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California
Native
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Association





Mission Statement

The mission of the California Native Grasslands Association is to promote, preserve, and restore the diversity of California's native grasses and grassland ecosystems through education, advocacy, research, and stewardship.

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From the President's Keyboard

Documenting the beauty and complexity of California's grasslands *by Jim Hanson, President*

CNGA's founders started this organization over 20 years ago to raise awareness and understanding about California's diverse grassland flora and ecosystems, to conserve them, and to return native grassland and prairie flora back to currently disturbed lands.

CNGA's 2008 Annual Conference delved into "Conserving California's Grasslands" with presenters and panel members discussing how to increase public awareness of grasslands and how to improve public policy to conserve them. Fortunately, the state's plant communities have been categorized and can be evaluated for rarity with the publication of the 2nd edition of the *Manual of California Vegetation* (Sawyer et al. 2009). Native plant community impacts can now be addressed in CEQA documents if citizens write and ask the "lead agency" to avoid causing damage to them. CNGA regularly submits comments on proposed development projects covered under CEQA to request that impacts to native grassland stands be avoided or minimized.

Still, conservation of exemplary stands of native grassland and prairie in California remains very young.

Enlisting New Media and Technology

Education is a big part of our work. With the assistance of a starter grant from the Tides Foundation and contributions by Board members, we are working on an online media presentation to introduce grasslands to elementary school students who are beginning to learn about earth and life sciences in their classrooms. We have also been reviewing the large volume of ecology-oriented curricula that has been developed for California's Education and the Environment Initiative (EEI) — a program designed to increase environmental literacy in K–12 students — to determine how to apply them to grassland learning.

After becoming aware that a plant community is valuable, one needs information to help recognize and gain knowledge about it.

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Grasslands Submission Guidelines

Send written submissions, as email attachments, to grasslands@cnga.org. All submissions are reviewed by the *Grasslands* Editorial Committee for suitability for publication. Contact the Editorial Committee Chair for formatting specifications: grasslands@cnga.org.

Written submissions include peer-reviewed research reports and non-refereed articles, such as progress reports, observations, field notes, interviews, book reviews, and opinions.

Also considered for publication are high-resolution color photographs. For each issue, the Editorial Committee votes on photos that will be featured on our full-color covers. Photos are selected to reflect the season of each issue. Send photo submissions, as email attachments, to Cathy Little at grasslands@cnga.org. Include a caption and credited photographer's name.

Submission deadlines for articles: Summer 2013 — May 15, 2013 Winter 2014 — Nov 15, 2013
Fall 2013 — Aug 15, 2013 Spring 2014 — Feb 15, 2014

President's Keyboard *continued*

Calflora (www.calflora.org) provides an interactive way to use the smartphone in the field to enter and locate plant species by region and by site. It is now not unusual to use the *Jepson Manual* to key out a plant in the field and then consult Calflora to see if there are reports of that plant growing in that site. Citizen scientists and others can also input and search for information online about the variety of plant and animal life in their area by using iNaturalist (www.inaturalist.org). Our field tools are expanding.

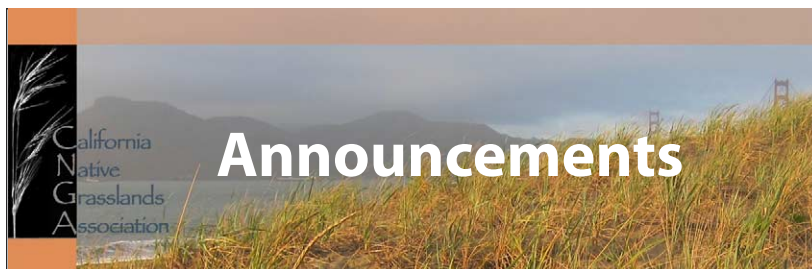
Many of you may be familiar with these and other field identification and mapping tools, and perhaps it is this nexus of plant research, ecological information, and images with accessible field mapping tools that will tangibly expand our capability to document many more exemplary native grass and forb populations.

For instance, our public agencies—cities, state, special districts, and federal—have many exemplar native grasslands and many diverse ecosystems under their care, but they may not have sufficient program funding and botanical personnel to build a profile of native plant diversity across the lands they manage. Combining botanical expertise with resources-oriented personnel and/or citizen scientists could help build a plant community inventory where nothing may have existed before.

