



## M5.21

# Geospatial Conservation Assessment Tool (GeoCAT): Implement visualisation tool for Scratchpads

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Work package: WP5 'Data'

Partner: Vizzuality

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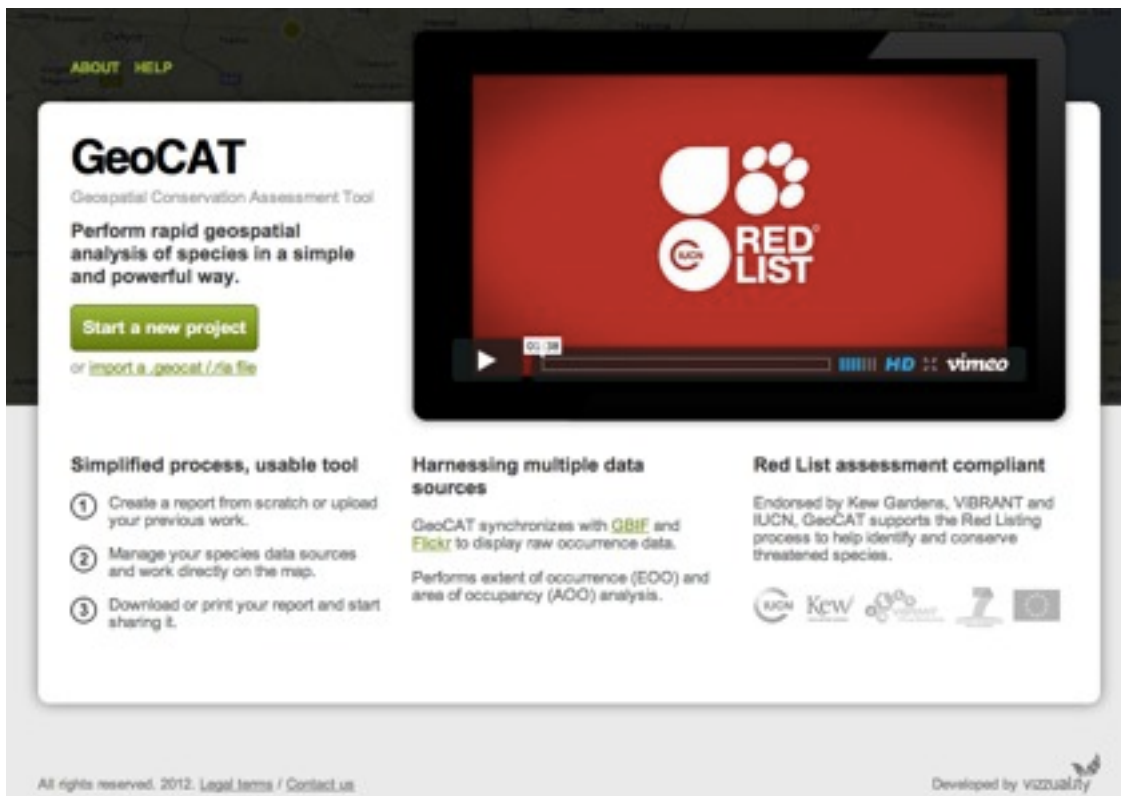
## Introduction

Most of Vizzuality participation on ViBRANT have to do with the development of the GeoCAT Tool. This tool is designed to produce rapid species level conservation assessments based on IUCN Red List Categories and Criteria (IUCN 2001). Through an easy to use interface with a familiar Google Map underlay you can upload primary occurrence data for a species and at the click of a button calculate values relating to the geographic range of a species.

We have completed version 1.0 of the tool and now is deployed and being used by many scientist.

