



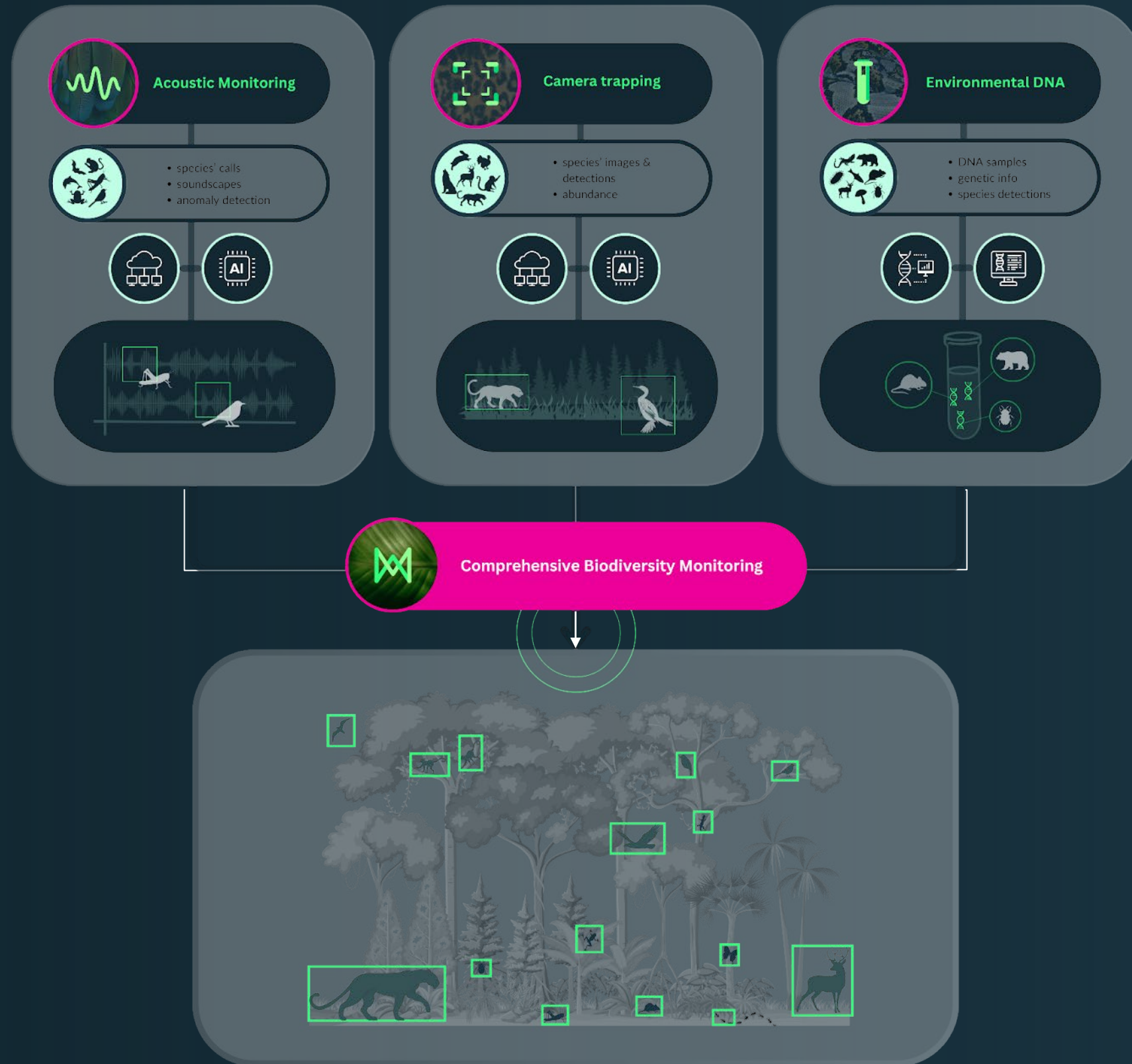
# Acoustic Monitoring for the determination of soundscapes and its application in environmental monitoring

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**We aim to improve how we monitor biodiversity by seamlessly integrating acoustics, camera traps, and eDNA to empower informed decisions, promote conservation, and support ecosystems.**



# What wildlife live in here?

How common are they?

