



Esri International User Conference | San Diego, CA

Technical Workshops | 7/12/2011, 1:30-2:45

7/14/2011, 3:15-4:30

Building Map Books in ArcGIS

Jeff Barrette

Tom Bole

Jeff Moulds

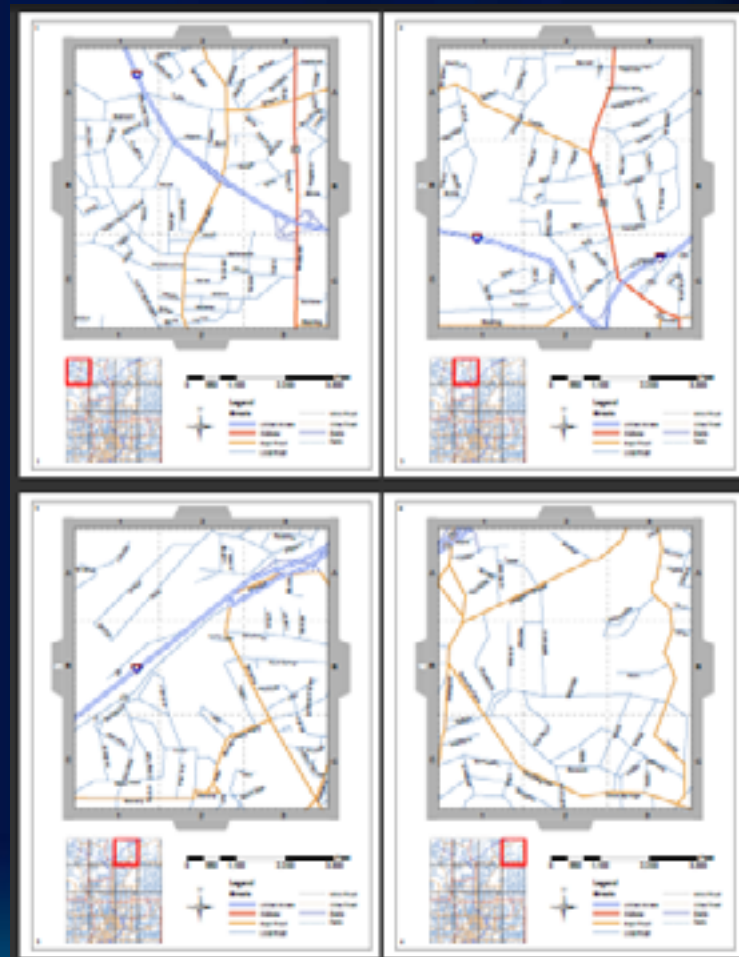
Agenda

- Types of map books
- Building map books with Data Driven Pages
- Introduction to arcpy.mapping
 - use to extend Data Driven Pages capabilities
- Custom applications beyond Data Driven Pages and arcpy.mapping
- Q&A

Types of Map Books

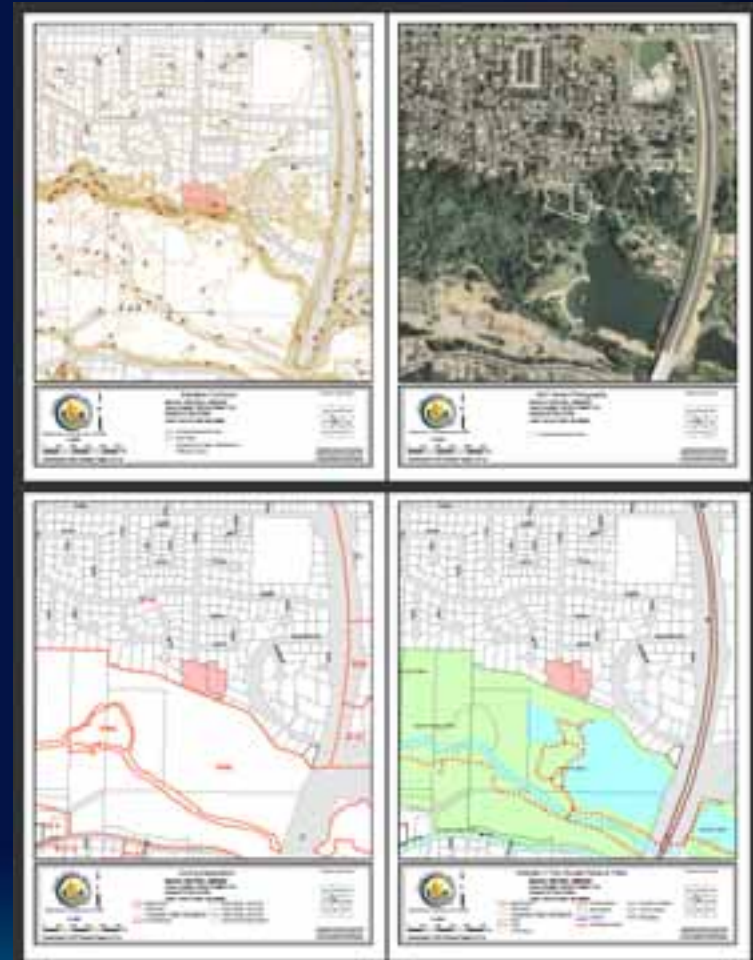
- Always have a group of "pages"
- They are more than just a collection of map pages
 - titles, TOC, index pages, etc.
- Output printed pages or export to graphics file, usually PDF
- Most common are reference map books
 - series of pages that iterate across a geographic area
 - reference grid based, strip maps, or feature based

