

Citizen-based aquatic field sampling in the time of COVID
4/21/2020 Zoom Meeting – Chat Input Summary

This document summarizes chatbox entries made during the above-referenced meeting. The chatbox was a primary means of contributing input to the brainstorm. This document should be used in tandem with the video recording, powerpoint presentation and best practices document.

Chat Input Summary

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Field Team Planning

Summary: Some groups are reaching out to their volunteer base to gauge interest and ability to sample. Some groups are using waivers to address liability concerns. Groups using solo teams provided best practices.

Nancy Mueller : NY (Citizens Statewide Lake Assessment Program) emailed all 400+ volunteers to ask whether or not they were willing and able to sample/ship samples in accordance with CDC and NY Pause guidelines. The overwhelming response was "yes". Emily Vail : Wondering about a first step to check in with volunteers about their individual risk, or availability. Some volunteers may not be willing/able to volunteer their time because of being higher-risk, or having new burdens on their time. Emily Grason (Washington Sea Grant, she/hers) : @EmilyVail, I agree, perceptions of personal safety among volunteers varies widely, and we're asking folks first and foremost if they even feel comfortable to sample with social distancing practices before moving on to logistics. Many volunteers are retired and in the most vulnerable category – some groups are forgoing sampling altogether or trying to allocate staff instead on a delayed schedule.

Meredyth Babcock: For interns is there something I should have them sign to protect the organization. Nancy Mueller : NY requires a waiver form, but it has never been tested in court. Sally Petrella : We always use release forms for all of our programs as part of the sign in. Nancy Mueller : NY Waiver Form - It does not have specific COVID info because they were collected before this hit: <https://nysfola.org/wp-content/uploads/CSLAP/WAIVER-FORM-2020-1.pdf>

Sarah Crosby : For solo field teams, are people allowing undergraduate interns to sample alone? We are debating whether we need to go to staff only. Jo Ann Muramoto : Yes we will have a solo intern sampling for cyanobacteria on ponds, but most of our sampling will be from shore not boat. Emily Grason (Washington Sea Grant, she/hers) : Not undergrads, but we ask folks never to go out in the field alone. If volunteers could physically sample alone, we can deputize a member of their household to be on site with them for safety supervision. We're providing designations for individuals of critical service to volunteers, and we can extend this to members of their household for only this purpose. Mary Finch : Cell service in our area can be spotty so working alone protocols can be tricky. I have heard the suggestion of sending 2 vehicles, 1 person samples and the other person watches from a distance

Training

Danielle DeHart : How is training done online when volunteers have not been to a stream. Example is training for collecting benthic macroinvertebrates. Sara Grady : We aren't going to train anyone new for water quality and send people out in family-only units. Ben Wetherill : At the moment, we are planning virtual retraining for experienced volunteers but assuming that new volunteers will need some sort of in-person training (with appropriate distancing). For water quality sampling and meter analysis. Emily Grason (Washington Sea Grant, she/hers) : Our program has also suspended bringing on any new volunteers because we (at the University of Washington) assume liability for program volunteers. So unless we can train them in person, we aren't able to assume that liability.

Has anyone made videos? Sara Grady : Yes, I made training videos for herring counts. Kristen Balschunat : This is an example of a water quality sampling video training created by the Addison County River Watch in VT. It could be a good starting point for inspiration. <http://acrpc.org/programs-services/natural-resources/acrwc/whatsnew/> . Ilana Haimes : We have some great training videos online! We have also had volunteers use cellphone cameras to take photos of inverts that they aren't sure about the ID on and email them in to a local contact. Barbara Warren : could set up iNaturalist app on cellphone - photos, location, ID known or unknown. Kris Stepenuck : This could be a nifty resource for your programs: <https://www.macroinvertebrates.org> Todd Menees : checking for volunteer's understanding is the really tough part of online training. Jenelle Dowling : Adventure Scientists trains all of our volunteers who collect data (thousands nationwide) remotely with online trainings. We're working to help scientists plan their field seasons, considering covid19. This can include creating online trainings for you: <https://www.adventurescientists.org/data-collection-help.html>. Jane Shuttleworth : I also follow up training with self-graded quiz.

Sydney Smith : For those who have started online trainings, have you altered/consider altering your QA/QC plans for including video-based trainings or modules.? - not answered by group

Field & Lab Practices

Nancy Mueller : We provide prepaid UPS labels for shipping samples to the lab, and most UPS drop off locations have "no contact" drop off. Field data will be entered online.

Jane Shuttleworth : from Iowa Lakeside Lab in NW Iowa we are planning to create Q [quarantine] crews only sample. They will have their own equipment and merely pick up bottles collect samples and we will run analysis

Is anyone requiring testing for fever/health? – Sam Dinkins : Ohio requires employees to check temperature daily. Must have temp below 100.4 F. Kate Laramie : Another webinar I was on discussed concern with taking temperatures and possible HIPPA violations/being careful with any acquired health information

Bryan Grimmelt : our working alone policy requires calling in when entering and leaving a site. Barbara Warren : Will need to check with each community's BOH, harbormaster, park and rec if can sample from a beach or stream. Sam Dinkins : If sampling requires permission to access a specific site, sampler should call in advance to be certain that the site is allowing visitors.

