

“Big Cats’ Big Problem”

Read the article below.

Dr. Stuart Pimm is a member of the committee for National Geographic’s Big Cats Initiative. The Big Cats Initiative is a project to stop the decline of big cats in the world. Pimm teaches conservation ecology at Duke University. Pimm and his students identify lion and cheetah habitats in Africa.

In 2010, Dr. Pimm traveled to the Tete Province in Mozambique. His job was to see if the region could become a wildlife corridor. The corridor would connect the lion populations of Mozambique and Zambia. He discovered that the land had been cleared for crops. This surprised him. Pimm and his students realized that satellite images did not show what was really happening to the land. The images came from Landsat, a satellite that circles the Earth 14 times per day. It is hard to see habitat changes on Landsat satellite images. Pimm’s group now uses new technology to zoom in on Africa’s savannas. One of these technologies is Google Earth. Google Earth helps them to see much more detail. Pimm is finding that rapid changes are occurring in big cat habitats. Large areas of Africa have been converted to small fields. These fields are used to grow crops. Human and lion populations are trying to settle in the same habitat. If humans use up all the food and space, then there can’t be any lions.

Mapping the habitats for lions and cheetahs in Africa is only part of Pimm’s work. He does many more things for the Big Cats Initiative. He travels to Africa to meet with scientists and conservationists. Most of these people are trying to reverse the decline of lion and cheetah populations. For example, Anne Kent Taylor is working to reinforce bomas. Bomas are traditional livestock enclosures. They are usually made from thorny bushes. Lions are often able to break through bomas and attack the cattle inside. This angers humans and makes them want to kill the lions. Taylor’s stronger bomas help keep lions out. This protects the cattle. Then humans don’t have to kill the lions to protect their cattle. Taylor and her team have been reinforcing bomas with chain-link fences. The metal fences help prevent lion attacks. Dr. Pimm supports Taylor’s work. He feels that the new fences will greatly decrease the number of lions killed by humans.

Dr. Pimm also studies the range (land area) of African lions. The lions need more land to patrol. Pimm says that the national parks in Africa are big. But they are not always big enough for the lions. Lions take up a large amount of space. They eat meat. They need a lot of food. Without enough space and food, they will not have healthy populations. Parks do not have fences. Lions and other wildlife can cross the boundaries of the protected parks. This can lead to problems with neighboring human populations. Pimm wants to use crowdsourcing to study this problem. Crowdsourcing is a new technique that uses people to assist with a task. Volunteers would monitor a national park and its surrounding region using Google Earth. They would note any major changes to the land. This could tell conservationists whether or not park rules are being broken. This public monitoring could help preserve big cat populations.