How can CCRC help scientists and rangeland managers best learn from each other?

1. On-The-Ground Training

Abstract: Scientists and ranchers need to get together for on-the-ground training. On-the-ground training will allow both ranchers and scientists to go over specific issues and increase the understanding they have for each other's work. On-the-ground training should include problem sites, not just success stories.

Feedback

Through meetings where scientists can learn and see what is being done on the land and answer questions managers and ranchers have with regard to the application.

Scientists and ranchers should convene on the same piece of land and discuss the issues.

Increase the amount of time spent on rangelands with the practitioners explaining their practices. Explanation of the true economies of the industry to the agency and research groups. Share information and communication. All grazing management plans (agency or consultants) should be viewed by a successful stockman.

More of these CCRC meetings with topical discussions – what are ranchers doing (what works, what doesn't), what are land managers (trusts, districts, parks, etc.) doing (what works and doesn't). Need info sharing onsite (both private, public, and ambiguous).

Need a field workshop evaluating a resource problem that needs to be resolved and working as a group to resolve the problems or issue.

Help to organize educational field days to spread research to land managers. Rather than touring a successfully grazed area, tour one that has been either poorly grazed or one that hasn't been grazed for some time, get ideas for a plan, and see how many different ideas the group has.

Throughout the year have several short day workshops on the land to go over some specific issues.

Facilitate in-field meetings with scientists and managers on specific issues and then share the findings.

They can learn better from each other by spending more time in the field in having discussions while doing real work to put things into perspective.

Tour problem places instead of successes and pose solution actions.

Highlight that we come from the same place – our care for the land. Hold more meetings as it is the best way to communicate. Get together on the ground.

2. Engage in Cooperative Projects

Abstract: Projects should involve both scientists and ranchers as much as possible. If scientists and ranchers can conduct studies together, they will be more invested in each other's work. CCRC could provide a system to partner landowners with scientists.

Feedback

Work with each other in their job to see what it takes to do one another's job and see what peer pressure and social issues each other face. Financial is a huge part and once that is understood it will ensure people mesh better.

There needs to be more cooperative projects, i.e. scientists being ranchers and ranchers being scientists.

Match goals of scientists and managers to future studies.

Facilitate rancher projects involving scientists and managers – try to bring them together with discreet projects. Get away from the more abstract discussions. Create forums for ongoing dialogue. Focus on non-public lands.

By encouraging scientists to use manager's experience in shaping questions and seeking knowledge and vice-versa.

Undertake joint projects that have both research and application to central coast rangelands

CCRC could potentially work with AWQA/UCCE or other groups to bring scientists and other experts with ranchers and land managers to focus on water quality and other issues that are relevant and helpful to rangelands management.

Could develop a system to partner landowners with scientists and NGOs. If all members submitted sheet reports on what they do, what their goals are, what questions/challenges they face, it could help to pair ranchers and scientists that are feeling pressure.

Expand the walk a mile in my boots program (NCBA) to include scientists. Have specific questions on a project that covers more details.

Involve more data from on the ground people in the research that affects their management. Allow those people on the ground to provide more data which the scientists compile to make conclusions.

I think creating a pool or group of scientists and range managers to conduct studies together. The scientist will have the luxury of study sites while informing managers and owners of the study. The managers and owners will be able to see science happening and hopefully lose the fear of science. In turn, if the study shows benefit in the range it should have direct relation in cattle or livestock health. This is the economic benefit of science.

There's been a lot of discussion of the disconnects between the science and on the ground feasibility, etc. I think there needs to be continued discussions on opportunities for overlap and how to bridge that gap. With all the different perspectives present, what are the current issues for ranchers and how can scientists/conservation groups work collaboratively on the issues and vice versa.

There needs to be better communication between researchers and grazers. CCRC needs to maintain this intersection between groups and advocate that grazers be inserted more often (i.e. theory or method testing) into the paradigm of research to result to manuscript to submission to publication to law or policy and assure that economic and social policy inform research.

Encouraging long-term research in private farms with the agreement and help of the farmers.

3. Reach Out to Regulators

Abstract: CCRC should reach out and involve regulators more effectively in the meetings. The regulators are the people making decisions and they need to be included.

Feedback

We need outreach to agencies and decision makers.

The science needs to get into the hands and/or heads of the regulators and decision makers. Don't keep preaching to the choir – get the message via peer-reviewed science to people who have not yet been exposed.

