

3D PRINTING AIDS ANIMALS



Sometimes animals are so badly injured that regular medicine cannot help them. Animal lovers can still come to the rescue, though. In Brazil, a group of them use medicine and computer technology to create artificial body parts.

Three-dimensional (3D) printing can create all sorts of objects, from a vase to a toy truck. The Brazil team used 3D printing to help a badly burned tortoise. A forest fire had destroyed 85 percent of her shell—something a tortoise can't survive without. The group nicknamed the tortoise Freddy. Together, they gave her another chance at life.

First they took photos of Freddy and of a healthy tortoise with a complete shell. Then they used a computer program to design a new shell that would fit her exactly. A 3D printer created the new plastic shell. It was made in three parts and fit together like a puzzle. The finished shell was attached to Freddy's body. Later, an artist painted the shell so that it resembled a real one. Freddy now lives with the veterinarian who helped save her life.

Do You Know?

3D printing takes a lot of plastic. Now three Canadian students have invented the ProtoCycler. It's a device that turns waste plastic such as bottles into the plastic that can be used in a 3D printer.

Tortoise Shell, Take Two



1 After the fire, Freddy's shell was nearly gone. 2 The team of Matheus Rabello, Paulo Miamoto, Roberto Fecchio, Cicero Moraes, Sergio Camargo, and Rodrigo Rabello fit together the parts of her plastic shell. 3 The new shell fit well, but the white plastic was not a natural look. 4 Artist Yuri Caldera hand-painted the shell to resemble a shell design from nature. The results are amazing!