

Best practices in Leading Fieldwork: Creating a respectful climate in the field

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The WHOI Workplace Climate Committee Fieldwork Climate Working Group held a workshop on best practices in leading fieldwork on February 17th, 2023 with ~30 people participating in person and on Zoom. The event was led by Anna Michel & Chris German, and was geared towards members of the WHOI community who "have been a Chief Scientist or Team/Expedition Lead for coastal, terrestrial or polar field work, or will be a new one in 2023." Participants split into breakout groups of ~6-8 people to discuss the topics listed below. Notes from the report-out were captured by scribe Hannah Mark.

Introduction

Goal: come up with some best practices to share with the community and with UNOLS, in anticipation of NSF requiring field plans/workplace climate statements that address this topic for future grant proposals.

Building on the Fall 2021 Communi-Tea and WCC fieldwork working group

Drawing on the immense collective experience of WHOI folks in leading fieldwork expeditions in all sorts of settings - at sea, on land, on ice.

Discussion Topics:

- What do you wish you knew or most want to know as a first time Chief Scientist or Expedition/Team Lead?
 - Ship berthing assignments
 - Managing multiple science projects on one expedition
 - Managing multiple levels of experience on one expedition
 - Handling ship ceremonies (equator crossings, 1st Alvin dive, etc.)?
- What are things you can do from start to the end of an expedition to set the tone/climate?
- What kind of feedback would you like as a Chief Scientist or Expedition/Team Lead?

Report-Out:

What do you wish you had known/want to know as a first-time chief scientist (CS) or expedition team lead?

- **Breadth of decisions** that CS is required to make (eg, CS is the one to make the call on weather sometimes, covid/illness, though how much say the CS has depends on the captain - from peoples' experiences it sounds like there isn't standard policy for much of this at least on UNOLS vessels)
 - Good to have a sense of the kinds of decisions that need to be made, many made before the cruise even starts. Helps for new CS to be prepped for that.
- 90% of the job is **logistics**
 - It helps on a cruise if the CS can delegate their science to someone else in the science party so the CS can focus on logistics and planning
 - Would be helpful to know more about ship scheduling and shipping and all the pre-cruise logistics - we don't get training in this!

- Make sure there's equity among science parties, when there are multiple groups/projects simultaneously on one cruise
 - Start with a scorecard of what each science party wants to achieve, and make sure everyone is making progress toward goals so everyone leaves the ship with what they need
- Need to understand what people can and can't physically do - i.e. vehicle teams being asked not to sleep for the sake of the science - and have good communication around that
- Have contingency plans for what to do when things aren't going as you'd hoped they would
 - Managing the expectations of junior sci folks who don't get as much done as they had wanted to do
- **Legal liability** as CS - you can be sued if things go wrong (CS and captain, if they make the wrong call on something)
- Another huge component of the CS job is **people/personality management**, navigated in a context where the lines between home and work are blurred
 - You will often have to work with people from outside your group or your institution. You are not their boss, yet you are sort of their boss while at sea.
 - For more junior CS especially, you may be in charge of people who are more senior/have much more field experience than you do
 - Choosing who you take into the field is important, though you may not have full control over it
 - One thing that has worked for some: before taking students to sea on a global class vessel for a long time, take people on a small boat for a day to see how they handle themselves (note, though, that small boats are their own challenge i.e. seasickness). Helps to figure out who you can trust and who will actually help out with/benefit from a full cruise
 - You will need to resolve conflicts, and set and manage expectations
 - There will be varying levels of field experience in the science party, and as CS you are responsible for making sure that the new people know what they're doing and the experienced people help them properly.
 - Some people for whatever reason see fieldwork as a fun vacation-mode type thing; some of us do the opposite, i.e. lock down and laser focus on work as soon as we're in the field. How to think about this and handle it? As long as people are getting work done and not hurting themselves it's ok? But it can make you think poorly of people who behave differently than you do.
 - In general, people may behave very differently in the field than they do in their normal life. They may seem like an entirely different person.
 - Hard vs soft intervention when conflicts arise: hard intervention can sometimes cause more problems than it resolves
 - Conflict resolution training for CS would be very very valuable
 - Could we have a resource on land, a hotline to call for advice on personnel/climate issues? Note that we can call HR, that's an option. Good also to make on-land/call resources available to everyone on the ship - if they don't feel comfortable reporting on the ship, make clear that we will pay for the fancy phone calls back to the home institution to talk to people who can help, or at least make sure people know how to find confidential reporting portals online.
 - Lack of sleep is one big thing that can make a situation go south.
- Berthing
 - Can be a challenge