Use DDP or arcpy.mapping



Types of Map Books (cont.)

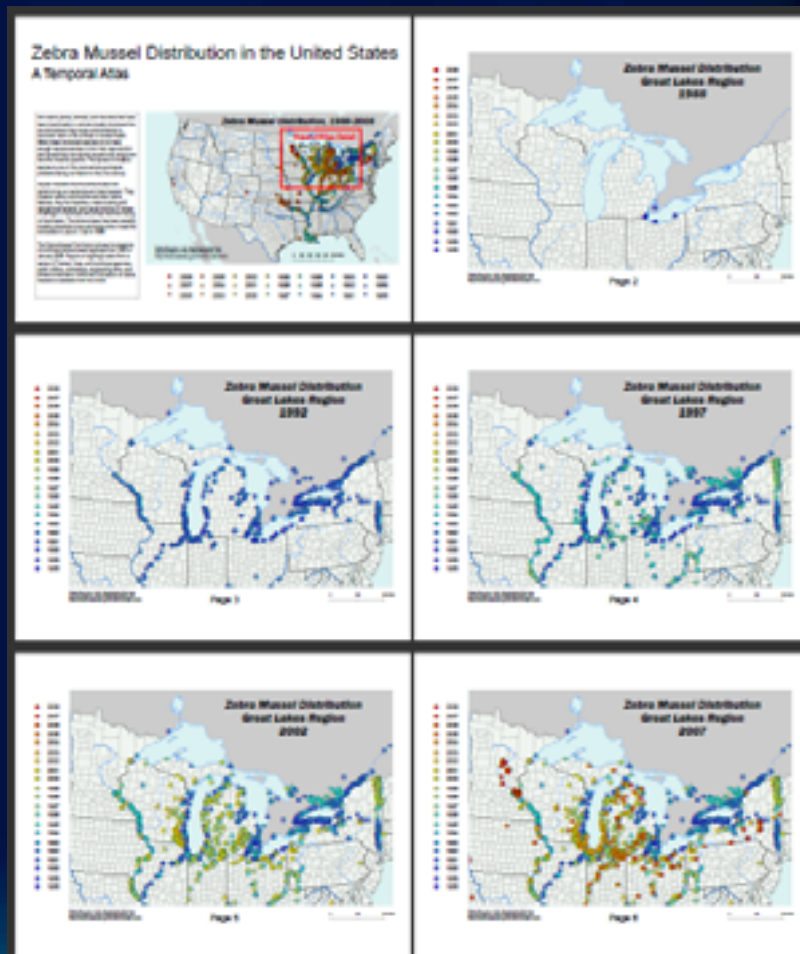
- Thematic map books
 - all pages have the same extent
 - each page shows unique theme
 - different layers are turn on and off



arcpy.mapping only

Types of Map Books (cont.)