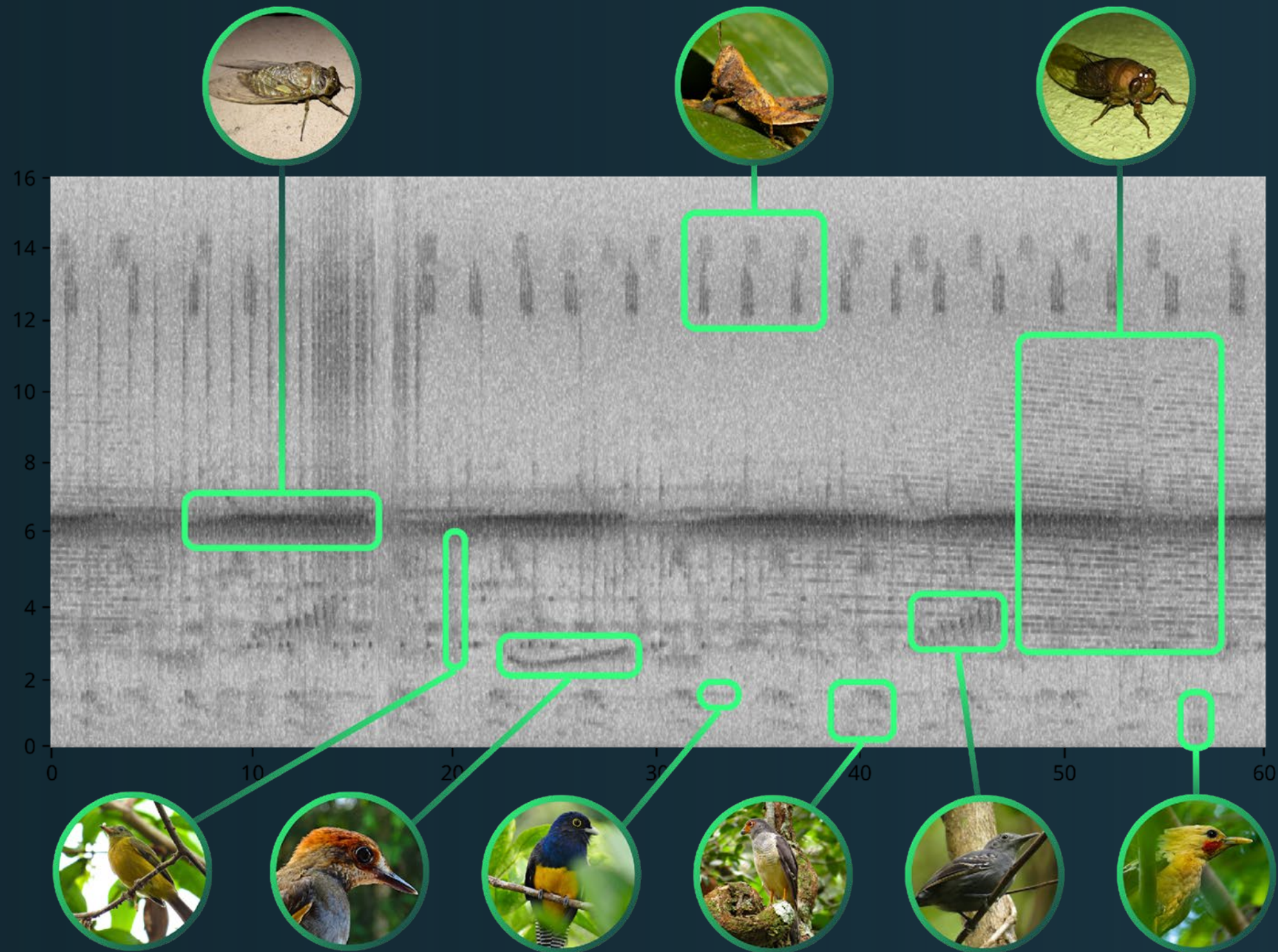
How are they distributed and why?

How dynamic are their populations?





