The world's biodiversity in the palm of your hand

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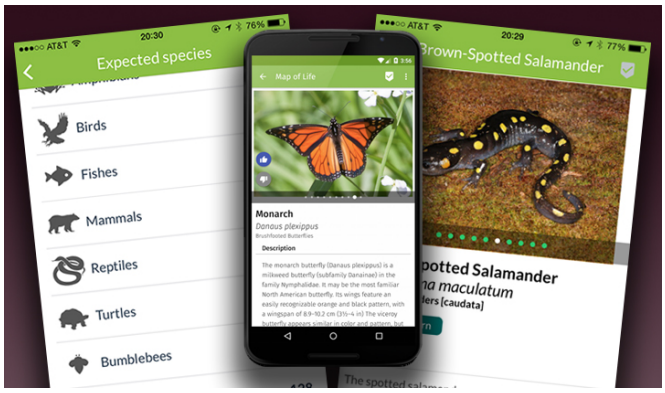

Never has knowledge of the world's biodiversity knowledge been more at your fingertips, thanks to a new smartphone app: the Map of Life. No matter where you are, the app can tell you what species of plants and animals are nearby.

Building on the Map of Life's unrivaled, integrated global database of everything from bumblebees to trees, the app tells users in an instant which species are likely to be found in their vicinity. Photos and text help users identify and learn more about what they see. The app also helps users create personal lists of observations and contribute those to scientific research and conservation efforts.

"The app puts a significant proportion of our global knowledge about biodiversity in the palm of your hand, and allows you to discover and connect with biodiversity in a place, wherever you are," said Walter Jetz, a Yale University associate professor of ecology and evolutionary biology, and the guiding force behind Map of Life. "This vast information, personalized for where we are, can change the way we identify and learn about the things we see when traveling, hiking in the woods, or stepping in our own back yard."

Instead of sifting through hundreds of pages in a printed field guide, naturalists get a digital guide that is already tailored to their location. With a novel modeling and mapping platform covering tens of thousands of species—everything from mammals and birds to plants, amphibians, reptiles, arthropod groups, and fish—Map of Life presents localized species information via maps, photographs, and detailed information. The National Science Foundation and NASA provided initial support for the Map of Life. Google and Senckenberg Gesellschaft für Naturforschung also have supported the project.

Thanks to a recording feature, citizen scientists everywhere can log their bird encounters and dragonfly sightings directly into the app and add to the biodiversity data available to scientists around the world. "Think of a field guide that continues to improve the more we all use it and add to it. That is the beauty of this mobile application, and its great strength," said Rob Guralnick, associate curator at the University of Florida and the project's co-leader. "We hope that the Map of Life app, built from 100 years of knowledge about where species are found, will accelerate our ability to completely close the many gaps in our biodiversity knowledge."

Indeed, making it easier and more globally streamlined for citizen scientists to contribute information is one of the key motivations behind creating the app. "The world is changing rapidly and species continue to disappear before we even knew where they existed, what role they had, and how we could conserve them," said Jetz, who is director of the Yale Program in Spatial Biodiversity Science & Conservation and is involved in several global science initiatives for advancing biodiversity monitoring.

"Too much of our knowledge is limited to too few places and species," Jetz said. "Helping people

everywhere to identify and then record biodiversity carries the potential to hugely extend the geographic and taxonomic reach of measuring the pulse of life."

The Map of Life app is available in six languages for iPhone and Android smartphones. For more information about the app, visit the website.

More information: For more information about the Map of Life project, visit the website: mol.org/

Provided by Yale University