



Vernal Pools of Roseville

HANNAH KANG
UC DAVIS CENTER FOR PLANT DIVERSITY
ECORP CONSULTING INC.



Introduction



ROSEVILLE IS LOCATED APPROXIMATELY 22 MILES NORTHEAST FROM CALIFORNIA'S STATE CAPITOL (SACRAMENTO). VERNAL POOLS ARE HIDDEN BEHIND ROSEVILLE'S SUBURBAN EXTERIOR AND REMNANTS OF WHAT WAS ONCE PRESENT ARE SPRINKLED THROUGHOUT OPEN SPACES AND REMAINING UNDEVELOPED PARCELS. ROSEVILLE'S VERNAL POOLS ARE UNDER COLLECTED AND UNDERSTUDIED UNLIKE MOST OF SACRAMENTO'S VERNAL POOLS. IN 2019, I BEGAN COLLECTING PLANTS WITHIN VERNAL POOLS AND UPLAND AREAS OF ROSEVILLE AND SURROUNDING VICINITIES SUCH AS ROCKLIN AND LINCOLN. CURRENTLY, I HAVE VOUCHERED 156 SPECIMENS ALONG WITH 10 COUNTY RECORDS. THESE COLLECTIONS ARE CONCENTRATED WITHIN WEST ROSEVILLE. I INTEND ON VOUCHERING AND EXPLORING MORE OF ROSEVILLE'S VERNAL POOLS IN THE COMING YEARS. ALL SPECIMENS ARE VOUCHERED AT DAV.

Placer County Records

THESE COUNTY RECORDS ARE A PRODUCT OF UNDER COLLECTED AREAS WITHIN ROSEVILLE. FOR EXAMPLE, *Crassula aquatica* (KANG 400) IS PREVALENT THROUGHOUT BOTH VERNAL POOLS AND WETLANDS BUT WAS NOT RECORDED IN PLACER COUNTY UNTIL 2020. AS OF 2021, I HAVE COLLECTED 10 COUNTY RECORDS: *Callitriche longipedunculata* (KANG 7), *Cicendia quadrangularis* (KANG 19), *Frankenia salina* (KANG 167), *Cressa truxillensis* (KANG 173), *Lythrum hyssopifolia* (KANG 179), *Crassula aquatica* (KANG 400), *Plantago elongata* (KANG 403), *Fumaria parviflora* (KANG 420), *Spergularia macrotheca* var. *longistyla* (CRPR 1B.2/KANG 523), *Bolboschoenus maritimus* subsp. *paludosus* (KANG 525).

Special-Status Species



I HAVE CURRENTLY COLLECTED FOUR SPECIAL-STATUS (CRPR 1B.2), *Gratiola heterosepala* (CRPR 1B.2/STATE LISTED), AND *Spergularia* SPECIES: *Downingia pusilla* (CRPR 2B.2), *Chloropyron molle* ssp. *hispidum* var. *macrotheca* var. *longistyla* (CRPR 1B.2). THERE ARE SEVERAL HISTORIC RECORDS OF SPECIAL-STATUS SPECIES THAT NEED TO BE INVESTIGATED. FOR EXAMPLE, *Balsamorhiza macrolepis* (CRPR 1B.2) WAS LAST RECORDED IN 1957 BY BEECHER CRAMPTON AND MAY BE EXTIRPATED FROM PLACER COUNTY DUE TO RESIDENTIAL AND COMMERCIAL DEVELOPMENTS (CCH2, 2022).



Vernal Pool Complexes

THE VERNAL POOLS OF ROSEVILLE FIT THE ALLIANCE CRITERIA FOR *Lasthenia fremontii* – *Downingia (bicornuta)*, *Lathenia glaberrima*, AND *Layia fremontii* – *Achyrachaena mollis* HERBACEOUS ALLIANCES (CNPS, 2022). MOST OF THE SHALLOWER VERNAL POOLS ARE DOMINATED *Navarretia leucocephala* ssp. *leucocephala*, *Downingia bicornuta* var. *picta*, *Downingia ornatissima*, *Montia fontana*, AND *Plagiobothrys stipitatus* var. *micranthus*. THE LONGER INUNDATED POOLS CONSIST OF *Isoetes howellii*, *Eryngium castrense*, *Alopecurus saccatus*, AND *Lasthenia fremontii*. THE UPLANDS ARE CHARACTERIZED AS ANNUAL GRASSLAND AND ARE DOMINATED BY *Elymus caput-medusae* AND *Festuca perennis* ALONG WITH *Hemizonia fitchii* AND *Holocarpha virgata*.



ROSEVILLE HARBORS DIVERSE VERNAL POOL COMMUNITIES – FROM ALKALINE VERNAL POOLS, VERNAL POOLS WITHIN BLUE OAK MOSAICS, AND MUCH MORE. ROSEVILLE IS BECOMING MORE URBANIZED AND IT'S IMPORTANT TO DOCUMENT PLANT DIVERSITY THROUGH HERBARIUM SPECIMENS. EACH SPECIMEN DOCUMENTS A PIECE OF NATURAL HISTORY.

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References

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