The tool can be access at:

<http://geocat.kew.org/>



The screenshot shows the GeoCAT website interface. At the top left, there are links for 'ABOUT' and 'HELP'. The main heading is 'GeoCAT' with the subtitle 'Geospatial Conservation Assessment Tool'. Below this, it states 'Perform rapid geospatial analysis of species in a simple and powerful way.' There is a green button labeled 'Start a new project' and a link 'or import a .geocat/.xls file'. To the right, there is a video player showing the IUCN Red List logo. Below the video, there are three columns of text:

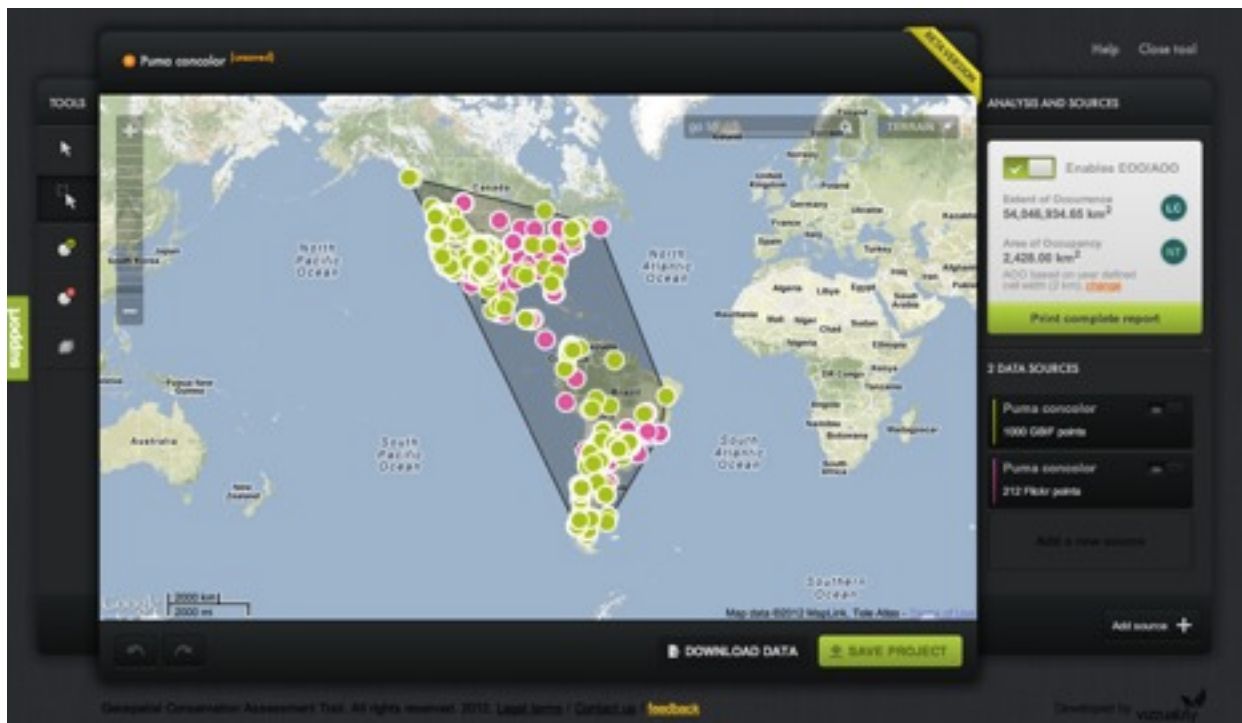
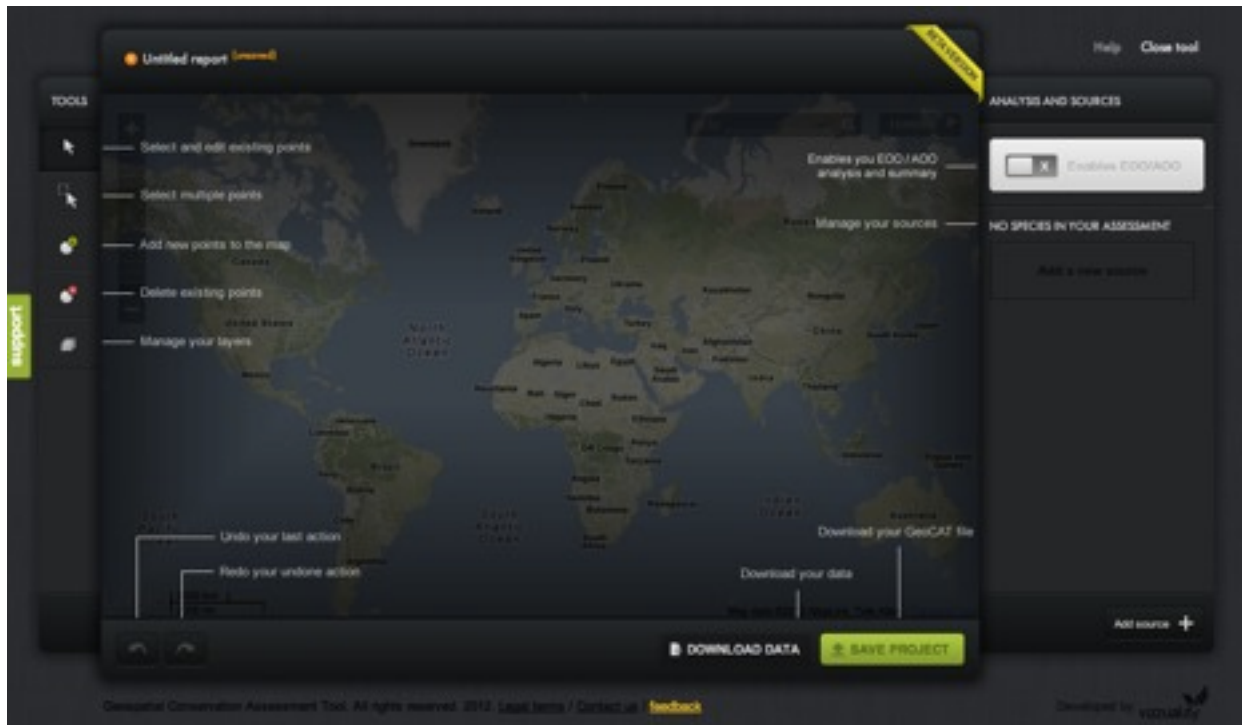
- Simplified process, usable tool**
  - 1 Create a report from scratch or upload your previous work.
  - 2 Manage your species data sources and work directly on the map.
  - 3 Download or print your report and start sharing it.
- Harnessing multiple data sources**

