# SBEADMR Pre-treatment Field Trip Notes

## Muddy Aspen Timber Sale, Paonia RD 8/12/2022

### SBEADMR Updates

#### Fuels

On the East Zone, the Coldsprings Rx fire checklist was completed early this summer and is slated to be burned this fall (up to 1500 acres aspen regeneration). This will be the first prescribed fire under SBEADMR NEPA

#### Timber

Moving forward, more sales may need to move to winter logging operations due to resource concerns – may see more conflicts with winter recreation. Interested in AMG thoughts on ways to deconflict this

#### AMG/Process updates

In May, GMUG Forest Leadership Team (FLT) reviewed and made decisions based on AMG recommendations for changes to SBEADMR. Results of that review have been shared with the AMG email list. The biggest change this year was the update of the checklist to allow for use of tethered cut-to-length equipment on slopes up to 60%; we really appreciate everyone’s engagement in that process.

### Muddy Aspen Stop

#### Area History and Overview – Levi Broyles

* In 1905 the Battlement, Grand Mesa, and Gunnison National Forests were designated.
* Much of the Grand Mesa burned in 1879 (big fire year in general)
* The corridor that we will travel today (265 and Stevens Gulch Rd) is one of the main areas of timber management focus on the Paonia RD.

#### Forest Health Update – Brad Lalande

* Most pathogens that occur on the GMUG NF are native; in many stands we see “normal” background mortality of up to 5%. Additionally, many insect populations, especially defoliators and bark beetles (mountain pine beetle, spruce beetle, and roundheaded pine beetle) have periodic outbreaks where they cause higher levels of mortality.
* Recent high wind events demonstrated the extent of root disease (specifically Armillaria root disease); these diseases are ubiquitous in most forests but become evident when we see it on the root ball of a down tree.
* Recent spring/summer moisture in 2021 and 2022 exacerbated needle casts in Gunnison area/SW Colorado forests, as foliar pathogens thrive following wet years.
* Western spruce budworm has been chronic in Colorado for the last ~20 years. This is concerning because it is normally cyclical (7-8 years on, 20-30 years off). WSB doesn’t usually kill trees, but it can; makes trees susceptible to other diseases.
* Not yet sure of the effects of the big 2019 avalanche cycle on spruce beetle; beetle populations spurred by those down trees would have flown in 2021, and new areas of SB mortality will show up on this summer’s (2022) Aerial Detection Survey flights.
* White pine blister rust (non-native) is now known to occur on the San Juan NF; not yet found on the GMUG but it’s only a matter of time.

#### Sudden Aspen Decline (SAD) – Brad Lalande

* Sudden aspen declines (SAD) is described as landscape level rapid branch dieback, thinning, and mortality of aspen.
* The 2004 rapid mortality in Colorado’s aspen forests was preceded by an extreme drought event in 2002. Initial research suggested that the rapid mortality was attributed to a complex of secondary agents including Cytospora canker, aspen bark beetles, poplar borer, and bronze poplar borer (Worrall et al., 2008; Marchetti et al., 2011). These agents in combination with predisposing (stand maturity, low density, southern aspects and low elevations) and inciting (drought in conjunction with high temperatures, i.e., 2002 conditions) factors have resulted in widespread aspen mortality that is referenced as sudden aspen decline (Worrall et al., 2008; Worrall et al., 2010).
* Forest Health Protection (FHP) established SAD monitoring plots in the early 2000s, and revisited many on the San Juan NF and the GMUG this summer. Overall, SAD affected aspen stands are showing good aspen regeneration, though lower elevation aspen stands on south or southwestern aspects may fully convert to shrubland as a result of SAD mortality.

#### Muddy Aspen Treatment Objectives, Prescriptions, and Design Features - Christie LaDue & Valerie Horncastle

* 176 acres to be treated with coppice cuts
* Leave 10-20 tons/acre of slash
* Objective is to remove some older aspen to spur regeneration; develop mosaic of age & size classes
* Treatment sizes will be at least 30 acres to overwhelm ungulates
* Reserve islands for redtail hawk; purple marten colonies in/near the project area have been mapped
* Timber projects buffer riparian, wetland, and fen areas
* Situate skid trails and landings to minimize impact to regeneration

### Terror Creek Stop & Science Team Updates

#### Jason Sibold

* Since the February meeting, we’ve done some updates on the landscape-scale dense horizontal cover model for the GMUG, and it is ready to use.
* This model is useful as a hypothesis and guide, but not the end-all answer to lynx habitat.
* Will be helpful to compare results of this model with Squires & Ivan approach; they are coming at this question from a different angle.