If more of California's exemplary grasslands, from multi-acre prairies to pocket meadows, were mapped and identified, then they could be managed as needed, used as reference sites, or located to visit and enjoy. Mapping and identification is not a substitute for a comprehensive public agency policy and practice to manage native plant communities for conservation, but it is a key component. One of CNGA's current goals is to help expand knowledge of native grassland diversity and locations across our state with the new tools available to all of us.

Enough said. Sun's out . . . time to lace up the boots, pack the sunscreen, water, notebook and digital camera, and go discover what's growing in the dog park with the natural meadow up the street.

P.S. Do you have a story or illustration that helps others become aware of the beauty of our grasslands, know of a native pocket meadow along a favorite trail in your area, or have you assembled an online native plant record from a local grass stand? If so, we'd love to hear about it. Please drop a note to Diane Crumley, CNGA Administrative Director, at admin@cnga.org.



CNGA Facebook Page & "Grass-blast" Emails

In January 2013, CNGA launched its Facebook page at www.facebook.com/CAnativegrassland. We invite our members and friends to visit the page and join the conversation. We post links to articles, events, restoration projects, videos, and photos sent in from other grassland and wildland enthusiasts.

Since 2009, CNGA has sent out a monthly "Grass-blast" email to members and friends to share announcements and keep in touch between *Grasslands* issues. If you are currently not receiving these emails or you would like to change your preferred email address for CNGA communications, please contact our Administrative Director, Diane Crumley, by emailing admin@cnga.org or by phone at 530.297.0500

CNGA Joint Membership Announcement

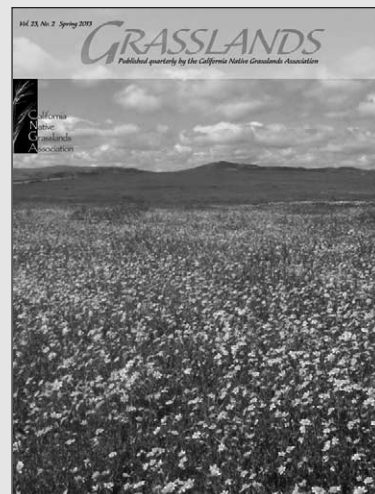
The Cal-IPC Board has recently voted to adopt a new membership structure. We regret to announce that Cal-IPC will no longer be participating in the discounted 3-way joint membership with SERCAL and CNGA.

While the 3-way joint membership option will no longer be offered, CNGA and SERCAL are working on the details of a new 2-way joint membership to be announced later this year.

All currently active joint memberships will be honored through the end of the 2013 calendar year.

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A volunteer installs native grass plugs within a grass patch at a restoration project at Miners Ravine Nature Reserve, Granite Bay. Photo: Chad Aakre

Volunteer Habitat Restoration — Trials and Triumphs

by Chad Aakre, Restoration Ecologist, Restoration Resources, c.aakre@restoration-resources.net

What could be more fun than volunteering for a morning to lead a crew of people you have never met through the intricate process of installing a habitat restoration project? No problem! Never mind that you may have a handful or a hundred people who vary in age from less than 3 to more than 80 years old. Never mind that some may be wearing flip-flops and shorts for weedy rangeland conditions. Never mind that the materials this “highly trained crew” is charged with installing are expensive and difficult to procure. Never mind that the species aren’t necessarily planted in the right places. You get the point. “So why do it?” you ask? Because I love it!

I love to see the results and know that the project would not have happened without the effort of the volunteers. I love to try new and innovative techniques that are often not allowed or are impractical on most habitat mitigation projects. I love to see how much I can do on a shoe-string budget and think about the natural legacy we leave behind. I love to know that I am building social relationships in the community while getting people out in nature and in the dirt, places where they likely spend too little time. Not to mention the ecological benefits to air, water, land, plants, and animals. Because I have worked with a large number of volunteers over the past 20 years in both California and Minnesota, I offer these bits of advice in order to maximize the success of habitat restoration with volunteer labor.

