GIS Training in Bali, Indonesia – October 2017

Working with ArcGIS for Environmental Analysis & Advanced Topics for ArcGIS

Juniper GIS is partnering with the Society of Conservation GIS (www.scgis.org) and SCGIS Indonesia to offer an intensive two-week course in ESRI's ArcGIS Desktop software this October in Bali, Indonesia. We will offer the one week *ArcGIS for Environmental Analysis* class October 9-13 and the one-week *Advanced Topics for ArcGIS* class October 16-20. Classes will start at 8 am and end at 5 pm with an hour for lunch.

The classes will be taught at the Indonesia Australia Language Foundation (IALF), located in Denpasar, Bali. Established in 1989, IALF is Indonesia's premier institution for English and Indonesian language training, IELTS testing and preparation, and teacher training for teachers of English. It is a non-profit organization, committed to providing high quality language training services throughout Indonesia and the Asia Pacific region.

The price for Indonesian nationals is IDR 3,375,000 for one class or IDR 4,750,000 if you take both classes. The price for students from other countries is $550 USD for one class and $950 USD for both classes. The price includes lunch and coffee/tea breaks on each class day. For payment options contact Andina Anastasia Krey at andinakrey@gmail.com if you are from Indonesia. If you are from other countries or wish to pay using Visa or Mastercard, contact John Schaeffer at john@junipergis.com. Each class is limited to 18 students, so it is best to register early. You can hold a seat with a 50% deposit with the full amount due August 9.

The classes will be taught by John Schaeffer, who has over twenty-five 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 in over a dozen countries 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. The class will be taught in English, but there will be an Indonesian-speaking helper to assist students.

"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!!!" – Lisa H, Boise Idaho, who took this class in Akumal, Mexico.

The course descriptions for the two classes are below. If you have more questions on course content, please feel free to contact John Schaeffer at john@junipergis.com. If you have general questions about Bali, contact Andina Anastasia Krey at andinakrey@gmail.com.

### ArcGIS for Environmental Analysis

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 coordinate systems, using symbology and labels to understand the data, working with tables and Excel to maximize the database functionality of GIS, using edit tools to create and clean data, performing analysis, and creating finished maps. Students will also be introduced to some advanced skills – working with Spatial Analyst, using ModelBuilder to create models for analysis, and moving data to and from Google Earth or ArcGIS 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.

## *Advanced Topics for ArcGIS*

Working with Geodatabases and Geodatabase Topology, 1 day. Students will learn how to design, create and manage Geodatabases, a data format that provides enhanced tools for data creation, data modeling, and data validation. 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.
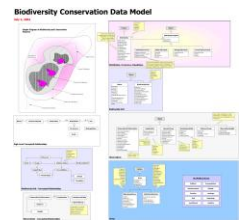
Working with ModelBuilder, 1 day. Students will learn how to use ModelBuilder to automate basic workflows and to perform complex analysis. Students will learn how to create models and tools (dialog boxes with user input) in ModelBuilder. The models will cover a variety of functions, including iteration, batch operations, process models, and branching. This is a practical, hands-on course designed to increase your productivity, making both analysis and basic tasks more efficient.

Using Spatial Analyst for ArcGIS, 1.5 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 work with the ArcGIS Hydrology tools. 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.
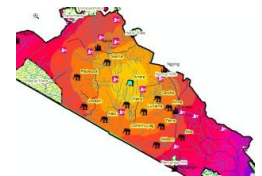
Web GIS, 1.5 days. In this course, students will learn how to prepare, publish and share their maps and analysis results on the web; to then be accessed from the web browsers and mobile devices. Students will also learn how to create compelling web applications and use mobile apps for field operations. This class will be taught by Canserina Kurnia, who is a GIS professional with over 21 years of experience. Canserina joined Esri, the leading GIS company, at the head office in Redlands, California in 1999. Currently she is stationed in Singapore, as a Solution Engineer, assisting Esri Global in building GIS technical capacity for Esri distributors and users in Asia Pacific region.

During the second week of classes, there will be time for people to work on their own projects, especially if they take both weeks of classes. For more information on these courses please contact John Schaeffer at **john@junipergis.com**.

The classes will be taught in the city of Denpasar. Although it may not be as popular as the vibrant tourist's compound of Kuta and Legian or the thrilling waves of the island's south coast among tourists, Denpasar, the capital city of the Province of Bali holds its own charm as a place where modernity and Balinese distinct culture blend flawlessly as a whole. The city also acts as the major hub that connects the many tourist destinations within Bali Island.

Most visitors coming to Bali will arrive at Ngurah Rai International Airport, located in Tuban between Kuta and Jimbaran, roughly 15 km from Denpasar or about 30 minutes drive. Ngurah Rai International Airport connects Bali to most of Indonesian major cities and some of the major cities of the world. More information on domestic and international flights to and from Bali can be found at http://www.ngurahrai-airport.co.id.

Denpasar is centrally located and easily reached by car or taxi from the main tourist regions of south Bali. A trip from Kuta, Legian and Seminyak will take 20-30 minutes depending on traffic. Sanur is just 15 minutes to the east and Ubud about 30 minutes to the north. Tabanan is about 40 minutes to the northwest. A taxi from the airport will cost between Indonesian Rupiah (IDR) 70,000-100,000, or USD 5-7, depending on exactly where in Denpasar you are heading to.

There are many hotels and guest houses around Denpasar. The easiest way is to Google the map around the location of IALF Bali. IALF itself has a list of affordable guest houses within walking distance. The price of the rooms in the list is around IDR 300,000-1,500,000/week or USD 23-115/week. IALF Address - Jl. Raya Sesetan 190 Denpasar Bali 80223; Phone: +62 361 225243; the phone hours are 8 AM – 9 PM. However, you could also choose to stay in tourism sites in South Bali; they are only a few minutes' drive from IALF in Denpasar. Also, the area around the training site has many good inexpensive restaurants.

For more information on tourism in Bali, you could check these links: https://www.youtube.com/watch?v=Nu7FNshQHPE https://www.youtube.com/watch?v=tgvy7MeBfKw http://www.indonesia.travel/en/destination/province/bali https://www.youtube.com/watch?v=CB70skVw3nU