



Loess Hills Cooperative Burn Week 2023 Post-Event Summary

The Loess Hills Fire Partners held the 8th Annual Cooperative Burn Week from April 24th- 28th. This event provided an opportunity to join with partners to achieve fire management in an area where additional skills and resources were needed to accomplish the work at a landscape scale. It was also an opportunity to build relationships with partners, share knowledge and skills, and work within a more complex organizational structure utilizing an expanded Incident Command System.

The Cooperative Burn Week was based at the Iowa DNR Loess Hills State Forest in Pisgah, Iowa. This year's event had a central Hills focal area of Pottawattamie, Harrison, Monona, and southern Woodbury Counties. Burn units located at Loess Hills State Forest, Missouri River Wildlife Unit, Lewis & Clark State Park, Iowa Natural Heritage Foundation, Monona County Conservation Board, Pottawattamie County Conservation lands were identified as priority areas. The central Loess Hills have experienced prolonged drought since 2019. The previous weeks leading up to the Cooperative Burn Week saw an outbreak of wildfires in the local area, one of which spanned 3,770 acres primarily on DNR Loess hills State Forest property. Persistent easterly winds, critical fuel conditions, and county burn bans presented challenges for the week's event. Participants were able to complete burn units on four different dates throughout the week. Operational shift #1 was a suppression focused operation with all participants working on initial attack exercises, size-up, and giving briefings to their crew. Participants were split into four divisions, and simultaneously burned units at 4 different locations on live fire days. We had participation ranging from 57-103 personnel on any given day of the planned week. This allowed for pairing of trainer/mentors and trainees to facilitate a one-on-one working environment. Participants were paired based on their qualification system (agency, NWCG, or the newly implemented DNR IFIRE qualification system).

A total of 135 participants from 56 conservation agencies/organizations, volunteers, and volunteer fire departments participated during the Cooperative Burn Week. Expanding from the 56 organizations, the Iowa Department of Natural Resources were represented by 15 different wildlife units, state parks, forestry districts, and bureaus. Participants attended this year's event from 8 different states, as well as the province of Saskatchewan, Canada. There was a diverse variety of training opportunities throughout the week. The suppression training day gave participants scenarios and repetitions at initial attack exercises, going through the size-up process, and briefing crew members before engaging the fire.

Twenty individuals received evaluations for their NWCG Position Taskbooks: 11 FFT1 (squad boss) taskbooks, 4 ICT5 (commander) taskbooks, 1 Faller taskbooks, 3 FIRB taskbooks, and 1 RxB2 (burn boss) taskbook. Of those twenty, 6 taskbooks received a final evaluation and completion status. Two other individuals received recertification status for the NWCG qualifications. Four individuals received evaluations on their IFIRE taskbooks (Ignition Boss and Burn Boss). Other personnel were able to fulfill role as agency burn bosses, squad bosses, UTV and engine operators, and mentors. Numerous trainees were able to work in their respective trainee role during more than one operational shift with their mentor. Other training opportunities included learning new or different engine and UTV setups, portable pump set-up, presentations on suppression and initial attack, presentation from the National Weather Service on weather conditions over the past year on wildfire days, Jones Creek Wildfire tour and discussion, and working within a complex burn organization with multiple divisions organized under the Incident Command System (ICS). See Appendix A for a more detail breakdown regarding number of participants and acres treated. See Appendix B for pictures taken throughout the week.

A highlight for this year's event was a special presentation at the Shadow Valley Golf Course (Woodbine, IA) on Monday evening. Brad Elder (local fire practitioner, fireline trainer/mentor, research professor, volunteer firefighter of Crete, and colleague) presented on his experience of being burned over on a wildfire in the fall of 2022 near Lincoln, NE. Brad talked about the needs for specialized wildland fire training, fire behavior evaluation, fuel conditions, PPE safety, and decision making. Brad talked through the physical rehabilitation, as well as the mental part of his recovery. Brad has been part of the planning teams for CBW/TREX events in the Loess Hills, Niobrara Valley Preserve, Loup River, and Canadian Prairies. Over 130 attendees from Cooperative Burn Week participants, Great Plains regional TREX lead personnel, FLN staff, additional Loess Hills Fire Partners personnel, county EMA staff, and local volunteer fire department personnel attended the event.

