



## 2007 GIS/IT SYMPOSIUM



### BUILDING A SERVICE ORIENTED COMMUNITY OF SHARED GIS RESOURCES

NOVEMBER 8-9, 2007  
ST. LOUIS, MO

Has your Garden launched a GIS? If not, then now's the time! GIS plays a critical role in various aspects of a garden or zoo, including plant collections, infrastructure management, and education/interpretation programs. Designed for garden and zoo professionals with various levels of experience, the focus of this program will be on ESRI's mapping software, and how it can be used to better manage your zoo or botanical garden. Enroll in this workshop that will explain how to launch a GIS, expand the value of your GIS, and how to use it as a part of your garden's education and interpretation plan. This is a perfect opportunity to establish a network of resources for your garden or zoo.



*In partnership with Missouri Botanical Garden,  
UC Davis Arboretum,  
and the Zoological Society of San Diego  
Sponsored by the ESRI Conservation Program*

# SYMPOSIUM SESSIONS

## TRACK I – HOW TO LAUNCH A GIS AT YOUR GARDEN OR ZOO

### SESSION I:

#### Creating Your GIS, Part 1

*Cary Sharp, Horticulturist*, San Diego Wild Animal Park, *Mary Burke, Director of Collections and Planning*, UC Davis Arboretum

Before funding a new GIS program, Directors and Boards of public gardens and zoos need a clear understanding of the value that a GIS can bring. This session will present some case studies that clearly explain “why” an institution’s leadership might consider investing in GIS and will explore the staffing needs and low-medium-high cost alternatives to consider when proposing a new GIS program for your botanical garden or zoo.

#### Creating Your GIS, Part 2

*Tod Chee, Facilities GIS Specialist*, San Diego Zoo, *Becky Sucher, Coordinator of Plant Records/ Applications*, Missouri Botanical Garden

A continuation of the previous session, Part 2 will focus on options for data collection, GPS units, and how to link/merge your geographic data with existing plant records data.

### SESSION II:

#### How to Fund Your GIS

*Mary Burke, Director of Collections and Planning*, UC Davis Arboretum, *Jerry Davis, Professor - Geography and Environmental Studies*, San Francisco State University

This session focuses on the “how to” of putting together a grant proposal to fund a GIS project to map plant collections at your public garden or zoo. Details on “making the case”, preparing a staffing plan, tapping into professional service volunteers, ideas about coming up with matching funds, and potential funding sources are included.

#### Recruiting and Training Staff and Volunteers

*Brian Morgan, GIS Manager*, UC Davis Arboretum, *Tom Chiosso, Superintendent of Grounds*, The San Francisco Zoological Society

This session will focus on finding passionate staff and volunteers that are both technically oriented and share the love of plants. Topics will include position advertising, technical training, and quality control through case studies at the UC Davis Arboretum and the San Francisco Zoo.

#### Case Studies: Collecting Data and Post Processing

*Becky Sucher, Coordinator of Plant Records/ Applications*, Missouri Botanical Garden, *Brian Morgan, GIS Manager*, UC Davis Arboretum, *Julio Barrantes, Curatorial Assistant*, Huntington Botanical Gardens

This session will focus on the complete process of collecting field data and getting it into a GIS. Three different data collection techniques that employ various combinations of hardware and software will be presented through case studies at the Missouri Botanical Garden, UC Davis Arboretum, and Huntington Botanical Garden.

### SESSION III:

#### Workshop: Working with ArcGIS

*Barry Nickel, Associate Director*, Institute for Geographic Information Science, San Francisco State University

This session provides an introduction to the foundation for becoming successful using ArcGIS and its integration into an organization. Students learn fundamental GIS concepts and become familiar with the range of functionality available in the world's leading GIS software package, ESRI's ArcGIS.

*(Track 1 continued on next page)*

# SYMPOSIUM SESSIONS

## TRACK I – CONTINUED

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### SESSION IV:

#### **Workshop: Designing and Producing Maps and Reports**

*Katie Harris, GIS Instructor, ESRI Educational Services, Brian Morgan, GIS Manager, UC Davis Arboretum, Jessie Cohen, GIS Specialist, Institute for Geographic Information Science, San Francisco State University*

This hands-on workshop will focus on the concepts and techniques used in creating effective maps and reports from a GIS. Participants will have the opportunity to work through instructor-led exercises in ArcGIS and Crystal Reports to create custom collection map and accession reports.