- Helpful if people have the opportunity to express concerns about it before the cruise starts - make sure that we aren't dealing with accommodations on the fly. For example, if someone needs a place to pump/store breast milk, make sure that is figured out *in advance*.
 - This means CS needs to ask people explicitly about their concerns *in advance*
- The biggest issues in the field relate to **communication**. Communication is hard.
 - Making sure the CS is copied on everything, aware of everything that's going on, especially if there are multiple sci groups
 - There's no such thing as overcommunication
 - Have a plan of the day that's shared with science and crew
 - As CS there are often issues you don't hear about until the end/until it's too late, even if you tell people to come to you with issues. It would be very helpful to have best practices written down for addressing these things when they come up - something to reference when you don't have the bandwidth to come up with a solution for a problem that, if you encountered it at home, you would know how to handle and have the ability to handle. Sometimes the CS is in a crisis situation re: logistics or safety more broadly and issues of someone being an asshole to someone else just can't be a priority even though it does need to be addressed.
 - People don't always seem to understand how much *is* on a CS's plate
 - There's some responsibility here on the people one level below the CS (other more senior sci, postdocs) to look out for people and report up if something is going wrong
 - Communicate goals, starting with safety as first priority. CS needs to make it clear that we want people to have a positive experience but being at sea is an intense environment
- Relationship between the science party and the marine crew is essential.
 - Sometimes when scientists aren't as good as "professional" people on deck the marine crew will look down on them.
 - CS is the liaison with the marine crew, and that can lead to some of the most fraught interactions during a cruise
 - There's also the dynamic of adding vehicle teams, which have their own expedition leaders. Communication is KEY.
 - Some have had experiences where captain has gone around the CS and made decisions with vehicle team leader. We can't control peoples' behavior, but we can cultivate good working relationships with vehicle teams so that if that starts to happen, they can also take a hand in making sure communication is going in all directions.
 - Talk to the captain early, ask about how they like to run their operations
 - What do you do when the captain is the issue? Going above them creates other issues
- Workplace climate is one thing, but **safety at sea** is also an important thing to focus on
 - There was an at-sea safety course at WHOI in the past that doesn't exist any longer? For some ships (especially European and industry ships) you have to have some training/certification for safety. There's a good course at Groton apparently, and there are some in New Bedford and Newport. Survival at sea, helicopter evac underwater (eek), similar things. WHOI should offer this or require it somehow.
 - Also would set expectations for a serious workplace environment
 - Can be pricey though, especially for the helicopter evac one.
- What's the deal with ship ceremonies? Are we still doing them? Why?

- Easier sometimes to make a blanket decision that we won't do these, but then some people miss them and ask why they aren't being done
- There are now tamer versions of things like equator crossings, much less hazing than they used to be
- Note that parts of these ceremonies are good bonding - eg everyone mixing, ship's crew and science, to make skits for the equator crossing
- It's definitely important that they be optional if they happen at all - people have a chance to sign up but aren't required to participate. Peer pressure may still be a factor.
- UNOLS could hand out a policy. They have anti-hazing policies (?) but somehow these things slip through. They also don't have policies (that we know of) on some things that seem to matter (like berthing). We like the idea of codifying more things.
- Silly hats are endorsed
- Cruises are long, so if you have a cruise that's not going well, how do you still get the science done? If it's a climate issue, not a safety issue that actually requires canceling ops, can we have a 2-page briefing for people to turn to for advice in that situation? How do you reset climate on a boat in a healthy way?
- When to walk away from the end-of-cruise party as CS ("early")
- Wish we'd known that CS has to climb multiple flights of stairs to get to their cabin

What are things you can do as CS/team lead to set the tone?

