Latin American Workshop on Citizen Science for Biodiversity Conservation Mexico City, September 24-25, 2018





Citizen Science for Biodiversity Conservation in Brazil

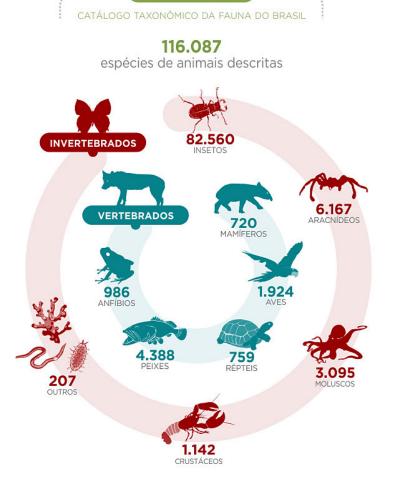
Onildo J Marini-Filho

Chico Mendes Institute of Biodiversity Conservation



Brazilian Biodiversity

- 170.000 to
 210.000
 known spp.
- Estimated
 1,8 million
 spp.
- Time to describe all unknown spp. is c. 8 Centuries



FAUNA





30

GIMNOSPERMAS

Systematizing biodiversity

• Science & Technology biodiversity system:

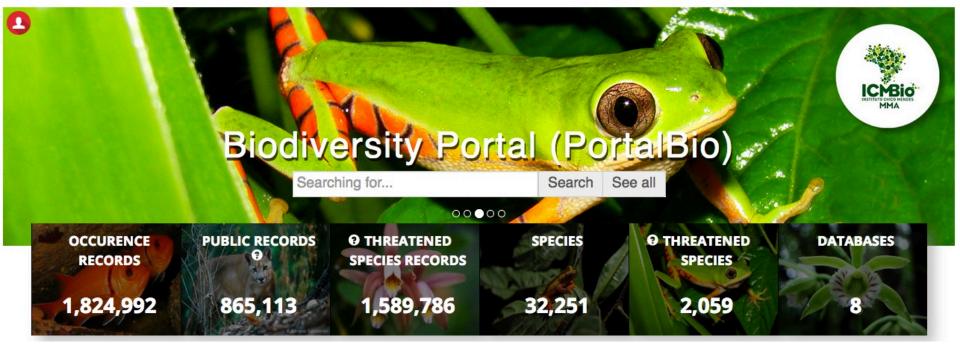


Focus on scientific collections and museums



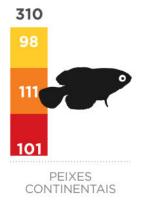
Systematizing Biodiversity

- Environmental biodiversity system: PortalBio
- Focus on recent field studies + threatened species



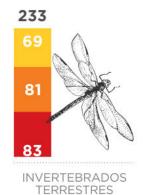
Threatened biodiversity

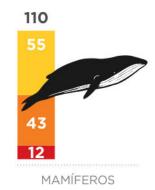
• 1,173 threatened animal species (2014)

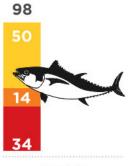




AVES







PEIXES MARINHOS





INVERTEBRADOS AQUÁTICOS



ANFÍBIOS

Public policies

- ICMBio has several conservation programs that benefit from citizen science initiatives
- Action Plans (QView)
- Species conservation assessments (QView)
- Species monitoring program



Citizen Science initiatives for biodiversity conservation

- Private and governmental institutions
- RedeLep via iNaturalist and social networks
- Monitora (ICMBio), native villagers
- Several others









Citizen participation

- RedeLep has c. 100 academic participants
- Monitora has capacitated 150 people
- Several interested citizens joined the projects







Data quality

- Collaborators generate naturalistic data from common and threatened species (place and date)
- Internet campaigns ask for pictures from 'wanted' butterflies
- Monitora uses paper files for field sampling





CSc information used in decision making

- Citizen science info is being used for planning species conservation actions, species assessments and monitoring
- We registered threatened species at new locations
- Citizen involvement in conservation actions
- Monitoring data for fruit-feeding butterflies at several sites

Opportunities and challenges

- Monitoring programs and threatened species data are fundamental and will profit much from citizen involvement
- It is important to have a mechanism to share data and allows the implementation of conservation projects → cell phones and internet connections at locations far from cities

Opportunities and challenges

- It is important to involve taxonomists to strengthen the identification tools and help beginners → credibility to species identification
- Megadiversity makes it very difficult to id at the species level → machine learning may help people learn faster and reach a better understanding



Thank you!