

Off-Road Tires

Keeping Missouri free from scrap tire dumps

by Dee Goss



DNR photo by Richard Allen

Among Dan Fester's first memories of inspecting an illegal tire dump was the fog – a fog not from the weather but from the millions of swarming mosquitoes.

By the end of his day, Fester, chief of the Missouri Department of Natural Resources' scrap tire and illegal dumping unit, looked

as though he'd entered a hornet's nest, rather than a scrap tire dump.

"The first one I clearly remember was a dump containing around 4 million tires," Fester said of the 15-acre site in central Missouri. "Acres of tires piled up to nearly 25 feet tall created a maze, blocking out the landscape and making it difficult to tell



DNR photo by Don Van Dyke

(Opposite page) Before a scrap tire cleanup, the ground is polluted, water is murky, and surrounding foliage is dying.

(Above) After cleanup the environment begins its return to health as water begins to clear.

(Below) Products made of scrap tires, such as this rubber mulch, are an effective substitute for wooden products. Materials made of recycled scrap tires do not attract mold, fungus or insects such as termites and ants. It will not fade or rot and is five times heavier than traditional mulch, so it will not float or blow away during heavy rain or wind.

where you were ... yeah, I'd say there was a problem."

Battling illegal tire dumps requires the Department of Natural Resources to address both the cleanup of existing sites and prevention of future sites. Such tire dumps pose threats to both human health and the environment, Fester said.

"Mosquitoes, snakes, spiders, bugs, skunks and other vermin love living in scrap tire dumps," Fester said. "Mosquitoes, in particular, are able to multiply quickly and thrive within the folds and crevices of piled up scrap tires, which allow for their breeding season to be extended from the heat retained in the tires. Mosquitoes appreciate and breed in the stagnate water col-



Michael Sebastian photo



DNR file photo

A scrap tire fire sends toxic smoke into the air and hazardous oily runoff into waterways.

lected in the inner rings. Snakes like to burrow under them as these insect eaters are treated to an all-you-can-eat buffet.”

Tire fires, which grow in likelihood with the number and size of illegal dumps, also threaten human health and the environment with their toxic smoke and oily runoff produced by the fire. These nasty byproducts must be cleaned up after a tire fire to prevent permanent environmental damage to the land and nearby surface waters, as well as long-term impacts to groundwater.

Massive tire dumps like the one Fester described once dotted Missouri’s countryside, with neither the state nor local municipalities having the resources to address a problem decades in the making. However, in 1990 citizens and legislators joined together to support the creation of a scrap tire fee that would support a safe disposal pathway for millions of scrap tires generated each year. This pathway includes recycling, repurposing and preparing them for proper disposal that will neither contribute to nor create pest issues.

The funds generated by the fee since 1990 have helped support the removal of nearly 17 million scrap tires found in illegal dumps across Missouri.

One key to keeping scrap tires out of landfills – both legal and illegal – is to find some other place for them. A portion of the fee is used for grants aimed at helping build a market for products made from recycled tires. Many of these recycled tire products can be found at the local playground, including mats, custom pour-in-place surfaces and shredded tire material. Crumb rubber also can be used as cushioning on playgrounds, running tracks and athletic fields, helping reduce the number and severity of recreation-related injuries.

In addition to playground materials, recycled tires also are used to make rubber modified asphalt, picnic tables, guard rail bumpers and livestock mats.

Not all reuses result in consumer products. Waste Corporation of Missouri is using scrap tire chips to filter the liquids that collect and leach from two of its municipal waste landfills. Kansas City Power &

Light uses tires mixed with coal as fuel at two of its Missouri power plants. This tire-derived fuel helps the utility reduce its coal use.

More than 20 years of cleanups, local grants and market development have combined to remove the state's massive dump sites, with the department focusing its remaining cleanup and enforcement efforts on smaller sites. Although the situation is being managed, a 20-month lapse in the funding of the scrap tire program between 2004 and 2005 illustrates just how quickly the problem could once again get out of hand, Fester said.

"Without enforcement, during this time, the department estimated nearly 500,000 tires were illegally dumped," he said. With Missourians generating nearly 6 million scrap tires per year, it would not take long before the state would once again find itself being run over by scrap tires.

However, as long as the department's scrap tire program continues its work, any fog in Missouri's forecast will likely be weather related – and not mosquitoes. 🍃

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(Above right) Recycled scrap tires can be formed into padded playground mats, allowing children to play while lowering the risk of injury from falls.

(Right) While visiting the Missouri State Fair, many attractive, splinter-free picnic tables and benches made from recycled scrap tires are available for visitors' use.

DNR photo by Dee Goss



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