GIS Training in Fiji May 2014
Working with ArcGIS for Environmental Analysis & Advanced Topics for ArcGIS

Juniper GIS is partnering with Global Visions International (GVI) to offer ArcGIS training this May in Suva, the capital of Fiji. The cost will be $500 US/850FJD for each one-week class. You will work alongside Fijian conservation staff and students from other parts of the world and your fees will help provide training to local people and to further their conservation efforts. Students will need to bring their own laptop capable of running ArcGIS 10.0/10.1/10.2, unless we can secure a computer lab. We will provide evaluation copies of the software if needed. If you sign up for both classes, the fee will only be **$900** US/1,530FJD for two weeks of excellent GIS training.

The first class, ArcGIS for Environmental Analysis, **May 12-16**, is a five-day class that covers beginning and intermediate GIS skills with a focus on conservation and natural resource applications. The second class, Advanced Topics in ArcGIS, **May 19-23**, consists of 3 modules – *Working with Geodatabases and Linear Referencing (2-days)*, *Working with ModelBuilder (1-day)*, and *Using Spatial Analyst for ArcGIS (2-days)*. In both classes, you will have some time to work with your own data and projects. There is more information on these classes below or you can see course descriptions at http://www.junipergis.com/training/class-descriptions/.

The classes will be taught by John Schaeffer, who has over twenty years experience teaching and using GIS, with an emphasis on conservation GIS. Juniper GIS courses are based on real projects, with an emphasis on the skills needed to successfully and efficiently complete your projects. John has taught extensively in the US, and also in Kenya, Uganda, Tanzania, South Africa, Russia and Mexico to a wide variety of state, local and federal agencies and many conservation groups, including the Jane Goodall Institute and the Society for Conservation GIS. This will be his second trip to Fiji.

"I have used my new knowledge and understanding of GIS EVERY DAY since I've returned. It was such a worthwhile training on so many fronts. Thank you so much John and Patti!!" – Lisa H, Boise Idaho, who took this same class in Akumal, Mexico.

The classes will be taught in Suva, located on the southeast coast of the island of Viti Levu, Fiji's largest island. Suva is Fiji's political and administrative capital and is the largest and the most cosmopolitan city in the South Pacific. It is also an important regional center, with students from the Pacific region and a growing expatriate community making up a significant portion of the city's population. When we know the actual location within the city, we will contact students who have registered. There are many affordable lodging options in Suva.

Suva is served by an international airport, but most of the flights to Suva originate in New Zealand and other Pacific islands in the region. If you are coming from other areas, you will most likely fly into Nadi International airport on the western side of Viti Levu, and from there take another flight or a bus to Suva. Taking the bus, you will go along Fiji's beautiful coral coast.

If you are not from Fiji, and have some time before or after the classes, you can explore more of Fiji and perhaps do some diving or snorkeling on their fantastic reefs, or rafting on their rivers, or hiking in the countryside. Since many people in the class will be from Fiji, you will get many good recommendations from people who know the Fijian islands well.

Working with ArcGIS for Environmental Analysis, May 12-16, 5 days for $500 US/860FJD

This one-week intensive course will focus on core GIS skills and introduce some advanced topics, all with an emphasis on conservation GIS. This class is appropriate for new GIS users and for experienced GIS users wanting more in-depth instruction.

Core GIS skills include compiling and organizing data, understanding projections, using symbology and labels to understand the data, working with tables to maximize the database functionality of GIS, using edit tools to create and clean the data, performing analysis, and creating finished maps. Students will also learn some advanced skills – working with Spatial Analyst, using raster GIS techniques for analysis, using ModelBuilder to create models for analysis, and moving data to and from Google Earth.

Students will practice and improve these skills while working through typical GIS projects that include identifying areas for elephant habitat, displaying coral abundance levels on reefs, and corridor analysis. These projects will use conservation and natural resource data from the US, Kenya, Mexico, and local data where applicable.

Advanced Topics for ArcGIS, May 19-23, 5 days for only $500 US/860FJD

<u>Working with Geodatabases and Linear Referencing</u>, 2 days. This course introduces users to the Geodatabase, a data format that provides enhanced tools for data creation, data modeling, and data validation. Participants will learn how to design, create and manage Geodatabases. At the end of the course, students will have an in-depth understanding of the Geodatabase structure and how to use subtypes, domains, and Geodatabase topology to clean data and maintain data integrity. Since one of the strengths of a Geodatabase is to validate and correct data, there will be many examples of editing, particularly with specialized Geodatabase editing tools and other advanced editing methods. In the last section students will learn how to create routes and use linear referencing for analysis working with stream and fish data.
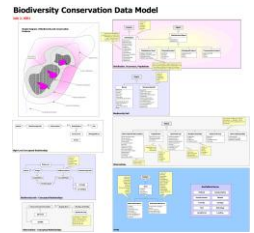
<u>Working with ModelBuilder</u>, 1 day. Students will learn how to use ModelBuilder to both automate basic workflows and to perform complex analysis. The course will first cover the ArcGIS Geoprocessing environment, which provides the foundation for ModelBuilder operations. Students will then learn how to create models and tools (dialog boxes with user input) in ModelBuilder. The models will cover a variety of functions, including iteration, batch operations, process models, and branching. Students will also learn how to add Python Scripts to ModelBuilder and how to use sub-models. This is a practical, hands-on course designed to increase your productivity, making both analysis and basic tasks more efficient.

<u>Using Spatial Analyst for ArcGIS</u>, 2 days. This course introduces participants to the Spatial Analyst extension and using Raster GIS by working through several projects. The first project illustrates basic raster functionality by locating the best site for a solar installation. The second project demonstrates more advanced analysis by determining wildland fire hazard zones. A third project explores the process of analyzing water tables and the impact of irrigation, providing an opportunity to look at the Hydrology sample provided for ArcGIS. The final projects combine the skills learned in earlier projects to locate sites for elephant conservation zones in Kenya and to do least-cost path analysis to find the best corridor between an elephant herd and a reserve area.

In this second class, there will be ample time for people to work on their own projects, especially if you take both classes. For more information on these courses please contact John Schaeffer at **john@junipergis.com**.

Payment:

Please contact Patti at Juniper GIS to verify that seats are available. You can then register at our website: http://www.junipergis.com/training/registration/. Juniper GIS can accept payment by Visa, MasterCard, check, Purchase Order or bank transfer. To hold your seat, we will need a credit card number or check, but we will not run this until the class is confirmed. **For Fiji Based Organizations, individuals, and government agencies – please email Daniel Lund at Fiji@gviworld.com for registration and payment details**. We will confirm the class by March 15 so you will have plenty of time to book a flight.