**Challenges of whitebark pine restoration: issues and solutions**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Start | End |  |  |  |  |  |  |  |  |  |  |  |  |
| ***September 19, 2013 (USFS RMRS Bozeman Lab conference room MSU campus)*** |
| 9:30 | 18:00 |  | **Whitebark Pine Ecosystem Foundation Board of Directors Meeting** |
| ***September 20, 2013 (Strand Union Building, SUB Ballroom B)*** |
| 8:00 | 8:10 |  | **Welcome – Dave McWethy, Diana Tomback** |
| 8:10 | 8:30 | **Paleoecology of whitebark pine and wildland fire – Cathy Whitlock MSU** |
| 8:30 | 8:50 | **Challenges, Issues, and solutions for wilderness whitebark pine restoration -- Dan Reinhart, National Park Service** |
| 8:50 | 9:10 | **An incidental Holocene history of whitebark pine and grizzly bears– Dave Mattson** |
| 9:10 | 9:30 | **Genetic concerns for restoration – Mary Frances Mahalovich, US Forest Service**  |
| **9:30** | **10:00** | **Break** |
| 10:00 | 12:00 |  | **Restoration and Management (Jenkins)****SUB Ballroom D** | **Research and Development (Cathy Cripps)****SUB Breakout room 233** |
| **10:00-****10:20** | ***David Gonzales*** *TreeFight--* The realities of citizen science in the forest and on the ground | ***Brytten Steed*** *USFS Forest Health Protection Missoula MT*- Insect pests of whitebark and limber pine |
| **10:20-****10:40** | ***Karl Buermeyer*** *Bridger Teton National Forest-* Planning and Implementing Whitebark Pine Protection and Restoration Efforts in the Greater Yellowstone Ecosystem | ***Signe Leirfallom*** *USFS RMRS Fire Lab Missoula, MT--* Seed source impacts on whitebark pine regeneration dynamics |
| **10:40-****11:00** | ***Cara Nelson*** *Univ Montana, Missoula, MT-*CFLRP whitebark pine restoration monitoring | ***Blakey Lockman*** *USFS Forest Health and Protection, Missoula MT-* Hi5Db: An Online Database for High Elevation White Pines; the New WLIS |
| **11:00-****11:20** | ***Anton Brennick*** *Beaverhead Deerlodge NF-* Barker Lake tree thinning project | ***Phil Farnes*** *and Stewart*-Relating Climatic Data to Whitebark Pine Cone Production in the Custer National Forest, MT |
| **11:20-****11:40** | ***Melissa Jenkins*** *Flathead National Forest Kalispell, MT--* Whitebark Pine Restoration on the Flathead National Forest | *Lonergan,* ***Cathy Cripps*** *and Smith*-Effect of terra-torching, microsite, and inoculation with native ectomycorrhizal fungi on early survival of whitebark pine seedlings planted in Waterton Lakes National Park |
| **11:40-****12:00** | ***Michael Murray*** *BC Forest Service Nelson BC*-Whitebark pine conservation in the Canadian Kootenays | ***Charlie Cartwright*** *Cowichan Lake Research Station Mesachie Lake BC-* Whitebark pine screening for blister rust resistance |
| **12:00** | **13:00** | **Lunch** *(Get lunch on your own )* |
| 13:00 | 15:00 |  | **Restoration and Management (Liz Davy)****SUB Ballroom D** | **Research and Development (Smith)****SUB Breakout room 233** |
| **13:00-****13:20** | ***Erin Shanahan****--* Monitoring trends in health and status of whitebark pine in the Greater Yellowstone Ecosystem (GYE): A trend report from 2004-2011*.* | ***Brenda Shepherd****, Cyndi Smith, David Langor, Waterton Lakes National Park, Waterton, AB Canada*.--Change in blister rust infection in whitebark and limber pine in Canada over time |
| **13:20-****13:40** | ***Jane Smith*** *USFS RMRS Fire Lab Missoula, MT*. Five needle pines in fire education | ***Diana Tomback*** *et al, Univ. Colorado, Denver CO*.- Whitebark pine as a tree island initiator: understanding its role in facilitation |
| **13:40-****14:00** | ***Glenda Scott*** *USFS Northern Region Missoula, MT*. Planting whitebark pine in the northern region: successes, guidelines, and recommendations | ***John Schwandt*** *USFS Forest Health and Protection Coeur d’Alene ID*-Does natural whitebark pine regeneration stand a chance? Results of monitoring blister rust and competing vegetation in five northern Idaho sites from 1995 to 2012 |
| **14:00-****14:20** | ***Ian Houseman****, Redcastle Resources—*Whitebark pine map of the Flathead | ***Clay DeMastus****, Montana State University*-Regenerating Whitebark Pine through Direct Seeding in the Northern Rockies |
| **14:20-****14:40** | ***Linda Vance****, Melissa Hart, Univ Montana—*Mapping whitebark pine mortality and regeneration in southwest Montana forests | *Wally Macfarlane and Jesse Logan*-Field-based documentation of whitebark pine decline in the Beartooth and Absoroka Mountain ranges |
| **14:40-****15:00** | ***Steve Shelly*** *USFS Northern Region Missoula MT-*Framework for project design and effects analysis for the restoration of whitebark pine as a sensitive species | ***Regan Nelson*** *et al*., *Montana State University, Bozeman, MT.* Informing implementation the GYA WBP Strategy based forecasting WBP response to future climate |
|  |  |  | **15:00-****15:20** | ***Andrew Hansen****, Tony Chang, Nate Piekielek,  Montana State University, Bozeman, MT* – Whitebark pine distribution model projections under future possible climates in the GYA.  | ***Elizabeth Pansing****, A. Wagner, and D. Tomback Univ Colorado Denver CO-*Role of microsite type, cache pilferage and elevation in whitebark pine regeneration in the northern Rocky Mountains: Implications for restoration and climate change |
| **15:20** | **15:50** |  | ***Break*** |
| 15:50 | 17:00 |  | **Meeting Challenges with Solutions: an interactive panel****Moderator: Bob Keane****Diana Tomback, Randy Moody, Linda Merigliano, Barry Bollenbacher** **SUB Ballroom B**  |
| **17:00** | **18:30** |  | ***Cash Bar and Heavy hors d'oeuvres*** |
| 18:30 | 20:30 |  | ***Public Session: Saving the whitebark pine*****Silent Auction 6:30-8:30 (Laura DeNitto): Bid on foundation merchandise, books, arts, crafts, nostalgia****Hosted social 6:30-7:30 (Liz Davy and Helen Smith): Celebrate with appetizers and no-host bar****Presentation at 7:30(Tomback, Davy, Westerhold): Whitebark pine in peril: what can be done?****SUB Ballroom B** |
| ***September 21, 2013 (Meet in MSU SUB parking lot)*** |
| 8:00 | 5:00 |  | **Field trip to Fairy Lake (Kirk and Beth Horn)****Meet at USFS RMRS Bozeman Forestry Sciences Lab at 8am** |
| ***September 22, 2013 (Meet in MSU SUB parking lot)*** |
|  |  |  | **Optional Field Trip to Beartooth Highway****(If we get more than 6 people to sign up)** |