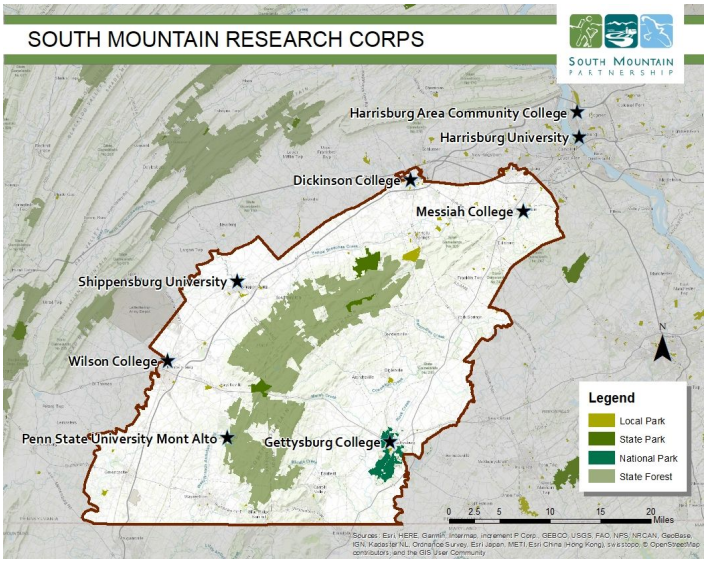
RESEARCH CORPS & SCIENCE SUMMIT

SOUTH MOUNTAIN PARTNERSHIP

May 2019 UPDATE

The South Mountain Partnership, the Pennsylvania Conservation Landscape Initiative located in south central Pennsylvania, launched the **South Mountain Research Corps** during an Inaugural **Science Summit** in April 2019.



The South Mountain Research Corps & Science Summit is envisioned as a program that is managed by a volunteer working committee, comprised of stakeholders from throughout the region (landowners, land managers, academic institutions, and researchers) who will assist the South Mountain Partnership in direct management and steering of the program.

The South Mountain landscape offers an intrinsically valuable, yet underutilized asset for place-based research and applied education. Establishment of the South Mountain Research Corps & Science Summit will encourage placed-based research and applied education within this intrinsically valuable landscape by:

- Providing researchers, at all educational levels, insight on the real challenges and questions experienced by land owners and land managers;
- Providing land owners & managers access to high quality research that answers their site specific land use and management issues; and
- Empowering student research to inform land stewardship within the South Mountain landscape.

SMRC endeavors to build an implementable, collaborative research program that supports the existing and emerging natural and cultural resource conservation efforts of land owners and land managers throughout the South Mountain landscape.

Core Projects

- ***Bi-annual South Mountain Science Summit*** - This venue is envisioned as one that celebrates and shares information from successful research collaboration and builds a more collaborative network of property owners; land managers; researchers; university students; colleges; land trusts; local, state, and federal agencies; and non-profit organizations operating in, or interested in operating within, the region. The Summit provides attendees the opportunity to access people and organizations they would not otherwise have access to, as well as to identify collaborative research opportunities and specific research projects;

- ***Research Database*** - Decades of research has taken place throughout the South Mountain landscape but it is difficult to understand what research was completed and how to access the research reports and data. The database project works to compile and manage a real-time list of 1) completed research that has taken place throughout the South Mountain landscape region, and 2) a list of new research project needs provided by volunteer land owners and land managers so that students, researchers, land managers, and land owners may access and build upon that work.

- ***Annual Research Corps and Research Awards***- The Research Corps offers to students experiential research opportunities located throughout the South Mountain region through research collaborations among three parties: an engaged property owner or land manager, an enthusiastic student researcher, and a supportive research expert. A team (student, researcher, and property owner or land manager) may apply to be part of the program by proposing to research a project that originated through the South Mountain Research Corps & Science Summit program. Research Awards will be provided to approved projects to help facilitate the project.

Get Involved

While South Mountain Partnership will continue to convene and facilitate the South Mountain Research Corps & Science Summit, the program's quality and success also depends on engagement from landowners, land managers, students, researchers, academic institutions, non-profits, and agency partners. ***We need you to consider how you can directly participate in helping to form and build this worthwhile program that benefits people and organizations who steward the land throughout the South Mountain landscape - our young people, property owners, researchers, land managers, academic institutions, + more!***

	Property Owners	Students	Land Managers	Researchers	Academic Institutions	Non-profits & Agencies	Businesses
Submit Land management questions	x		x			x	x
Volunteer to host research on your property	x		x		x	x	x
Submit previously conducted research		x	x	x	x	x	
Become part of a Research Team	x	x	x	x			
Serve on the Research Corps Committee	x		x	x	x	x	x
Sponsor this Program	x		x		x	x	x
Introduce us to your supervisors & colleagues		x	x	x	x	x	x
Introduce us to your neighbors & community	x	x	x		x	x	x

PARTICIPATE IN PILOT RESEARCH CORPS PROGRAM (2019-2020)

Over the next year, we will facilitate a pilot research program to support 2 - 5 research projects. We anticipate learning and refining the program based upon what we learn along the way, including the real on-the-ground needs in the region and logistical considerations. Potential research questions identified at the 2019 South Mountain Science Summit include:

- How do trail racing events impact streams in Michaux State Forest?
- What land management techniques improve songbird habitat?
- What is the land use and cultural history of my 100 year old cabin and how do I steward it?
- How can wetland function improve on my property?
- How might drones improve an understanding of songbird behavior?

