SEED CORN

MY OLDER DAUGHTER graduates from high school in June, but I see no indication that oceanography looms large on her horizon. She has prepared well in mathematics and science, but the liberal arts evidently will be the immediate beneficiary. Her sister, three years astern and closing fast, also hones the tools of science, but already she wanders from the straight and narrow, already she flirts with other fields of clover. Sometimes when corn is planted, roses spring up in luxuriant flower.

Oceanography is an anomaly among the sciences. Unlike the physicists or biologists or chemists, we have no novitiate, no roots that tap deeply into the fertile soil of elementary and high school years. Ask a bright eighth-grader about the ocean and you will likely hear of whales, the *Titanic*, or Bo Derek, with little awareness of the preparation required for a career in oceanography. Today our profession is mostly peopled by latter-day converts from the traditional sciences and mathematics, occasionally spiced by a dissident theologian or an itinerant musician. We take pride in our eclectic business, preaching that a basic scientific tool kit must be assembled before tinkering with oceanic machinery. In doing so, we defer young aspirants to an intellectual purgatory when the fires of idealism burn most brightly; we offer asceticism when shining eyes seek adventure. Finally the brass ring of oceanography is extended, typically in graduate years, to those who have not already embraced other challenges. Should we then be surprised to find that much youthful zeal has been channeled elsewhere?

Perhaps our husbandry is in need of review.

There is no shortage of environmental challenge today. Ominous global issues — greenhouse warming, third-world famine, ozone depletion, to name just a few — are much in the public eye. The worrisome litany echoes in the elementary grades, whose students have an understandably keen interest in the planetary home they are about to inherit. All of these issues intimately depend on oceanic processes, and all of them beg the attention of supple young minds. When we speak of Global Geosciences, invoking that trendy phrase, who do we have in mind to be its proponent in the coming decades? Who will be its advocate, who its executor?

Perhaps our husbandry is in need of review. Surely we can do a better job of encouraging youthful vigor in the paths of global service. An infusion of excitement and relevance in pre-college science and mathematics would help immensely. Our new society can promote recognition of worthy teachers, encourage civic pride in public education, and insist on a return to national standards of excellence. At an individual level, we can visit classrooms, participate in career seminars, sponsor internships, and lobby school boards. There is no question that the fundamentals of science and mathematics must form the foundation of oceanography, but students should first see the power of new tools when they are shiny and bright, not long afterward when dulled by disuse. Tell Johnny about the significance of Antarctic krill as he memorizes phyla. Show Suzie that computers can predict ocean circulation when she first grasps the wonder of long division. Let them both sense, as early as possible, their own potential influence on global affairs of great consequence.

The Oceanography Society and this magazine can help rejuvenate public science education; indeed, it may be our most important calling. Not all of our articles are accessible to budding scientists, but some are and more should be. We hope to do a better job in this respect, not by diluting the material, but by encouraging authors to think and write clearly, and thus avoid the cloudy mist that swirls about much scientific prose. And on fortunate occasions, we will offer visions of the future to challenge and inspire young minds.

— David A. Brooks