TO START A FIRE by Jim Hoy

Pasture burners in the Flint Hills have employed a variety of techniques and folk devices for setting fires. Some ranchers, in a manner related to the Indian method of dragging a burning ball of dead grass across the prairie, have wrapped a log chain around a kerosene-soaked bale of hay (or an old tire) and pulled it behind a pickup. Others have wrapped burlap into a tightly twisted ball, soaked it with kerosene, attached it to a length of heavy wire, then tied the wire to a lariat rope and dragged it behind a horse. A more physically demanding method involves using a rake (often with a metal pipe substituting for its wooden handle) or a pitchfork to pull clumps of burning dead grass along the edge of the pasture to be set ablaze. Regular wooden kitchen matches, broken in half before striking, are often thrown into the grass from the window of a pickup or the back of a horse. (Only half a match is used because a whole match will more often than not lie on top of the grass and go out whereas a broken match will more easily drop down into a clump of grass.) One Flint Hills rancher orders special matches with wax-coated oversized heads from a maritime supply house for use during pasture-burning season. Other ranchers have become more mechanized, adapting to their own use such commercially manufactured devices as kerosene weed burners, propane branding-iron torches, and army-surplus flame throwers.

Undoubtedly the most striking bit of folk technology to have emerged from the annual burning of the Flint Hills is a fire starter called variously a firestick, a firepipe, or a firesetter. This device, simple in construction and appearance, is easy to use and effective, although somewhat forbidding, even frightening, to the uninitiated in its makeup: it is nothing more than a length of ordinary pipe filled with gasoline, one end sealed, the other plugged, with a small hole in the removable plug so that the gasoline can drip out and catch fire. To use a firestick, one sets fire to a clump of grass with a match, then drops the plugged end of the firestick into the fire. The gasoline ignites and, as the pipe is dragged along (whether on foot or from the rear of a four-wheeler or the bed of a pickup), the gasoline dribbles and bounces out, setting grass ablaze in a continuous string of fire. To extinguish the firestick, the operator simply turns the drip end skyward and it will soon blaze out, or he can harmlessly smother the flame with a gloved hand.

What keeps a firestick from blowing up? Operators say that for an explosion to occur, air would have to get into the pipe, which it cannot do. Admittedly the device has every appearance of a bomb, but not a single one of the hundreds that are or have been in use has ever been known to have exploded. One rancher, in fact, lost his firestick when it bounced off his flatbed pickup. When he went back to look for it, the prairie fire had burned over it and

the heat had caused the gasoline inside to expand and squirt out the drip hole like a geyser. Flames were shooting ten to fifteen feet in the air, but the firestick did not explode.

This record of safety, however, has not induced extension service personnel or university researchers to adopt the firestick. Instead, most of them use the commercially manufactured drip torch for lighting fires. This device is comprised of a canister with handles on the side and a stem extending from the top. A coil in the stem at its base keeps air from getting into the canister, while a wick at the end of the stem drips the burning fuel, a mixture of gasoline and diesel fuel. Drip torehes, developed from kerosene flame torehes, were first introduced in the early 1950s.

Firesticks came into widespread use in the Flint Hills during the 1970s, but oral tradition records their use back into the 1950s and even beyond. The earliest, in use before World War Two, seem to have been made of keroseneor gasoline-filled three-quarter-inch pipe with a corncob or rags stuffed in one end for a wick and a thumb held onto the other end. Today all Flint Hills firesticks are homemade, perhaps because the potential market is too small to support commercial manufacture. They come in many different sizes and lengths, with variations reflecting the individuality of their makers—a ring welded onto the sealed end for attachment to a four-wheeler, a shovel-like handle built into the sealed end for easy handling, a cage of iron rod built around the drip end to hold it up and out of the mud or wet cow chips, an upper end of plastic pipe and the lower fourth of metal to reduce the weight.

Pasture burning may be the hardest part of a Flint Hills rancher's job, but the firestick has helped to make it easier.

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