

The Paper Chase

This issue of the *MRS Bulletin* gives a flavor of the research going on in the area of wood-based and related products, and it documents the tremendous progress in recycled paper technology. So, why hasn't MRS closed the loop by printing the *MRS Bulletin* on recycled paper?

MRS has been considering using recycled paper for the *Bulletin* and for all its publications for the past 10 years. Indeed, many MRS publications are already printed on recycled paper—Call for Papers, Meeting Guide, and numerous mailings to our members and others. The art department has nearly equal quantities of recycled and virgin paper samples that it considers for any project. However, the quality of paper required to produce the *Bulletin* prohibits printing it on recycled paper at this time.

Most people agree that the concept of recycling is good, (although the benefit of making certain grades of paper from recycled stock is still debated),* but we must balance our social responsibility with our responsibility to deliver a quality product within fiscal constraints.

The *Bulletin* demands high-quality paper. Clarity of micrographs helps spread technical information accurately to more than 11,000 readers. Opacity and brightness improve the readability of our pages and satisfy the reproduction expectations of our advertisers, without whom we cannot afford to publish. High-grade coated paper also helps the magazine endure repetitive handling in classrooms and libraries and among colleagues over years of environmental exposure (from Silicon Valley sun and Route 128 blizzards).

Technology of recycled paper is on the brink of meeting our needs. Several years ago, the selection of recycled paper was meager, and the quality needed for publications like the *Bulletin* did not exist. Now larger quantities and more grades of recycled paper are available, even ones purported to match the quality required for the *Bulletin*. But our biggest stumbling block is rallying enough demand for the paper we need to make it affordable.

Demand for recycled paper is below the threshold to make it economical for our printer to stock a wide variety of high-grade recycled paper, particularly because the cost of virgin paper has dropped in recent years.** To stock the grade we need requires a truckload of paper per month—40,000 lb—which is six times the quantity the *Bulletin* can use.

Such demand does exist in pockets. For example, the four magazines[†] published by the National Wildlife Federation are printed on high-quality recycled paper, something it achieved by creating its own market. With a total monthly circulation of 2 million (nearly 600,000 lb/month), the National Wildlife Federation had the leverage to have a special recycled sheet made with 20% post-consumer waste, just for their publications. It would take the *Bulletin* over seven years to use this much paper.

Without this independent leverage, we must take a more subtle approach. We can accelerate the meeting of scientific progress and affordable technology by disseminating information on materials developments in this field (technology push), and by cultivating opportunities to print on recycled paper (technology pull).

This month's guest editors and authors give a snapshot of technical challenges still associated with recycling, such as removing ink and contaminants from waste paper. Other issues concern logistical problems such as transporting waste paper from the cities to paper mills near the forests and coping with the smaller capacity of machines still used for recycled versus virgin stock. And volatility of paper prices—both virgin and recycled—and supply and demand swings continue to affect the market.

Materials developments are just one part of the equation of bringing technology to the marketplace, but we hope that the research described in this issue of the *Bulletin*, although printed on virgin paper, will lead to developments that can be the foundation—literally—for *Bulletin* pages in the future (until electronic publishing changes the game). In the meantime, you can reduce waste to the landfills by keeping your *MRS Bulletin* collection on your shelf.

E.L. FLEISCHER
Technical Editor
MRS Bulletin

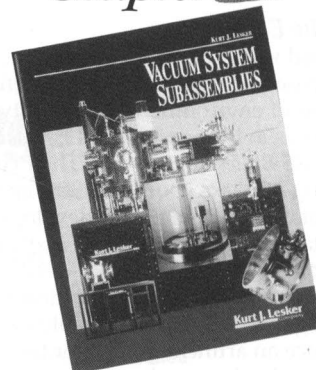
*Eric O. Edelmann, "Recycled Paper: An Industry Report Card," *Magazine Design & Production*, January/February 1992, p. 32.

**Information supplied from Dartmouth Printing Company for December 1990 through February 1992 shows as much as a 10% drop in prices for paper used on web presses.

†National Wildlife, International Wildlife, Ranger Rick, and Your Big Backyard.

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