## TRACK II: NOW WHAT? EXPANDING THE VALUE OF YOUR GIS

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### SESSION I:

#### **Workshop: Fun with GPS**

*Jerry Davis, Professor - Geography and Environmental Studies, San Francisco State University*

In this workshop, participants will collect real data in the garden using a GPS unit. They will then go back to the classroom and learn how to download, post-process, and work with the data in ArcGIS software.

### SESSION II:

#### **GIS Analysis Tools**

*Tod Chee, Facilities GIS Specialist, San Diego Zoo*

This session will provide an overview of various methods of GIS analysis, and a comparison of “out-of-the-box” solutions and “aftermarket” extensions.

### SESSION III:

#### **Geodatabase Design, Database Links, and the ArcGIS Botanical Garden & Zoo Data Model**

*Brian Morgan, GIS Manager, UC Davis Arboretum*

This session will focus on the process of designing a GIS database that meets the needs of the garden, and is compatible with other database systems and data sharing protocols. Considerable attention will be given to the evolving process of creating the ArcGIS Botanical Garden & Zoo Data Model.

### Case Studies: GIS in Landscape Management

*Tod Chee, Facilities GIS Specialist, San Diego Zoo, Shari Buckout, Plant Registrar, The Zoological Society of San Diego, Jeannine Carlin, GIS Specialist, Zoological Society of San Diego*

This session will provide an overview of how the Zoological Society of San Diego uses GIS for facility management and plant records. How geographic information is distributed and used will also be discussed.

### SESSION IV:

#### **Delivering Your GIS Services: Server GIS**

*Barry Nickel, Associate Director, Institute for Geographic Information Science San Francisco State University, Tod Chee, Facilities GIS Specialist, San Diego Zoo, Brian Morgan, GIS Manager, UC Davis Arboretum*

Web-based GIS applications are an innovative solution for disseminating geographic information and services throughout an enterprise, across organizational boundaries, and to the public. Session instructors will describe and demonstrate ESRI's server-based software, ArcIMS and ArcGIS Server, as a platform to increase communication and collaboration, enhance productivity and workflow, and better manage resources and assets within your organization.

# SYMPOSIUM SESSIONS

## TRACK III: GIS IN EDUCATION/INTERPRETATION

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### SESSION I:

#### **Why is Geography Important?**

*Katie Harris, GIS Instructor, ESRI Educational Services*

Most organizations' databases already contain spatial components that are not being utilized. Katie will explain how using a GIS can unlock this spatial data and give the vision and analysis needed to save time and money—and to make better decisions.

#### **A GIS Powered Interpretation Program**

*Eddy Dawson, Information Technology Manager, Red Butte Garden & Arboretum*

Red Butte Garden has developed a hand-held interpretation system for the public that for the first time provides visitors a window into our collections data, a vehicle for delivering stories about our living museum objects, and a GIS powered navigation system for which to explore our garden's treasures. In his talk Eddy will talk about the implementation and its challenges as well as future opportunities for the system.

### SESSION II:

#### **K-12 and 4-H Mapping Programs**

*Bob Coulter, Senior Manager - Education Division, Missouri Botanical Garden, Esther Worker, ESRI Educational Services*

Teachers and 4-H leaders across the country are engaging youth in projects that make a difference in the community while they develop students' interest and skills in science, math, and technology. This session will highlight ecology-focused projects and discuss how staff from informal learning institutions can support youth in their local community.

#### **Plant Blindness**

*Cary Sharp, Horticulturist, San Diego Wild Animal Park, Mary Burke, Director of Collections and Planning, UC Davis Arboretum*

A national effort to combat “plant blindness” has recently been launched by scientists and conservationists who seek to balance the current animal-centric teaching approach with an equally strong focus on understanding and celebrating plants. This session explores this idea along with the use of GIS as a new and fascinating lens that can help our visitors connect locally with the plants in our garden and zoo collections, and globally with worldwide efforts for plant conservation.

### SESSION III:

#### **Wherigo Adventure in the Garden**

*Shauna Maggs, Director of Marketing, Groundspeak*

Wherigo is a toolset for creating and playing location based adventures in the real world. Shauna will take participants on a custom Wherigo adventure in Missouri Botanical Garden where they will use this exciting new tool not only to learn, but to have fun!

### SESSION IV:

#### **Collaborative National & International Efforts**

*Mary Burke, Director of Collections and Planning, UC Davis Arboretum, Boyce Tankersly, Project Director, PlantCollections™ A Community Solution, Director of Living Plant Documentation, Chicago Botanic Garden*

This session will feature and explain some key national and international efforts underway to permit global sharing of primary data information by museums, botanical gardens, zoos, and other holders of biodiversity information. Links between these efforts and our emerging “community build” effort will be explored, along with descriptions of some emerging online tools and resources that may be of value for zoo and botanical garden staff and GIS managers.

