

*Cyperus eragrostis*

**Ericaceae:**

*Arbutus menziesii*

*Vaccinium ovatum*

**Fabaceae:**

*Lathyrus vestitus*

**Fagaceae:**

*Lithocarpus densiflorus*

**Lamiaceae:**

*Stachys rigida* ssp. *ajugoides*

**Lauraceae:**

*Umbellularia californica*

**Myricaceae:**

*Myrica californica*

**Onagraceae:**

*Epilobium californicum*

**Oxalidaceae:**

*Oxalis oregana*

**Polygonaceae:***Rumex pulcher* ?**Portulacaceae:***Claytonia perfoliata***Primulaceae:***Trientalis latifolia***Ranunculaceae:***Actaea rubra**Ranunculus orthorhynchus* ?**Rhamnaceae:***Rhamnus californica***Rosaceae:***Fragaria californica**Holodiscus discolor**Rosa gymnocarpa**Rubus discolor**Rubus parviflorus**Rubus ursinus***Rubiaceae:***Galium aparine**Galium triflorum***Saxifragaceae:***Tellima grandiflora***Scrophulariaceae:***Scrophularia californica***Violaceae:***Viola glabella* ?*Viola sempervirens***Alliaceae:***Allium triquetrum***Asparagaceae:***Maianthemum racemosum**Maianthemum stellatum***Liliaceae:***Prosartes smithii**Scoliopus bigelovii***Orchidaceae:***Epipactis helleborine***Poaceae:***Hierochloë odorata**Melica subulata* ?**Trilliaceae:***Trillium ovatum***Mt. Vision: Unburned *Pinus muricata* Forest**

Next we stop at the unburned Bishop Pine (*Pinus muricata*) forest, part of the closed-cone conifer plant association. *Pinus muricata* is part of the *P. radiata* group of closed-cone pines along with *P. attenuata*. This forest is on acidic soil. Thus, members of the Ericaceae are common in the understory. There are a lot of cultivated plants in the vicinity of the parking lot. Our last stop will be at another area of this forest that was burned ten years ago.

**Blechnaceae:***Blechnum spicant***Dennstaedtiaceae:***Pteridium aquilinum***Dryopteridaceae:***Dryopteris arguta**Polystichum munitum***Cupressaceae:***Cupressus macrocarpa***Pinaceae:***Pinus muricata***Aizoaceae:***Carpobrotus chilensis***Anacardiaceae:***Toxicodendron diversilobum***Apiaceae:***Sanicula crassicaulis***Aquifoliaceae:***Ilex aquifolium***Araliaceae:***Hedera helix***Asteraceae:***Baccharis pilularis**Chrysanthemum segetum**Cirsium vulgare**Erichtites minima*

*Gnaphalium purpureum*  
*Hypochaeris radicata*  
*Silybum marianum*  
*Taraxacum officinale*

**Betulaceae:**

*Corylus cornuta* var. *californica*

**Brassicaceae:**

*Cardamine oligosperma*

**Caprifoliaceae:**

*Lonicera hispidula*  
*Sambucus racemosa*  
*Symphoricarpos mollis*

**Caryophyllaceae:**

*Stellaria media*

**Cucurbitaceae:**

*Marah fabaceus*  
*Marah oreganus*

**Ericaceae:**

*Arbutus menziesii*  
*Arctostaphylos virgata*  
*Gaultheria shallon*  
*Ledum glandulosum*  
*Vaccinium ovatum*

**Platanaceae:**

*Platanus x acerifolia*

**Polygonaceae:**

*Rumex acetosella*

**Portulacaceae:**

*Claytonia parvifolia*

**Primulaceae:**

*Trientalis latifolia*

**Rhamnaceae:**

*Ceanothus foliosus*  
*Ceanothus thyrsiflorus*  
*Rhamnus californica*

**Rosaceae:**

*Fragaria californica*  
*Holodiscus discolor*  
*Oemleria cerasifera*  
*Rubus parviflorus*  
*Rubus spectabilis*  
*Rubus ursinus*

**Fabaceae:**

*Trifolium subterraneum*  
*Vicia sativa*

**Fagaceae:**

*Chrysolepis chrysophylla*  
*Notholithocarpus densiflorus*  
*Quercus agrifolia*

**Garryaceae:**

*Garrya elliptica*

**Grossulariaceae:**

*Ribes* sp.