Collaborate

My first tip is just one word: Collaborate! The project simply will not happen if you try to do it all on your own or adopt a defensive or combative tone. Striking a collaborative tone is very important in staying positive throughout the process and developing good working rapport with the key stakeholders. Identifying the primary stakeholders that will influence the success or failure of a project is an important first step. For example, the landowner of the project site must be a stakeholder throughout the entire process. Key stakeholders also include municipal staff (e.g., open space maintenance staff), management entities, other landowners, partnering nonprofit directors, and so on. It is also important to do enough up-front research so that no key stakeholders are left out at the beginning of the decision-making process. An ally at the start of a project can become an adversary in the middle if they never had a chance to “buy in.”

Finding a local nonprofit with which you can partner in the project will provide the validity you need to convince key stakeholders that they should collaborate with you. Local nonprofits often provide expertise, funding, materials, and/or a volunteer pool from which to draw. My volunteer efforts in western Placer County have always

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Volunteer Habitat Restoration *continued*

involved a local nonprofit called Dry Creek Conservancy (DCC) as an active partner in the process. I work closely with the executive director of DCC, Gregg Bates, to vet possible volunteer restoration ideas prior to planning and executing them.

One important way to achieve a collaborative culture for your project is to strive for consensus on all decisions. Be sure to get all relevant stakeholders' points of view prior to laying out a plan on which everyone can agree. Keep modifying the plan until you get consensus, and do not accept indecision and conflict. Stick to the facts, and choose the consensus decision.

The next series of tips are represented by the acronym SSS: Simple, Small, Successful.

Simple

Keeping it simple can be difficult because restoration projects are often inherently complicated. Strive for simplicity in all parts of the process to ensure that your volunteer restoration project is enjoyable and successful. One way to keep it simple is to think like a volunteer. Break the volunteer effort down into a simple step-by-step procedure. For example, a simple procedure for installing a native grass patch could be 1) de-grass the planting area, 2) rake to break up soil to 3-inch depth, 3) spread the seed evenly over area by hand, 4) lightly rake in seed for good soil contact, 5) install plugs with 1-ft spacing, 6) top dress planting area with dry peat moss to cover ground, and 6) water planting area soon after installation. Another way to keep it simple is to divide the volunteers into specific crews. The example above might involve a different crew for each step. Another helpful simple step at the beginning of a volunteer event is to do an example planting and then follow up by watching volunteers do one themselves. Keeping things simple will make the project more successful and also more rewarding for the volunteers.

Another way to keep it simple is to make a map. You can more easily convey and discuss your project if you have a simple map to show interested individuals. The best maps for these kinds of projects usually involve an updated aerial base map with simple polygons or points layered on top. Expensive programs like ArcGIS and AutoCAD can be used to make these maps, or use free programs such as Google Earth. The point is to have a simple and well-conveyed idea of what you would like to see happen on the project. Often the map can be paired with a simple letter of intent. The letter of intent and the map can provide potential stakeholders with an introduction to yourself and your idea.

One aspect of volunteer projects is not simple at all: correspondence. A large amount of correspondence is required to manage a volunteer restoration project. Take the estimated number of emails, phone calls, and meetings required to manage a normal restoration project, and then multiply this by at least 4. Striving for consensus among numerous stakeholders requires a lot of communication. Being

prepared for the correspondence load will help you keep the project small and manageable and also minimize your own burnout.

Small

Keeping the project small will keep it manageable during the installation process and the establishment period. Consider installing a small number of grass patches instead of seeding a large area. This approach cuts costs, labor hours, and maintenance hours but does not measurably decrease ecological value because the dense patches of perennial native grasses will be well-established and presumably will persist in the sea of annuals into the distant future. Larger projects often result in burnout of the key partners. The size of your project should be directly proportional to the number of labor hours and other resources you have available. Think of these projects like your front yard: much effort is put into a small amount of square footage. The same applies to these projects. Start small, and then increase in incremental steps. A small project will win approval by key stakeholders more easily. Strive to be innovative but measured in your approach. Using techniques that maximize efficiency will help keep a project small and maximize success.

Successful

Keeping the project successful can only happen if the project area is managed in perpetuity. If you do not designate a group or organization to manage the area in the future, then it is likely that the project will die when you exit the scene. Ideally, the landowner shoulders the responsibility of ongoing management. If your project is on public lands, then a local open space or parks department may take on the project. Local nonprofit organizations may also take responsibility for ongoing management. If an entity cannot be readily identified, then you may have to start a group of your own. Many "Friends of" groups have started this way. One way I like to push a project in the right direction is by creating annual work days in the restoration area that are tied to local cultural events or dates. My projects usually have spring and fall work days tied to Earth Day and Arbor Day, which have provided lots of opportunities for ongoing management.

