KUDZILLA

THE KUDZU WARRIOR



by Dianne Smith Fergusson, Ph.D., Photos by Newt Hardie

ince its formation in 2006, the Kudzu Coalition of Spartanburg County, South Carolina has tried many methods of controlling kudzu infestations in the urban environment. From the most handson treatment to the use of plastic sheeting, boiling water, gapping, mowing and burning, the Coalition volunteers have utilized a variety of methods to control kudzu without the use of chemicals.

Each method has been successful in its own way, but one of the most potent weapons in the Coalition's attacks on kudzu is "Kudzilla," a modified skid loader. While he's neither faster than a speeding bullet nor able to leap tall buildings in a single bound, Kudzilla, the newest weapon in the Kudzu Coalition's fight against the "green invader," is indeed a superhero. Equipped with tracks over the tires, a custom six-fork implement, a 20-foot-long boom grapple and a new red, reptilian plywood crest, Kudzilla is both an attention getter and an amazing tool to fight kudzu.

Kudzilla began life as an ordinary New Holland skid loader which Coalition board member and volunteer Paul David Blakely brought from his farm to a kudzu work site in August, 2006. This small vehicle has four wheels, with the left and right side wheels being controlled independently. This gives it great agility and maneuverability and it can quickly rotate around its center. Blakely recalls that on the first outing in August 2006 he was able to make considerable inroads into the mountain of green kudzu just using the skid loader in its original form. The attempt was so successful that efforts began immediately to modify the skid loader to make it even more efficient.

Kudzilla's approach is to remove a mass of kudzu by slipping the fork under the mat of kudzu on the ground and moving it forward a few feet, slightly lifting the mass to pull vines and crowns from the ground. With the original two-pronged fork, the vines sometimes became wrapped around the wheels of the skid loader. "Since then," says Blakely, "we have designed a custom six-fork implement that's wider than the tires to prevent the kudzu vines from becoming entangled in the wheels." And today Kudzilla is anything but an ordinary skid loader.

Using the "kudzu roll" (rolling up the vines as it goes), Kudzilla removes more than

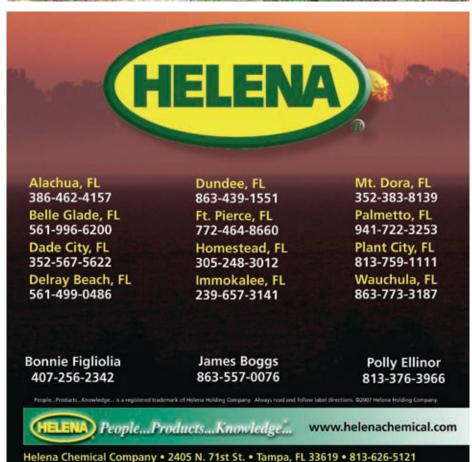
half of the kudzu crowns from the ground, thereby killing the plants. This also opens the area for volunteers to get in and kill the vines by destroying the remaining crowns directly. The Coalition's currently favored tools for removing root crowns include a three-tined pronghoe, a pick, and a folding hand pruning saw. Kudzilla is especially impressive on uneven, hilly terrain that is difficult for volunteers to access. Paul Savko, also a Coalition board member and very active volunteer, is a great admirer of the monster machine. "It turns daunting sites, not practical for volunteer entry and attack, into workable sites," he says.

Kudzilla has enabled the volunteers of the Kudzu Coalition to be much more efficient in the urban patches around Spartanburg. "Kudzilla could initially do the work of more than 10 volunteers in an hour," says Newt Hardie, founder and president of Spartanburg, SC's Kudzu Coalition. "My guess now is that with all the modifications, it's even more effective. After adding the double wide fork attachment, it's about equal to 20 volunteers; with tracks, about 40; with boom and grapple hook, at least 50 to 1! Sometimes Kudzilla's appearance

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slows down the work of volunteers because they stop to watch it, but it more than makes up for any lost productivity by the amount of biomass and the number of crowns it can take up in one swoop."

As different modifications were made to the skid loader based on experience in the kudzu patch, its appearance took on a whole new look. The name came about as a result of the addition of the boom and a discussion at a weekly meeting of volunteers. "We thought it looked sort of like a giraffe," says Howard Miller, a retired heavy equipment salesman who helped the Coalition acquire the used tracks that make the machine so sure-footed on uneven terrain. "From that came Godzilla, and then Kudzilla, which seemed more appropriate for our use."

The development of Kudzilla has been an evolutionary process according to Roddy Jeffers, owner of Pressley Machine Works in Spartanburg, who has done many of the modifications. Often working from notes and sketches on napkins developed at Coalition breakfast meetings, Jeffers describes the process as definitely not high tech. Two other companies, Blanchard Machinery Company of Spartanburg and Piedmont Forklift, Inc., of Greenville, also have been helpful in making the skid loader's transformation possible.

"Designing kudzu weapons is an ongoing effort," Blakely says. As experience in the patch suggests new ways of dealing with the vine that can grow a foot in one day, who knows what the next incarnation of Kudzilla will be? But one thing is for sure, Kudzilla the Kudzu Warrior will continue to be a highly effective weapon in the Kudzu Coalition's war.

Visit the Kudzu Coalition's website at www.kokudzu.com.

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