**Lamiaceae:**

*Stachys rigida* ssp. *ajugoides*

**Lauraceae:**

*Umbellularia californica*

**Myricaceae:**

*Myrica californica*

**Oxalidaceae:**

*Oxalis pes-caprae*

**Plantaginaceae:**

*Plantago lanceolata*

**Rubiaceae:**

*Galium aparine*  
*Galium californicum*

**Salicaceae:**

*Salix scouleriana*

**Scrophulariaceae:**

*Mimulus aurantiacus*

**Urticaceae:**

*Urtica dioica* ssp. *holosericea*

**Violaceae:**

*Viola glabella?*

**Araceae:**

*Zantedeschia aethiopica*

**Iridaceae:**

*Iris douglasii*

**Juncaceae:**

*Luzula comosa*  
*Juncus effusus*  
*Juncus occidentalis?*

**Poaceae:**  
*Bromus carinatus*

*Hierochloë odorata*

### Tomales Bay Marsh

The marsh fits into the salt marsh plant community, as indicated by many salt-tolerant plants including *Atriplex* and *Salicornia* (Amaranthaceae), *Jaumea* (Asteraceae), *Limonium* (Plumbaginaceae), *Frankenia* (Tamaricaceae), *Triglochin* (Juncaginaceae), and *Distichlis* (Poaceae). The marsh mostly has native plants, but there are a lot of introduced, weedy plants in the area between the parking lot and the marsh.

**Amaranthaceae:**  
*Atriplex californicus*  
*Atriplex triangularis*  
*Salicornia virginica*

*Oxalis corniculata*

**Plantaginaceae:**  
*Plantago lanceolata*

**Apiaceae:**  
*Conium maculatum*  
*Foeniculum vulgare*

**Plumbaginaceae:**  
*Limonium californicum*

**Apocynaceae:**  
*Vinca major*

**Polygonaceae:**  
*Polygonum marinense* (E)  
*Rumex acetosella*  
*Rumex crispus*

**Asteraceae:**  
*Achillea millefolium*  
*Artemisia douglasiana*  
*Baccharis pilularis*  
*Cotula coronopifolia*  
*Grindelia hirsutula*  
*Jaumea carnosa*

**Primulaceae:**  
*Anagallis arvensis*

**Rosaceae:**  
*Rubus ursinus*

**Brassicaceae:**  
*Brassica campestris*  
*Raphanus sativus*

**Scrophulariaceae:**  
*Scrophularia californica*

**Fabaceae:**  
*Medicago polymorpha*  
*Vicia faba*

**Tamaricaceae:**  
*Frankenia salina*

**Geraniaceae:**  
*Erodium cicutarium*  
*Geranium dissectum*

**Juncaginaceae:**  
*Triglochin concinna*  
*Triglochin striata*

**Lamiaceae:**  
*Stachys rigida* ssp. *ajugoides*

**Poaceae:**  
*Bromus carinatus*  
*Bromus hordeaceus*  
*Distichlis spicata*  
*Festuca arundinacea*  
*Hordeum murinum* ssp. *leporinum*  
*Vulpia myuros*

**Oxalidaceae:**

### North Beach

The area of North Beach we will visit is a Coastal Strand community that is now dominated by the introduced iceplant, *Carpobrotus*. The *Carpobrotus* has been removed in some places allowing the native plants to remain. Conspicuous native plants include *Ambrosia chamissonis* (silver beachweed), *Artemisia pycnocephala* (beach wormwood), and the familiar *Baccharis pilularis* (coyote brush) in a dwarf form with small leaves. All three shrubs are members of the Asteraceae.

