

SAILING SABBATICAL SUPPORTS SUSTAINABILITY INDEX STUDY

DONALD G. MEADOWS

VISITS TO MILLS DURING VOYAGE ON AMERICA'S WATERWAYS

BY DEFINITION, A SABBATICAL IS TIME AWAY FOR TRAVEL, for research, for rest.

Since last summer, Allan Springer, professor of environmental sciences at Miami University in Oxford, OH, has been on sabbatical. He has been traveling by sailboat through the Great Lakes, down the waterways of America's heartland, and on to the Gulf Coast of Florida. He has been doing research—visiting mills along the way to develop an environmental index. And he has had moments here and there to rest, enjoy life, and renew acquaintances.

Tangible results of the voyage include a draft sustainability survey and index—something of a self-test that companies can use to rate their own environmental responsiveness—and several videos. Springer's findings and a description of the index begin on p. xx of this issue. Springer is also on the program for this month's TAPPI International Environmental Conference.

In transit across the Green Bay last August, eyeing a course to Menominee, MI, Springer talked about the project.

"We are in the era of the precautionary principle," Springer said. That means that many things influence environmental regulations, aside from scientific facts. If the public perceives something as a potential threat to their health, then they want something done about it, he said.

The reality of being a natural-products industry is that trees produce and accumulate a variety of potentially

toxic substances that can end up in the effluent streams of pulp and paper mills. Although the industry has put a lot of effort into making sure its effluent is as clean as

possible, it's put a lot less effort into public relations efforts to promote those efforts, Springer said.

So it's easy for the public to become concerned. And, "public opinion is going to influence environmental regulations in the near future," Springer said. There is a need, then, for the industry "to communicate with the public in a clear, simple fashion," he reasoned. "To do that, we need an easy way to monitor our environmental



Sandy and Allan Springer, with their dog Addie and the Star-song, their 30-ft catamaran

performance."

To make it easier for mills to both measure how they are progressing in various environmental areas (water, air, solid waste) and as a communications tool to highlight that progress, Springer decided to develop a single-number environmental performance index.

As a way to validate the index and get "reconnected" with the U. S. pulp and paper industry, Springer decided to undertake a sabbatical project involving visits to 10 mills—five secondary fiber mills and five integrated bleached kraft mills. He was also curious to see what differences he might find between Northern and Southern mills.

Along with visiting the mills, Springer tried to meet with and interview community leaders to get their opinions about the mills and the pulp and paper industry. Videotaped portions of those interviews have been edited into half-hour and hour-long videos.

During the trip, Springer also planned to videotape



A boater's view of Menominee (MI) Paper Co.



Springer videotaping some of Menominee Paper's effluent treatment processes



Anita Doepke, Menominee's environmental director

examples of exemplary practices at some of the mills, to illustrate what is considered sustainable technology in both types of mills. He got good cooperation from the recycled mills, but none of the kraft mills was willing to grant permission. He was able, however, to videotape

examples of sustainable forestry, as measured against principles devised through the American Forest & Paper Association (AF&PA), he said.

"When you talk to people about the paper industry, they are more concerned about the trees than anything else," Springer explained. From what he's seen, the industry is doing a very good job of managing its forest resources for timber production and for wildlife preservation, he said. "I am impressed with how enthusiastic and dedicated the forestry people are," he said after visiting operations at E. B. Eddy in Espanola, ON, Canada, and Mead in Escanaba, MI.

E. B. Eddy's mill in Port Huron, MI, was Springer's first official visit of the trip. The company has continued to invest in the mill to keep the operation up-to-date, he observed.

From Port Huron, the Springers sailed up the western shore of Lake Huron to Alpena, MI, for a visit at Fletcher Paper Co. While in Alpena, Springer interviewed the city

manager, a councilman, and the founder of a local environmental group. From an environmental standpoint, those public leaders had no problem with Fletcher's paper mill. They were a little concerned about a sweet odor coming from another mill in town but expected that to go away once odor collection equipment was installed.

The next leg of the trip took the Springers to the North Channel area above Georgian Bay for some pleasure cruising in Canadian waters, and then on to the E. B. Eddy mill at Espanola. The integrated bleached kraft mill there produces market pulp using hardwood and softwood, as well as thermomechanical pulp from aspen, and about 200 tons/day of finished paper, Springer said.

"The town of Espanola would not exist without the mill there," Springer said. Consequently, the mayor, the city manager, and the head of the Remedial Action Plan Committee were very familiar with the mill and supportive of the operation. From what Springer saw, that support is certainly justified.

The mill uses oxygen delignification and short-stage bleaching as part of its extended modified continual cooking process, and the river water quality looked to be good.