# Solution - Acoustic Monitoring



Less invasive

Covers large areas (360°)

Long, continuous time frames

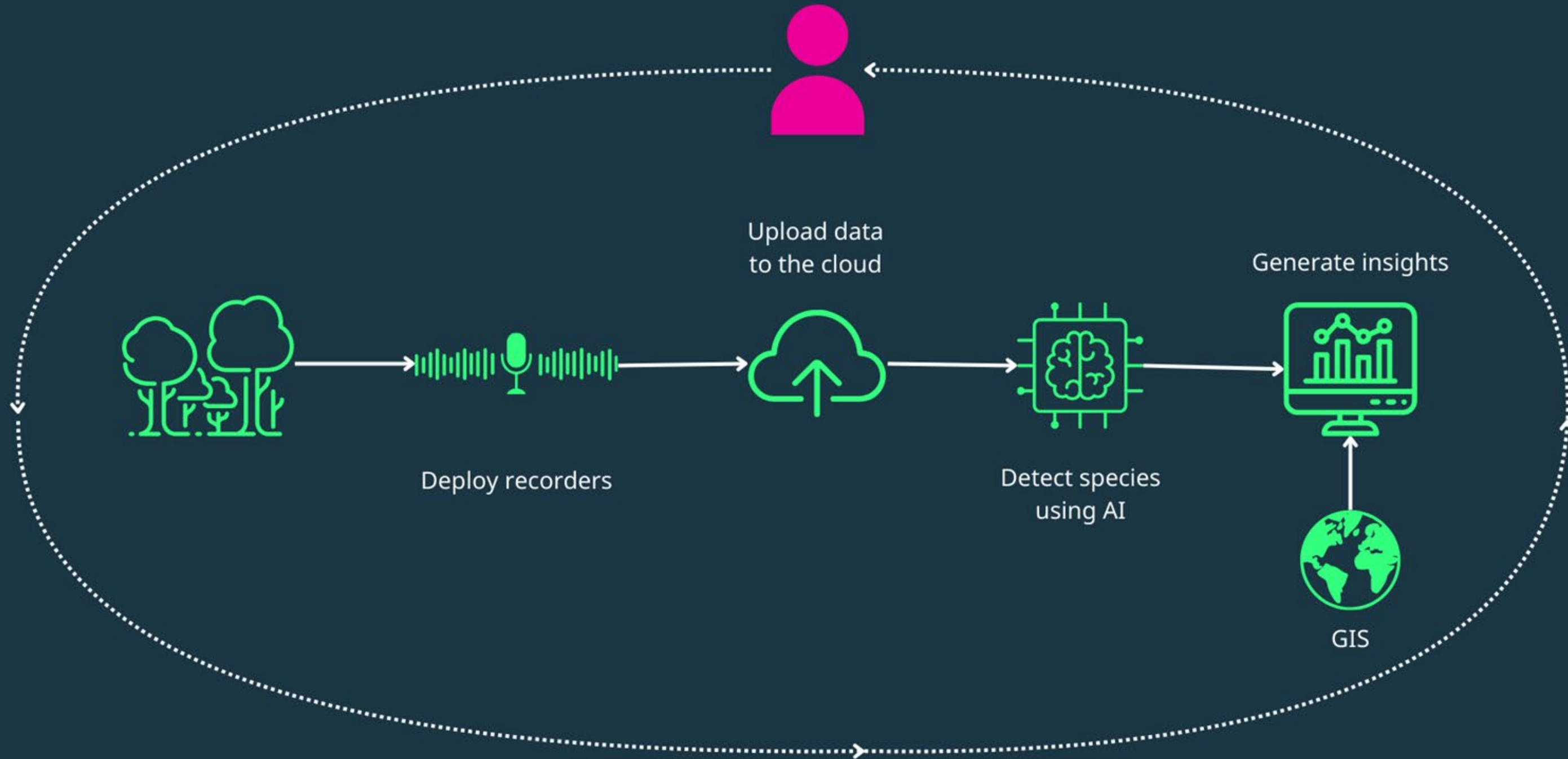
Survey multiple species simultaneously

Permanent audio archive



# Harnessing the power of AI

## Acoustics Pipeline.

