

# Ecological Degradation in Protected Areas: The Case of Wolong Nature Reserve for Giant Pandas

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It is generally perceived that biodiversity is better protected from human activities after an area is designated as a protected area. However, we found that this common perception was not true in Wolong Nature Reserve (south-western China), which was established in 1975 as a “flagship” protected area for the world-renowned endangered giant pandas. Analyses of remote sensing data from pre- and post-establishment periods indicate that the reserve has become more fragmented and less suitable for giant panda habitation. The rate of loss of high-quality habitat after the reserve’s establishment was much higher than before the reserve was created, and the fragmentation of high-quality habitat became far more severe. After the creation of the reserve, rates of habitat loss and fragmentation inside the reserve unexpectedly increased to levels that were similar to or higher than those outside the reserve, in contrast to the situation before the reserve was created.