Keeping the project successful also involves having a clear vision of what you want it to eventually look like and figuring out how to gently push the project along in that direction. I include a holistic goal (developed by Holistic Management International) with my letter of intent and map to get everyone aligned with the eventual outcome of the project. A well-written goal document not only provides justification for the project but also keeps everyone on the same page during the process.

Striving for success involves making good decisions, ones that are equally sound ecologically, socially, and financially. For example, a group of stakeholders may be discussing the need for weed control

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Gregg Bates (Dry Creek Conservancy Executive Director) amongst vigorous creeping wildrye (*Elymus triticoides*) plantings at a volunteer restoration project at Mahaney Park, Roseville. Photo: Chad Aakre

Volunteer Habitat Restoration *continued*

on a project. One stakeholder suggests the use of cardboard as biodegradable weed barrier, and the group must then decide whether to implement the suggestion. Cardboard as a weed barrier may be a sound decision ecologically because the material is biodegradable and saves resources by reusing a product. There may be no social constraints to cardboard, and some social benefit may be achieved by a demonstrated reuse of trash items. Cardboard may make sense financially because it is cheaper than purchasing convention plastic weed barriers. So the decision to use cardboard becomes a good ecological, social, and financial decision.

Grass-Centric

One last bit of advice comes from the grass lover in me: be grass-centric. Look for opportunities to install grasses in every project you are involved with. For example, many tree planting projects often do not have a native herbaceous component. One-gallon native grass container plantings can usually be easily incorporated into traditional tree planting projects with no measurable changes in design or management. I strive to include a native grass component on every project that I can influence.

Although it may seem difficult (remember that nothing worth doing is easy), I encourage you to get out and find a place that you can help restore on a volunteer basis. Get partners and make contacts. Collaborate your way into a natural legacy, and we all benefit!



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Native Grasslands and the California Environmental Quality Act

by Mike Wood, Biological Consultant, and Co-chair, Rare Plant Committee, Yerba Buena (San Francisco)
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The California Environmental Quality Act (CEQA) was enacted in 1970 on the heels of such ground-breaking federal legislation as the Clean Water Act (CWA, 1965), Clean Air Act (CAA, 1967), and the National Environmental Policy Act (NEPA, 1969), all part of a backlash against the pollution and environmental degradation that resulted from unrestrained industrial and commercial activities following World War II. While the CWA, almost by accident, applied strict regulations on activities affecting aquatic habitats, most conservation-oriented legislation focused primarily on species thought to be at risk of extinction, with less thought given to the habitats on which they depend. With the exception of the small amount of land designated as “Critical Habitat” under the federal Endangered Species Act, often already in the public domain, development of upland habitats is largely unrestricted.

While we still have a long way to go toward regulating the effects of society’s activities, CEQA provides a means by which our values are reflected in the impacts on the environment that we are willing to accept or the protections we desire.

One of the most remarkable aspects of the CEQA, and one that is often under-appreciated, is the fact that with its enactment the decision-making process of county boards of supervisors, planning commissions, city and town councils, or other public agency directors became fully transparent. In addition, the public is provided with a means by which it can have input into the process by which elected or appointed officials make decisions affecting their community.

The transparency that CEQA brought to the process of planning development is crucial for protecting native grasslands. If you are reading this article, you likely already have an appreciation of grasslands and you are also probably familiar with the oft-cited facts: grass-dominated vegetation covers one-quarter of the state’s land area, virtually all grasslands have been significantly modified from their natural condition, the area of native perennial and annual grasslands has been greatly reduced since arrival of Europeans, “grasslands” have been historically lumped together as annual grasslands dominated by species of Mediterranean origin, and native grasslands are routinely overlooked in the environmental review process. Given that native grasslands are typically found in small patches that are difficult to define, much less map, it is not too

surprising that they have fallen through the cracks in the review process. That grasslands have received any attention at all is primarily due to the fact that they may support endangered species of butterflies, salamanders, fairy shrimp, and other flowering plants. But by themselves, with the exception of some rare species, grasslands do not receive much attention and virtually no formal protection.

Fortunately, this has started to change. An awareness of their existence and the historical evidence suggesting that these species have been greatly affected by human activities, such as overgrazing, the spread of non-native annual grasses, changes in fire regime, and development, have led to an increased appreciation of the contribution California’s native grasses make to the state’s remarkable biological diversity.