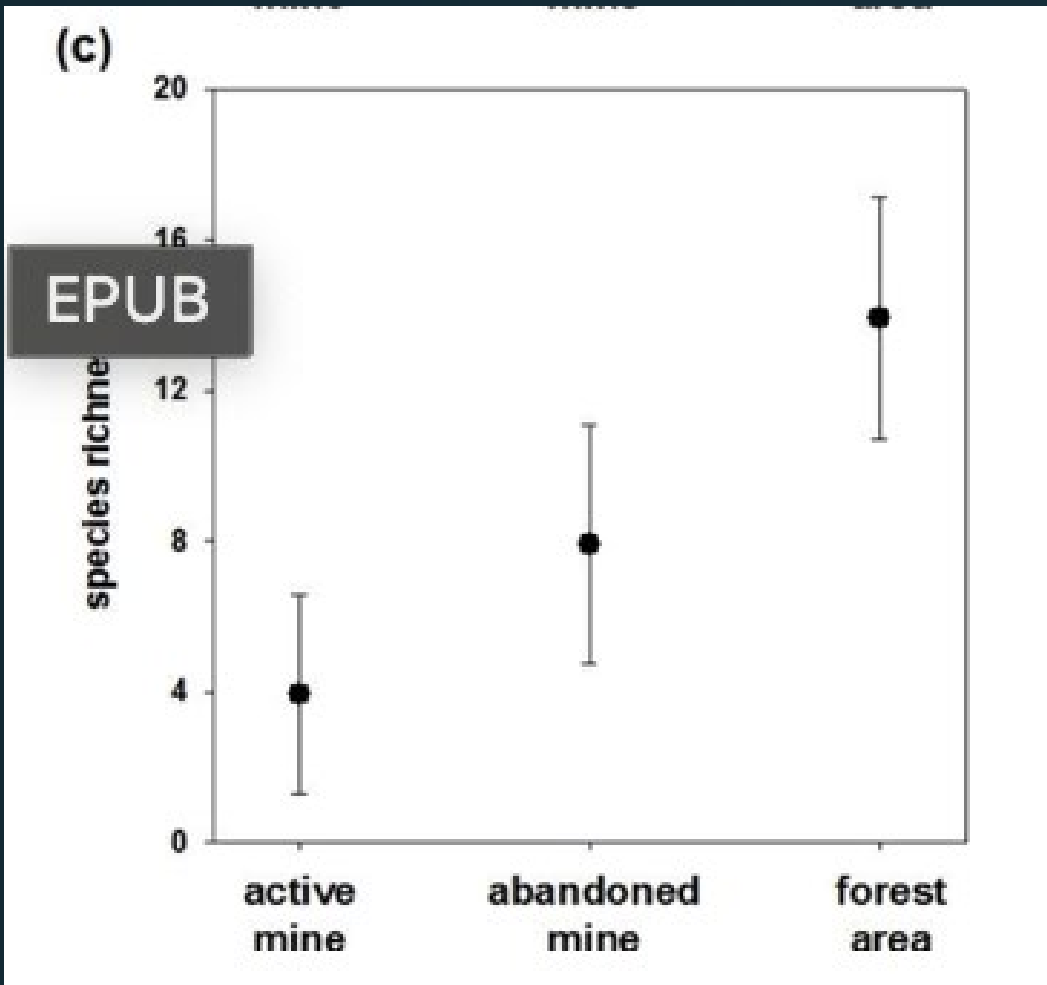




# Acoustic monitoring in the Amazon

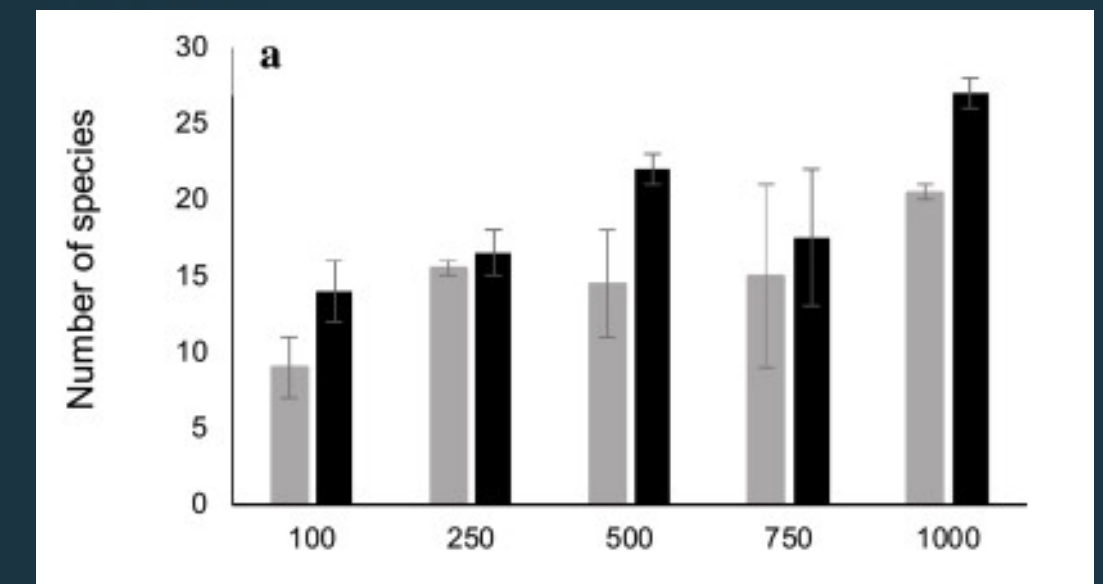
## Impacts of Small-Scale Gold Mining on Birds and Anurans Near the Tambopata Natural Reserve, Peru, Assessed Using Passive Acoustic Monitoring