GeoCAT synchronizes with **GBIF** and **Elictr** to display raw occurrence data.

Performs extent of occurrence (EOO) and area of occupancy (AOO) analysis.
- Red List assessment compliant**

Endorsed by Kew Gardens, VIBRANT and IUCN, GeoCAT supports the Red Listing process to help identify and conserve threatened species.

At the bottom left, it says 'All rights reserved. 2012. Legal terms / Contact Us'. At the bottom right, it says 'Developed by Vizzuality' with the Vizzuality logo.





## Source code

The source for the application has been released under an Open Source BSD license and is available on the following code repository:

<https://github.com/Vizzuality/geocat>

The source code includes instructions on how to install it on your own server, but most users are expected to use it online.

A screenshot of the GitHub repository page for Vizzuality/GeoCAT. The page shows the repository name, navigation tabs (Code, Network, Pull Requests, Wiki, Stats & Graphs), and a list of files. The latest commit is highlighted, showing the message "target added to support tab" by user xavijam. Below this, a table lists the repository's files and their commit history.

name	age	message	history
app	16 days ago	target added to support tab [xavijam]	
config	22 days ago	Enables validation of data files [FerdeV]	
db	11 months ago	Changes some migration names [xavijam]	
lib	21 days ago	Solves some bugs with csv importing [FerdeV]	

The repository is being followed by 10 people and has been forked 5 times already.



## Publication and impact

A scientific paper has been published for the use of the tool and is also submitted as part of this milestone. It can be found at:

Bachman S, Moat J, Hill AW, de la Torre J, Scott B

[“Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool.” \(2011\)](#)

In: Smith V, Penev L (Eds) e-Infrastructures for data publishing in biodiversity science. ZooKeys 150: 117–126. doi: 0.3897/zookeys.150.2109

In terms of users of the application here are the stats from Google Analytics from January 2012 to February 29th 2012.

1,324 Visits

577 Unique Visitors

3,089 Pageviews

2.33 Pages/Visit

00:04:09 Avg. Time on Site

41.24% Bounce Rate

38.37% % New Visits