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# INTACT FOREST LANDSCAPES (IFLs)

▶ **WHY THEY MUST  
BE PROTECTED**

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# THE WORLD'S INTACT FOREST LANDSCAPES



## WHAT ARE INTACT FOREST LANDSCAPES?

Intact Forest Landscapes (IFLs) are the remaining large unfragmented areas within the forest zone, undisturbed by roads or other significant human infrastructure<sup>1</sup>.

IFL patches are defined as unbroken expanses of natural ecosystems (both forested and non-forested) greater than 500 km<sup>2</sup>. Most IFLs consist of dense and open forest (81%) with the remainder being swamps, rocky terrain, grasslands, rivers and lakes etc<sup>2</sup>.

The vast majority of IFLs are found in two biomes: Tropical and Boreal forests. 90% of the world's total IFL area is concentrated in only 11 countries, with just three of them - Canada, Russia and Brazil - containing approximately 65% of the world's entire IFL area.



# REST LANDSCAPES (IFLs)

160E



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## WHY ARE IFLs SO IMPORTANT?

They have extremely important conservation value, as they contain a disproportionately high amount of global forest carbon, are large enough to sustain their complete ensemble of biological diversity, and are critical for the livelihoods of forest dependent peoples living within and adjacent to them. They are large enough to both host far ranging top predators as well as other critical wildlife and species at risk

such as tigers or caribou, allow continued evolution, and enable many plant and animal species to adapt to shifts in biomes as a result of climate change.

Finally, they provide crucial ecosystem services such as regulating water and nutrient cycles, as well as containing the last remaining wilderness areas that are largely undisturbed by people.

## FACTS

- ▶ In 2013 Intact Forest Landscapes covered 11.81 million km<sup>2</sup>, 9.53 million km<sup>2</sup> (81%) of which was forest. This is about one quarter of FAO's latest global forest area estimate of 40.33 million km<sup>2</sup> (FAO - FRA 2010)<sup>3</sup>
- ▶ 65% of the world's IFLs are located in just 3 countries - Canada, Russia and Brazil.
- ▶ 8% of the world's remaining IFLs [1 million km<sup>2</sup> - an area the size of Egypt] were degraded between 2000 and 2013. The vast majority of IFL degradation occurred in Boreal and Tropical forest zones<sup>4</sup> where most IFLs exist - 56% in Canada, Russia and Brazil alone.
- ▶ 81% of IFL degradation is due to fragmentation, where an IFL is cut into smaller forest fragments (e.g. through roadbuilding). The remaining 19% is due to tree cover loss (clearcut-logging, agricultural clearing, fires etc.).
- ▶ Only 13% of IFLs were inside protected areas (IUCN categories I-III) in 2013<sup>5</sup>. IFL degradation still took place within these protected areas, but at a much lower level (4%) compared to IFL degradation outside protected areas (8.6%).



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**image**  
IFL degradation usually begins with roadbuilding.



**8% OF THE WORLD'S REMAINING IFLs  
[1 MILLION KM<sup>2</sup> - AN AREA THE SIZE OF EGYPT]  
WERE DEGRADED BETWEEN 2000 AND 2013.**





## WHY IFLs DESERVE SPECIAL ATTENTION?

Intactness is a value that is very sensitive to industrial activity disturbances such as fragmentation created by road construction, with potential huge impacts and very difficult to reverse once carried out.<sup>6</sup> Also, calling for the

protection of IFLs does not mean that other critical or high biodiversity areas should not also be protected. IFLs can simply be a proxy for high carbon and biodiversity.

### FACTS

**Fragmented forests can suffer from die back along their edges,** leading to losses of forest carbon (both from soil and woody biomass), and reduced of uptake of carbon. It has been estimated that these edge effects related to fragmentation may cause up to 150 million tonnes of carbon per year to be lost to the atmosphere, above and beyond that from tropical deforestation.

**IFLs are more resilient to climate change impacts than fragmented forests** as they are less vulnerable to drying, wind and fire than fragmented forest because they are less affected by edge effects. “Evidence suggests that intact forests, particularly primary forests, will be more resistant to climate change than second growth forests and degraded forests.” (CBD 2009)

**Much of the Amazon rainforest could become savannah within 50 years.** Fragmentation magnifies climate change impacts in tropical forests, especially the Amazon, by fragmenting the remaining forest, making it drier along its edges and more vulnerable to drought-induced fire.

**Roads are the pathways to forest destruction.** Once a formerly intact forest is opened up through roadbuilding, the pressure to open more for hunting and other activities increases. The *RoadFree* initiative indicates 95% of tree cover loss occurs within 50 km of a road<sup>7</sup> and roads put wildlife at risk.

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## References

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- 2** M. C. Hansen et al. High-Resolution Global Maps of 21st-Century Forest Cover Change. *Science* 342 (6160): 850-853. <http://www.sciencemag.org/content/342/6160/850>
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- 5** World Database on Protected Areas (WDPA). IUCN and UNEP, 2013. <http://www.protectedplanet.net>
- 6** 'Intact forest landscapes: Why it is critical to protect them from industrial exploration'. Thies, C., G. Rosoman, J. Cotter, and S. Meaden. 2011. Greenpeace, Amsterdam, the Netherlands: <http://www.intactforests.org/pdf/publications/Intact.Forest.Landscapes.Greenpeace.2011.pdf>
- 7** 95% of tree cover loss occurs within 50 km of a road. RoadFree: <http://roadfree.org>





**ONLY 13% OF IFLS WERE  
INSIDE PROTECTED AREAS  
- IUCN CATEGORIES I-III -  
IN 2013.**

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