EXPAND SMRC PARTNERSHIPS

We hope the inaugural Science Summit catalyzed conversations among landowners, land managers, researchers and students and we know the success of the program relates to the strength and size of our network.

CONTRIBUTE TO PROJECT DATABASE

One goal of SMRC is to improve communication among researchers by providing a database of previous work and venue to collaborate. Let us know what work you have done in the region!

CONTACT US!

We are eager to share the SMRC vision with landowners, land managers, and researchers.

- Share this summary with your neighbors, colleagues, and/or associates
- Invite us to present at your next department or organization meeting
- Contact the Center for Land Use and Sustainability (CLUS@ship.edu; 717-477-1509) to learn more and see how you can get involved!

INAUGURAL SCIENCE SUMMIT SUMMARY (April 11, 2019)

The inaugural Science Summit focused on building connections between **Landowners & Land Managers** (private and public) and **Researchers** (academic institutions, university students and partners, conservation organizations and partners). These connections are the foundation for building an implementable program that considers land management logistics as well as academic institution capacity.

WHO ATTENDED?

The invitation to the summit was shared through land trusts, County Conservation Districts, farmland preservation programs, and additional partners of the South Mountain Partnership. Of the attendees, 9 represented land and 11 represented researcher (8 professors, 3 students) interests. Many others expressed interest in the summit, but schedule conflicts prevented their attendance.

WHAT OCCURRED?

At our first Science Summit, it was all about listening and sharing. First, we shared the results of our preliminary survey (March 2019). Based upon input of 33 respondents, the survey results outlined research interests and needs, as well as research capacity. We facilitated two breakout sessions. The first breakout separated property owners and land managers into one group and researchers and students into another group to discuss concerns, logistical considerations, interests, capacities, and schedule restrictions. The second breakout offered all attendees a venue to connect based upon mutual research interests, initiating conversations about potential project ideas and project feasibility.

WHAT ARE CURRENT RESEARCH INTERESTS?

Landowner & Land Manager Interests

Challenges for all landowners, regardless of ownership type (public, private, NGO), include natural resource management (such as deer browsing, invasive plant species, and forest health). Private landowners are interested habitat development for game and nongame (i.e. song birds) species. Public land managers are challenged by the impacts on natural resources by diverse forms of recreation. Additionally, private land owners/managers struggle with finding expertise and guidance about the cultural or natural resources on their land.

Researcher Interests

Researchers are interested in learning about the needs of landowners and managers and open to diverse project ideas and needs. Their research interests include understanding foraging communities, evaluating plant species ranges, mapping songbirds, use of drones for terrain analysis, connecting land with public health, and evaluating wildlife population movement & connectivity.

WHAT ARE POSSIBLE BARRIERS OR CONCERNS FOR PROGRAM DEVELOPMENT?

Landowner or Land Manager Considerations

Historically, research performed on state managed lands has been driven by the researcher. Both public and private land owners/managers are concerned that research focus could shift away from their original question or need.

Researcher Considerations

Researchers and students noted a lack of background knowledge about previous research makes it challenging to develop new projects and ideas; they supported the development of a research database and/or communication network. Institutions are in need of funds to support research expenses (equipment, mileage, transportation), and in some cases, student stipends.

WHAT ARE THE LOGISTICAL CONSIDERATIONS?

Landowner and Land Manager Logistics

State managed lands such as State Forests and Parks have well-established protocols for performing research on public lands. Private landowners were interested in an initial site visit with the student & researcher to allow review of site specific concerns. All land owners requested a courtesy call prior to subsequent visits. We anticipate developing an agreement sheet that ensures all team members are aware of expectations.

Researcher Logistics

Most institutions focus on undergraduates; therefore, research projects fall into two categories: large researcher-driven projects divided into manageable short-term (semester long) student project; and student-driven research conducted over the course of a year (two semesters) to develop a proposal, collect data, and present results. Some professors are able to incorporate a research question into class curriculum to involve multiple students.

Based upon an assumed 12-month research cycle, hosting future summits on a Saturday in late April to early May would allow students to share completed research during the school year while accommodating busy landowner and researcher schedules. Requesting new research proposals directly after the Science Summit would maintain program momentum as well as capture new projects and connections generated by the Science Summit.

Next Steps

- **May**
    - Follow-up on potential research projects identified at April Science Summit and develop specific research questions;
    - Follow-up with Researchers for interest, availability, student recruitment
- **June-July**
    - Research Corps Committee Meets (contact us if you are interested in attending)
    - Begin development of Research Database

    - Outreach to Land Managers and Non-profits regarding contacting their landowners for project needs
- **August**
    - Begin adding research questions to database
    - Initiate Research Projects(develop requirements, research proposal, funding requests, grant awards)
    - Formalize South Mountain Research Corps Committee (contact us if you are interested in serving)
        - Research team land access agreement
        - RFP and Selection process
        - Funding requests
        - Seed money, fund initial meetings
- **September - December**
    - Monitor research projects
    - Continue building database
    - South Mountain Research Corps Committee meeting (contact us if you are interested in serving)
    - Develop funding