A CAVE TO SAVE

Volunteers rally to clean cave at Goodwin sinkhole

Restoration Project Manager Klaus Leidenfrost stands at the entrance to the Goodwin sinkhole and cave. Since 2012, Missouri Caves & Karst Conservancy has removed nearly 190 tons of trash from the longtime dumping site in Laclede County.

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Toads hop around muddy puddles in the cave's cool depths, some 50 feet below a quiet gravel road. On the surface it appears to be a beautiful afternoon in the country, but a few telltale oddities — a rebar barricade, "No Dumping" signs and the door of a washing machine sticking out of the side of a hill — indicate not all is what it seems here in rural Laclede County.

For more than 60 years, the Goodwin sinkhole and cave served as the area's unofficial trash can. Stories from locals give a laundry list of garbage thrown into the sink: household appliances, clothes and hundreds of car tires. Since 2012, Missouri Caves & Karst Conservancy has been knee deep in an effort to turn back the clock. These days you have to look a little harder for the debris, but trust Project Manager Klaus Leidenfrost — the job is far from done.

"This looks clean, but there's still a lot of trash under us," Klaus says as he walks down the hill toward the cave. "Some places we've gone down 30 feet at the entrance and we're still finding trash. We never realized the extent when we started."

The cave was accessible as recently as 1954, when Douglas Goodwin's parents bought the property that includes the sinkhole. It was during this time the dumping started, but try as they might, the Goodwin family could never get it stopped.

"Unfortunately they make convenient dumpsites — out of sight, out of mind," Klaus says of the sinkhole. A retired wildlife biologist for the U.S. Forest Service, he has experience working on watershed projects in Idaho and other sinkhole cleanups in Missouri. Douglas contacted him about the problem and later donated the sinkhole to the conservancy, which manages and preserves karst systems in Missouri, with the hope not only of cleaning up the site but also restoring it.

"For some people I don't think it has anything to do with economic hardship," Klaus says. "Some people just like to dump, but I think most people don't realize the connections."

More distressing than the unsightly mess the trash pit creates is what it does to the surrounding area. Instead of draining through the porous cave system, rain and runoff across 90 acres back up in the sinkhole like a plugged bathtub, undercutting nearby Lancaster Road. Worse still is water from the cave resurfaces at Ha Ha Tonka Spring in Camdenton. It's only 11 miles northwest of the sink as the crow flies, but karst topography rarely lets water take a straight path between two places. Between those miles are an unknown number of wells supplying homes, businesses and farms with water.

The possible effect of all that trash on the groundwater was the driving force for Laclede Electric Cooperative to lend a hand, according to Financial Assistant Shellie Weaver. In December 2016 and this April, the co-op donated a total of $4,400 through Operation Round Up. The program, administered through Laclede Electric Trust, allows co-op members to round up their electric bill to the nearest dollar with the resultant change going to assist community projects. Although the conservancy is based in St. Louis, Shellie says their local focus caught the co-op's attention.

"When we realized it was taking place in our service area and affecting our members, we decided it was something we were interested in," Shellie says. "It's phenomenal all those people get thigh deep in that mud to dig trash out just because it's the right thing to do."

In five years of operation, the project has received donations totaling between $30,000 and $40,000 from more than 35 individuals and organizations. Across 110 workdays, more than 1,000 volunteers have removed nearly 190 tons of trash, metal and tires from the dumpsite. More useful than volunteers are the dollars that rent heavy equipment such as dump trucks, excavators and skid steers plus operators to haul the waste topside. The price tag for such assistance runs around $4,000 per day.

But how much refuse remains under the ground and in the cave is unknown. The cleanup's farthest progress was made in December 2014 when a spelunker crawled 130 feet into the cave. His progress was stopped by yet another car tire.

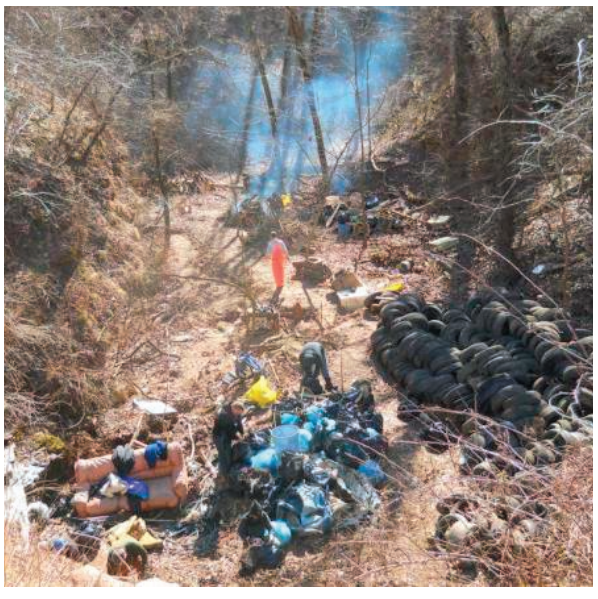
Heavy rains and flooding also wash dead trees — some as large as 8 inches in diameter — into the cave entrance and impede further progress. Enough rain filled the sinkhole in December 2015 that the next equipment workday at the cave was delayed until the following October. For every step forward, Klaus says, weather sometimes sets the project two steps back.

"It's been a slow process and lots of frustration when you see a flood come and wash in dump truck loads of material," he adds. "That's hard. It feels great when you can see the accomplishment, though."

Much of the work over the past few years has been undoing flood damage instead of removing garbage, but Klaus is optimistic. From his successes with previous cleanups, he believes that as long as the project is funded, the dumping in the area can be curbed once the cave is clean.

"When we're done the plan is to put up an 8-foot chainlink fence with barbed wire on top between the sinkhole and the road," Klaus says. "It doesn't look good, but you have to really throw stuff to get it over and most people aren't going to throw a washer."

For more information on the Goodwin sinkhole restoration project, visit http://s.coop/25wdy or follow the Missouri Caves & Karst Conservancy-page on Facebook. To donate to or volunteer for the cleanup, contact Klaus Leidenfrost at goodwinmgr@mocavesandkarst.org.

photo courtesy Klaus Leidenfrost

Below: Flood damage leaves mounds of mud-caked trash stuck in the crevices of the cave's walls. **Below right:** In the early stages of the restoration project, volunteers gathered more than 700 tires from the sink in a single day.