

# INSIDE ArcInfo

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**Third Edition**

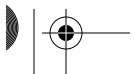
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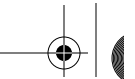
**Completely revised for Version 8.0 for  
Windows NT and UNIX**

**JAY FLYNN AND TERESA PITTS**

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SAN 694-0269  
Third Edition, 2000  
10 9 8 7 6 5 4 3 2 1  
Printed in Canada

Library of Congress Cataloging-in-Publication Data

Flynn, John J., 1958–  
    Inside ArcInfo / John Flynn and Teresa Pitts.  
        cm.  
Includes index.  
ISBN 1-56690-194-4  
1. ArcInfo. 2. Geographic information systems. I. Pitts, Teresa, 1965– II. Title.

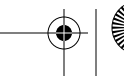
G70.2 .F58 2000  
910'.285—dc21  
99-058422

For more information, contact  
OnWord Press An imprint of Thomson Learning  
Box 15-015 Albany, New York USA 12212-15015

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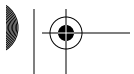
**Teresa Pitts** has worked in GIS for both the private and local government sectors, as well as for the U.S. Geological Survey and on U.S. Forest Service funded projects. She is currently employed as an instructor in the Geography Department at Radford University, Virginia.

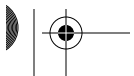
## ***Acknowledgments***

The authors would like to acknowledge the people at ESRI for their help throughout this project, including technical review and especially their helpfulness in obtaining the software and permission to use data from their on-line web site ([www.esri.com](http://www.esri.com)) for exercises.

We would also like to acknowledge Denise Dodd and Ben Logan for their proofreading and testing of the exercises.

Ms. Pitts would like to thank the staff of the Slow the Spread program, a U.S. Forest Service project conducted at Virginia Tech, for giving her the opportunity to expand her ArcInfo knowledge.







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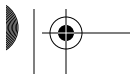
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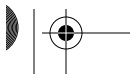
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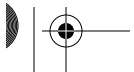
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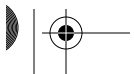
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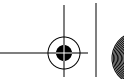
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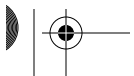
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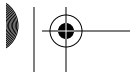
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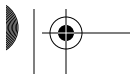
Help is what you need and what this book offers. Designed for both new users and veteran GISers, *INSIDE ArcInfo 8.0* describes the new features found in Desktop ArcInfo, ESRI's new Windows NT software. Also described are the traditional core modules found in Workstation ArcInfo, ArcEdit, ArcPlot, and Arc. This book is organized to get you started quickly, whether you are an experienced user or new to ArcInfo or GIS.

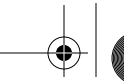
## ***Philosophy and Approach***

Learning ArcInfo often seems like a daunting task to persons new to the software. This book seeks to make the process as simple as possible. Many hands-on exercises help you learn how to perform everyday tasks, as well as more complicated GIS operations. As you learn more about ArcInfo, you will find the sections of this book that provide quick descriptions of commands and menus found throughout ArcInfo an invaluable reference feature.

## ***What This Book Covers***

No book can cover all aspects of ArcInfo in depth. It is too vast and complex a program. Indeed, most organizations use only some of the modules of ArcInfo. The authors have chosen to concentrate on





those modules that are included with out-of-the-box ArcInfo. The first part of the book focuses on the new drag-and-drop interface modules.

- ArcCatalog
- ArcMap
- ArcToolbox

The second part of the book examines the traditional modules.

- Arc
- ArcEdit
- ArcPlot
- INFO
- AML

Specialty modules such as Grid, Network, etc. are not covered in this book. Look to other OnWord Press publications to help you with them.

### ***New in Version 8.0***

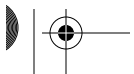
Lots! Finally, ArcInfo look likes the custom, menu-driven software each organization wishes it had time to create. Not only do new drag and drop interfaces allow users to quickly compose map graphics, but also images and even *shapefiles* (ArcView formatted data layers) can be incorporated with the new ArcMap tool. The ArcCatalog tool makes it easy to find and manage your data: no more launching another file manager.

