

MtnClim 2018 Workshops / Research Tours					
				bbcc = billy barr community center	
Wednesday, September 19, 2018, 1:10 PM - 3:00 PM, up to 20 participants can register					
	Name	Email	Title	Description	Location
1)	John Harte	jharte@berkeley.edu	Warming Meadow Experiment Research Tour	John will lead a 1.5 hour walking tour for up to 20 well-behaved visitors of his long-term 28 year ecosystem warming experiment at RMBL. Design, background, hypotheses, findings and implications to-date will be discussed. The site is about a 15 minute walk from the billy barr community center.	meet outside bbcc to walk to Warming Meadow
2)	Jennifer Reithel	sd@rmb.org	Tour of RMBL Research Center and Natural History Building	We will tour RMBL's modern research center, which has a variety of equipment and work spaces. Rooms include a sample processing room, GIS office, Precision Techniques Room, and Wet Lab. For those who are interested, we will continue the tour to the Natural History Building, which holds the RMBL Herbarium, Insect, and Vertebrate collections.	meet outside bbcc to walk in Gothic
3)	Rick Horn	store@rmb.org	An Rocky Mountain Biological Laboratory Science and History tour of the Gothic town site	A one-hour town site tour featuring RMBL science research & education, plus the history of our mining town founded in 1879, led by a Visitor Center Interpretive Guide.	meet outside bbcc to walk in Gothic
4)	Scotty Strachan	scotty@dayhike.net	Sensor networks for hydroclimate: best practices in deployment	Sensor hardware is becoming affordable, but total expense and quality/usefulness of data depends on how the system is implemented in the field. This short workshop gives an overview in best practices for power supply, communication, and deployment hardware to reduce downtime and expensive site visits.	Inside Main Hall of bbcc
5)	Lara Kueppers	lmkueppers@berkeley.edu	GLORIA at MtnClim	GLORIA is a global observation network for the comparative study of climate change impacts on mountain communities. Join us to learn about GLORIA sites in western North America with MtnClim researchers involved in this long-term research effort focused on alpine plant species.	Upper Barclay Classroom East
6)	Stu Weiss	stu@creeksidescience.com	Making the most of the revolution in small temperature loggers: Science questions, network deployment, data analysis, and modeling.	This workshop will draw on more than 10 years experience deploying and analyzing data from inexpensive temperature loggers of various types. Topics will cover developing key science questions, deployment strategies, data management and analysis, and spatial and temporal modeling of results.	Upper Barclay Classroom West
7)	Elizabeth Burakowski	elizabeth.burakowski@unh.edu	Climate Change and Winter Recreation: Engaging the winter sports community in climate action and advocacy	The multi-billion dollar winter recreation and tourism industry is particularly vulnerable to the impacts of climate change. The Boulder-based non-profit, Protect Our Winters has led the charge in engaging the outdoor industry in educational initiatives, political advocacy and community-based activism. The POW Alliance includes a community of professional athletes, artists, and scientists who advocate for climate action and solutions. Liz Burakowski has been working with POW since 2010 on a variety of projects and has served on the POW Science Alliance since 2016. Most recently, Liz co-authored an updated economic report, <i>Economic Contributions of Winter Sports in a Changing Climate</i> . In this workshop, we'll exchange knowledge and practices for engaging winter recreation stakeholders, discuss existing and developing adaptation strategies, and talk about the role of POW in potential broader impacts projects. We'll also be joined by polar explorer and POW Rider's Alliance representative, Eric Larsen, who will share his experiences in education, outreach, and advocacy work.	TBD based on signups

8)	John All	John.All@wwu.edu	What skill are needed for the next generation of mountain researchers?	Western Washington University has created a new Mountain Environments Research Institute with the goals of facilitating interdisciplinary mountain research and of training students to do research in remote and mountainous environments. As we develop our strategic goals and seek partners, we are constantly refining the curriculum that we offer students. This workshop is intended to pull together relevant stakeholders – students, university scientists, agency personal, and others – in order to discuss what specific knowledge and skills that you look for when choosing employees or interns; what skills you think are critical for the next generation to possess as they enter this exciting and challenging discipline.	TBD based on signups
9)	Julia Klein	jklein.csu@gmail.com	Innovations for Sustainability in the World's Mountains	Our goal is to explore and discuss successful innovations towards mountain sustainability. We hope that workshop participants will bring examples and/or ideas of these types of innovations. Examples could include: (1) new applications of traditional and emerging science and technology in mountains; (2) novel partnerships, such as responsible, equitable public-private enterprise and citizen science approaches; and (3) innovative knowledge-with-action processes that promote better policies and public engagement. We welcome examples from all different mountain regions of the world. Come and share your ideas and/or experiences on this topic!	TBD based on signups

MtnClim 2018 Workshops / Breakouts					
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Friday, September 21, 2018, 8:00 AM - 11:50 AM, up to 20 participants can register					
	Name	Email	Title	Description	
1)	Ian Breckheimer	ian_breckheimer@fas.harvard.edu	Wiring RMBL: Design and Implementation of a Microclimate Monitoring Network for Rocky Mountain Biological Lab	High-fidelity spatial predictions of microclimate and snow cover dynamics could dramatically advance the ability of researchers at Rocky Mountain Biological Lab to address landscape- and watershed-scale questions. In this workshop, RMBL researchers and others will set priorities for this work and develop a strategy for data collection, synthesis, and distribution.	bbcc Boardroom
2)	Imtiaz Rangwala, Renée Rondeau & Marcie Demmy-Bidwell	imtiaz.rangwala@colorado.edu Renee.Rondeau@colostate.edu marcie@mountainstudies.org	Identifying Climate Refugia in the Spruce-Fir Ecosystem: Connecting Modeling Outputs with Field Characteristics and Managers Needs in the Upper Gunnison Basin	In this workshop we will build off of a four-year stakeholder driven project to identify climate change adaptation strategies in different social-ecological landscapes in Southwest Colorado. One of the leading adaptation strategies that came out of this process was to identify, protect, and manage climate refugia within the Spruce-Fir ecosystem. While we have high confidence in this high-level strategy, we find that managers seldom have enough fine-grained information to incorporate this strategy into their management plans. During the workshop, we will present mid-21st century projections of ecosystem response in the spruce-fir region around Gothic based on bioclimatic envelope modeling; hear from local USFS managers; and foster a discussion on identifying and characterizing climate refugia on a landscape while visiting a site. Our field trip will facilitate field-based identification of potential climate refugia sites as well as descriptors for resiliency within a site. Our goal is to connect local USFS managers with climate specialists to further develop useful and actionable material for managers. We will discuss topics that are associated with managers' needs that range from the use of models to the need for on-the-ground identification characteristics that may bring greater confidence to the managers' plans.	bbcc Main Hall