

## Mapping: Update and Problem Solving Session

Topic Leaders: John Knapp, Catalina Island Conservancy; Deanne DiPietro, Sonoma Ecology Center;

Jason Casanova, Los Angeles and San Gabriel Rivers Watershed Council

Facilitator: Jason Giessow, Santa Margarita/San Luis Rey Weed Management Area

Note taker: Doug Gibson, San Elijo Lagoon Conservancy

### Attendees

Regina Ball	Robert Steers	Lynn Sweet
Dawn Nielson	Colleen Murphy	Rachel Hutchinson
Jessica Spencer	Anoria Williams	Ingrid Hogle
Melanie Vanderhoof	Brittany Woiderski	Larry Klaasen
Catherine Stupar	Robin Marushia	Deanne DiPietro
Jason van Warmerdam	Mark Outton	Lynn Overtree
Brad Roth	Polly Johnson	

### Current Cal-IPC Mapping Efforts

An overview of the field course was given and Jason Giessow briefly discussed three key map-based projects that Cal-IPC is currently undertaking:

1. Arundo Mapping From Tijuana Estuary to Salinas
2. Predictive Modeling – CLIMEX model
3. CalHIP

### Data Management and Storage Issues

Deanne DiPietro from the Sonoma Ecology Center and Team Arundo Del Norte gave a brief overview of the Department of Fish and Game BIOS<sup>1</sup> web-based mapping application. The Sonoma Ecology Center recently submitted a Northern California-based Arundo dataset to BIOS that they had been aggregating from a variety of data sources. While discussing the dataset Deanne also described the metadata development process (multiple sources using varying mapping methodologies) and the link that is made from BIOS through to the CERES<sup>2</sup> catalog, the State's online clearinghouse for metadata. Deanne also touched on the importance of using NAWMA<sup>3</sup> standards that will streamline merging shared data into one comprehensive dataset. Other web-based mapping systems that were touched on include the national level NBII CRISIS Maps.

*Jason Casanova gave a demo of BIOS (<http://bios.dfg.ca.gov>).*

#### Key Points:

- metadata is needed for all layers in BIOS
- BIOS will accept any feature type (point, line, or polygon)

#### Question and Answer

Q: Can you have time layers or multi year records?

A: Yes, but you cannot customize the symbology within the program interface.

---

<sup>1</sup> Biogeographic Information and Observation System

<sup>2</sup> California Environmental Resources Evaluation System (<http://gis.ca.gov/catalog>)

<sup>3</sup> North American Weed Management Association

Q: Can DFG symbolize multiyear layers if requested?

A: Most likely (contact BIOS point person – Kristina White with specific questions)

Q: Is anyone using Google Earth? Anyone uploading data?

A: Not really (problems include: no one simple method, time constraints, no direction)

Q: Is there an interest in metadata workshops –

A: Follow-up with Deanne regarding the potential for hosting workshops

Q: Who can you contact regarding BIOS help?

A: <http://bios.dfg.ca.gov> - Look for the button that says HELP.

General concern was raised about issues to data sharing, mainly in regards to the usability/applicability of disparate data sets created using different methodologies. What constitutes good data?

### **Discussion on Different Mapping Protocols**

John Knapp discussed a variety of methodologies based on overarching goals, size of area, geography, etc.

Q: What is a patch? How do you determine this?

A:     1. Distance apart  
       2. Type of vegetation  
       3. Dispersal  
       4. Determine a protocol and stick with it.

Q: What feature type (point, line, polygon) is best when collecting data? Are there best practices for mapping?

- Good to have area mapped with polygons rather than point data if possible (high accuracy for acreage estimates); but ultimately it depends on project area size. Points are more realistic for larger areas with large species lists.
- Create a choropleth map with spatial tags – size classification
- For determining rough area of extent – use road, mile markers, P/S Blocks & roads surveyed looking for leading edges
- Use a GPS track log to track absence of information
- Important to determine confidence in data layer (e.g. walking vs. driving, map scale)
- Resolution is important

Another resource for doing pre-mapping (in-house) of larger species before entering the field: Microsoft's Maps Live <http://maps.live.com>. The site contains fairly recent high-resolution vertical and oblique imagery that can be used to identify larger species.

*Jason Casanova presented a short demo Microsoft Maps Live.*