

## THE TERMINATORS

*Maine proves fertile ground for two creators of mosquito-killing traps, real and imagined.*

Dennis John Ashbaugh and Mohsen Shahinpoor have never met, but their recent projects suggest they are kindred spirits, at least when it comes to mosquitoes.

Ashbaugh is a prominent New York painter who was so tormented by our state bird (the mosquito, that is, not the chickadee) while vacationing in Tenants Harbor that he was driven to creative expression. With twigs, stones, barbecue skewers, electric cords, and other beach debris, he crafted a dozen or so mosquito traps so whimsically macabre they would make Charles Addams smile. They include a flame gun fashioned from a grill lighter and a bundle of kitchen matches, a tank with an inflated snack bag for a body and a plastic straw for a cannon, and a tripod pulley system which, judging from the blood smear at its base, has just dropped a stone on an unsuspecting skeeter. (See

Ashbaugh's traps online at mosquitoes.mustdic.com)

Shahinpoor is a University of Maine professor of mechanical engineering whose lifelong fascination with the Venus flytrap led him to create a robotic version of the carnivorous plant. The Venus flytrap's lobes snap shut when an insect alights on their sensitive bristles. Mimicking those trigger hairs on Shahinpoor's plantbot is a polymer membrane coated with gold electrodes. It looks like something right out of Ashbaugh's imagination.

Artist and scientist have entirely different aspirations for their works. Though his constructions are humorous, Ashbaugh seriously hates mosquitoes. "They have killed more people than wars," he says, citing diseases like malaria, yellow fever, and encephalitis. "But no one thinks about how bad they are unless he has mosquitoes on them. Bill Gates, Warren Buffett, Bono, and Bill Clinton have made progress in the fight against mosquitoes. I'm only an

artist. What can I do? I can bring awareness to the issue."

Shahinpoor, by contrast, is not an entomophobe. "I'm into intelligent robotics and smart materials," he explains. Artificial muscle, as he calls his polymer, might be useful in industry or in medicine (an eye blink, for example, could trigger a sensor, which in turn releases tears in patients with dry eye). "And I know this is rather gruesome," Shahinpoor adds, "but it could be used to create robots that feed themselves. If a robot can move around and capture prey, it can fuel itself. And if the prey is something we don't like, such as mosquitoes and flies, there's nothing wrong with that."

Ashbaugh, not surprisingly, reacted with glee when told of the professor's vision, but we admit the notion gives us a twinge of trepidation. After all, if mosquito-eating robots had been roaming Tenants Harbor when Ashbaugh was visiting, he might never had made his delightfully ghoulish devices, and that would have been a shame indeed. ■