

Science to study oil extraction impacts in the Amazon

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CONTEXT:

- Tropical forests harbor over half of the planet's life forms and are also home to many Indigenous Peoples (1)
- > 30% Tropical forests overlap with oil extractive reservoirs (2)
- > Toxic, carcinogenic and mutagenic compounds (e.g. heavy metals, PAHs) are usually found in oil extraction industry byproducts (3,4)
- > Environmental and health impacts are largely unknown (2,5)

STUDY AREA:

Peruvian Amazon – Oil Block 1AB/192 **Achuar and Quechua Territory**

1971 Oil extraction began in the Achuar and Quechua territories

1983 Indigenous communities ask for the shutdown of oil activities

PRELIMINARY RESULTS:

Cuniculus paca

SPECIES RECORDED VISITING OIL-POLLUTED SITES

- 1984 "One of the most damaged regions of Peru" (6)
- 2006 99.2% and 79.2% local adults had Cd and Pb above the acceptable limits (7)

2010 1,000,000 Barrels of produced waters dumped daily into waters and rivers (8)

Visit the web here!

INDIGENOUS PEOPLES

2006 COMMUNITY-BASED MONITORING began (9), carried out by:

- 3 Indigenous federations
- FEDIQUEP, FECONACOR and OPIKAFPE
- + ICTA-UAB
- + NGOs
- +200 oil spills detected by the indigenous Monitors (not reported by the oil company)

Are animals ingesting oil-polluted soil and water?

ICTA-UAB / DEPT. VETERINÀRIA UAB

Are animals ingesting oil-polluted soil and water?

TOGETHER WITH LOCAL MONITORS:

2014 Camera trapping study began +8,000 videos collected in 20 sites 315 samples of liver tissues from Animals hunted for food

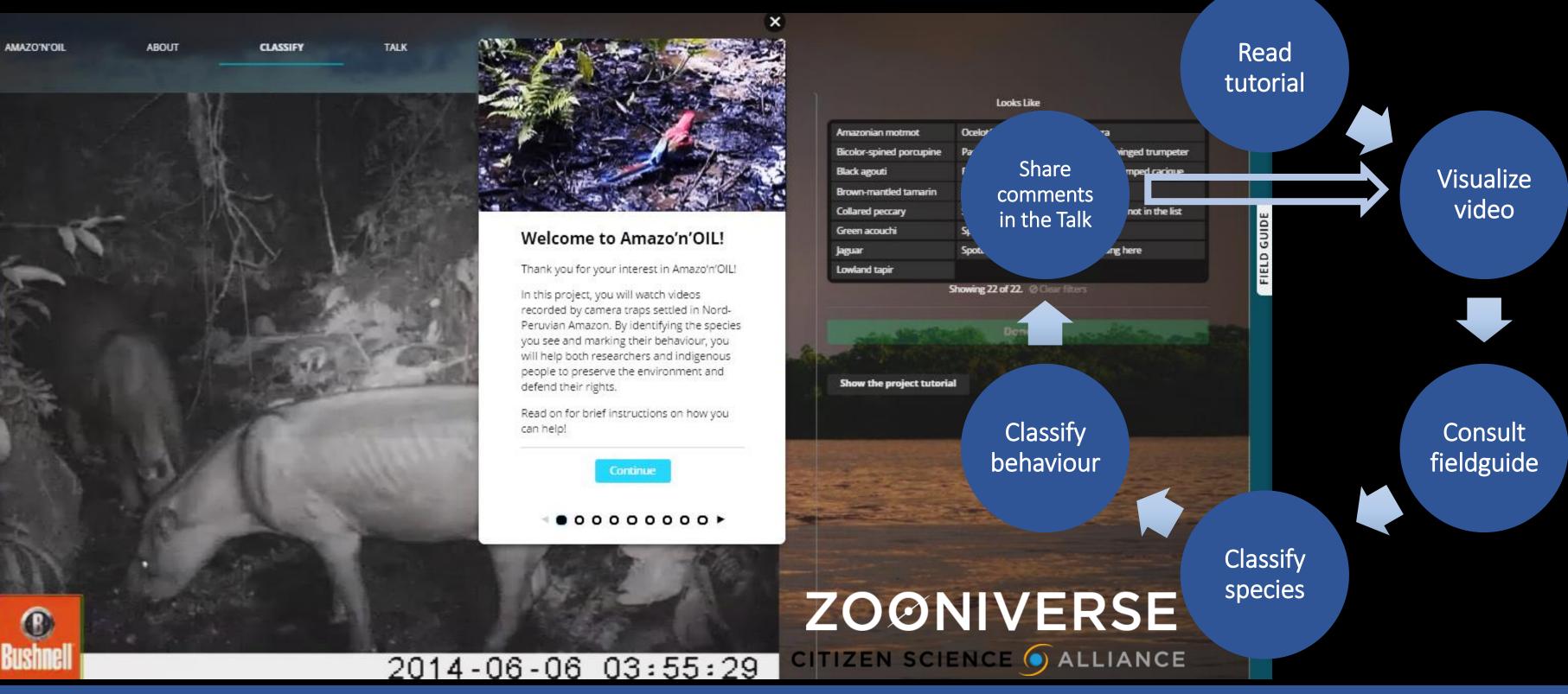
20 samples from oil-polluted soils sites visited by wildlife



WORLDWIDE DIGITAL VOLUNTEERS

April 2018 Amazo'N'Oil Online platform launched https://www.zooniverse.org/projects/marcartro/amazonoil

1,350 digital volunteers collaborated by now **32,150** classifications (3,900 videos) by now











CONCLUSIONS:

- The combination of different stakeholders' knowledges and strengths in documenting and investigating oil impacts have created synergies that help understand oil extraction activities impacts and overcome scientific knowledge gaps, while prompting the industry to take the adequate steps to mitigate them.
- > Are animals ingesting oil-polluted soil and water? Yes. This new-to-science behaviour is widespread taxonomically, geographically and temporally and may pose a risk for the whole ecosystem, including human populations that rely on subsistence hunting. Moreover, it might be happening in other oil concessions worldwide.
- > The digital platform Amazo'N'oil has allowed, so far, the fast analysis of thousands of videos. Moreover, volunteers inputs in the Talk have being very useful both in terms of improve the platform and of further the knowledge on oil extraction impacts on wildlife.

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