

April 20, 2016

Utah Geological Survey Wetland Program Spring 2016 Newsletter

The Utah Geological Survey's Wetland Program is busy preparing for the upcoming field season. This summer we will be continuing to collect wetland assessment data in the Jordan and Utah Lake watershed and finishing up field work for a mapping project around Great Salt Lake. Check out the updates below to get an update on our program, learn about a cool new wetland plant resource, and find out some ways you may be able to help out the Wetland Program!

Wildlife Habitat Feature Identification

The Wetland Program would like to add a wildlife habitat component to our current protocol and could use some help! We are working on developing checklists for different groups of species that will help us determine whether particular sites have potential to support those species. Help out by providing information on key site attributes for those groups of species that you are knowledgeable about. For example, is a species group associated with particular water depths or dependent on water being available a certain time of year? Does the species group tend to avoid areas with certain types of landscape disturbances? The groups of species we are most interested in are aquatic mollusks, amphibians, waterfowl (duck, geese, swan), shorebirds (avocet, stilt, plover, gull, etc.), wading birds (egret, heron, ibis, etc.), and piscivorous birds (pelican, tern, grebe, cormorant, etc.). Email me a list of attributes for the species' groups you work with or, if you have more time, see the more detailed instructions below. Your best professional judgement will be combined with experts, so don't worry about how "exact" your list of suggested attributes is.

Request for Help—Identifying Pristine and Severely Altered Wetlands in the Jordan/Utah Lake Watershed

To make sure that we survey wetland sites that span a wide range of conditions, we are requesting help identifying pristine and severely altered wetlands in the Jordan and Utah Lake watershed. Ideally, pristine wetlands would have no history of livestock grazing, unaltered hydrology, not be within 100 m of roads or other unnatural land cover, and have low cover of non-native plant species (though wetlands in this condition can be hard to find!). Severely altered wetlands may have a number of moderate intensity stressors or be severely altered in

terms of hydrology, plant cover, water quality, etc. We have divided the study area in different units (see attached kmz file and image) and are most interested in the following:

- 1) Heavily altered wetlands in alpine areas, and montane areas (both areas managed by the Uinta-Wasatch Cache National Forest (UWCNF) and areas labeled as “montane” on the map)
- 2) Close to pristine wetlands everywhere except the alpine area. We are especially interested in montane sites and Utah Lake sites with little to no grazing history, intact plant communities, and little other disturbance. We are also interested in *any* potential “least disturbed” sites around Great Salt Lake, such as sites with close approximations to natural hydroperiods, sites with a good mix of native plant species, etc.

Send me an email with coordinates or a description if you have potential candidate sites!!

Webpage Update—Now Easier to Find UGS Reports

Our webpage has been updated to make it easier to find links to wetland technical reports: <http://geology.utah.gov/resources/wetlands/wetlands-publications>. You can find both wetland-related official Utah Geological Survey publications and technical reports, as well as other hard-to-find wetland literature relevant to Utah in the GeoDataArchive System. Some new documents of note include a tri-fold brochure summarizing findings from our Weber River watershed wetland study and a newly posted technical report on the landscape integrity model for Utah’s wetlands. Reports for studies on boreal toad habitat conditions and wetland condition in the Weber River watershed and north slope of the Uintas will be posted soon.

New Wetland Plant ID Resource

The Colorado Natural Heritage Program has created a really cool free mobile app to help with identifying wetland plants! The app has detailed descriptions of over 700 plants commonly found in Colorado’s wetlands, but many of the species are also found in Utah. The app is available for Android through Google Play at <https://play.google.com/store/apps/details?id=edu.colostate.cnhp.cwic&hl=en> or for iPhone or iPad by searching “Colorado Wetland” in the App Store on your device.

Wildlife Habitat Feature Identification- More Detailed Work

If you want to contribute more to the wildlife habitat project, you can help out by going through the attached excel spreadsheet of potential wildlife habitat features by wildlife groups. For each potential habitat feature (e.g., Animal burrows are present at site), select whether the feature is “Necessary”, “Good”, or “Not important.” “Necessary” would imply that site is very unlikely to support species if feature is not present, versus “good” is a preferred habitat feature but not absolutely necessary. The specifics of each feature can be refined in the future; feel free to add notes or recommendations regarding the feature in the appropriate location. If you can’t evaluate a particular species or attribute, leave the feature as “Not Eval.” **Important:** Please do

not make changes to the spreadsheet besides changing the "Not Eval." status to the appropriate status in the drop down menu and adding notes or recommendations as needed. I plan on importing the data directly into R and therefore it is important to preserve the original format.