

THE MERKLE RESEARCH GROUP

Vision, philosophy, policies and expectations

Vision

The Merkle Research Group is motivated by 1) a profound curiosity for the natural world, and 2) a realization that innovative policy and management actions are necessary to conserve the biodiversity, ecological processes, and the left over wide open spaces we see in the world today.

Specifically, we strive to make a lasting impact on the field of wildlife ecology and management. To do this, we:

- Ask scientific questions and develop study designs that uncover exciting aspects of wildlife ecology, while providing reliable knowledge that practitioners can use to manage and conserve wildlife and their habitat;
- Broadly communicate these findings to researchers, managers, policy makers, and the public;
- Train leaders in our field.

Philosophy

In general, we treat each other as colleagues. No matter the rank (e.g., undergraduate, graduate student, postdoc), each of us has research and/or life skills that others likely do not. We are all expected to realize this, and respect each other accordingly. Likewise, harassment or misconduct (as outlined in [University of Wyoming's student code of conduct](#)) of any kind will not be tolerated. UW resources for reporting such behavior can be found [here](#).

Similarly, we contribute to fostering a team environment. Although each of us is expected to work independently, none of us ever work alone. Thus, we frequently talk to each other about science, ask each other for advice, and help each other out – but never ‘tell’ each other what to do.

Uncovering exciting aspects of wildlife ecology and providing reliable information involves digging deep into every research question we ask. Research conducted in our Group involves: 1) testing every prediction of a hypothesis possible, 2) examining the same question from several different angles, and 3) implementing numerous statistical and modeling techniques to verify our results are robust. In other words, we push the limits of our research, we take risks that might lead to novel and useful discoveries, and we question and think critically at every step of the research process.

We conduct science with integrity (see Nature's [scientific integrity statement](#)) and with a positive attitude. Failures and mistakes are common in science, but a negative attitude is unacceptable – especially if it effects the morale or reputation of our Group.

Finally, we realize our work is a service to the animals and habitats we study. Thus, we are passionate about our work, meaning that we take our work seriously, work hard, and act in a professional manner.

Policies and expectations

Collaboration. To be successful, we must collaborate with a multitude of partners including regional and federal land and wildlife management agencies and non-governmental organizations. Because we produce reliable knowledge that practitioners can use to manage and conserve wildlife, these relationships are very important and must be prioritized. Each member of our Group has their own specific collaborators with respect to their project, and thus each collaboration is an essential component of a larger network of collaborations within our Group.

Communication (with collaborators). A key aspect to effective collaboration is communication. Members of the Group expected to keep their collaborators (which includes Jerod Merkle) in the know with their research progress. The “got it, thanks” mantra is the first step to communicating with colleagues properly. If a collaborator sends suggestions for how to conduct field work, comments on a manuscript, or anything, the first thing we are expected to do is respond with “got it, thanks.” Without adhering to this simple mantra, collaborators that receive a “no response” will most likely think the worst. They may think they have been ignored or their input is not appreciated. Without responding with a quick phrase telling a collaborator that their message was received, there is a risk of losing trust and respect, which are the building blocks of effective collaboration.

Communication (within our Research Group). Open and honest communication is central to success of any team. Each member of the Group is expected to be aware of, and communicate to Jerod Merkle, what is needed to be happy and feel fulfilled. For example, it is up to members of the Group to notify Jerod Merkle if there are lab components (e.g., computers, chairs, desks, etc.) that are needed. Other important communication includes being open about one’s level of stress and work load. The Merkle Research Group does not tolerate a culture of silence, and will facilitate open and accessible conversations about mental health and other personal matters of concern. UW resources in regards to mental health can be found [here](#).

Time in the lab. We respect that everyone has a different work ethic and life circumstances. There are no set rules for when to be in the lab; however, working together in a shared space fosters a team environment. Common sense should serve to define reasonable minimum standards for time in the lab. Being in the lab while you work during normal business hours is the expectation. Special circumstances (e.g., working from home) are potentially acceptable, but must be discussed with Jerod Merkle.

Vacation. Although being productive requires hard work, dedication, and thoughtful planning and design, everyone needs a break at some point. Staying healthy with regards to physical and mental well-being and family is important, and taking time off is supported. There are no set rules for how much vacation one can or cannot take. Each of us are expected to ask themselves if time off will interfere with their productivity, research goals, and timeline. If time off will be taken, Group members must notify Jerod Merkle when the vacation will occur.

Weekly meetings. As noted before, effective collaboration stems from communication of progress. It is expect that each member of Group meet with (or update) Jerod Merkle on a weekly basis. If a group member is in the field, weekly updates are expected. In addition to updates on progress, these weekly meetings provide an opportunity to ask questions and obtain consistent feedback. These meetings also provide an opportunity for alternative research avenues to be discussed – particularly if current ones do not appear to be fruitful or result in exciting ecological discoveries or reliable knowledge for practitioners.

Data. Data collected as a part of the Merkle Research Group will always be backed up on a cloud-type system (e.g., box.com). Data that we use in collaboration with other entities will: 1) only be used for the work agreed upon by the collaborator, and 2) never be shared with a third party unless there is written consent from the data owner.

Mentoring plans. Each graduate student (not for post-docs) in The Merkle Research Group will be expected to work with Jerod Merkle to develop a mentoring plan within the first month or so of starting graduate school. This exercise is essential to agreeing on expectations of each other, and how the graduate program and work will unfold. This document serves as a means to assess productivity and success. This document will also be updated, if necessary, every 6 months. Students are expected to take the lead in developing the plan and keeping it updated. Mentoring plans include: 1) what you can expect from me; 2) your goals (short-term, long-term, research and career); 3) milestones (i.e., when to expect parts of your research to be completed); 4) a plan of attack; 5) publication plans; 6) funding; 7) conference and outreach plans; and 8) courses.

Publishing. Members of the Merkle Research Group are expected to publish their research in top-tiered ecology and applied ecology journals. Graduation paperwork will not be signed until $\geq 50\%$ of the chapters are published or submitted in the peer-review literature. For example, if a student has 2 chapters, 1 of them must be submitted or published prior to graduation. If a student has 3 chapters, 2 of them published or submitted before graduation. Under certain circumstances this expectation can be changed, but the student must work with Jerod Merkle to agree on alternate expectations at least 6 months before the student's graduation date.

Presentations. Graduate students are expected to present their work at professional conferences and, in some cases, at other venues such as local conservation groups, and informal funder or collaborator meetings. Presentations must be practiced in front of Jerod Merkle prior to presenting anywhere or to anyone.

Lab meeting. It is expected that members of The Merkle Research Group organize a lab meeting each week. There are many benefits to having a lab meeting, which include: 1) developing your scientific mind; 2) thinking more broadly than your own research topic/question and ecosystem; 3) learning how to engage in productive conversations about science; 4) helping each other think through each other's (and others outside our group's) research; and 5) making sure we are all moving forward with our projects. The bottom line here is that we are a research team. Each member's input, expertise, and past experience are valuable contributions to our individual and collective efforts. These meetings bring us together physically and provide a good space for us to help each other out.

Department and other Seminars. Each of us are expected to attend all Zoology and Physiology department (including Brown Bag) and Program in Ecology seminars. There will never be a better opportunity to learn about cutting edge research than now. If the subject is not of interest, then watch the seminar with an eye towards effective and ineffective methods to deliver a presentation.