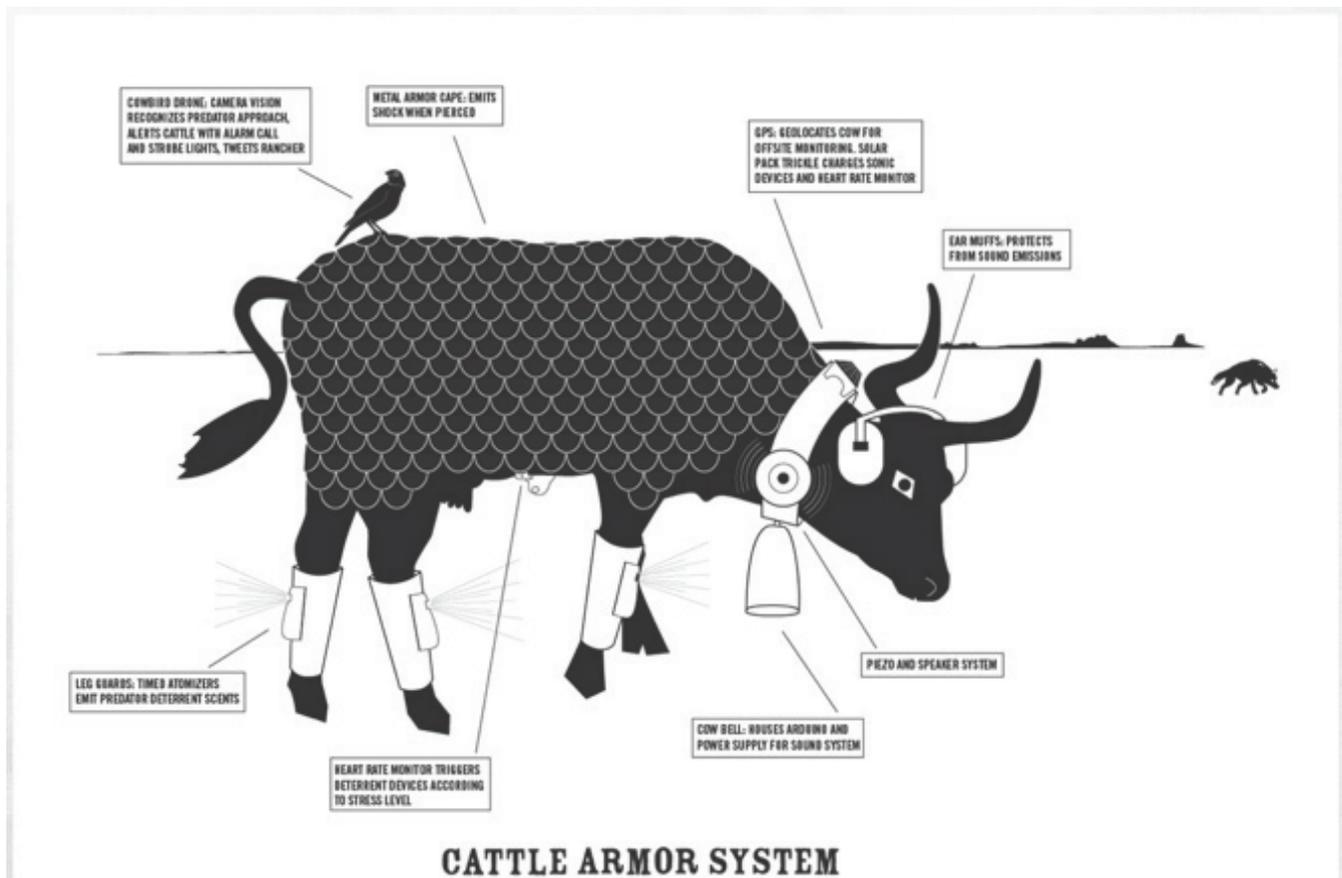


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Gila 2.0: Warding off the Wolf | Marina Zurkow and Christie Leece



The Gila Wilderness was the first officially designated Wilderness in the United States in 1924; Aldo Leopold's ecological holism was born here, while working for the US Forest Service as a predator hunter. The Gila National Forest, the Gila Wilderness and the adjacent Apache Forest constitute the 4.4 million acre area known as the Blue Range Wolf Recovery Area (BRWRA).

These forests and high desert grasslands support a host of fauna: mountain lion, black bear, coyote, white-tailed and mule deer, reintroduced elk, abundant migratory and resident bird species (including the Spotted owl). They also support cattle. Ranchers homesteaded the Gila in the 1880s, and now utilize grazing allotments administered by the US Forest Service, which are rented at \$1.35 a head (per cow and calf) per month; related costs of grazing on public land—fencing, water management, and predator control—are subsidized by tax dollars.