#### **Web-based Tools for Community Data Sharing**

*Frank Biasi, National Geographic Society*

The Internet has created untold opportunities for collaboration and sharing. This session will provide an overview of web-based tools for data sharing and how they can support open, collaborative management and use of data.

# SCHEDULE AT A GLANCE

## THURSDAY, NOVEMBER 8, 2007

7:30 a.m.	Buses depart for Missouri Botanical Garden
7:45 a.m.	Breakfast
8:00 a.m.	Really Cool Maps Slideshow
8:30 a.m.	Introduction
9:00 a.m. - 9:30 a.m.	Welcome – Dr. Peter Raven
9:30 a.m.	Buses depart for classrooms
10:00 a.m. - 11:45 a.m.	Session I
11:45 a.m. - 12:30 p.m.	Lunch
12:30 p.m. - 3:30 p.m.	Session II
3:30 p.m. - 5:00 p.m.	Garden Tour and Reception
5:00 p.m. - 6:00 p.m.	Closing Session
6:00 p.m.	Buses depart for hotel

## FRIDAY, NOVEMBER 9, 2007

7:30 a.m.	Buses departs for Missouri Botanical Garden
7:45 a.m.	Breakfast
8:00 a.m. - 9:00 a.m.	Keynote Speaker TBA
9:00 a.m.	Buses depart for classrooms
9:30 a.m. - 12:15 p.m.	Session III
12:15 p.m. - 1:00 p.m.	Lunch
1:00 p.m. - 3:45 p.m.	Session IV
3:45 p.m.	Buses depart for classrooms
4:15 p.m. - 5:00 p.m.	Closing Session
5:00 p.m.	Buses depart for hotel

### Registration Form

APGA is presenting the GIS/IT Symposium as a benefit to its individual members. To receive the member rate, you must be an individual member. As part of the registration, APGA is offering a special \$60 individual membership rate to all symposium participants.

Register online today at [www.publicgardens.org](http://www.publicgardens.org). OR complete the form below and fax to APGA at 302-655-8100.

### Personal Information

Name \_\_\_\_\_

Name for Badge \_\_\_\_\_

Job Title \_\_\_\_\_

Institutional Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

### Choose Your Track

- Track I How to Launch a GIS at Your Garden or Zoo
- Track II Now What? Expanding the Value of Your GIS
- Track III GIS in Education/Interpretation

### Membership Status

Please check the appropriate box.

- Individual Member       Student Member
- Non Member
- I would like to join today as an Individual Member for \$60 and save \$100 on registration
- I would like to join today as a Student Member for \$30 (*proof of student ID required*)

### Fee Schedule

A portion of this program has been generously underwritten by ESRI Conservation Program. Please check the appropriate box.

	Early (by 10/7)	Regular (by 10/30)
<input type="checkbox"/> Individual Member	\$99	\$149
<input type="checkbox"/> Student Member	\$79	\$129
<input type="checkbox"/> Non Member	\$199	\$249

### Symposium Refund Policy

To receive a refund, cancellations must be received by October 7, 2007. No refunds will be given after that date for cancellations or no shows.

### Questions?

Contact Sharon Malgire, APGA Meetings Manager, at (302) 655-7100, ext. 18, or [smalgire@publicgardens.org](mailto:smalgire@publicgardens.org).

### Lodging Information

To reserve rooms, please call the hotel's reservation office at (314) 231-1234 or (800) 233-1234. Please provide the reservationists with the code **American Public Gardens Association** provided for the group. Reservations must be made no later than **October 7, 2007**.

### Special conference rates

\$129 + tax

Hyatt Regency St. Louis  
One St. Louis Union Station  
St. Louis, MO 63103  
(314) 231-1234 (800) 233-1234  
[www.hyatt.com](http://www.hyatt.com)

### Special Needs

Vegetarian     Other \_\_\_\_\_

### Tally Your Registration

Your registration fee \_\_\_\_\_  
Your Individual Membership dues \_\_\_\_\_  
**Total Amount Due** \_\_\_\_\_

### Payment Information

Check     Mastercard     Visa

Card Number: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_  
Signature: \_\_\_\_\_

Register online today at [www.publicgardens.org](http://www.publicgardens.org). OR Mail or fax the completed form with payment to:  
American Public Gardens Association  
100 West 10th Street, Suite 614  
Wilmington, DE 19801  
Fax (302) 655-8100

**Space is limited to 100 participants. Register now to guarantee your spot!**

