





## *Fens, Springs, and Seeps continued*

- My feeling is the way to address this is going to be through a trampling protocol, but we have yet to formally adopt one of those for our Region, and even when monitoring trampling, what is going to be an appropriate standard? One of the things we struggle with is the variability between Forests and even fen types. Whatever we may come up with is not going to cover everything.
- Fence them off if they are getting degraded, and make them a photo point. Provide off-site water as needed. Don't salt within 500 feet to 1/4 mile. Avoid surface disturbance with 500 feet unless special protective mitigation measures are taken.
- Fens are areas of upwelling groundwater and fragile soils. My first reaction is to state the obvious, the less grazing in these areas the better. When viewed as part of the entire system, such areas are much more valuable for their water storage and biodiversity than for the comparatively small amount of feed that they can produce. Drought makes it even more so. If there is a need to rank the extent of damage between various areas, I suggest starting with the items in the lentic checklist. Percentage of vegetative cover (grazed/ungrazed) and disturbance could be used to rank direct impacts but would not take into account changes to the capacitance in the water storage system caused by soil compaction.
- I don't know the details of the site, but in general I would not suggest any grazing or water development in fen/spring/seep areas because they: 1) usually have some unique and sensitive plants species, 2) have unique/sensitive soils, 3) provide cold subsurface flows to nearby streams, 4) provide high quality water to nearby streams, and 5) have rich biodiversity of both plants and associated (dependent) wildlife. These areas are an especially important part of more arid landscapes and ecosystems.
- The Humboldt-Toiyabe National Forest has dealt with this issue. Contact Diane Weaver, Range Program Lead for more information ([dlweaver@fs.fed.us](mailto:dlweaver@fs.fed.us), 775-355-5396).
- See TR 1737-17 A Guide to Managing, Restoring, and Conserving Springs in the Western United States. Chapter IV discusses spring resource management goals and Chapter V discusses spring management assessment and priorities (<http://www.blm.gov/nstc/library/techref.htm>).
- USDA Forest Service Pacific Southwest Region (R5) has developed a [fen inventory form](#) to document soil, hydrologic and vegetative characteristics. The inventory form is used to determine whether a site is a fen, and document incidental observations of impacts. They are developing a [fen condition checklist](#) which is adapted from the PFC lentic checklist and Colorado Natural Heritage Program fen information, to evaluate condition and effects of any impacts. For more information on the fen inventory form contact Sue Weis, Inyo National Forest ([sweis@fs.fed.us](mailto:sweis@fs.fed.us), 760-873-2496). For more information on the fen condition checklist or to provide comments on the early draft, contact Dave Weixelman, Tahoe National Forest ([dweixelman@fs.fed.us](mailto:dweixelman@fs.fed.us), 530-478-6843).
- Steve Smith and Tim Burton (Idaho BLM) have been working on a Multiple Indicator Monitoring protocol for application in wetlands. It is in the developmental stage and they have done some testing. They have measured stubble height, woody use, and wetland surface alteration (trampling) on wet and mesic meadows. This winter they are also working to develop a soil stability/hummock indicator as well. Monitoring Streambanks and Riparian Vegetation—Multiple Indicators Version 2.0 (Cowley et. al 2006) can be downloaded at [http://www.id.blm.gov/techbulb/05\\_02/index.htm](http://www.id.blm.gov/techbulb/05_02/index.htm). For more information contact Steve Smith ([Steve\\_J\\_Smith@blm.gov](mailto:Steve_J_Smith@blm.gov), 208 373-4000).

As you can see, differences exist even within our Creeks and Communities Network, supporting the importance of a collaborative approach in developing a shared understanding of all the processes used to manage riparian-wetland areas and catchments. Hopefully, the continuation of open communication on this, and other topics, will inform these efforts and foster the best outcomes. Thanks to all who replied, and as we learn of additional efforts relative to livestock grazing implementation monitoring protocols for fens, springs, and seeps, we'll include them in future issues of Full Stream Ahead.

(See the BLM Partnerships website for the BLM 2007 Collaboration Desk Guide for more information on collaboration ([http://www.blm.gov/partnerships/Collaboration\\_Desk\\_Guide.pdf](http://www.blm.gov/partnerships/Collaboration_Desk_Guide.pdf).)









