

Michael Elsohn Ross

P.O. Box 295, El Portal, CA 95318
(209) 379- 2448

May 6, 2016

Reza Abrahamzadeh
5565 Meadow Lane
Mariposa, California 95338

Rare Plant Survey- for Abrahamzadeh Property in Mariposa
(APN 015-090-006)

On May 4, 2016 I completed a rare plant and animal survey at the Abrahamzadeh property in Mariposa (APN 015-090-006) for the species listed on the California Fish and Game Natural Diversity Data Base; Mariposa Lupine (*Lupinus citrinus* var. *deflexus*), slender stalked monkeyflower (*Mimulus gracilipes*), pansy monkeyflower (*Mimulus pulchellus*), Madera leptosiphon (*Leptosiphon serrulatus*), and the valley elderberry longhorn beetle (*Desmocerus Californicus dimorhpus*).

The purpose of the survey was to determine if any of the species were present on the parcel. The presence of above species in the area is indicated by the State Department of Fish and Game Natural Diversity Data Base. The plants and animals on the list are considered of special concern, threatened, rare, or endangered. I have reviewed information about the habitat of the above plant species from the database, *The Jepson Manual, California Flora* by Munz and the *California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California*.

Survey Design:

A survey is recommended for annual species during the blooming period, therefore I conducted my search during the optimal period of blooming for the above species. Since all of the plant species and one of the animal species in this area of the Mariposa County inhabit distinctive habitat I conducted a habitat/species survey to determine suitable habitat sites. The size of the parcel and specific habitat requirements of the targeted species warranted a walking survey. Thus my survey was a targeted search for species indicated by the database as present in the vicinity and having specific habitat requirements and plant community associations. The large size and heavy vegetation on the parcel prompted me to conduct a meandering search pattern. I was able to cover all areas of suitable habitat.

The Abrahamzadeh property is a mixture of pine-oakwoodland and valley oak savannah. The soil is mostly loam and is scattered with granitic boulders. A seasonal creek borders the western boundary of the property and was dry at the time of the survey. Like much of the land in the foothill zone has been significantly disturbed in the past. The large number of alien primary succession species reflects this disturbance. The predominant non-native plant species are as follows; (annual grasses such as wild oats (*Avena* sp.), red-stem storksbill (*Erodium cicutarium*), broad leaf storksbill (*Erodium botry*), cut-leaved geranium (*Geranium dissectum*), dovecoat *Geranium molle*), vetch (*Vicia americana*), sweet clover (*Melilotus indica*), shortpod mustard

(*Hirschfeldia incana*), shepherd's purse (*Capsella bursa-pastoris*), lace pod (*Thysanocarpus curvipes*), miner's lice (*Torilis arvensis*), rattlesnake weed (*Daucus pusillus*), goldwire (*Hypericum concinnum*), chickweed (*Stellaria media*), mouse-eared chickweed (*Cerastrium arvense*), big chickweed (*Cerastrium fontanum*), Canada thistle (*Cirsium arvense*), herba impia (*Filago gallica*), pineappleweed (*Matricaria discoidea*), smooth cat's ear (*Hypochaeris glabra*), peppermint (*Mentha spicata*), spiny buttercup (*Ranunculus muricatus*), and speedwell (*Veronica arvensis*). A number of tree of species native to cismontane woodland were present including canyon live oak (*Quercus chrysolepis*), Blue Oak (*Quercus douglasii*), valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*) California buckeye (*Aesculus californica*), ponderosa pine (*Pinus ponderosa*), gray pine (*Pinus sabiniana*), and incense cedar (*Calocedrus decurrens*). Shrubs found included spiny redberry (*Rhamnus crocea*), Mariposa manzanita (*Arctostaphylos viscida ssp. viscida*), deer brush (*Ceanothus intergerimus*), buck brush (*Ceanothus cuneatus*), poison oak (*Toxicodendron diversilobum*), yerba santa (*Eriodictyon californicum*), sierra gooseberry (*Ribes roezlii*), and creeping snowberry (*Symphoricarpos mollis*).

