

CONNECTIONS

VOLUME XV

ISSUE 1

August 2004

- Exploring the Public-Academy Relationshippage 2
- The Civic Mission of Higher Educationpage 7
- Revitalizing the University of Minnesota's Civic Missionpage 8
- The Role of Historically Black Colleges and Universities in Building Civic Responsibilitypage 11
- The New Engagement: From Community Relations to Community Partnershipspage 13
- The Public Practice of Scholarship and the Production of Knowledgepage 17
- Apple IPM in Massachusetts: Public Scholarship in Actionpage 18
- College Students as Citizenspage 22
- Fraternal Futures: Empowering Students to Shape the Future of Greek Organizations.page 23
- Increasing Student Civic Engagement through Balanced Democratic Dialogue.page 25
- June Board Summarypage 28
- An Update on Public Journalismpage 29
- The Footbridge Forumpage 31
- New Stories for Television: Promoting Public Judgment in Colombia.page 32
- Books Worth Readingpage 34



University

Institutions,
Professions, and the Public:
Focus on the
Public-Academy
Relationship

be done about them in pursuit of public values and interests.”

What, if anything significant, America’s colleges and universities can do to revitalize this nation’s civic life presents a complex challenge to a foundation whose mission is to help make democracy work as it should. Kettering trustees and staff are currently examining the foundation’s

agenda in this area with a view toward setting its research priorities for the coming year.

Deborab Witte is a program officer at the Kettering Foundation. She can be reached by E-mail at dwitte@kettering.org.

Apple IPM in Massachusetts: Public Scholarship in Action

By Daniel R. Cooley

This brief account of public scholarship in action describes one of eight field studies conducted by a team of scholars from five land-grant universities. The research was supported by the Kettering Foundation, the Kellogg Foundation, and the Cornell University Agricultural Experiment Station’s federal formula funds.

On the surface of it, this is an account of a research and teaching program intended to reduce or even eliminate the use of pesticides in New England apple production, using a general approach called integrated pest management, or IPM. IPM is an amalgam of biology and ecology, as well as economics and politics, and a different history of the program might emphasize its technical evolution. This story, however, suggests that scholarship in the arena of a public issue, in this case agricultural pesticides, must be public scholarship if it is to truly succeed.

Several characteristics make apple IPM public scholarship. For one, the teaching and research reach well beyond

the campus. The labs extend beyond brick and ivy to the orchards of New England, the libraries go beyond journals and papers to include the experience of people who seldom set foot on university grounds, and the lecture halls include cold barns and hotel conference rooms.

Perhaps because public scholarship, like IPM, engages nonacademics, it is viewed as less scholarly. In reality, public scholars must produce typically scholarly publications, teach advanced courses, and then, unlike many of their colleagues, engage people outside academia in the scholarly process. For example, ecologists and entomologists around the world know Dr. Ron Prokopy as an innovative researcher in insect behavior ecology and evolution, while most New England apple growers know him as Ron, the apple bug guy.

While his students and technicians perform experiments on the insect colonies in the basement lab of Fernald Hall, Prokopy himself might be knee-deep in dew-covered grass chatting with a grower about the family or the price of apples. Faculty who engage in public scholar-



**THE PUBLIC
PRACTICE OF
SCHOLARSHIP**



Courtesy of Daniel R. Cooley

Dr. Prokopy explains the apple maggot's predilection for round red objects. Placing them in trees help growers determine whether they need to apply an insecticide.

dew-covered grass chatting with a grower about the family or the price of apples. Faculty who engage in public scholarship serve two masters, in this case, apple growers and the academy. For Prokopy to succeed academically, that is, get tenure and be promoted, he had to obtain grants, publish in well-regarded journals, and teach graduate and undergraduate classes on campus.

To succeed in his public (Extension) role, he had to satisfy the apple growers of Massachusetts that he would help them keep apple maggots out of their fruit. Like many who engage in public research, Prokopy views this public interaction as an opportunity, not as an added burden. He never considered ignoring the growers so that he might focus on less-applied aspects of his work. Just as important, and less obvious, he knows that application often informs discovery in his more theoretical work.

An impressive number of microbes and insects try to take advantage of the rich food resources in cultivated apples. In an attempt to stop their attacks, the

first broad use of insecticides and fungicides began in earnest in the mid-twentieth century. As soon became evident, however, when we attempt to control nature without fully understanding it, our victories may be short-lived. It became clear that with overuse, some pesticides generated resistant insects and environmental pollution problems.

