TO WARD OFF EXTINCTIONS, SCIENTISTS GET CREATIVE

SOME SCIENTISTS contend that we're heading toward what would be the sixth mass extinction in the history of life on Earth. Human activity has increased the rate of extinction by several orders of magnitude. A recent UN report says around one million species "are now threatened with extinction, many within decades."

That prospect is grim but not inevitable. Across the world, scientists are using new technologies and unorthodox approaches to bring species back. From lending a hand in breeding to training dogs to sniff out rare gorillas, scientists are taking extraordinary measures to save the animals they love. —ANNIE ROTH





1. GOLDEN POISON PROG

ENDANGERED

Marketing options

Coveted by amphibian collectors, this frog has been heavily poached. Conservationist Ivan Lozano captive-breeds a naturally occurring variant of the species—black-foot terribilis, a gold frog with black feet—and believes that offering this variant may steer demand away from wild-caught frogs.

2. WHITE-NAPED CRANE

VULNERABLE

Playing the part

When Walnut the crane was brought to the Smithsonian Conservation Biology Institute, she fixated on keeper Chris Crowe and refused to take a mate. Now Crowe (hand shown) plays that role: He mimics crane courtship gestures to get her interested, then artificially inseminates her eggs.

3. BILBY

VULNERABLE

Introducing the enemy

Rabbit-eared Australian marsupials are being hunted out of existence by foxes and feral cats in their environment. Now scientists are exposing bibbies to cats in a fenced reserve in hopes of sensitizing the marsupial to avoid the predator.

4. KAKAPO

Deploying technology

With fewer than 150 adults left in the wild, kakapos can't afford one bad breeding season. To monitor and encourage the birds' breeding, scientists deploy high-tech gadgets. One example: Drones deliver kakapo semen to scientists so they can artificially inseminate females in the field.

5. CROSS RIVER GORILLA

CRITICALLY ENDANGERED

Following the scent

Africa's rarest great ape is hard to track in its dense forest habitat. But now scientists get help from former shelter dogs, trained by the group Working Dogs for Conservation, to follow the scent of the gorilla's poop.