**Dennstaedtiaceae:***Pteridium aquilinum***Aizoaceae:***Carpobrotus chilensis**Carpobrotus edulis***Apiaceae:***Lomatium dasycarpum***Asteraceae:***Achillea millefolium**Ambrosia chamissonis**Artemisia pycnocephala**Baccharis pilularis**Ericameria ericoides**Gnaphalium stramineum**Grindelia stricta* var. *platyphylla* ?*Lasthenia californica**Layia carnosa* (E)**Boraginaceae:***Cryptantha leiocarpa**Nemophila menziesii**Phacelia* sp.**Brassicaceae:***Cardamine oligosperma**Erysimum concinnum* (E)**Caryophyllaceae:***Armeria maritima**Cardionema ramosissima**Paronychia franciscana***Drake's Beach**

We will visit two hills on Drake's Beach. They are separated by a pond and a willow thicket that was more extensive before the parking lot was built. This area is an example of a coastal prairie community. There is a high diversity of flowering plants supported by deep soils and lack of salt spray. Although the hills are near each other, each is dominated by a different group of plants. The inland hill is dominated by the grasses *Nassella pulchra*, purple needlegrass; *Bromus carinatus*, smooth brome; and *Festuca idahoensis*, Idaho fescue, while the coastal hill is dominated by *Calamagrostis nutkaensis*, reed grass, and *Heracleum lanatum*, cow parsnip.

**Dennstaedtiaceae:***Pteridium aquilinum***Equisetaceae:***Equisetum telmateia* ssp. *gigantea***Anacardiaceae:***Toxicodendron diversilobum***Apiaceae:***Angelica tomentosa***Crassulaceae:***Crassula connata**Dudleya farinosa***Cucurbitaceae:***Marah fabaceus***Fabaceae:***Lupinus albifrons***Onagraceae:***Camissonia cheiranthifolia***Papaveraceae:***Eschscholzia californica***Polygonaceae:***Eriogonum latifolium**Polygonum franciscanum**Pterostegia drymarioides***Portulacaceae:***Claytonia parvifolia***Rubiaceae:***Galium aparine***Poaceae:***Ammophila arenaria**Poa douglasii**Conium maculatum**Eryngium* cf. *aristulatum**Heracleum lanatum**Hydrocotyle**Ligusticum apiifolium**Oenanthe sarmentosa**Perideridia kelloggii* ?*Sanicula bipinnatifida**Sanicula crassicaulis***Asteraceae:**

*Achillea millefolium*  
*Anaphalis margaritacea*  
*Aster lentus*  
*Baccharis pilularis*  
*Cirsium quercetorum*  
*Gnaphalium purpureum*  
*Grindelia camporum*  
*Hypochaeris radicata*  
*Senecio vulgaris*  
*Silybum marianum*  
*Sonchus asper*  
*Wyethia angustifolia*

**Berberidaceae:**

*Berberis pinnata*

**Boraginaceae:**

*Phacelia nemoralis*

**Caryophyllaceae:**

*Cerastium arvense*  
*Silene gallica*

**Convolvulaceae:**

*Calystegia purpurata*

**Crassulaceae:**

*Dudleya farinosa*

**Cucurbitaceae:**

*Marah fabaceus*

**Fabaceae:**

*Lathyrus vestitus*  
*Lotus humistratus*  
*Lupinus chamissonis*  
*Medicago polymorpha*  
*Vicia sativa*

**Geraniaceae:**

*Geranium dissectum*

**Lamiaceae:**

*Monardella villosa*  
*Prunella vulgaris*  
*Stachys rigida* ssp. *ajugoides*

**Malvaceae:**

*Sidalcea malviflora*

**Myricaceae:**

*Myrica californica*

**Onagraceae:**

*Camissonia ovata*

**Orobanchaceae**

*Castilleja affinis*

**Plantaginaceae:**

*Plantago erecta*  
*Plantago lanceolata*

**Polygonaceae:**

*Eriogonum latifolium*  
*Polygonum* sp.  
*Rumex acetosella*

**Portulacaceae:**

*Claytonia perfoliata*

**Primulaceae:**

*Anagallis arvensis*

**Rhamnaceae:**

*Ceanothus thyrsiflorus*  
*Rhamnus californica*

**Ranunculaceae:**

*Ranunculus californicus*

**Rosaceae:**

*Fragaria chiloensis*  
*Potentilla anserina*  
*Potentilla glandulosa*  
*Rubus spectabilis*  
*Rubus ursinus*

**Rubiaceae:**

*Galium aparine*

**Salicaceae:**

*Salix lasiolepis*

**Scrophulariaceae:**

*Mimulus aurantiacus*  
*Myoporum laetum*

**Solanaceae:**

*Solanum nigrum* ?

