

BRIGHT IDEAS

INNOVATION BUSINESS GADGETRY

HOW IT'S DONE

SAVING THE GIANT PANDA, ONE BEAR COSTUME AT A TIME

Not long ago, the primary obstacle to increasing the panda population was convincing the bears to mate in captivity. Now that researchers have mostly surmounted that problem—using artificial insemination—another dilemma has reared its extinction-threatening head. It turns out that pandas raised in captivity have a tough time surviving in the wild. That's where Hemin Zhang, director of the China Conservation and Research Center for the Giant Panda in Chengdu, and Jianguo Liu, professor of fisheries and wildlife at Michigan State University, enter the picture. Over the last 17 years, the two of them, with their teams, have developed a multi-pronged plan aimed at safely increasing the population of pandas in protected areas—one that includes, curiously, staff members wearing panda bear costumes. The first cub reared under this program, Tao Tao, was released into the wild late last year and is doing well so far. Here's how they did it. —JACQUELINE DETWILER

1 When pandas are one to two years old, they enter a hilly training area with their mothers. Over the course of several years, the mothers teach the cubs how to establish their territory, climb trees for safety and locate enough bamboo to survive—adult pandas eat about 28 pounds of the stuff a day, so this can be quite a task.

2 To ensure that the cubs can distinguish between safe and dangerous creatures, sheep, birds and pigs also live in the enclosure, which staffers seed with feces from predators like clouded leopards. In order to tend to the environment without the bears getting used to being around humans, training center staff members wear panda suits.

3 Finally, Zhang and Liu have worked with the Chinese government to provide education and electricity subsidies that discourage local residents from destroying panda habitats by chopping down trees and raising horses that eat bamboo. "To make the conservation sustainable, we have to consider how to improve the well-being of people as well," says Liu.

