Table of Contents

1......Introduction to Data Curation

Lisa R. Johnston

Data, Data Repositories, and Data Curation: Our Terminology

Why We Curate Research Data

The Challenge of Providing Data Curation Services

Reuse: the Ultimate Goal of Data Curation?

Conclusion

Notes

Bibliography

Part I. Setting the Stage for Data Curation. Policies,

Culture, and Collaboration

33Chapter 1. Research and the Changing Nature of Data Repositories

Karen S. Baker and Ruth E. Duerr

Introduction

Background

Changing Support for Data

Expanding Support for Data in Natural and Social Sciences

Data Repository Diversity

Three Concepts at Work

Data Ecosystem: Growing Interdependence

Liaison Work and Mediation

Continuing Design: Standards, Systems, and Models

Changing Research Needs and New Initiatives

Final Thoughts

Notes

Bibliography

61......Chapter 2. Institutional, Funder, and Journal Data Policies

Kristin Briney, Abigail Goben, and Lisa Zilinski

Funding Agency Data Policies

Institutional Data Policies

Journal Data Policies

Navigating the Data Policy Landscape for Curation

Summary

Notes

Bibliography

79......Chapter 3. Collaborative Research Data Curation Services: A View from Canada

Eugene Barsky, Larry Laliberté, Amber Leahey, and Leanne Trimble Canadian Academic Library Involvement in Research Data Management

Overview of Case Studies

Local Services: University of Alberta Libraries Informal Regional Consortia: University of British Columbia Library Formal Regional Consortia: The Ontario Council of University Libraries

Data Repository Services in Canadian Libraries

Discovery and Access Platforms Long-Term Preservation

Operational Costs of Data Repository Services

National Collaboration: Portage

Goal 1: Portage National Data Preservation Infrastructure

Goal 2: Portage Network of Expertise

Future Directions

Conclusions

Notes

Bibliography

103Chapter 4. Practices Do Not Make Perfect: Disciplinary Data Sharing and Reuse Practices and Their Implications for Repository Data Curation

Ixchel M. Faniel and Elizabeth Yakel

Introduction

Overview and Methodology for the DIPIR Project Disciplinary Traditions for Data Sharing and Reuse

Social Scientists Archaeologists Zoologists

Data Reuse and Trust

Trust Marker: Data Producer

Documentation

Trust Marker: Publications and Prior Reuse Indicators

Trust Marker: Repository Reputation

Sources of Additional Support for Data Reuse

Social Scientists Archaeologists Zoologists

Implications for Repository Practice

Conclusion

Acknowledgments

Notes

Bibliography

127.....Chapter 5. Overlooked and Overrated Data Sharing: Why Some Scientists Are Confused and/or Dismissive

Heidi J. Imker

Data Sharing in Context

Overlooked Data Sharing: Article Publication

Overlooked Data Sharing: Supplemental Material

Overrated Data Sharing: Unsustained Community Resources

Overrated Data Sharing: Hyperbolic Arguments

Conclusions

Acknowledgments

Notes

Bibliography

Part II. Data Curation Services in Action

153Chapter 6. Research Data Services Maturity in Academic Libraries

Inna Kouper, Kathleen Fear, Mayu Ishida, Christine Kollen, and Sarah C. Williams

Introduction

Research Data and Libraries

The Current Landscape

RDS Maturity

Looking into the Future

Appendix 6A: Typology of Services and Their Descriptions on Websites

Notes

Bibliography

171 Chapter 7. Extending Data Curation Service Models for Academic Library and Institutional Repositories

Jon Wheeler

Introduction

Conceptual Models and Rationale

Alignment with Existing Roles and Capabilities

Applications: Requirements and Example Use Cases

Defining Stakeholder Interactions and Requirements

Harvesting and Metadata Processing

Content Curation and Packaging

Conclusion

Acknowledgments

Notes

Bibliography

193Chapter 8. Beyond Cost Recovery: Revenue Models and Practices for Data Repositories in Academia

Karl Nilsen

Introduction

From Costs to Revenue

Data Repository Revenue Models

Model 1: Public or Consortium

Model 2: Freemium

Model 3: Pay-to-Play

Model 4: Pay-if-You-Can or Pay-if-You-Want

Model 5: Grants

Model 6: Outside-Data

Common Challenges Associated with Revenue Practices

Conclusion

Notes

Bibliography

213.....Chapter 9. Current Outreach and Marketing Practices for Research Data Repositories

Katherine J. Gerwig

The Survey

The Interviews

Measuring the Success of Repository Promotions

Successful Promotional Techniques

Unsuccessful Promotional Techniques

Target Audiences

Challenges to Increasing Awareness

Differences in Promoting the Institutional Repository and the Data

Repository

Looking for Inspiration

Discussion

Conclusion

Promotional Examples for Inspiration

Acknowledgments

Appendix 9A: Data Repository Promotional Practices—Initial Google

Survey

Notes

Bibliography

Part III. Preparing Data for the Future. Ethical and Appropriate Reuse of Data

235Chapter 10. Open Exit: Reaching the End of the Data Life Cycle

Andrea Ogier, Natsuko Nicholls, and Ryan Speer

Introduction

Comparative Exploration

"End of Life Cycle" Terminology

Scope

Authority

Appraisal Criteria

Resources (Human, Financial, and Spatial)

Discussion

University Records and Information Management Library Collections Data Curation

Conclusion

Notes

Bibliography

251 Chapter 11. The Current State of Meta-Repositories for Data

Cynthia R. Hudson Vitale

Introduction

Community Initiatives and Solutions to Support Meta-repositories of

Data

Methods

Results

Content

Functionality

Metadata

Discussion

Conclusion

Notes

Bibliography

263 Chapter 12. Curation of Scientific Data at Risk of Loss: Data Rescue and Dissemination

Robert R. Downs and Robert S. Chen

Benefits of Data Rescue

Challenges of Data Rescue for Repositories

Repository Considerations for Data Rescue

Rescue of the Millennium Ecosystem Assessment (MA) Data

Dissemination of the Millennium Ecosystem Assessment (MA) Data

Lessons Learned

Discussion and Conclusion

Acknowledgments

Notes

Bibliography

279.....Contributor Biographies

Editor Biography Author Biographies