The more agency people we get, the more they are educated. The more agency people and ranchers, the better. The ranchers that are here want to be here.

I'd like to see CCRC providing a node/mode/nexus of communication to/with regulatory agencies so that the common sense experience of ranchers and the science-based info from academic partners can inform new regulation (TMDLs, etc.) and can inform rancher's compliance efforts with the regulators.

Work on regulatory agency problems.

It seems to me that ranchers and managers have an issue with uninformed regulators who make recommendations on pond and creek management that are not informed by science, especially CTS & CRLF, and their recommendations include that cattle are bad in riparian zones and ponds. It seems that regulators are not informed on science regarding invasive species that come in riparian zones without grazing.

Invite regulators to participate in a two-way street conversation and to discuss and to offer up solutions prior to them becoming limitations.

4. Continue Information Sharing/Networking

Abstract: CCRC should continue to hold meetings that bring together ranchers and scientists. Informal communication can often be the best way to increase collaboration. Information sharing should also include updates on results.

Feedback

There should be group discussions like this one with someone regulating.

More of the same – these meetings and setting up collaboration opportunities like the field sampling and literature reviews and letting them ask each other questions.

Continue hosting events that bring together scientists, ranchers, and managers. Informal communication seems effective in spurring collaboration.

Meetings such as this one.

Help agencies like NRCS and UC Extension advertise their workshops.

Through facilitation that validates people's views and knowledge. By creating opportunities for open dialogue.

Continue to listen to each other and build trust.

Continue to host/facilitate these types of meetings. Inviting a broad spectrum of view points and continue to encourage innovation and feedback. Specific forum of sharing ideas is great.

Follow-up communication through the network on results; tap into multi-sector stakeholders perspectives to reach practical solutions for management; peer review outside of your normal network.

Continue to hold meetings as they are great opportunities for mutual learning.

Keep maintaining the relationship between science people and land management people for the good of both.

Continue to provide a means to meet and exchange ideas and information between the groups

Continue with programs like this and encourage participation from diverse groups/people that are involved with land management.

Continue with bi-yearly meetings

Provide venue for researchers and ranchers to speak about what they have learned and what they are working on.

Providing a conduit for participants to network in these info meetings.

More dialogues between rangeland owners and scientists. Offer the opportunity for range students in college or even high school to go outside to study more knowledge in rangelands.

Hear more from the audience at every stage. More discussion instead of presentations. Pre-set action items with smaller group discussion. Network opportunity board poster. Add details to Contact List about what each person does.

5. Provide Tools for Info Sharing

Abstract: CCRC should provide various tools to help members spread information and increase participation. Tools include things like a website, listserve, newsletter, conference proceedings paper, online forum for info sharing, among others.

Feedback

References, references – tools to go to battle with anti-grazing folks.

A wiki/web forum on BMPs with everyone contributing to problem solving on common issues or questions with voluntary follow-up offline exchange.

Provide tools for participants in CCRC to better share information with their friends, colleagues, neighbors, etc.

Create a website. Send regular emails to anyone interested.

Website

By publishing a periodical of results of these meetings, including questions and conclusions.

CCRC website, newsletter, blog, post presentations, listserve. Mentorship program between elders/ranchers and students/volunteers.

Idea to further networking between attendees at meetings: create an online or news print publication for participants to explain, share, sell ideas showing emails, phones, etc.

Provide written short articles via email on work and findings.

Poll CCRC members to better understand not only research needs (i.e. content) but also formats so that we can improve delivery of science to different audiences. How do different groups prefer to give and receive info?

Set up a forum with questions and answers with more rancher involvement. Present shared learnings or approaches/techniques that have benefited both sides. Present obstacles preventing involvement. Focus on the social/economic impact vs. environmental quality.

6. Get A Wider Audience

Abstract: CCRC should reach out to a wider audience and invite more ranchers and scientists. Having a presence at other conferences can help attract a wider audience. CCRC should also get the word out to the general public.

Feedback

Seek more rancher/private landowner input.

I'm happy to see managers and scientists talking, but this is a self-selected group. It would be nice if the circle was larger. It would be nice to see more ranchers compared to agency people at these meetings. However, this is a positive step. It's a better proportion of ranchers to agency people at CCRC compared to Nevada.