#### Mike Battaglia & Kevin Barrett

* Terror Creek Applied Silvicultural Assessment was designed to look at the impacts of coppice cuts on aspen stands with different levels of SAD impact. Study design and initial sampling led by Dr. Wayne Shepperd (now retired from RMRS) in partnership with Paonia RD.
* CFRI crew (under Kevin’s leadership) resampled these plots this past summer – results will be ready to share at February 2023 SBEADMR meeting.
* Initial observations show that treated plots show greater stems/ac than control plots; control plots have more of a groupy/clumpy pattern of aspen regeneration
* Some newer papers coming out looking at genetic diversity in aspen (both genotypic and cytotypic/ploidy) and potential implications for aspen management and adaptation to climate change; consider seed sources in aspen management (leave patches for raptors may cover this in some cases)

#### Jarod Dunn

* Beginning work on a case study on SBEADMR & the AMG. More info to come on that.

# Attendee List

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| --- | --- | --- |
| **Name** | **Affiliation/Interest** | **Position** |
| **Forest Service Staff** |  |  |
| Levi Broyles | Paonia Ranger District | District Ranger |
| Valerie Horncastle | Paonia Ranger District | Wildlife Biologist |
| Brad Lelande | Forest Health Protection | Forest Pathologist |
| Amy Lockner | Forest Health Protection | Forest Entomologist |
| Christie LaDue | West Zone Timber | Forester |
| Carlyn Perovich | GMUG SO | Forest Ecologist |
| Gina Rone | GMUG SO | Soil Scientist |
| Lauren Traylor | GMUG SO | Watershed Technician |
| Adrianna Weickhart | GMUG SO | Renewal Resource Staff Off |
| Sean Ferrell | GMUG SO | Renewable Resources Staff Officer |
| Matthew Vasquez | GMUG SO | Wildlife Program Manager |
| Bryan Gaines | GMUG SO | Deputy Fire Staff Officer |
| Kate Vassal | Paonia Ranger District | Rangeland Mgmt Specialist |
| Lacie Allen | Paonia Ranger Distrct | Rangeland Intern |
| Tony Edwards | GMUG SO | Deputy Forest Supervisor |
| Josh Schutz | Ouray Ranger District | Timber Crew Lead |
| Casey | Ouray Ranger District | Timber Crew |
| **SBEADMR Science Team** |  |  |
| Mike Battaglia | Rocky Mt Research Station | Research Forester |
| George Woolsey | CO Forest Restitution Inst. | CSU Student/GMUG intern |
| Jason Sibold | Colorado State University | Associate Professor/Geography |
| Brynn Colby | Colorado State University | Student |
| Kevin Barrett | CO Forest Restitution Inst. | Forest Inventory Program Specialist |
| Jarod Dunn | CO Forest Restitution Inst. | Research Associate |
| **Other Attendees** |  |  |
| Craig Grother | Wildife/Fisheries | AMG Member |
| Chris Jauhola | Environmental/Conserva | AMG Member/Monitor Com |
| Robin Nicholoff | Environmental/Conserva | AMG Member |
| Justin Musser | Montrose County | AMG Member |
| Molly Pitts | Intermtn Forest Assn | AMG Member/Monitor Com |
| Tim Kyllo | Montrose Forest Products | AMG Member |
| Enno Heuscher | Environmental/Conservation | AMG Member |
| Hilary Cooper | San Miguel County Commissioner | AMG Member/Monitor Com |
| Cindy Dozier | Hinsdale County | Interested Citizen |
| Josh Hansen | Montrose Forest Products | Forester |
| Joe Lovarini | Nat'l Forest Foundation | Stewardship Coord/Gunnison Cty |
| Mason Osgood | Sheep Mountain Alliance | Director |
| Peter Hart | Wilderness Wkshp/Carbondale | Attorney |
| Chris Cox | Crawford Landowner | Interested citizen |
| Eli Smith | High County Conservation Advocates | Stewardship Director |
| Dave Sitton | Aspen Wall Wood - Dolores | Owner/Operator |
| Peter Morin | CO State Forest Service | Forester |
| Dylan Elmery | CO State Forest Service | Forester |
| Kamie Long | CO State Forest Service | Forester |
| Trevor Lawrence | CO State Forest Service | Intern |
| Jodi Rist | CO State Forest Service | Supervisory Forester |
| Jeff Rainey | CO State Forest Service | Forester |
| Tanya Banulis | CO State Forest Service | Forester |
| Sam Pankratz | CO State Forest Service | Forest Program Specialist |
| Ben Katz | West Slope Conservation Ct | Public Lands Program Director |
| Alison Elliot | West Slope Conservation Ct | WSCC Public Lands Comm |
| David Shishim | West Slope Conservation Ct | WSCC Public Lands Comm |
| Russ Zuck | West Slope Conservation Ct | WSCC Public Lands Comm |
| Melisa Flower | West Slope Conservation Ct | WSCC Public Lands Comm |
| Susan Hansen | SBEADMR Project | Meeting Facilitator |