Lisa Kumpf : what about sampling from a small boat, about 8' long? would it be possible? Jane Shuttleworth : yes we do boat based and are have Q [quarantine] teams only. Sarah Crosby : We are not launching our boat on our normal schedule. We are waiting until mid-season, if at all. Laurie Sovell : MN has decided boat sampling is not possible while meeting social distancing guidelines. Heather Pembroke : Limit boat based sampling to same household crews. Chris Petrone : Safe boating guidance from Sea Tow: <https://www.discoverboating.com/resources/boating-during-coronavirus-covid-19>. Barbara Warren : Regarding using boats, it is still unknown if larger boats will go into the ocean this summer, particularly if they need access to their boat by a launch or a yacht club.

Jo Ann Muramoto : Consider partitions (Plexiglas) between people working in a lab, or other ways to physically separate people. We may be getting two tents to house interns while they're analyzing samples.

Charles Stoll : NY DEC Has provided recommendation to bring your own pen or pencil everywhere. It is recommended vehicles are disinfected every morning and afternoon and limiting vehicle use to a single field staff person.

Nancy Mueller : Do we know whether or not hand sanitizer has anything in it that might contaminate samples? -- regular sampling quality control should keep anything but the sample medium from getting into the bottle.

Norman Dewar : Recommendations for disinfectant? General Ag Disinfectant (a commercial product and a surfactant) has the same active ingredient as Clorex or Lysol wipes but concentrated. It diluted with water and can be put in a spray bottle. Other than "Javex" products and most domestic disinfectants are hard to find. Is that an option for a disinfectant? Bryan Grimmelt : 70% isopropanol is widely used to sanitize. Erick Burres : <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>.

Matthew Liebman : how are people dealing with calibrating instruments? Doug Suitor : We (maine dep) are having them UPS DO meters to our office. Then a single staff is calibrating and returning via UPS. Norman Dewar : We use walkie talkies for communication where mobile service is spotty. Limited range but does provide coverage between people working in stream and someone on the outside.

Contamination/transmission in Rivers (from sewage)

Erick Bures : <https://www.sciencedirect.com/science/article/pii/S0048969720322816>;
<https://www.circleofblue.org/2020/world/virus-hunters-find-coronavirus-clues-in-sewage/>;
<https://www.latimes.com/california/story/2020-04-02/coronavirus-ocean-swimming-surfing-safe-beaches-los-angeles>; <https://www.kgw.com/article/news/local/tracking-coronavirus-covid19-in-sewage/283-68e6204d-8a44-462b-b0e6-20324ffcac22>

Sam Chan (samuel.chan@oregonstate.edu) is working to develop this research topic further and come up with FAQ's. Rob Buchanan : curious to know how many groups who sample for pathogens are going to delay sampling for fear of viral transmission via sewage pollution. sounds like at least one (cape cod. maybe the organizers could run a poll? ((Poll was administered. About 25% of answers were going to delay sampling.)

Erick Bures : Its not just raw sewage that needs to be of concern. Many pipes have stagnating water that may have contaminants.

Kim Falinski : we are interested in specifically tracking changes in wastewater due to lack of tourists. is anyone else looking at this type of sampling design? Kim Falinski : so I'm interested even not for ww, are people changing sampling designs to take advantage? have groups noticed cleaner water? Jane Shuttleworth : actually we might do that but not via volunteers. Norman Dewar : Hadn't thought of the tracking changes but going to look in it.

Sebastian Pillitteri : Per Water Research Foundation webinar last week: Stool has high PCR positivity for COVID (including culturable virus from stool in china, has not been replicated in other places). COVID has a survival rate of about 1-2 days in ambient water, 3 hours in aerosol, up to 5 weeks in feces Link to webinar: https://event.webcasts.com/viewer/event.jsp?ei=1298571&tp_key=e0469efe57.

Misc.

Suggested topics for future brainstorms: Sierra Hylton : Topic: virtual learning platforms, interactive ones preferred. Barbara Warren : Definitely training on making training videos. Holly Porter-Morgan : Perhaps case studies of how a few groups have done with implementing training. Challenges and achievements!

Unanswered questions: Thoughts or recommendations on samples/volunteers that cross state lines? Thoughts on having dogs along? Thoughts on difference between using volunteers and interns? Heather Pembrook : Waht other guidance have your laboratories given to avoid transmission? Kathalene Lamboy : Are there any ideas in terms of the continuation of volunteer engagement during this time? Keeping people interested and feeling as though they are still contributing.