We have improved tools for describing and quantifying the subtle vegetative features of grasslands. In his report *Preliminary Descriptions of the Terrestrial Natural Communities of California*, Holland (1986) included descriptions of 15 grass-dominated plant communities, with grasses featured prominently in another 18. Although it took a great deal of “shoe-horning” in order to make one’s observations of the on-the-ground conditions fit into one of these broad categories, the characterizations presented in this publication were invaluable to biologists charged with creating a narrative to describe the existing conditions of a project site. With the publication of the second edition of *A Manual of California Vegetation* (MCV2, Sawyer et al. 2009), which includes a total of 44 alliances with grass species either as dominants or co-dominants, the amount of “shoe-horning” needed to place plant assemblages into pre-defined categories has been reduced (but not eliminated). In addition to an improved characterization of the diversity of grassland communities, MCV2 includes membership rules and assigns global and state-wide rarity ratings for each association. These more detailed definitions of grassland types should improve the setting descriptions of environmental review documents, while statements of rarity greatly aid in the defensibility of statements of the significance of impacts.

The land use decisions of lead agencies are, at least initially, only as good as the information provided by the technical experts preparing

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*Since 1994, Mike Wood has written the column “Focus on Rarities” for the Yerba Buena CNPS chapter’s quarterly newsletter. He has compiled the chapter publication *Rare and Endangered Plants of San Francisco’s Wild and Scenic Places*. He recently completed a preliminary checklist of the extant flora of San Francisco and is compiling a list of locally significant plant species for the chapter area.

SPECIES SPOTLIGHT: Grasshopper Sparrow (*Ammodramus savannarum*)

by John Sterling, Sterling Wildlife Biology, jsterling@wavecable.com

A faint “tsip” or an insect-like high pitch buzzy trill is usually the only evidence that the diminutive Grasshopper Sparrow is present in its grassland habitat. If you happen to flush one, you will see a small “football-shaped” ball of feathers flying directly in front of you for a few dozen feet, and then as it drops into the grass, it will turn 180 degrees to get a look at the intruder before disappearing on the ground. After landing, it will scamper off like a vole. Males will sometimes sing on perches on the tallest forbs or even on fence posts or barbed wires to afford the best looks of this secretive sparrow. Grasshopper Sparrow diet consists primarily of grasshoppers and seeds, and they consume other insects to a lesser degree (Vickery 1996).

The Grasshopper Sparrow is a “California Bird Species of Special Concern” because it is relatively rare and patchily distributed throughout California’s dwindling grasslands. Although they are primarily summer residents and breeders, a few individuals are occasionally detected in the winter in the valley. Their true winter status is unclear due to the difficulty in detecting non-singing birds. They arrive on territory as early as mid-March, and circumstantial evidence exists that they leave the valley after raising a brood, to re-nest on coastal prairie sites (Shuford 1993). Grinnell and Miller (1944) stated that Grasshopper Sparrows were “sparse and irregularly distributed. They listed only four locations for the Central Valley, from Sacramento to Tulare County. We now know that they are found in many more areas. However, due to lack of systematic surveys and lack of access to much of the species’ potential habitat on private rangelands, its true breeding and wintering status and distribution throughout the Central Valley and surrounding foothills are unclear.

In the Central Valley, Grasshopper Sparrows are most often found in clusters of breeding territories, which results in a clumped distribution leaving much seemingly available habitat unoccupied. However, because of the vast areas of inaccessible potential habitat, the primary areas for this species are difficult to clarify, especially with a dearth of surveys. Gently rolling hills on the west side of the Central Valley probably have the highest number of breeding records, but valley floor locations such as the southern Yolo Bypass also have important breeding populations. In the Central Valley, Grasshopper Sparrows are found in a variety of grassland habitats, including wild rye, irrigated pasture, annual grasslands

with scattered forbs, and native bunchgrasses. Occasionally, migrants are also found in alfalfa fields and annual grasslands dominated by star thistle. Although they most often occupy hillsides in rolling foothills, Grasshopper Sparrows also occur in flat terrain on the valley floor. Winter habitat may differ from breeding habitat, but there are too few records of wintering birds in the Central Valley to adequately compare these differences. Grasshopper Sparrows are predominately found in large expanses of grasslands, but may also be found in relatively small, irrigated pastures (~40 acres) within riparian and oak woodland mosaics (Sterling pers. obs.). However, a study from Contra Costa and Alameda counties, just outside of the Central Valley, found that patch size was not a significant variable in modeling Grasshopper Sparrow habitat, but that sparrows were only detected in patches greater than 343 acres (Roa et al. 2008). This study also found a negative association with landscape heterogeneity at the 2-km scale.