By the late 1960s and early 1970s, a few scientists at land-grant universities began to look at an alternative that would reduce pesticide use but still adequately protect crops. As IPM concepts emerged in the 1970s, they particularly captured the imagination of the young Ron Prokopy. Prokopy had been raised on his uncle's orchard in Connecticut. He grew up with the land-grant system, from Extension meetings featuring scientists from the Connecticut Experiment Station to matriculating at Cornell University where he received his Ph.D. in entomology. He inherited the philosophy and methods of public scholarship and learned the new ecological concepts behind IPM. He brought these with him when he came to

Perhaps because public scholarship, like IPM, engages nonacademics, it is viewed as less scholarly.

Courtesy of Daniel R. Cooley



Dr. Prokopy says that teaching growers how to manage apple pests teaches him how best to apply his theories and makes his classroom more relevant to his other students.

Prokopy views this public interaction as an opportunity, not as an added burden.... He knows that application often informs discovery in his more theoretical work.

the University of Massachusetts Amherst in 1975.

By appearance, Prokopy was not the ideal man to sell IPM to fruit growers. In 1978, he still kept most of his long hair from the 1960s and carried paperwork and field equipment in a woven Guatemalan handbag. And the IPM message ran counter to the pest management dogma of the previous decades, when the university, county Extension, and pesticide salespeople all had been telling orchardists that they needed to spray chemicals weekly, sometimes more often, to prevent pests. Most growers did not care why mites were becoming resistant to miticides but simply wanted to know what new miticide would work. Yet Prokopy was asking them to hang colored sheets of sticky cardboard in the orchards, count bugs, and keep track of the rain and temperature. Naturally, the pesticide salespeople who would occasionally shadow the university field teams from orchard to orchard, suggested that this IPM approach threatened disaster and was unproven theory from the ivory tower crowd. The growers, looking at

Prokopy and his colored cardboards, were inclined to agree.

But Prokopy, having grown up on a fruit farm, was not an ivory tower scientist. He may have been an idealist, but he understood growing apples. And after talking with him, a few influential growers recognized that. Prokopy worked tirelessly and asked the field crews to work just as hard. Technical specialists and students drove the state daily, visiting orchards at least once a week, climbing trees, inspecting thousands of fruit and leaves and, most importantly, talking with growers about what they saw. This regular communication with growers usually kept IPM researchers grounded in the realities of what producers were facing on an almost daily basis.

By 1983, apple IPM had shown that an ecological approach offered a potential solution to pesticide problems and drew an infusion of new state dollars, which eased the grant-hunting job that had supported much of the earlier research. But the steady pesticide reductions of the first five years of the project had stalled. Further reductions would mean moving

to what Prokopy termed “second-level IPM,” which either relied on nonpesticide management tools or, when pesticides were needed, used environmentally benign chemicals. And this would mean major new research.

Prokopy launched second-level IPM work in earnest in 1991. Results were generally positive, but after four years they were not as clear as they had been in the first-level work. A host of other technical and financial problems arose as well.

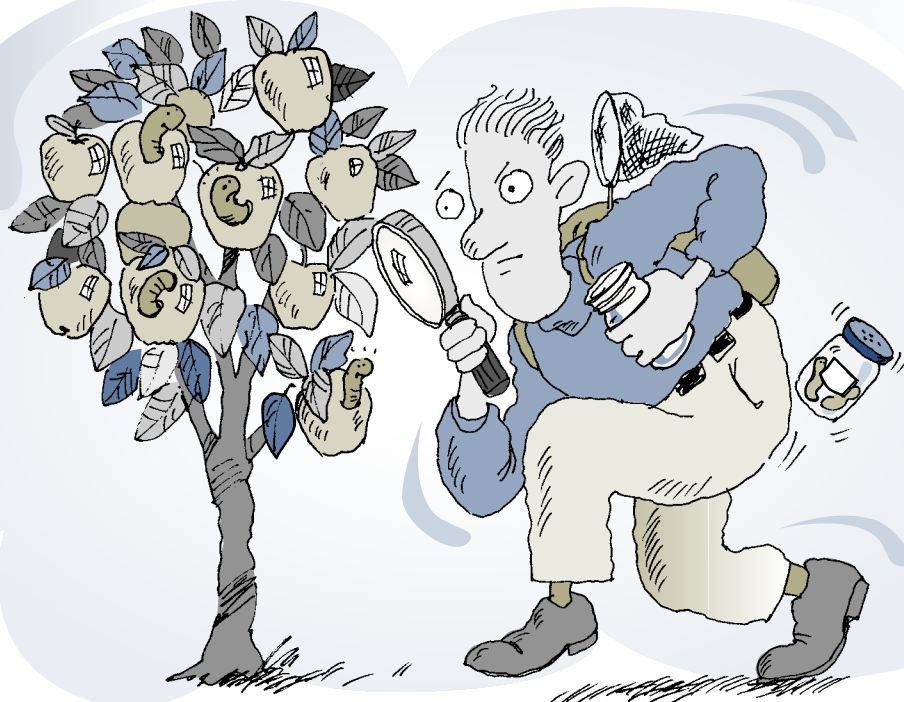
It was in this climate that the team first decided to invite the growers to an advisory meeting. The idea was that, if engaged in a more detailed discussion of the research, growers would remain enthusiastic about participation. The growers could also tell the researchers, before the growing season started, what they thought were the most pressing problems, what looked to them like it would work, and what sounded stupid. The grower advisory group proved invaluable in moving the research along. Over the decade, members from retail stores, environmental nonprofits, and other academic institutions were added, helping to move the IPM effort toward yet another IPM goal — community involvement.