One of Springer's initial concerns was that the five-page form for his environmental index would be difficult for people to fill out. "It turns out it's very easy," he said. "I can do it in about two hours of talking with the environmental person," he discovered.

After passing under the Mackinac Bridge, Springer headed over to Michigan's Beaver Island and Garden Island, swung down to Charlevoix and as far south as Sleeping Bear Dunes, then caught a good wind for a broad reach across Lake Michigan to the tip of Wisconsin's Door County Peninsula.

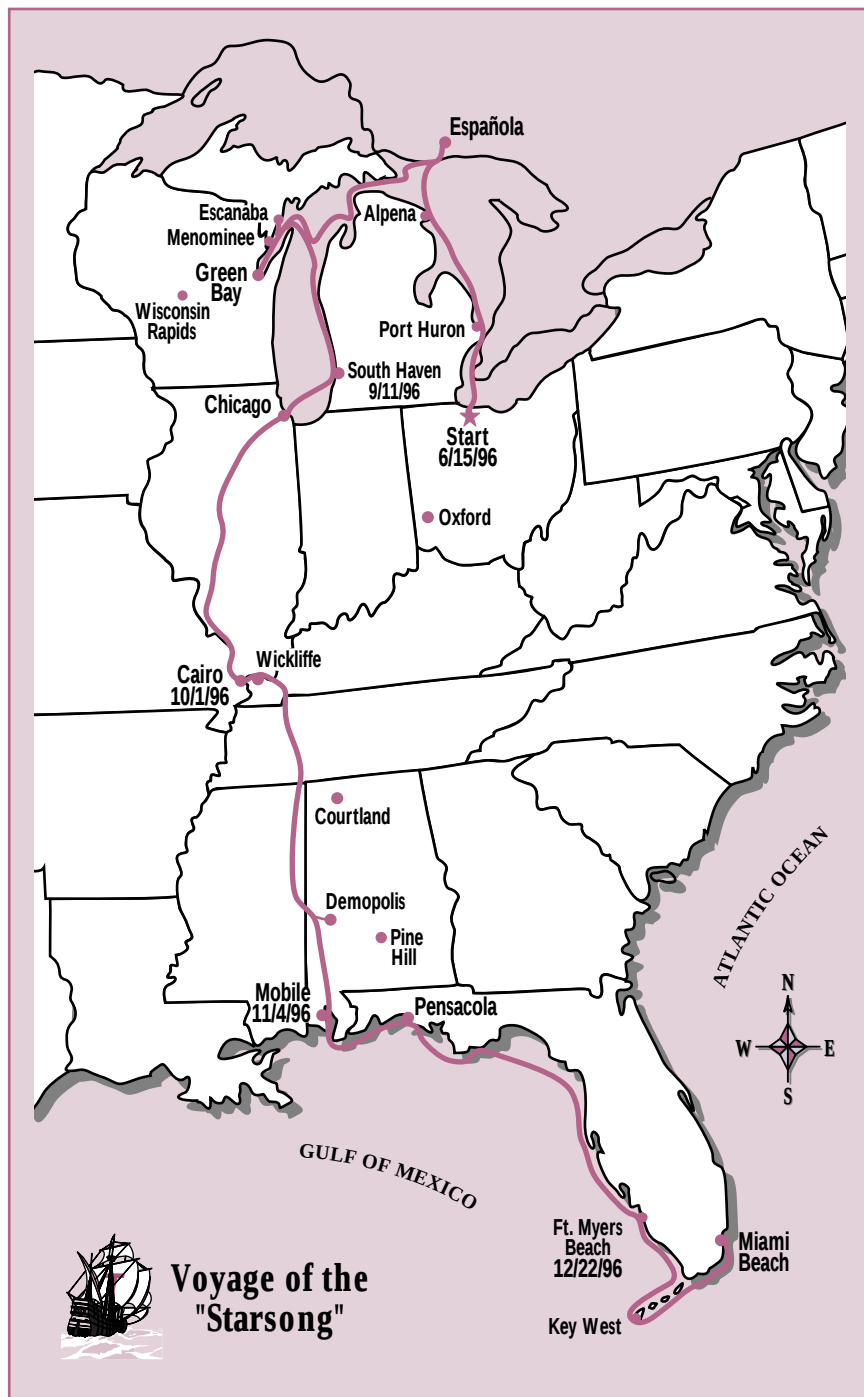
Mead's Escanaba, MI, mill was the next stop for the project. The mill has a good reputation—"and justly

deserved I think," Springer said—though he was surprised that some of the technology the mill continues to use is older than he had expected. Because the mill uses a primary clarifier, activated sludge, a long aerated stabilization basin, and then a tertiary clarifier, the final quality of its effluent is better than required by Cluster Rule standards, he said. Additional mill visits on the trip included Menominee Paper in Menominee, MI; James River in Green Bay, WI; Consolidated in Wisconsin Rapids, WI; Westvaco in Wickliffe, KY; MacMillan Bloedel in Pine Hill, AL; International Paper at Mobile, AL; and Champion in Cortland, AL, and Pensacola, FL. A planned stop at St. Joe Forest Products in Port St. Joe, FL, had to be canceled because of a "no beards" policy at the mill.