- Temporal map books
 - mapping time series data
 - each page shows unique data and time

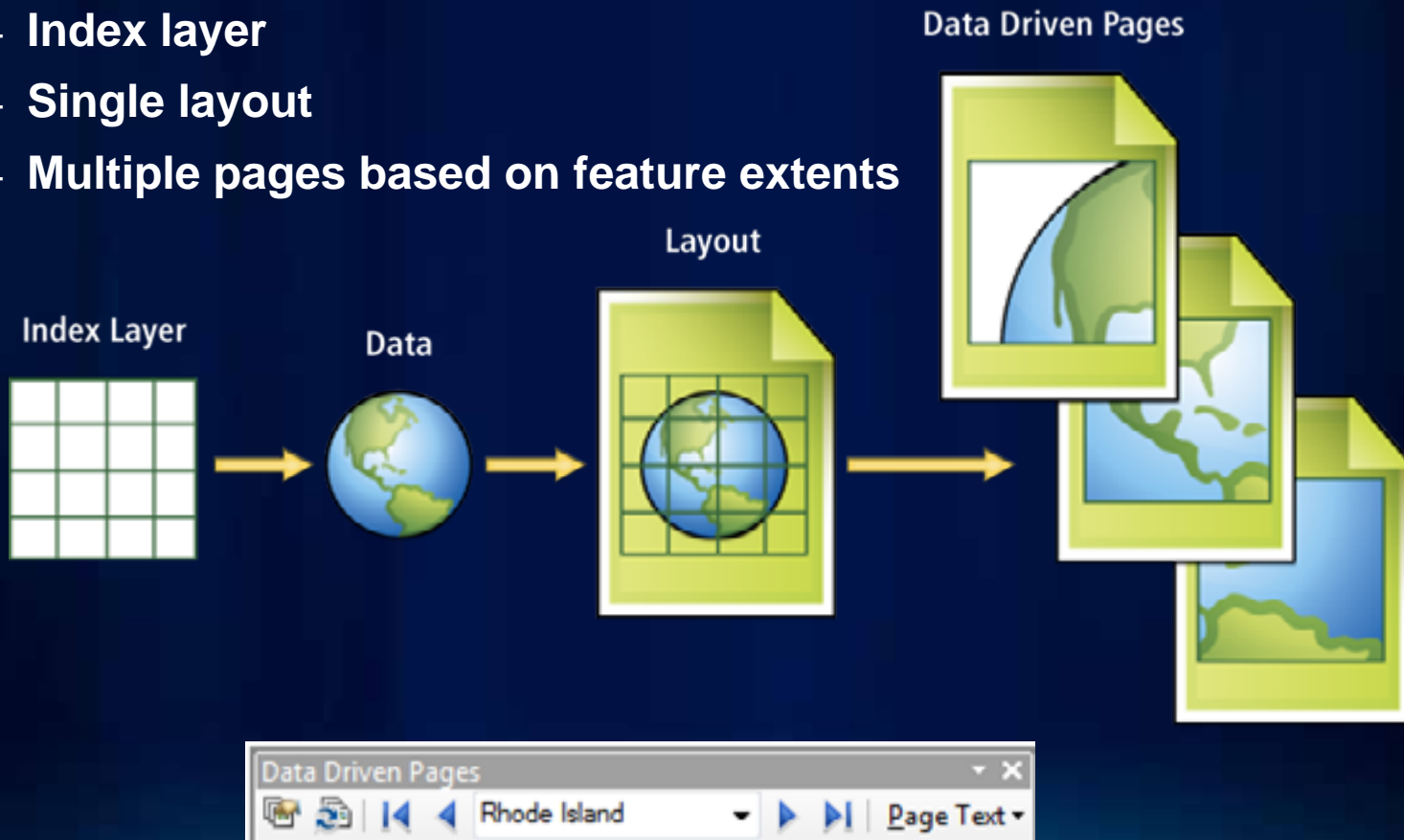


arcpy.mapping only

ArcGIS 10 - Data Driven Pages

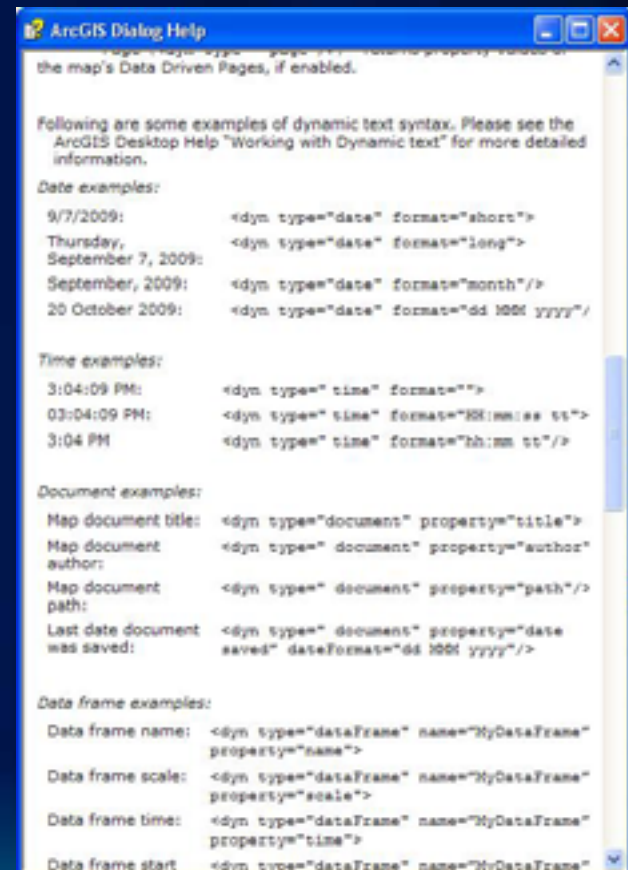
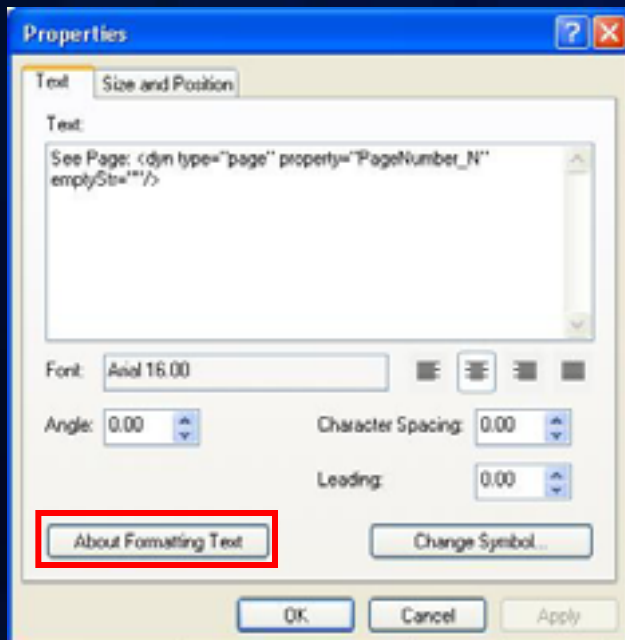
- **Data driven pages**

- Index layer
- Single layout
- Multiple pages based on feature extents



ArcGIS 10 - Dynamic Text

- DDP or standard layout text element
- Insert text with dynamic tags
- Additional tags available





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Fulton County Dept. of Health and Wellness/District 3, Unit 2, 04/10/2010

Demo: Data Driven Pages

Tom Bole



What is arcpy.mapping?

- A new map scripting environment at 10.0
- Mapping module that is part of the ArcPy site-package
- Python scripting API that allows our users to:
 - manage map documents, layer files, and their contents
 - find a layer with data source X and replace with Y
 - update a layer's symbology in many MXDs
 - generate reports that lists document information
 - data sources, broken layers, spatial reference info, etc.
 - Automate the exporting and printing of map documents
 - Automate map production and create map books
 - extend Data Driven Pages capabilities

Who is arcpy.mapping for? Why was it built?

- An easy to use, productive scripting environment for the GIS Analyst
 - courser grained object model
 - not a complete replacement for ArcObjects
- An environment to use for basic map/layer management and map automation tasks
- A simple way to publish mapping tasks to the server environment
 - arcpy.mapping scripts can be easily published as geoprocessing tools