Prokopy has always insisted that the best research was informed by real-world outreach and teaching. Certainly, aspects of the research should contribute to fundamental science and be favorably reviewed by researchers who had no interest in its application. Still, aspects of the research also needed to interest producers, so people doing apple IPM had to work in both the theoretical and applied worlds.

Interestingly, public scholarship, like IPM, works at several levels. Just as an IPM program may move from a level that involves simply a few growers and an entomologist to a level that adds pathologists, horticulturists, economists, store managers, consumers, conservationists, politicians, and deans, public scholarship may involve a small slice of the public or attempt to involve whole communities or regions. In apple IPM, the circles of involvement have widened from a fairly small set of growers and researchers in Massachusetts to involve programs in virtually every northeastern state as well as many other parts of the world.

Daniel R. Cooley is an associate professor in the Department of Microbiology at the University of Massachusetts. He can be reached by E-mail at dcooley@micrbio.umass.edu.

Public scholarship may involve a small slice of the public or attempt to involve whole communities or regions.



The Kettering Foundation, chartered in 1927, is an operating foundation — not a grant-giving foundation — rooted in the American tradition of inventive research. Its founder, Charles F. Kettering, holder of more than 200 patents, is best known for his invention of the automobile self-starter. He was interested, above all, in seeking practical answers to “the problems behind the problems.” The foundation today continues in that tradition. The objective of the research now — the study of what helps democracy work as it should. Six major Kettering programs are designed to shed light on what is required for strengthening public life. Kettering is a nonprofit 501(c)(3) research corporation supported by a \$250 million endowment.

How to Order Kettering Foundation Publications

To request a *KF Publications Catalog*, call 1-800-600-4060, send a FAX to 1-937-435-7367, or write:

Kettering Foundation
 Order Department
 P. O. Box 41626
 Dayton, OH 45441

Name _____

Title _____

Organization _____

Street _____

City _____

State _____ ZIP _____

Phone (_____) _____

For more information about KF research and publications, see the Kettering Foundation’s Web site at www.kettering.org.

Connections is published by the Kettering Foundation, 200 Commons Road, Dayton, Ohio 45459-2799.

Unless expressly stated to the contrary, the articles in Connections reflect the views of the authors and not necessarily those of the foundation, its trustees, or officers.

Those who contributed to producing this issue include:

Editor...

Ilse Tebbetts

Program staff...

Maxine Thomas

John Dedrick

Deborah Witte

Graphic Design

& Desktop Publishing...

Long’s Graphic Design, Inc.

Copy Editor...

Betty Frecker

Assistant to the Publisher...

Valerie Breidenbach

Publisher...

Kenneth A. Brown

LGD-0881-KF-15500-MP-07-04

*Kettering
 Foundation*

© Copyright 2004 by the Kettering Foundation

200 Commons Road, Dayton, Ohio 45459-2799 (937) 434-7300

444 North Capitol Street N.W., Washington, D.C. 20001 (202) 393-4478

6 East 39th Street, New York, New York 10016 (212) 686-7016

Kettering Foundation
 200 Commons Road
 Dayton, OH 45459-2799

Nonprofit
 Organization
 U.S. Postage
 PAID
 Dayton, OH
 Permit No. 638