- All hands briefing first day, CS lays out expectations for cruise, climate expectations, org chart for the ship showing communication channels, who to talk to about what, etc. Or do it on zoom before you leave!
 - What kind of climate briefing/expectation setting things happen is more or less up to the CS at this point - there isn't a standardized procedure except maybe making everyone watch the UNOLS "courtesy, professionalism, respect" video
 - People don't get much out of videos when they're seasick
- Good communication throughout the cruise! Work plans, updates, etc.
- Setting expectations pre-cruise is important for climate
 - Manual for people going to sea for the first time - there are a lot of unstated things, like how science party members should and shouldn't interact with ship's crew, proper channels for communication, what you should and should not do in the mess hall (not eating crew members' special foods, letting people who have work shifts go first, etc.)
 - Code of conduct for people to agree with before a cruise
- Communicate to younger people that no, harassment is not actually a rite of passage at sea. It is in fact NOT normal.
 - We do feel like things have gotten way better. It feels easier to talk to the marine crew even though they are still overwhelmingly male - seems like marine crew are now more accustomed to having women on ships. There are also more women on marine crews.
- Show people the org chart for the ship! Make sure, in particular, that sci people/new people know they shouldn't go to marine crew members directly and tell them they're doing something wrong (unless someone is imminently going to be hurt) - bring concerns to CS who can raise with the captain. Relationship dynamics, chains of command, proper reporting.

- Appoint ombuds people on the cruise? Someone other than CS who people are encouraged to talk to about climate issues. This has been a suggestion, and it's something that the Germans have implemented (one male, one female)
 - Make sure the captain knows this person exists, so that ombuds can go to the captain if, say, the CS is the problem.
- It would be great if NSF had a top-down mechanism for training and/or reporting so that on multi-institution projects we don't have misaligned expectations and we don't always have to reinvent the wheel when it comes to guidelines. Centralize this stuff, especially as NSF is requiring these climate statements

What kind of feedback would you like as CS/team lead?

- On industry ships, daily lab meeting where people submit anonymous cards on things they've seen that are unsafe and everyone discusses them. Not punitive, no names involved, just talking about what the team as a whole can do to improve and be safer. Seen as a negative when there are no cards, because we all know there will be things that aren't perfect.
 - What would the dynamic be like on a research vessel with a science party and a ship's crew? Would there be two separate meetings? Do marine crew already have mechanisms like this in place on their side? Communication with ship's crew should go up through CS to captain and then down, and not laterally from scientist to marine crew
- Ask people about communication that happened during the cruise: how do people want to get information? What forms of communication work for people at sea? Was there enough communication during the cruise?
 - UNOLS vessels are not as good at this as some others - eg German vessels like Polarstern have monitors in literally every space and have a scrolling schedule for the day so you don't have to look at paper printouts and CS can just update that digitally as they go.
 - Opinion expressed that UNOLS vessels don't set the stage for people to be comfortable. German vessels, eg, have real couches (!) and real lounge space with carpet that seem like they actually intend to help you relax. There's insulation and noise suppression. There are structural things we could do to ships that would improve climate on ships and improve communication.
 - Falkor and other Schmitt ships are the other extreme of luxury at sea. We should meet in the middle.
- What happened on the cruise that I (CS) didn't know about?
- Mid-cruise survey?
 - Would be good to have feedback to CS while at sea, and ways to report anonymously so things can be addressed in a timely manner
- Post cruise, it would be nice to have feedback from captain to CS of what they think went well or didn't work, to improve for future cruises

Concluding thoughts

Can we gather a bunch of resources on fieldwork/climate best practices and put them someplace aggregated? WCC site may not be the best place to host, though it could. Marine ops website? We don't need to make all of this up ourselves, much of it exists already and there is even peer-reviewed literature on the subject.