Now, after a forty-year absence, there are also wolves.

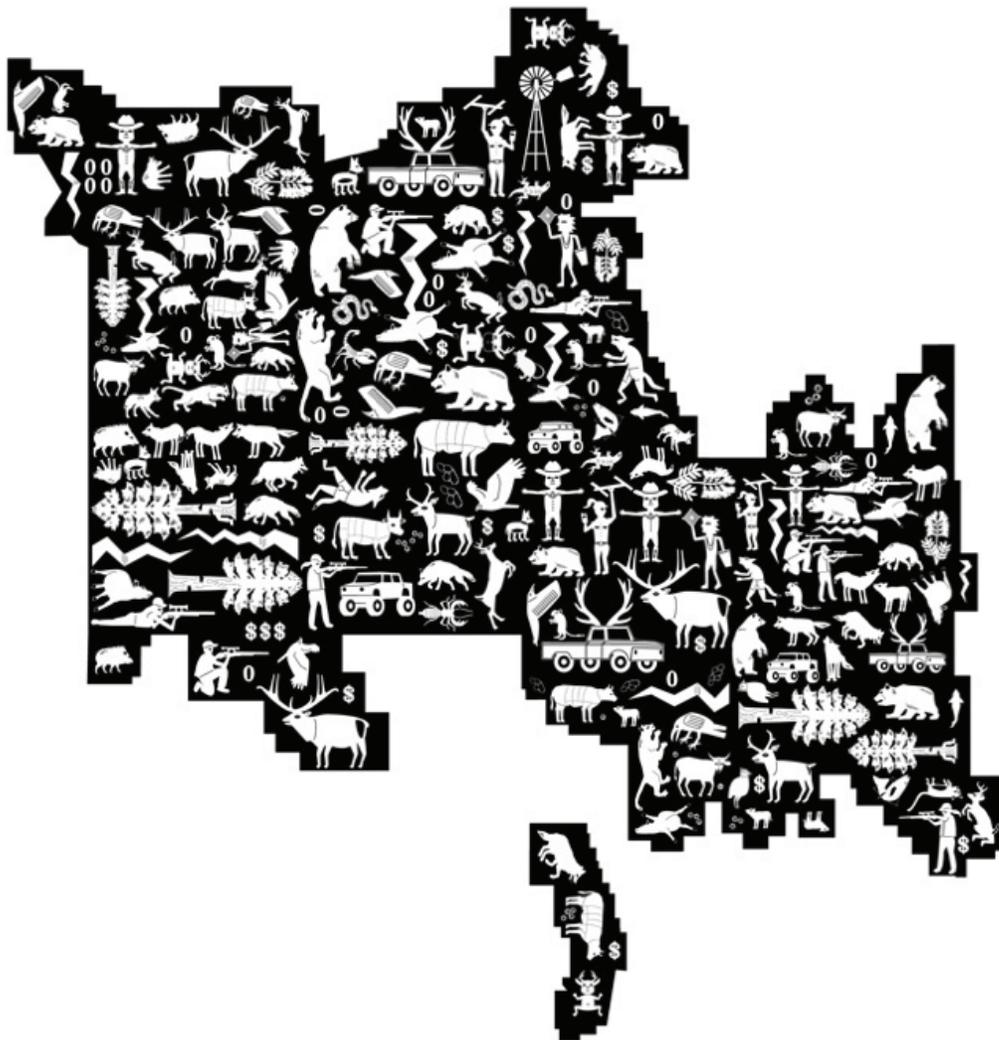


ILLUSTRATION FOR THE GILA AND APACHE FORESTS (2012) MARINA ZURKOV AND CHRISTIE LEECE

Following Richard Nixon’s landmark passing of the Endangered Species Act in 1973, the notion of “the environment” as we knew it changed. With the realization that species are nearing extinction, creatures large and small require protection by the US Government. State and federal agencies—a dizzying array—have to navigate the interests of the animals, plants, loggers, ranchers, miners, and environmentalists. Everyone is angry; there are lawsuits and lug nuts loosened in parking lots to prove it.

Twenty-five years after the enactment of the Endangered Species Act, eleven radio-collared Mexican gray wolves were introduced into Arizona’s Apache Forest area with the intent that the wolves would spread into New Mexico’s Gila (which they did). The Mexican gray wolf is the most endangered subspecies of wolf in the world. These wolves are federally designated as a “nonessential, experimental population” in order to afford the government more managerial flexibility in capture, monitoring and relocation. Federal public lands have many shoes to fill and mouths to feed. It is illegal to kill or injure a wolf, or even emulate wolf howls.