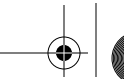
And remember all the times you had to look up Arc command syntaxes? No more! Popular Arc commands are now just a click away using the ArcToolbox, which can even be customized to suit your specific needs. ArcInfo Version 8.0 is a truly exciting development in the GIS industry. Its ease of use will open GIS capabilities to scores of new users.

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## **Summary of New Features**

ArcInfo 8.0 introduces Desktop ArcInfo, the new Microsoft Windows NT-based version of ArcInfo. ArcInfo Workstation, the traditional ArcInfo software already known to many users, is still maintained and supported by ESRI. This first half of this book





## Introduction

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describes the new Desktop ArcInfo software and includes many exercises to familiarize you with it. Here is a summary of the modules that make up Desktop ArcInfo:

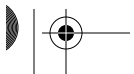
- *ArcCatalog*: This module is used to organize your spatial data, preview coverages and shapefiles, list data tables, establish links between ArcInfo and third party databases, and maintain your data. ArcCatalog is especially useful for keeping your data organized, including copying, renaming, or deleting coverages, shapefiles, and data tables.
- *ArcMap*: Use this module to create professional maps using a wide array of symbols and fonts. Included are a number of map templates to help you create maps very quickly. It features an easy to use graphical user interface (GUI) that makes map production a breeze. Great looking maps can be viewed on screen or printed. On screen features can be “hot linked” to photographs, documents, even web pages on the Internet.
- *ArcToolbox*: A great benefit to all users, this module provides a menu system to access many of the commands in ArcInfo. Organized by function into toolsets, you can quickly find the commands you need without having to search for them. A few commands have step by step menus called Wizards that make more complex commands more accessible to the new user.

### Will My AMLs Still Run?

Yes! ArcInfo Version 8.0 retains all the functions of Version 7. Any Arc Macro Language programs (commonly called AMLs) your organization relies upon can still be used.

## How to Use This Book

First, set up a workspace that is yours alone – a place to store your finished and unfinished exercises. You will want to access them easily. Second, as soon as you can, learn or review the basic concepts of GIS; this will enhance your understanding of the exercises and the software. Third, be consistent in your efforts: do not let weeks go by in between learning sessions. And finally, relax: ArcInfo is a large, complex software package with thousands of





commands; this book breaks it up into easy to tackle sections. You will find help and tips throughout the book.

This book allows you to chart your own course – pardon the pun – through this newest version of ArcInfo software. Each chapter can be worked through as a discrete unit, so you are able to learn what you need when you need it.

- Totally new to GIS, ArcInfo, and panicking? Don't worry. Head to the PowerStart exercise on Page XX *now* and have a map out in about an hour. At your leisure return to Chapter 1, "What is GIS?" And proceed through the rest of the book.
- Totally new to GIS but not panicking? Begin at the beginning! Start with "What is GIS?" Learn the concepts behind GIS first to enhance understanding of the software and its varied commands. Then proceed to the PowerStart exercise following Chapter 1.
- Know GIS but not ArcInfo? Skip the first part of Chapter 1 and start at the section entitled "ArcInfo and Topology", then go to the PowerStart exercise to get you up to speed.
- Already know ArcInfo version 7? Jump in at the PowerStart Exercise: it introduces the new drag and drop interface in version 8.0. Then proceed to descriptions of the new modules.

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## **CD installation**

The CD contains a folder called "ai80exercises", which holds the data used for all the exercises in the book. To use the data, you must copy it to your hard drive. The exercises will not work reliably if you attempt to run them from the CD!

Use Windows Explorer to copy the entire folder from the CD to your hard drive. Throughout this book, the hard drive is assumed to use the letter "D:". You may copy the exercise folder to any drive letter, but be sure to note your drive letter designator when working through the exercises.

There is also a file called *data\_links.htm* on your PC. This file is a web document containing links to sources of spatial data available on the Internet. The links in this document are the same as those found in the Appendix.

