Announcement

Geospatial Analytics Training Course 15-18 March 2022

With funding from the Cleveland Metroparks Zoo and technical support from experts from the University of Wuerzburg, GIS and Geodata4Africa, the Center of Excellence in Biodiversity and Natural Resource Management at University of Rwanda, and The Dian Fossey Gorilla Fund will hold a 4-day **Geospatial Analytics Training Course** at its new Ellen DeGeneres Campus in Kinigi, Musanze District, from the **15-18th March 2022.**

The course is designed to ensure continuity of capacity building in geospatial analytics among African professionals by integrating a training for future trainers and creating a platform for a 'community of practice' in geospatial analytics. The course targets practitioners in conservation-related fields with basic knowledge in geospatial analysis and who already use or aim to integrate geospatial analytics into their work as well as current and future trainers in geospatial analytics.

Participants will learn the full process of designing and implementing satellite-based monitoring approaches in the context of global change (incl. field work and data sharing). The four-day course includes one day of field excursion in the Volcanoes National Park to practice geospatial data collection with dedicated devices and the import of field data of various formats into GIS software for data analysis and creating maps.

What can you expect?

- Satellite missions and sensor types
- Data gateways
- Introduction into GIS software
- Vector analysis
- Raster analysis
- EO project design, e.g., design your own field campaign
- Data integration and pre-processing
- Analysis of field work and intersection with environmental remote sensing data

The training schedule is below. Please apply for the training course by filling a questionnaire available at https://arcg.is/0G9TCP0 We will select applicants based on likelihood to train others and build capacity within conservation and education organizations, and the provided information will help to optimally design the course based on the participants existing knowledge and future goals. Application deadline is the **27 February 2022.** Selected participants will be informed by 2nd March 2022. Space is limited so please apply early. Only applicants who can attend the full four days will be considered.

Note that participants are expected to arrive at the course location by 3 pm on the 14th March 2022 and departure is planned for the morning of the 19th March 2022. We encourage participants to bring their own laptops, but it is not compulsory. *Successful applicants will have specific costs covered, including transport, accommodation and food on site, and the field trip. No per diems will be provided.*

For any questions, please contact Dr. Winnie Eckardt (weckardt@gorillafund.org).

Agenda for Geospatial Analytics Training

	Tuesday (15th March)	Wednesday[1] (16th March)	Thursday (17th March)	Friday (18th March)
8 am – 10:15 am	• potential and challenges of spatial data analysis • overview of available spatial data and respective sources	• vector analysis (buffer, intersect, query)		• analysis of field work and intersection with environmental remote sensing data
Coffee Break			**FIELD WORK:**	

10:30 am – 1 pm	• general introduction to spatial data (formats, types, file types, metadata, sources)
	• introduction to GIS software
	   • vector import/export
	   • raster import/export
		• raster analysis (vegetation indices, classification)
		• raster-vector query
			• field work with dedicated spatial mobile software (mobile phone like Qfield, Input)
			• creating field work maps
			• import of field data of different formats into GIS software
				• creation of landcover information, e.g., classification based on in-situ data
				• finalizing an informative map based on derived environmental information

Lunch Break				

2 pm – 5pm	• introduction to GIS software
	   • vector manipulation
	   • projections
	• general map making issues
		• discussing of field work potential and challenges
		• discussing of field work protocol setup
		• discussion of field work setup (spatial coverage)
				• sharing of metadata, data, and results
				• discussing "community of practice" WhatsApp group for participants and rules for usage
				• Wrap up & final discussion

---

[1] ONLY Wednesday: session from 5 pm – 6pm: Preparation and introduction into field work (incl. choice of devices: GPS, smart phones, tablets)