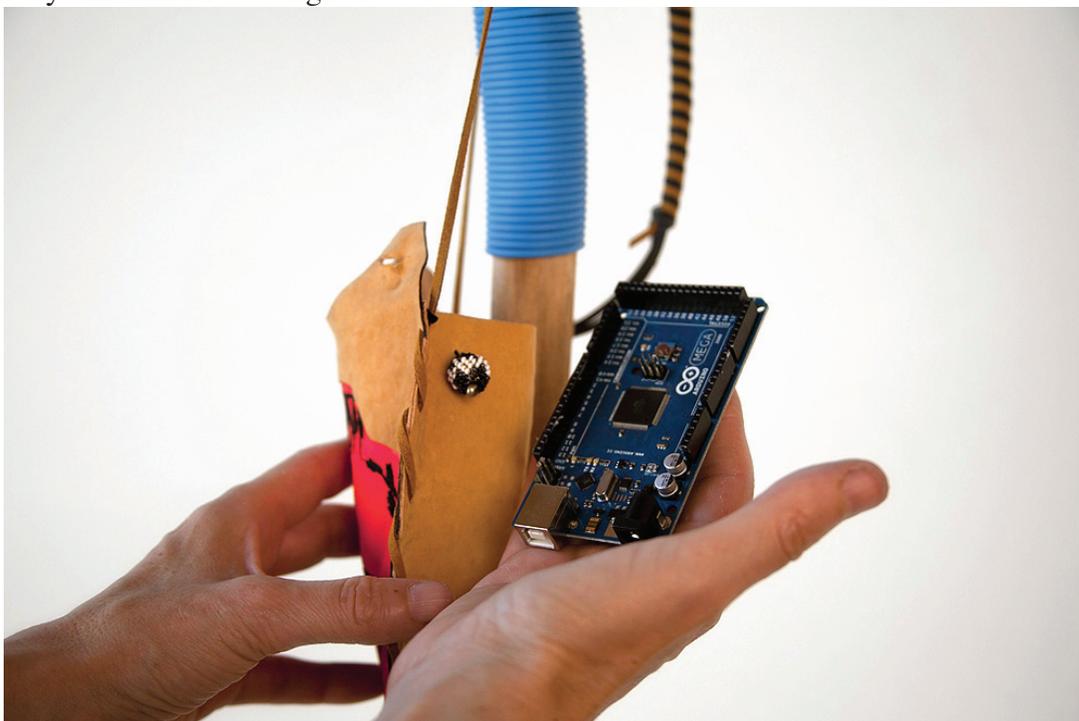
In addition to its endangered status, the wolf is a keystone predator, considered integral to the structure of a healthy ecosystem. There are approximately 58 wolves, 34 of which are radio-collared, currently in the BRWRA. Recovery program redesigns, ranchers’ and New Mexico state government’s resistance, and illegal shootings have crippled the program’s goal of having a sustainable population in this vast area.



Image above: Unique prototype consisting of leather, embroidered nylon, brass, Arduino, piezo tweeters, plexiglass, 2012. Playlist soundtracks are available at the bottom of this page.

Ranchers have suffered a difficult transition as members of the Gila ecosystem. They see regulation as a steady winnowing of their rights, and the wolf symbolizes both real and mythical perceptions of attack. Ranchers originally attempted to rid the land of all predators competing for their herds, and ran at least five times as many cattle per acre than are now permitted on public land. The return of the wolf bears the European symbolic burden of the monster-Satan narrative, which ranchers can add the wolf's recent association with the Feds to.

Within these shifts in the cultural and ecological landscape, Gila 2.0: Warding Off the Wolf employs technology and design as a platform for research and dialogue, investigating the current state of the ecosystem and how it might be transformed.



Gila 2.0: Warding Off the Wolf consists of a “cattle armor system” of predator deterrent devices focused on the wolf; these are based on aversion and deterrent research conducted in animal cognitive behavior and predator control. Our research and design propositions offer a self-defense system for cattle using GPS, sound and olfactory output devices, video sensing, surveillance, and two-way communication. Gila 2.0: Warding Off the Wolf is a response to the grievance that wolf depredations are the cause of widespread livestock loss and intense emotional stress among the Gila’s rural populations.

Minimizing the wolf’s interaction with cattle—as long as they share public lands—ultimately benefits the wolf, whether that is accomplished by changing animal husbandry techniques, working with heritage breeds more suited to the desert ecology, or creating new human-animal relations via remote technologies.

This project was originally commissioned by ISEA 2012 and the New Mexico Wilderness Alliance. Visit the project website at: <http://www.o-matic.com/play/wolf/>.