Monday evening also served as the unveiling of the Loess Hills Partners & Stewardship video to promote partnerships, land stewardship, and ecological benefit for the region. The purpose was to develop a beneficial stewardship engagement video accessible for all of the organizations in the region to utilize to engage a broad audience during future presentations, gatherings, and events. The content for that video was filmed during the 2022 CBW, which was held in the southern Loess Hills.

Eighteen personnel from multiple agencies served on the Incident Management Team in a variety of roles to assist with the planning of the event. Several members served in trainee or learning roles on the team to gain experience and build redundancy within the IMT and region. The event also hosted a professional videographer to document the Brad Elder's special presentation. Public information officers and other key staff for the event also promoted and moderated coverage of the event on several social media platforms enhancing the message of the importance of prescribed fire and collaborative partnerships.

The weather conditions this year were favorable for live fire on four of the five days of the event. The final day saw moisture move into the area which did not provide conducive conditions for live fire. Operations for that day saw personnel tour the Jones Creek Wildfire scar, which occurred April 13-14, 2023 (two weeks before the CBW event). The wildfire spanned 3770 acres of remnant prairie, deciduous woodland, and prairie reconstructions. Extreme fire behavior with catastrophic results to portions of the mature oak woodland were pointed out. Many of the Loess Hills Fire Partners personnel assisted local volunteer departments on the incident. The conservation professionals implemented 10.2 miles of burnout operations to secure the perimeters of the wildfire to minimize size, minimize property

Loess Hills Fire Partners, May 2023

loss, and provide for public safety.

Within our landscape and organizations, the squad boss level (FFT1) continues to be the most crucial and critical for fire operations. Firefighters at this level possess the local knowledge that aids in their ability to control both the holding and firing within their divisions, while also controlling the tempo for the day. Focusing additional time, knowledge, and experience towards this position level is a necessity for all organizations within the Loess Hills and region to continue to build fire capacity, proficiency, and efficiency. The overall planning for multiple simultaneous divisions continues to stretch the overhead for further learning and creativity. This was the first year having 4 separate divisions and 3 days seeing over 100 participants.

Funding for this event was provided by The Fire Learning Network, the Loess Hills Alliance, and the participating agencies. These funders provided financial support for supplies, breakfast and evening meals, housing, and planning meeting support. Additional project support was provided by the participants and their agencies in the form of personnel and equipment time. Other participants donated their personal time and labor to support this event during unit prep, planning, and burn operations. The Iowa Department of Natural Resources and Loess Hills State Forest generously donated meeting and logistical space for the week. Harrison county Conservation Board and Iowa Natural Heritage Foundation provided lodging and camping space at their facilities for the week.

Participants have shared that the Cooperative Burn Week was a positive experience and was successful in achieving multiple objectives, including land management goals, fireline training and experience, leadership and personal development skills, and improving collaboration between partners in the Loess Hills and Great Plains region. The participation of 135 participants speaks to the high level of interest amongst partners in collaboratively completing priority burn units and pursuing training and networking opportunities in the region. It also speaks towards the success of the previous CBW events and the product participants are receiving. This was the first CBW for 62 of the participants. The event also saw a 26% female participation percentage. Several organizations from across the country sent personnel to gain fireline knowledge, learn from a professional atmosphere, and gain tips towards starting other cooperative efforts across the state. The use of an expanded Incident Management Team as well as a more focused Incident Command System provided additional organization and smoother operations on burn days, non-burn day preparations, and throughout the week in its entirety.

The Loess Hills Cooperative Burn Week model has been adopted in other regions as well. The Little Sioux Watershed Conservation Partnership hosted their first cooperative burn week in May of 2022 with strong regional participation and success. The event saw interagency collaboration from the Little Sioux River Valley of northwest Iowa to implement fire in the region on multiple different organizational properties. This was a strong foot forward to share personnel, equipment, and skills in the region. Their second annual event was held in early May of 2023. The Canadian Prairies Prescribed Fire Exchange hosted their first TREX event in October of 2022 in Saskatoon, Saskatchewan. The event saw 40 participants from across 4 different provinces of Canada come together in their first collaborative effort to implement prescribed fire on a landscape where prescribed fire is not seen as a positive management tool by the general public. This was a great start to expanding cooperative efforts in a high quality area. The incident commanders for both events attended to job shadow and pick up new tips to take home for their respective event. All of these regional events will continue to support each other for many years to come.