There is still much to be learned about Grasshopper Sparrows in the Central Valley and adjacent foothills aside from the task of determining their current distribution and population size. How many stay for the winter, and do they move to different locations and/or habitats? Are there differences in breeding success in different types of grasslands? How do different grazing regimes affect breeding success and habitat quality? What is their overall population trend? What is their meta-population dynamic (do colonies come and go)? Until we come to fill these information gaps, we will have very little understanding of this rare, quintessential grassland specialist.



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Above: Grasshopper Sparrow (*Ammodramus savannarum*). Photo: John Sterling

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SPECIES SPOTLIGHT *continued*

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Native Grasslands and CEQA *continued*

each section of an Environmental Impact Report (EIR), one type of environmental review document. The biological resources section of an EIR must include a discussion of the environmental setting, project impacts, and mitigation for project impacts.

It is common knowledge that EIRs must address impacts on federally and state-listed species. Impacts on non-listed species considered to have "special status" must also be addressed under CEQA. Furthermore, riparian, aquatic, or other wetland habitats that are regulated under CWA (Sections 404 and 401), the California Lake and Streambed Alteration Program (LSAP; Cal. Fish and Game Code 1600, et seq.) and the California Porter-Cologne Water Quality Control Act (Porter-Cologne; Cal. Water Code Sections 13000-14920) must be described.

But what about those species and habitats that are not expressly defined, yet are considered unusual or locally unique, such as some of our native grasslands? CEQA guidelines pertaining to the description of the environmental setting specify that "knowledge of the regional setting is critical to the assessment of environmental impacts. *Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project.* The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context" (Section 15125[c]; emphasis added). This requires that CEQA practitioners, stakeholders, and the public ensure that "locally significant" species and plant communities are properly described and impacts evaluated. Common deficiencies in the setting section include a failure to provide a complete and accurate description of the project setting and providing an erroneous baseline.

The setting section should include a description of all special-status natural communities present on site. Special-status natural communities are those that are considered rare in the region, support special-status plant or wildlife species, or receive regulatory protection under the CWA, LSAP, and/or Porter-Cologne. A number of plant communities have been designated as rare, and these communities are given the highest inventory priority by the California Natural Diversity Database (CNDDB) and the California Department of Fish and Game (CDFG 2010). Vegetation alliances given a global or state rarity ranking of 1, 2, or 3 are considered rare and threatened throughout their range (Sawyer et al. 2009), and impacts should be evaluated in environmental documents. Alliances ranked as 4 or 5 are generally considered common, and impacts would typically not be regarded as significant under CEQA because they are presumed not to meet the definition of rare.

CEQA guidelines (Appendix G and Section 15065) include specific criteria defining when an impact on biological resources must be considered significant. Where general plans and zoning ordinances specifically address native grasslands and identify them as resources worthy of protection, two criteria relevant to grasslands may apply:

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Native Grasslands and CEQA *continued*

- ✎ Have a substantial adverse effect on any riparian habitat or other sensitive natural community (i.e., aquatic and wetland habitat) identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW¹) or U.S. Fish and Wildlife Service (USFWS), or
- ✎ Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

When resources are not otherwise addressed in planning documents, familiarity with the local region and the term *locally significant* becomes essential. As discussed above, the setting section should include a description of biological resources that are *rare or unique to the region*. This can be, of course, highly subjective and, as the sponsor of the EIR, the lead agency may choose either to omit any discussion of such resources or dismiss the impacts by making a “statement of overriding considerations.” However, with the publication of scientific articles and books such as MCV2, as well as lists of locally significant species compiled by organizations such as the California Native Plant Society (CNPS), or other publications citing the uniqueness of certain local resources (e.g., Bartosh et al. 2010, Lake 2010), both the lead agencies and commenting public have valuable documents to which to refer when evaluating the adequacy of an environmental review document. Of course, having the importance of native grasslands specifically identified in the local general plans is most desirable. Unfortunately, only seven counties (Fresno, Sacramento, San Diego, San Luis Obispo, Santa Barbara, Sonoma, and Stanislaus) include specific mention of native grasslands in their general plans.