Nora Alvarez-Berrios<sup>1,\*</sup>, Marconi Campos-Cerqueira<sup>2</sup>, Andrés Hernández-Serna<sup>2</sup>, C.J. Amanda Delgado<sup>3</sup>, Francisco Román-Dañobeytia<sup>4,5</sup>, and T. Mitchell Aide<sup>2</sup>



## Soundscape analysis and acoustic monitoring document impacts of natural gas exploration on biodiversity in a tropical forest

Jessica L. Deichmann<sup>a,\*</sup>, Andrés Hernández-Serna<sup>b,c</sup>, J. Amanda Delgado C.<sup>a,d</sup>, Marconi Campos-Cerqueira<sup>b,c</sup>, T. Mitchell Aide<sup>b,c</sup>

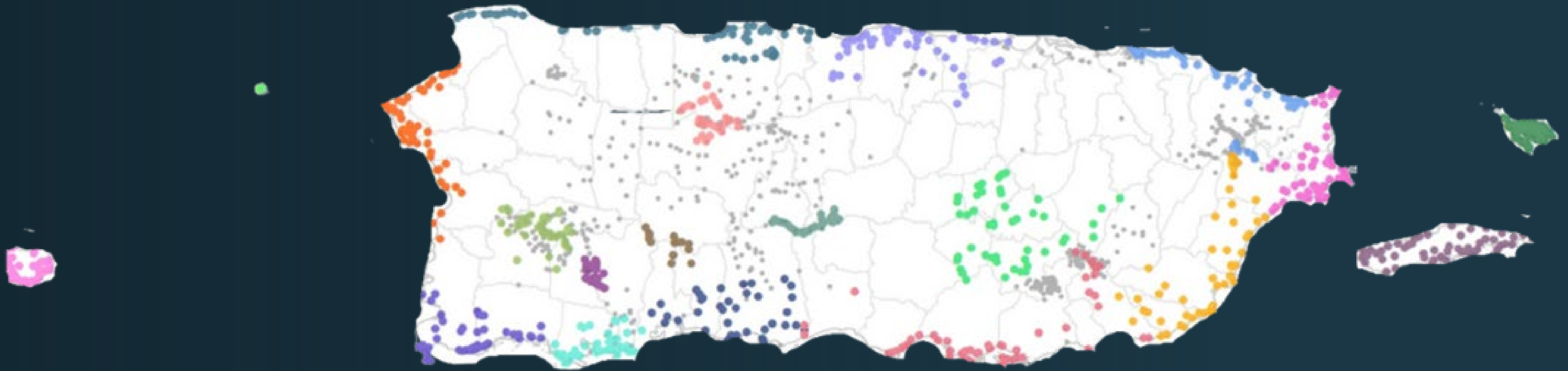




# Regional Acoustic Monitoring - Caribbean

**1500 sampling sites**  
**98 species, including**  
**27 endemics**

**19 threatened**  
**16 invasive species**





# Regional Acoustic Monitoring - Caribbean

There is a **mismatch** between current protected areas and suitable habitat under climate change scenarios.







# Global Real-Time Biodiversity Monitoring



**Acoustics**  
**eDNA**  
**Camera traps**

**Point counts**  
**GBIF**

Tracking changes in biodiversity over time & space provides essential data for:

evidence-based  
decision-making

monitoring progress  
towards GBF targets



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