Appendix A: Participants, Agencies, and Acres Treated

Participating Agencies/Organizations:

Bureau of Land Management
Bur Oak Land Trust
Canadian Prairies Prescribed Fire Exchange/Meeswassin Valley Authority
Canadian Wildlife Services
Certified Sawyer Services
City of Coralville
Conservation Corps of Iowa/Minnesota
Conservation Districts of Iowa
Des Moines County Conservation Board
Des Moines Fire Department
Doane University
Ellsworth Community College
Fontenelle Forest
Golden Hills RC&D
Hardin County Conservation Board
Harrison County Conservation Board
Harrison County EMA
Iowa Department of Natural

Resources

Parks Division (5 State Parks)
Wildlife Division (3 units)
Loess Hills State Forest
District Forestry (2 districts)
Private Lands
Fire
Conservation Officers
Administration

Iowa Natural Heritage Foundation
Iowa State University
Lefthand Fire Protection District (Colorado)
Lincoln Parks & Recreation
Loess Hills Alliance
MJ Cattle Co
Mondamin VFD
Monona County Conservation Board
Monona County EMA
National Weather Service
Omaha Henry Doorly Zoo
Onawa VFD
Pheasants Forever (Iowa, Nebraska, and Minnesota)
Plymouth County Conservation Board
Pottawattamie County Conservation Board
Prairie Land Conservancy (Illinois)
Ranney Photography

Smithland VFD
 Southwest Rural Fire Protection District (Lincoln, NE)
 The Nature Conservancy- (Iowa and Nebraska State Chapters)
 The Nature Conservancy- Fire Learning Network
 The Nature Conservancy- North American Fire Crew (California)
 Turkey Creek Preserve
 United States Fish & Wildlife Service
 United State Forest Service- Tongass National Forest (Alaska)
 University of Nebraska- Lincoln
 University of Nebraska- Omaha
 Upper Iowa University
 Webster County Conservation Board
 Wohlers Fire Equipment LLC
 Woodbine Fire & Rescue
 Woodbury County Conservation Board
 Woodbury County EMA



# of Participating Agencies/Orgs	56
# of VFD Departments	7
Total # of Participants:	135
Personnel-Hours:	5,032 Hours
Equipment Utilized:	9 Engines
	23 UTVs
	Countless Agency Vehicles & Handtools

Burn Unit Completion Summary

Burn Unit	Ownership	County	Day Completed	Acres
Reese Wetland	Monona CCB	Monona	4/24/2023	70
Louisville New Field	DNR- MoRiver Wildlife	Monona	4/24/2023	10
Lewis & Clark Campground	DNR- MoRiver Wildlife	Monona	4/24/2023	2
Lewis & Clark Butterfly Garden	DNR- MoRiver Wildlife	Monona	4/24/2023	0.5
Lewis & Clark Shop	DNR- MoRiver Wildlife	Monona	4/24/2023	2
Collison Harl	DNR- LHSF	Harrison	4/25/2023	804
Spencer Timber	DNR- LHSF	Harrison	4/25/2023	217
Davis Wetland	Monona CCB	Monona	4/25/2023	54
Winkel- Walters	DNR- MoRiver Wildlife	Woodbury	4/25/2023	328
North Boehmer	DNR- MoRiver Wildlife	Woodbury	4/25/2023	343
Snyder Seeding	DNR- MoRiver Wildlife	Woodbury	4/25/2023	20.5
Smokey Hills- South	INHF	Monona	4/26/2023	178
Hanson-Poole Pasture	INHF	Monona	4/26/2023	17
Tieville Middle	DNR- MoRiver Wildlife	Monona	4/26/2023	125
WGCA East Triangle	Pottawattamie CCB	Pottawattamie	4/26/2023	21
Buckingham IHAP	Pottawattamie CCB	Pottawattamie	4/26/2023	151.6
FCPWA Young Dam	Pottawattamie CCB	Pottawattamie	4/26/2023	3.8
FCPWA Young Hay 2	Pottawattamie CCB	Pottawattamie	4/26/2023	18.2
FCPWA Riepe NW	Pottawattamie CCB	Pottawattamie	4/26/2023	14
FCPWA Riepe NE	Pottawattamie CCB	Pottawattamie	4/26/2023	17
PPG South (Night Op)	DNR- LHSF	Harrison	4/26/2023	270.1
Smokey Hills- Northwest	INHF	Monona	4/27/2023	645
LSSR East	DNR/INHF	Monona	4/27/2023	615.7
Haner Slough	DNR- LHSF	Monona	4/27/2023	32
			Public/Org acres	2949.1
			Private acres	1012.3
			24 Burn Units	
	TOTAL			3961.4 acres

