Highways and disease threatening the conservation of felids in the pristine forests of the Andes-Amazon region of southeastern Peru

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“Recreational development is a job not of building roads into lovely country, but of building receptivity into the still unloved human mind.” —Aldo Leopold

The Madre de Dios watershed in southeastern Peru is globally important in biodiversity and harbors at least seven species of wild cats. Human population density is low, and more than 80% of the region is wildlands. Seven protected areas are virtually contiguous in Madre de Dios, divided by a dirt road that is now being paved into a major highway. To the north of the highway lie the Alto Purus (2.5 million ha) and Manu (1.7 million ha) National Parks, the Amaruqariri Communal Conservation (402,000 ha), the Los Amigos Conservation Concession (145,000 ha) and the Reserve for the Isolated Indigenous Groups of Madre de Dios. To the south are the Tambopata National Reserve (275,000 ha) and the Bahauja Sonene National Park (1.1 million ha). These protected areas are a key part of the 30 million-ha Vilaclamba Amboró Conservation Corridor, which extends from the Apurimac Reserve in central Peru to the Amboró National Park in central Bolivia. Leite Pitman (in prep.) estimated the population of felids at three sites in Alto Purus, Manu National Park and Los Amigos Conservation Concession from camera trap and census work. The data suggest populations in these areas of at least 1,500 jaguars, 1,100 pumas and 37,000 spotted cats (Leopardus pardalis, L. wiedii and L. tigrinus)—the largest population of these species in contiguous areas ever reported. These populations are likely to be decimated by direct and indirect impacts of the new highway: road kills, disease habitat loss, and loss of genetic flow among populations (Malo et al. 2004).

Elevating and fencing critical portions of the Interoceanic Highway, and turning it into a toll-pay scenic road, will help conserve the Andes-Amazon region and at the same time catalyze the long-term economic stability of local people through ecotourism. Limiting economic activities around the highway only to special exits can be a great opportunity for regional economic growth. At the same time it will be possible to offer tourists a variety of needs at one stop, including hotels, restaurants and field guides ready to show tourists the unique regional fauna and flora that should be regarded with pride and protected accordingly. This will have a positive effect on all threats the highway poses:

HUNTING
The lack of access to the forest will make hunting more difficult. This combined with a strong education program to increase the local knowledge about wildcats and to show how they can be attractive to tourists can be a great tool to avoid hunting.

DISEASES
The limitation of highway exits will reduce the uncontrolled spread of domestic animals and their diseases in wild areas. For more effectiveness, control of domestic animals inside protected areas is needed, as well a local education program on diseases of domestic and wild animals. Implementing a vaccination plan for domestic animals inside protected areas is an essential measure.

COLLISIONS
Elevating parts of the road and fencing others will drop collision rates to zero. This is a great life-saving and economic measure also, since each year in the USA 200 people are killed and 29,000 injured and US$1 billion of property lost in animal-collision accidents. In the state of Vermont alone, in 1981-1991, US$31 million in property damage was caused by animal-collision accidents (Havlck 2004).

DEFORESTATION
Deforestation and “fishbone” fragmentation will be reduced if access to the highway is restricted.

REFERENCES