



Fire Learning Network Notes from the Field

April 2012

Prescribed Fire Training Exchange Loess Hills, Iowa

For two weeks in April, 38 fire practitioners from around the country and throughout the Loess Hills came together to experience something new. Forming a large roving team, they worked together to accomplish a good deal of necessary prescribed fire. Achieving acres burned was not the main focus of the event, however. Rather, they focused on meeting the training needs and building the skills of participants.

Like all Fire Learning Network training exchanges, this event incorporated local ecology and land use practices into the rationale and planning for burning, stressing the use of natural fire breaks based on vegetation and time of the year and establishing monitoring protocols. The landscape thus provides an open canvas on which to test different firing techniques. All of this was rolled up into two weeks of waiting out rain and watching for appropriate windows to execute burns so that ecological goals could be achieved.

The interagency crew was managed by The Nature Conservancy and its Loess Hills host partners,



Above: Participants from The Nature Conservancy (Maryland) and the Pottawattamie County (Iowa) Conservation Board discuss the operations. During a training exchange, everyone is a trainee, and all learn something new by interacting with people from a wide range of agencies and geographic locations. © TNC / Neil Chapman

Right: Participants from the Key Peninsula Fire Department and the South Dakota Wildland Fire Suppression Division work through a sand table exercise during some rainy weather. The sand table was missing, but participants got very creative using items on hand in the Broken Kettle Preserve shop to enhance the experience.

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the Mills, Pottawattamie, Harrison and Plymouth County Conservation Boards, Iowa Department of Natural Resources, and county Soil & Water Conservation Districts. Over the course of the exchange, they were able to achieve about 1,800 acres of prescribed fire during. The burns stretched throughout the 200-mile long Loess Hills, including the Loess Hills State Forest, Broken Kettle Grassland Preserve, Loess Hills Wildlife Area, Stone State Park and Farm Creek Public Wildlife Area.

The crew—28 trainees and 10 cadre—consisted of practitioners with a wide range of experience, from prescribed fire crew member (RXCM) to burn boss trainees (RXB2). They were also diverse in geography, with seven states represented, and in organizational background, coming from 10 different agencies. The mixed crews created in training exchanges force participants to work outside their comfort zone, which allows for a better flow of knowledge among all players: at training exchanges, everyone learns from everybody, nominal trainees and trainers alike.



Left: During an orientation at the Broken Kettle Grasslands Preserve, the Conservancy's Western Iowa Land Steward provided an orientation to the importance of the region's largest intact grassland, where bison are once again grazing the landscape. The unit in the background was burned during this exchange.



Right: Participants from the Conservancy and Pottawattamie County Conservation Board observe the test fire at Broken Kettle Grasslands Preserve. Although conditions for the burn were on the "cooler" side of the burn prescription, with higher humidity, lower temperatures and recent precipitation, the grass fuels still burned and offered novel training opportunities. During the after action review there was discussion about the effects of burning on the cooler end of a prescription and how such burns are not often attempted in the area.

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Above: A crew member from the Pottawattamie CCB overlooks ignitions performed at the Broken Kettle Grasslands Preserve. The Fire Effects Monitor (FEMO) trainee from the Conservancy's Southern Rockies Wildland Fire Module just visible in the background is collecting some of the data used by the burn boss to assess whether the fire was meeting its objectives. Conditions for burning became less favorable over the course of the burn, and it was shut down later in the day because it was not meeting the burn objectives.

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Participating Agencies & Organizations

Colorado State Forest Service
Iowa Department of Natural Resources
Key Peninsula Fire Department
Loess Hills Alliance
Monona County Soil and Water Conservation District
Plymouth County
Pottawattamie County

Rocky Mountain Fire
South Dakota Wildland Fire Suppression Division
The Nature Conservancy—Arizona, Colorado, Georgia, Iowa, Maryland
U.S. Fish and Wildlife Service—Neal Smith NWR

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Top: A burn boss from the Iowa Department of Natural Resources reviews the map and burn plan with burn boss trainee from the South Dakota Wildfire Suppression Division during pre-burn scouting and planning for the Alton North Burn on the Loess Hills State Forest. At these exchanges, local partners provide the expertise needed to help the out-of-town participants get oriented to their new surroundings, which includes learning new fuels as well as new approaches to business as usual. Fire may be widespread, but it is also very local.

Bottom: The burn boss trainee (white helmet) leads a briefing. Working in new fuel types and a different part of the country offered a new experience for this trainee. Although he already had a good deal of experience under his belt, he was surprised to see the fire just die once it hit the fuel transition to the woods—where he is used to working, fire burns well in timber.

Top: Participants from Pottawattamie County (IA) Conservation Board, South Dakota State Fire and the Conservancy (Maryland) review the ignitions for the Alton North burn on the Loess Hills State Forest. While organized by The Nature Conservancy, partners provided burn units, time, resources and cadre for the operations of the exchange. Without the help of numerous partners, this training event could not have taken place—let alone reach the scale of the entire Loess Hills landform.

Bottom: A trainee from the Rocky Mountain Fire Department (CO) holds a perimeter line on a ridge with an incredible view of the rugged Loess Hills to the east and the Missouri River Valley to the west. Participants learned about the varying fuel types in this landform—dry prairie on the ridge tops transitions to shrub and wooded fuel types moving down the slopes—and how ignitions can be used to manipulate fire behavior for burn objectives. In the Loess Hills, fire is used to keep the prairie open and to advance the prairie back into wooded areas it once occupied.

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The Fire Learning Network is a cooperative program of the Forest Service, Department of the Interior agencies—Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service and National Park Service—and The Nature Conservancy. It has a ten-year track record of helping to restore our nation's forests and grasslands and making communities safer from fire. For more information, contact Lynn Decker at ldecker@tnc.org or (801) 320-0524. *An equal opportunity provider.*

