

Ignorance and Surprise

Science, Society, and Ecological Design

Matthias Gross

The MIT Press
Cambridge, Massachusetts
London, England

© 2010 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

For information about special quantity discounts, please email special_sales@mitpress.mit.edu.

This book was set in Stone Serif and Stone Sans by Toppan Best-set Premedia Limited. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Gross, Matthias, 1969–

Ignorance and surprise : science, society, and ecological design / Matthias Gross.

p. cm.—(Inside technology)

Includes bibliographical references and index.

ISBN 978-0-262-01348-2 (hc : alk. paper)

1. Restoration ecology—Social aspects. 2. Human ecology. 3. Science—Social aspects. 4. Knowledge, Sociology of. I. Title.

QH541.15.R45G75 2010

333.71'53—dc22

2009037131

10 9 8 7 6 5 4 3 2 1

Acknowledgments

I am very grateful for comments and inspiration from Kelly Moore, David Hess, and especially Wolfgang Krohn. Discussions with Alena Bleicher, Stefan Böschen, Scott Frickel, Holger Hoffmann-Riem, Christian Kuhlicke, and Peter Wehling have also greatly improved the book. Mark B. Brown, Arthur Mol, Otthein Rammstedt, and Michael Huber have read and constructively commented on one or more of the chapters. Paul H. Gobster from the United States Department of Agriculture's Forest Service has delivered invaluable materials and maps, as well as unpublished memos and minutes from meetings from the City of Chicago and the Chicago Park District's Office of Research and Planning. Research on the Chicago shoreline was begun in a research project on "Real-World Experiments" at Bielefeld University's Institute for Science and Technology Studies (IWT) funded by the Volkswagen Foundation. I would like to thank the Department of Sociology at Loyola University Chicago, my platform for conducting most of this research, for their support. Of the many people in Chicago who have helped me over the years, I want to mention Lynne Westphal, Kathy Dickhut, Buffy and Bill Jordan, Alannah Fitch, Chris Gent, and Suzanne Malec-McKenna. I am also thankful to the liberal work environment of the Helmholtz Centre for Environmental Research in Leipzig, where the book was finished. Without the early research on postmining areas by Sigrun Kabisch and Sabine Linke, I probably would not have learned about this fascinating field of landscape transformation.

Over the years, our little working group on mining impact assessments in Leipzig, consisting of Dagmar Haase, Martin Schultze, Katrin Wendt-Potthoff, and myself, has been a great source for getting a feeling for the surprising design of postmining lakes. I am also grateful to Andreas Berkner, Bernd Walther, Birgit Felinks, Bertram Schiffers, and Gerhard Strauch for

making papers from the Office for Mining (Büro für Bergbauangelegenheiten) and other internal materials available to me. Travel stipends to different settings in North America and Germany from the American Council on Germany (ACG) in New York, the German Research Foundation (DFG), and the Helmholtz Association are highly appreciated.