Native herbaceous plants present included miner's lettuce (*Montia perfoliata*), western buttercup (*Ranunculus occidentalis*), fiddleneck (*Amsinckia intermedia*), popcorn flower (*Plagiobotrys nothofulvus*), popcorn flower (*Cryptanthus sp.*), pacific snake root (*Sanicula crassifolius*), purple sanicle (*Sanicula bipinnatifida*), elegant tarweed (*Madia elegans*), dwarf tarweed (*Hemizonella minima*) pearly everlasting (*Anaphalis margaritacea*), slender cottonhead (*Micropus californicus*), common gumplant (*Grindelia camporum*), spear leaf dandelion (*Agoseris retorsa*), foothill sunburst (*Psuedobahia hermanii*), Hall's mule's ears (*Wyethia elata*), narrow leaf mule's ears (*Wyethia angustifolia*), slender woolly marbles (*Psilocarpus tenellus*), California goldenrod (*Solidago californica*), mugwort (*Artemesia douglasiana*), baby white eyes (*Nempohlia heterophylla*), five spot (*Nempohlia maculata*), Chinese houses (*Collinsia heterophylla*), purple false gilia (*Allophyllum divaricatum*), valley tassels (*Castilleja attenuata*), oak violet (*Viola purpurea ssp quercetorum*), Spanish lotus (*Acmispon americanus*), miniature lupine (*Lupinus bicolor*), and dwarf lupine (*Lupinus nanus*), Sierra Nevada Pea (*Lathyrus nevadensis*), blue dicks (*Dichlostemma capitatum*), snake lily (*Dichlostemma volubile*), foothill pretty face (*Triteliea ixiodes var. scabra*), soapplant (*Chlorogalum pomeridium*), woodland stars (*Lithophragma parviflora*), stick ciquefoil (*Potentilla glandulosa*), whisker brush (*Leptosiphon bicolor*), common monkey flower (*Mimulus guttatus*), and winecup clarkia (*Clarkia purpurea ssp. purpurea*).

Findings:

After conducting a thorough survey I did not locate any of the targeted species. Though I searched in suitable habitat I was unable to locate Mariposa Lupine (*Lupinus citrinus var. deflexus*). Though there are granitic boulders on the property, granitic gravel, the requisite substrate for this species is lacking. I found dwarf lupine (*Lupinus nanus*) and miniature lupine (*Lupinus bicolors*), but no Mariposa lupine. I was unable to locate specimens of Madera Leptosiphon (*Leptosiphon serrulatus*, but did find whisker brush (*Leptosiphon bicolor*), which is a related species. I located numerous specimens of common monkey flower (*Mimulus guttatus*) growing in a seep on the east end of the property but neither of the targeted Mimulus species. Slender stalked monkeyflower (*Mimulus gracilipes*) grows in vernal wet depressions and pansy monkeyflower (*Mimulus pulchellus*) is found on decomposed granite soils particularly as

a primary succession plant after fires. Neither slender stalked monkeyflower (*Mimulus gracilipes*) nor the pansy monkeyflower (*Mimulus pulchellus*) are present on this property.

I did not discover any blue elderberry (*Sambucus mexicana*), which is habitat for the valley elderberry longhorn beetle (*Desmocerus Californicus dimorphus*), though I did sight some on the neighboring property. After a thorough search of a variety of habitats I conclude that there are no rare or endangered species on this property.

Qualifications of Biologist:

B.S. in Conservation of Natural Resources, U.C. Berkeley. 1974. This included course work in plant and animal ecology and taxonomy, wildlife management, and vertebrate zoology. Special Service Teaching Credential for Community College in environmental science. Have taught botany field classes in Yosemite for over 15 years. (With the Yosemite Association and Merced Community College.) Assisted in NPS surveys of rare plant species in Yosemite National Park. Worked with Dr. Carl Sharsmith in preparing collections for the Sharsmith Herbarium at San Jose State. Familiarity with flora of the Central Sierra Nevada and specific rare plants of Mariposa County, including the surveyed species.

If you have any questions about the survey or think I have omitted any pertinent information please give me a phone call at 379-2448.

Sincerely,

Michael Elsohn Ross

Michael Elsohn Ross P.O. Box 295, El Portal, CA 95318

(209) 379- 2448

September 4, 2019

Steve Engfer, Mariposa Planning

P.O. Box 2039 • 5100 Bullion Street

Mariposa CA • 95338

Dear Steve,

I am writing on behalf of Reza Abrahamzadeh who I conducted a biological survey for at his property at 5565 Meadow Lane, Mariposa, CA on May 4, 2016. It is unlikely that the results of my survey for targeted plant and animal species would be any different today and that there are no new species added to that target list. My survey followed California Department of Fish and Wildlife protocols.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Elsohn Ross", with a long horizontal flourish extending to the right.

Michael Elsohn Ross