Appendix B: Pictures

To see the complete photo album, go to: [Cooperative Burn Week 2023 - Google Photos](#)



The squads on the Pink division begin to close the door on the Reese Wetland unit during Operational Shift #1. Photo courtesy of Kody Wohlers.



Suppression and initial attack exercises are critical when things do not go as planned on a prescribed fire with a slopover, spot fire, or the need to shut the fire down. The very same tactics are used for a wildfire initial attack. Crews were able to gain numerous repetitions throughout the first Operational Shift to practice these tactics. Photo courtesy of Kerry Hecker.



Green division has their After Action Review (AAR) following an initial attack exercise to discuss ways to further improve future operations. Photo courtesy of Renny Grilz.



Fire pulls into a stand of undesired woody encroachment. Sending it hot was required to meet objectives to topkill numerous species of invasives. Photo courtesy of Shawna Gorman.



Crews perform suppression exercises by following the water resource with handtools to attain complete suppression along the fireline. Photo courtesy of Kody Wohlers.



Orange division is ready to roll. Photo courtesy of Kody Wohlers.



Yellow division. Photo courtesy of Kody Wohlers.



The north squad of the Blue division for the North Boehmer burn unit pauses for a snapshot before implementing fire. Photo courtesy of Caitlin Golle.



Pink division breakout session. Photo courtesy of Kody Wohlers.



Yellow division puts up a good column on the Winkel-Walters burn unit. Photo courtesy of Kody Wohlers.



An engine keeps eyes on the fireline, as well as crew members. Photo courtesy of Kody Wohlers.



A squad prepares for initial attack during a suppression exercise. Initial size-up, crew briefing, LCES, and resources are all needed before engaging the fire. Photo courtesy of Jacob Smith.



A crew lights the backfire on the Snyder Seeding burn unit. Photo courtesy of Kody Wohlers.



Strip ignition is a regularly utilized ignition tactic to safely and efficiently progress fire spread in a prescribed or wildfire setting. Photo courtesy of Emily Hohman.



A Canadian participant stops to snap a picture at an entrance sign to the Loess Hills State Forest. Photo courtesy of Renny Grilz.



Keeping a keen eye on the line. Photo courtesy of Lance Brisbois.



Personnel and equipment are both required assets to safely and effectively implement prescribed fire on the Loess Hills landscape. UTVs are the most relied upon piece of equipment to navigate the steep terrain, and reach places that would otherwise be inaccessible by other larger engines or water resources. Photo courtesy of Kody Wohlers.



A ridgetop briefing before the Hansen-Poole Pasture unit. Photo courtesy of Kerry Hecker.



The lead ignitor brings fire off a steep remnant ridge while crew personnel hold the line. Photo courtesy of Kody Wohlers.



The rehab station for crews to refill water and drip torch fuel. Photo courtesy of Pete Hildreth.



A handline firebreak installed, lit, and held by the Blue division. Photo courtesy of Kody Wohlers.



An interior ignitor observes fire behavior within the deciduous oak woodland. Photo courtesy of Melanie Schmidt.