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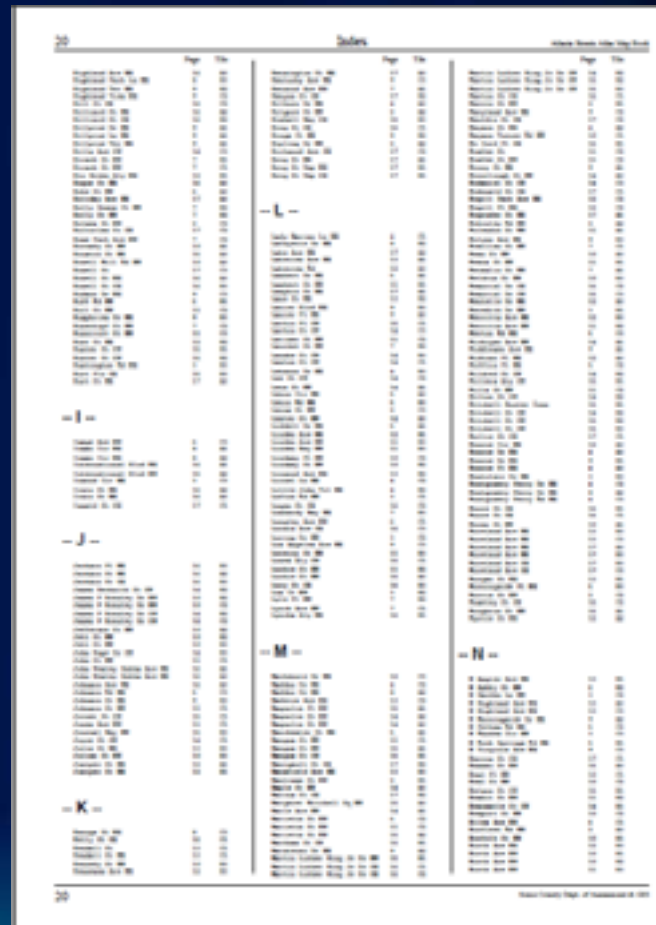
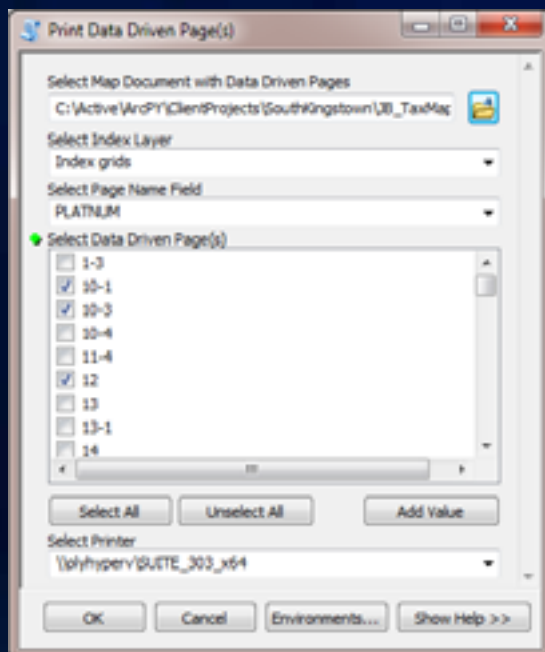
Demo: arcpy.mapping

Jeff Moulds



Custom applications beyond arcpy.mapping and DDP

- Create simple script tools to quickly execute common tasks
- Extend capabilities with 3rd party Python modules





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Demo: Complete Map Books

Jeff Barrette



Other Resources

- Extensive Desktop help with 100's of sample scripts
- Resource Center (Geoprocessing Model and Script tool Gallery)
 - [arcpy.mapping Mapbook with Index Pages](#)
 - arcpy.mapping Sample Script Tools
- Geoprocessing Video Presentations
- Map Automation Forum
- Desktop, Server and Geoprocessing Blogs
- Training – short web courses
 - Basics of Python (for ArcGIS 10)
 - Python Scripting for Map Automation in ArcGIS 10

Related workshops

- Tuesday
 - 4:00-4:45 Using arcpy.mapping with ArcGIS Server to Generate High Quality PDF Map Documents Over the Web (Demo Theatre)
 - 4:00 – 5:00 Road Ahead – Map Books and Map Scripting
- Wednesday
 - 1:55 – 2:15 Managing Layer Data Sources (Demo Theatre)
 - 3:15 – 4:30 Python – Scripting for Map Automation
 - 3:15 – 4:30 Road Ahead – ArcGIS Desktop 10.1
- Thursday
 - 1:00 – 1:30 Building the Legislative District Atlas using Data Driven Pages (Demo Theatre)
 - 4:05 – 4:25 Road Ahead – Python Scripting Abilities



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