Get the word out to the general public that ranchers and scientists are working together, that ranchers and cattle people aren't bad. That land is being managed for the future.

Need more presence at conferences, giving presentations and hosting more working groups at even smaller geographic areas such as the Eastern Alameda Rangeland Working Group. Empower members more.

Invite more ranchers and scientists to meetings like today.

7. Develop Questions for Each Other

Abstract: Everyone in the CCRC should come up with questions or problems they want researched or answered and then the CCRC network can work together to answer these questions.

Feedback

Managers develop list of specific questions they want researched (funding may also be necessary.) Go together into the field to discuss rangeland management. Managers review suggestions developed from research.

It would be interesting to have everyone in the CCRC come up with questions they have for people in the various categories (rancher, scientist, agency). Use some of those questions as a basis for the next meeting. Hold a meeting about communication with different groups and how communication can be more effective.

Increasing the opportunity of communication between two groups, collecting the specific questions or problems from managers and telling scientists. Supporting scientific research on these aspects. Scientific research is time consuming – give scientists time to handle the problems and also the problems are more complicated than you imagine.

Come up with a list of ideas/questions to present and then discuss them rather than talking about research.

8. Find Common Language

Abstract: CCRC should find a common language between ranchers and scientists. A common language will help build trust between a diverse group of people.

<u>Feedback</u>

Have everyone wear costumes so they can't be pigeon holed as either a scientist or rancher. More common ground conversations to build trust.

Agree to basic values. Good facilitation – increasing awareness of one another's perspectives. Finding common language.

Common language.

Bring scientists and ranchers together informally for more discussion to build relationships and find a common language. I want to see the scientists, listen, and when they do speak, speak simply but not dumbed down.

9. Focus on Economic Considerations

Abstract: Scientific research should take into consideration the potential cost impacts of their science and grazing plans need to be economically feasible.

Feedback

Scientific community is realizing that science needs to evolve over time. Scientists need to remember the potential cost impacts of their science. Can a producer realistically produce that? Research is often done in a vacuum of economics.

We need to share ways to make it economic to ranch.

Ranchers can't afford to put input into leases that are top rate. SCC Parks – at first used highest bid, then changed it to put it to bid, but they could take a lower bid if there's reason to. Lessee could keep lease if they're doing a good job.

County of Monterey – always highest bidder, then it went to RFP, but ranchers hated it. SC County government is a little more conservation oriented and has more money, so their attitude is different. SF Water changed from highest bidder too. The resistance depends on where you are. Educating the community about benefits of grazing can help change the way an agency does the lease.

Not so much focus on how much a tenant pays, but who is a better steward is important. A better steward is someone who is making a living at it; if you charge a high price, they'll try to get as much as possible. If less money, then the lessee is willing to work with you more

Grazing plan needs to be feasible for the rancher. Adaptive management is very important. It's limiting if you focus on public lands as good management because there are problems sometimes compared to private ranches.

Stress cost/benefit to land owners.

10. Future Conferences Possibilities

Abstract: CCRC should focus future workshops on specific topics like reducing water pollution and focus on results rather than future steps.

Feedback

Need a conference on some folks/agencies that don't like grazing ahead.

Host a small panel session: please invite Dr. Sam Sweet, UCSB, to discuss with ranchers, BLM, USFWS, NRCS, etc. why the 4D role is "bad" for RLF and CTS.

CCRC meetings should focus first on results – what has been done or learned – then delve into what needs to be done next.

Is there anytime that somebody might want to study the use of raw milk as a fertilizer to the soil?

The CCRC could sponsor workshops on specific management topics, e.g. the best or most effective practices to reduce water pollution, where scientists, agency managers, ranchers, and others discuss and find consensus. That process would be fun and valuable and would attract participants to the meetings.

11. Miscellaneous Feedback

Encourage/compel scientists to boil down the takeaway from their reports into a 3-5 sentence abstract. Write and research like a scientist, but learn to communicate like a rancher/human being. Cut the jargon and get to the point so the reader cares and understands.

Focus on strategies that land trusts and public land agencies can use to better private land management and meet resource conservation goals. Focus on specifics of an issue, i.e. water quality, conservation easement, ranch economics, property valuation for long term protection.

Help scientists by clearly identifying gaps in the understanding of biological mechanisms that are responsible for sustainable grassland systems including soil, water, and biomass management.