

# Are our efforts enough to protect one of the most biodiverse places on earth?

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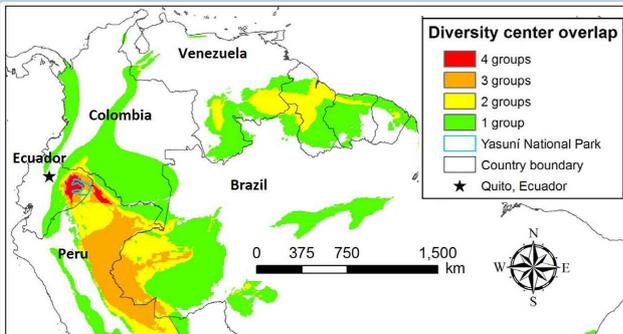
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## About the study area

### The Yasuní National Park (YNP)

- Ecuador's only National Park, created in 1979
- UNESCO Man and the Biosphere Reserve (9820 km<sup>2</sup>) since 1989
- Geography:** intersection of the Amazon, the Andes mountains and the equator; **climate:** moist tropical forest conditions
- Biodiversity:** biodiversity hotspot: e.g. over 600 tree species per hectare; 43 endemic vertebrate species; 15 Near Threatened vertebrate species
- Threats:** human activities including logging, oil drilling, habitat fragmentation and deforestation due to road construction, pollution



### Biodiversity in the Yasuní National Park<sup>1</sup>

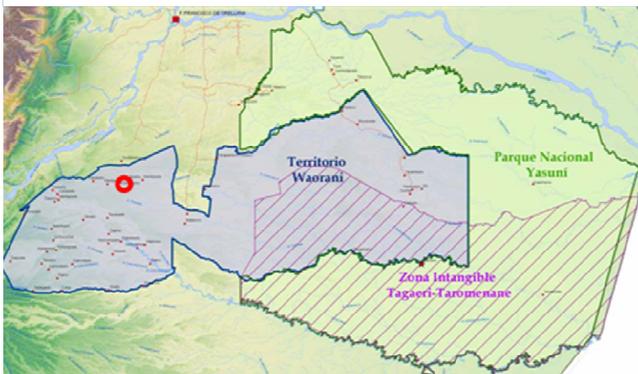
Overlapping richness centers of the groups mammals, amphibians, birds and vascular plants

### The Zona Intangible (ZI)

- Reserve for the protection of the Tagaeri & Taromenane (indigenous population) within the YNP
- No kind of extraction (timber, oil, etc.) allowed

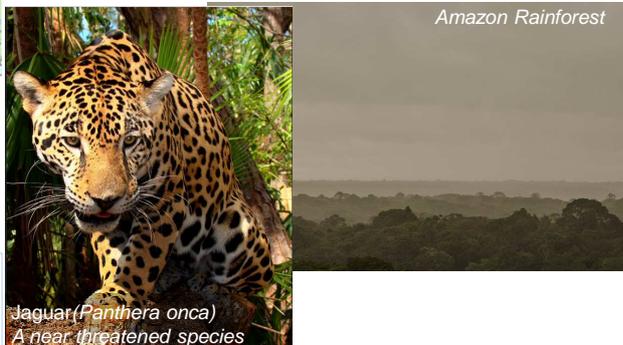
### Current state of research

- Biodiversity of the YNP quite well assessed (mainly  $\alpha$ -diversity) - especially for mammals, birds, amphibians, reptiles and vascular plants
- So far: no studies about the role of the ZI for biodiversity conservation and no comparison of biodiversity richness of the YNP and ZI

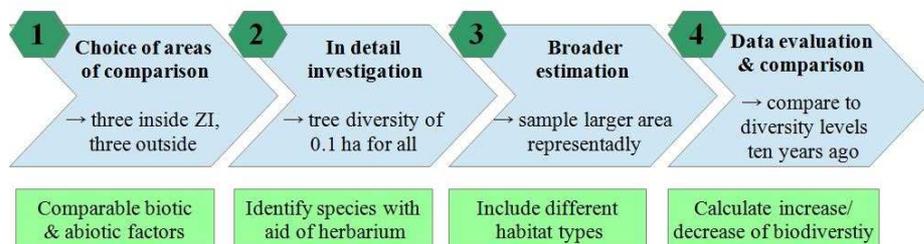


### Yasuní National Park and Zona Intangible<sup>2</sup>

The two study areas.



## Methods and trial design



Is there a difference in biodiversity richness between the ZI and the YNP? Is a National Park enough protection?

### Sources:

Bass et al. (2010). Global conservation Significance of Ecuador's Yasuní National Park. *PLoS ONE*, January 2010 (5).

Finer et al. (2010). Leaving the Oil under the Amazon: Ecuador's Yasuní-ITT Initiative. *Biotropica*, Vol. 42 (1), pp. 63–66.

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Scientists Concerned for Yasuní [SCY] (2013). Oil Drilling Threatens the Most Biodiverse Rainforest on Earth (Press release); Yasuní National Park and Biosphere Reserve, Ecuador; Download : <http://www.yasuninationalpark.org/wp-content/uploads/2013/10/SCY-2013-Press-Release.pdf> (last accessed: Jul 11, 2016).

World Rainforest Movement [WRM] (2013). Ecuador: The Tagaeri Taromenane Intangible Zone in Yasuní Park. Posted on Oct 2, 2013. <http://wrm.org.uy/articles-from-the-wrm-bulletin/section1/ecuador-the-tagaeri-taromenane-intangible-zone-in-yasuní-park/> (last accessed: Jul 11, 2016).

<sup>1</sup>modified according to Bass et al. (2010). Global conservation Significance of Ecuador's Yasuní National Park, *PLoS ONE*, January 2010 (5).

<sup>2</sup>[http://1.bp.blogspot.com/\\_8hXy10kltwQ/TGcfy69syAI/AAAAAAAAABQA/zVIgLSQ6h4/s1600/Keweriono+amd+Wao+Ter+map.png](http://1.bp.blogspot.com/_8hXy10kltwQ/TGcfy69syAI/AAAAAAAAABQA/zVIgLSQ6h4/s1600/Keweriono+amd+Wao+Ter+map.png) (last accessed: Jul 13, 2016).

Picture on the right: [https://pixabay.com/static/uploads/photo/2014/10/13/01/52/amazon-486353\\_960\\_720.jpg](https://pixabay.com/static/uploads/photo/2014/10/13/01/52/amazon-486353_960_720.jpg) (last accessed: Jul 25, 2016).

Picture on the left: <https://upload.wikimedia.org/wikipedia/commons/2/21/Junior-Jaguar-Belize-Zoo.jpg> (last accessed: Jul 25, 2016).