**Violaceae:**

*Viola adunca*

**Asparagaceae:**

*Chlorogalum pomeridianum*

**Cyperaceae:**

*Carex* cf. *barbarae*  
*Carex tumulicola*  
*Scirpus californicus*

**Iridaceae:**

*Iris douglasii*  
*Sisyrinchium bellum*

**Juncaceae:**

*Juncus effusus*  
*Juncus patens*

**Liliaceae:****Mt. Vision, Bayview Trailhead—Burned *Pinus muricata* forest**

This area would have had the same assemblage of species as the other *Pinus muricata* forest we visited before it was burned ten years ago. The fire opened up the understory and allowed chaparral species such as *Baccharis pilularis* and *Ceanothus thyrsiflorus* to become dominant. Shade-intolerant *P. muricata* seedlings are only able to establish on the sunnier margins of the chaparral and the road banks.

**Dennstaedtiaceae:**

*Pteridium aquilinum*

**Dryopteridaceae:**

*Athyrium filix-femina*  
*Polystichum munitum*

**Pinaceae:**

*Pinus muricata*  
*Pseudotsuga menziesii*

**Anacardiaceae:**

*Toxicodendron diversilobum*

**Apiaceae:**

*Heracleum lanatum*

**Asteraceae:**

*Anaphalis margaritacea*  
*Artemisia douglasiana*  
*Baccharis pilularis*  
*Cirsium brevistylum*  
*Erechtites minima*  
*Filago gallica*  
*Pseudognaphalium* sp.  
*Hypochaeris radicata*

**Betulaceae:**

*Alnus rubra*

**Boraginaceae:**

*Myosotis latifolia*

**Brassicaceae:**

*Cardamine oligosperma*

**Caprifoliaceae:**

*Sambucus racemosa*

*Calochortus tolmiei*

**Poaceae:**

*Briza minor*  
*Bromus carinatus*  
*Calamagrostis nutkaensis*  
*Festuca idahoensis*  
*Hordeum brachyantherum*  
*Nassella pulchra*

**Caryophyllaceae:**

*Cerastium glomeratum*  
*Stellaria media*

**Cucurbitaceae:**

*Marah fabaceus*  
*Marah oreganus*

**Ericaceae:**

*Arbutus menziesii*  
*Gaultheria shallon*  
*Vaccinium ovatum*

**Fabaceae:**

*Lotus scoparius*  
*Medicago polymorpha*  
*Vicia sativa*

**Fagaceae:**

*Chrysolepis chrysophylla*  
*Lithocarpus densiflorus*  
*Quercus agrifolia*

**Grossulariaceae:**

*Ribes sanguineum*

**Lamiaceae:**

*Stachys rigida* ssp. *ajugoides*

**Lauraceae:**

*Umbellularia californica*

**Myricaceae:**

*Myrica californica*

**Plantaginaceae:**

*Plantago lanceolata*

**Polygalaceae:**

*Polygala californica*

**Polygonaceae:**

*Rumex acetosella*

**Portulacaceae:**

*Claytonia perfoliata*

**Primulaceae:**

*Anagallis arvensis*

*Trientalis latifolia*

**Ranunculaceae:**

*Aquilegia formosa*

**Rhamnaceae:**

*Ceanothus thyrsiflorus*

*Rhamnus californica*

**Rosaceae:**

*Fragaria californica*

*Rubus parviflorus*

*Rubus ursinus*

**Rubiaceae:**

*Galium aparine*

*Galium californicum*

**Saxifragaceae:**

*Heuchera macrantha*

*Tellima grandiflora*

**Scrophulariaceae:**

*Bacopa* sp.

*Digitalis purpurea*

*Mimulus aurantiacus*

*Mimulus guttatus*

**Urticaceae:**

*Urtica dioica* ssp. *holosericea*

**Cyperaceae:**

*Carex praegracilis*

**Iridaceae:**

*Iris douglasii*

*Sisyrinchium californicum*

**Juncaceae:**

*Juncus effusus*

**Poaceae:**

*Briza major*

*Bromus carinatus*

*Festuca arundinacea*

*Melica torreyana*