Common deficiencies in the impacts section include the failure to present a complete, accurate, and unbiased evaluation of project impacts, including cumulative and long-term effects of the project and other projects affecting the same species, and the misapplication of the significance criteria.

To be deemed adequate, the mitigation section of an EIR should consider feasible avoidance alternatives to affecting sensitive or valuable vegetation communities, feasibility of restoration programs, and functional values of replacement habitats compared with those affected. If restoration or enhancement is proposed, the section must outline the responsible parties, funding sources, long-term monitoring and reporting requirements, standards by which the effort will be deemed successful, remedial measures if the project is not deemed successful, and provisions for the protection of the mitigation site in perpetuity (e.g., deed restriction, conservation easement). Common deficiencies in the mitigation section include mitigation measures that are incomplete, unproved, vague, unenforceable, deferred, cannot be monitored, lack success standards

or a range of options to achieve success, or lack a demonstration of commitment to their implementation.

Conclusions

To me, happening upon a healthy stand of native grasses is like traveling back in time, to an era before wild oats, ryegrass, and the European bromes and fescues took over the landscape. I readily admit that appreciation for the subtle beauty of native grasslands is an acquired taste and one that is not easily transferrable, especially to supervisors, council members, and planning commissioners more concerned with budgets, building, and ballots.

I would like to leave you with a brief checklist of things to consider when reviewing CEQA documents with native grasslands in mind:

- ✎ Review the general plan for the lead agency’s jurisdiction, looking for language that calls attention to grasslands. Pay particular attention to these general plan elements: Conservation, Open Space, Land Use, Agriculture, Coastal, Biology, and even Parks and Recreation. Also review local zoning ordinances.
- ✎ Carefully review the setting section. How detailed are the descriptions of habitats, and do they include dominant and co-dominant species, levels of disturbance, and local context? Are habitats mapped in sufficient detail to make an adequate evaluation of impacts? Are special-status communities addressed? Were field studies performed in the appropriate seasons to detect rare grassland species? If you have specific knowledge of any resources present on site, are they appropriately described? Are native and non-native components described?
- ✎ Review the criteria used to evaluate the significance of project-related impacts. Are special-status and locally unique natural communities evaluated? Are all direct, indirect, and cumulative impacts considered? Are there local publications or references that should have been cited and used in making significance determinations?
- ✎ Review the mitigation measures. If impacts will result, were alternatives explored? What modifications were made to the original project design to make it more environmentally sensitive? Is the proposed mitigation feasible? Has it been successfully done before?
- ✎ Review the mitigation policies of CNPS or other organizations, and make the lead agency aware of the fact that just because an idea is written down does not mean it will work. Is the ratio of mitigation acreage to impact acreage at least 2:1? Are the

continued page 11

¹Effective January 1, 2013, the CA Dept. of Fish and Game is now known as the CA Dept. of Fish and Wildlife.

Visiting California Grasslands: Walker Ridge

by Andrew Fulks, Director, Putah Creek Riparian Reserve and Campus Naturalized Lands, amfulks@ucdavis.edu


When one thinks of grasslands, the majestic image of endless acres of waving grass may come to mind. Grasslands need not be immense swaths of waving grass, rolling on to the horizon. Many grasslands, can be small glorious pockets and patches of grasses and forbs in intimate valleys. Some can be as small as a kitchen table. In northern California, there exists a remarkable landscape that contains serpentine barrens, lush meadows, seeps, and springs on thousands of acres of public land. The area is Walker Ridge, north of Highway 20 in Colusa and Lake counties. At 10 miles long and 4 miles wide, the ridge is host to numerous native grass and wildflower species, and is known for its diversity of serpentine endemics and California rare plants.