At various points along the way, Springer has returned to Miami University for planning meetings; flown to Portland, ME, to help with a mill trial there; or stopped in at TAPPI conferences. He also had a chance to attend the August 1996 Institute of Paper Chemistry (IPC) reunion and picnic in Appleton, WI.

After wintering in Ft. Myers Beach and the Florida Keys, the Springers made a stop in Miami Beach before heading over to the Bahamas for as long as three months. Come August, the sabbatical ends and it's back to teaching at Miami University in Oxford, OH. **TJ**

Meadows is editor of TAPPI JOURNAL



The route of the Starsong

A SAILOR'S LIFE

DONALD G. MEADOWS

The *Starsong*—a 30-ft, sloop-rigged catamaran—sat moored a couple yards from the dock master at Menominee (MI) Municipal Marina. Addie (Admiral), the old Labrador retriever, held his usual post, napping in the aft cockpit. Inside, Sandy Springer was catching up on some correspondence. Her husband, Allan Springer, was over at Menominee Paper Co., meeting with Anita Doecke, the mill's environmental director, as part of a sabbatical project.



Sandy and Allan Springer

The Springers had set sail from Ohio in mid-June of 1996 for a 14-month voyage. Sandy had retired from her job at Hoechst Marion Roussel as patent (chemical) information scientist; Allan had gotten approval to take the time off and to work on the environmental project. Addie didn't have any previous commitments.

Their travels took them around Michigan and into the great river systems of the Midwest at Chicago. At the beginning of October, they moved up the Ohio River, heading over to Kentucky's Land Between the Lakes. By the beginning of November they had entered salt water at Mobile, AL, and started their way around Florida's Gulf Coast. They welcomed the New Year during a three-week layover at Ft. Myers Beach, FL. After that, they explored the Florida Keys and prepared to sail the Bahamas before completing the hiatus and returning to Ohio.

Life on a boat can be relatively comfortable, though a bit cramped. It forces you to minimize your possessions and become more self-reliant. It also gives you an up-close appreciation of the many faces of Mother Nature.

Part of the romance of sailing is in the doing—in har-

nessing the wind, in following a true course, in facing the challenge of rough weather. Another part of the romance, shared by travellers of all kinds, is in the discovery. Often it's simple things, like finding a sheltered cove with wild blueberries for picking or observing manatees in a Florida wildlife park.



The Starsong

Part of the reality of sailing is dealing with repairs along the way. Fortunately, none of the mechanical problems on this trip were insurmountable—they ranged from a broken wire on the refrigerator to leaking oil seals and an electric fuel pump that needed to be replaced.

On a cruising sailboat, home is where you tie your line or drop your anchor. Amenities vary. Sometimes you take advantage of a hot shower, sometimes you make do with a cold plunge in the lake.

Keeping in touch with other people was relatively easy. Springer had a cellular phone on-board the boat and could also receive phone messages. At various ports along the way, the Springers were able to access e-mail. They also had designated mail drops where they could get letters and other correspondence.

Each port seemed to be home to an old acquaintance. At Escanaba, MI, Springer had a chance to get reacquainted with a couple of classmates from IPC: Glen and Marilyn Kinsey Brown. Glen Brown is also vice president of technology at the Mead mill Springer visited. While at Menominee, the Springers had dinner with Robert D. Fraik and his wife Joan at their newly built home. Fraik had been director of quality assurance and product development at Crosse Pointe Paper Corp. in West Carrollton, OH.

Springer is a sailboat aficionado. He can spot a boat on the Great Lakes, identify the design, rattle off a brief history, tell you where it rates among others of its call, and sometimes tell you who owns it as he wanders over to chat with the captain. In Fish Creek, WI, he spotted the 87-ft *Aria*, owned by Green Bay Packaging's George F.



Weighing anchor

Kress...and wandered over.

That's a common trait among sailors. They'll often wander over, or row over, just to chat for a bit. And they swap stories. There's one about a dog that fell down a cliff near Killarney, ON, in Canada and had to be rescued in the middle of the night. The dog happened to be Addie.



Addie's taxi service



Sunset at Fish Creek, WI