Crews working on suppression repetitions with handtools, bladder bags, leafblowers, and water apparatus to hone their skills. Photo courtesy of Pete Hildreth.



Participants observe a presentation on the Jones Creek Wildfire prior to touring the burn scar. Photo courtesy of Kody Wohlers.



A firefighter drops a standing snag with fire in it's top close to the burn unit perimeter. Faller training operations are also priority skills in the prescribed fire setting. Photo courtesy of Melanie Schmidt.



A remnant prairie ridgeline sees fire for the first time in 7 years on the Smokey Hills unit. Photo courtesy of Kody Wohlers.



The Orange division receives their operation briefing prior to the LSSR burn. Photo courtesy of Shawna Gorman.



Implementing fire on the landscape is one of the most poetic things you can do as a land steward. Photo courtesy of Dale Maxson.



A squad stops for a snapshot at the conclusion of the unit being rung. Photo courtesy of Dale Maxson.



Networking, partnerships, and having fun are always priorities for the CBW. Lots of smiles fill the week. Photo courtesy of Jason Andersen.



Participants get a tutorial on setting up a portable pump for a water source. Photo courtesy of Jason Andersen.



A private landowner gives crew members some pointers as to local knowledge on the Smokey Hills South burn unit. Photo courtesy of Caitlin Golle.



Night operations can be a strong learning experience for young firefighters. This can also be a window to burn with higher humidities and lower wind speeds when the weather conditions are on the more extreme end during daylight hours. Additional safety precautions are put into place, and LCES are paramount. Photo courtesy of Shawna Gorman.



Holding the line, both fireline and state line! Photo courtesy of Trevor Ruffcorn.



A glimpse of the division staging area. Photo courtesy of Trevor Ruffcorn.



Communication is critical task and a strong focus of the training for the event, as well as every fire incident. Staying in contact with other crew members is essential. Photo courtesy of Kerry Hecker.



It was a tremendous honor to have Brad Elder present to the Loess Hills Cooperative Burn Week participants, as well as local volunteer fire department personnel. Brad has dedicated most of his career to training wildland firefighters the art of implementing prescribed fire, while also being a volunteer firefighter. Brad's powerful presentation talked through his burnover while on a wildfire, the importance of quality PPE, training, and sound decision making. It has been a long road to recovery, and the audience was blessed to hear Brad's honesty and real-life experience. Pictured with Brad are TNC FLN event lead's from across the Great Plains region whom he has assisted on event's with: Kerry Hecker and Renny Grilz of Canadian Prairies TREX, Kody Wohlers of Loess Hills Cooperative Burn Week, Ben Wheeler of Loup River TREX, Chad Bladow of Niobrara Valley Preserve TREX, and Emily Hohman of the Fire Learning Network. Photo courtesy of Melanie Schmidt.



A crew works to secure a flank of the Jones Creek Wildfire. Photo courtesy of Thad Pothast.



A photo capturing an epic burnout operation on the Jones Creek Wildfire that required 2 ignitors, 5 leafblowers, 4 bladder bags, 2 handtools, 1 UTV, and 2 engines. The wildfire spanned 3770 acres and required 10.2 miles of burnout operations to secure the spread of the fire. By securing this ridgeline, in very tough weather conditions on a 2' dirt path, crews saved another 2000 acres from being involved in the wildfire. Numerous homes most likely would have been lost without the success of this operation.

Wildland firefighters and volunteer firefighters joined forces for the success of the overall incident.

Photo courtesy of Katherine Hoepner.



3:00 AM April 14th 2023

Fire activity on the Jones Creek Wildfire persisted through the night. Wildland firefighters worked the line for 30 hours to achieve containment. Wildland personnel from throughout western Iowa rallied upon the call to assist in the effort. VFD personnel from 3 counties assisted. Photo courtesy of Thad Pothast.



The visitor's center at Lewis & Clark State Park was one of the sites utilize during the suppression exercises during the first operational shift. The Loess Hills Cooperative Burn Week has been a great template for other training events around the state, country, and Canada. We are blessed to showcase the great partnerships and wildland firefighters Iowa has to offer! Photo courtesy of Caitlin Golle.