Walker Ridge. Photo: Andrew Fulks

Access to the ridge itself is easy. Walker Ridge Road, an all-weather dirt and gravel road, runs north-south along its length. Travel along Highway 20, west of Highway 16 or east of Clear Lake, and turn north at the intersection of Walker Ridge Road and Highway 20. Travel along the road until you spot a meadow, interesting road edge, or a spur trail to hike. Visitors have the option of looking at the grasslands and flowers along the road edges, or those more adventurous can wander on the many old trails and paths that drop from the road to the lands on the east and west of the ridge. Most of the land on Walker Ridge is public land administered by the Bureau of Land Management. Private inholdings are well-posted so visitors will know where they are not allowed to roam without landowner permission. Loop hikes can be created by piecing together segments of old ranch roads. One suggested hike is from the intersection of Walker Ridge Road and Indian Valley Road to Signal Rock. Signal Rock is a rock formation on the top of a hill east of the road and above the intersection, readily identifiable on a USGS quad map and reachable using old roads that have since become trails. A map and use of GPS are advised, as there are no trail signs. However, the rewards for exploration and adventure are fields of common monkeyflower (*Mimulus guttatus*), red ribbons (*Clarkia concinna*), and Oregon sunshine (*Eriophyllum lanatum*). The best times to visit for viewing annual herbs are May through June.





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Native Grasslands and CEQA *continued*

responsible parties, monitoring measures, and success standards clearly defined? Will the land be preserved in perpetuity?

- ✎ Finally, are there publications to which you can refer? What may be common knowledge among members of your organization is effectively invisible unless that information is in a form that can be cited and reviewed. Although peer-reviewed publications may have the greatest value in court, you will find that memos, articles, communications among members of your organization, even blogs are useful in drawing attention to the resources you value. Draw on local expertise. Emphasize the resource values at sites that are well known to harbor the best local examples of native grassland communities. The folks serving on the decision-making bodies are also citizens, and they are often very interested in learning what makes their communities special.



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Additional References

For an excellent guide to CEQA, see:

Grasseti Environmental Consulting. 2011. *Understanding Environmental Impact Assessment, a Layperson's Guide to Environmental Impact Documents and Processes*. Berkeley: Grasseti Environmental Consulting. Available at www.Amazon.com or directly from the author at www.grassetienviroental.com.

For an excellent overview of the laws and regulations that govern impacts to grasslands, see:

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May 10: Grassland Monitoring Methods for Vegetation and Wildlife

This one-day workshop will provide a detailed, yet broad overview of vegetation and wildlife monitoring in the grassland setting. The workshop will start with a classroom presentation on setting goals and objectives for monitoring, putting together a sampling design, conducting field sampling, analyzing data, and using results to inform management action. Two primary methods for obtaining foliar cover data will be the focus of the portion on vegetation monitoring: point-intercept sampling and quadrat sampling. Wildlife monitoring techniques will also be presented in four sections corresponding to general taxa categories: birds, mammals, invertebrates, and reptiles/amphibians. After lunch, we will move outside to practice what we have learned. Participants will break into two groups (vegetation, wildlife) during the afternoon session, based on primary interest. This workshop is designed for restoration practitioners, land managers, landowners, students, or anyone with an interest in learning more about vegetation and wildlife monitoring techniques in a grassland setting. Bring appropriate field gear including sturdy shoes and sunscreen.

Location: Cache Creek Nature Preserve, west of Woodland

Fees: \$130 CNGA members / \$150 non-members / \$80 students w ID

Instructors: *Chad Aakre*, Ecologist, Restoration Resources, Inc., Rocklin, CA; *Hillary White*, Wildlife and Restoration Ecologist, H.T. Harvey & Associates, Sacramento, CA

June 8 and 9: Identifying the Native and Naturalized Grasses of California

This two-day workshop will provide a detailed introduction to California's grassland ecology, the qualities of specific native grasses for restoration projects, while assisting attendees in becoming skilled at recognizing the basic groups and common species through work with plant samples in the classroom (Day 1) and through exploring a local grassland (Day 2). Instruction will include the old Tribe method, as well as the artificial key methodology focusing on the important distinguishing traits. Bring a 10X hand lens, notebook, tape, and grass field guides. Recommended texts: *Jepson Manual*, *Hitchcock Manual*, and *Beecher Crampton's Grasses in California* (UC Press).

Location: Pt. Reyes Station, Marin County

Fees: \$220 CNGA members / \$240 non-members / \$145 students w ID

Instructors: *David Amme*, Wildland Vegetation Manager, East Bay Regional Park District; *Jim Hanson*, Landscape Mitigation, Caltrans, & CNGA President; *Michelle Cooper*, Conservation Easement Steward Associate, Marin Agricultural Land Trust



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