

Letters

EDUCATIONAL EXPERIENCE TO BE AVOIDED

John W. Rushin's interesting article, "Biology Class Goes to the Stream" (*ABT* 36[9]:531), offers suggestions for some educational student-teacher field work, but it fails to mention that many states have very strict laws about *how* and *what* aquatic specimens may be collected. Penalties for violations tend to be severe.

Any teacher planning an aquatic field trip should first check with local conservation officers. A run-in with an unsympathetic fish warden would doubtless be entertaining and educational for the class, but it could be embarrassing and costly for the teacher.

Alan M. Fletcher
Department of Communication Arts
Cornell University
Ithaca, N.Y. 14850

John W. Rushin comments:

A "run-in" with an unsympathetic game warden is a very real possibility when a biology class is working in the field. The fact that state laws vary across the country and that it is the responsibility of individual teachers to learn about the game laws in their states should have been emphasized in my article.

In Indiana a teacher can obtain a collector's permit from the Department of Natural Resources for collecting fish that are not covered by a regular fishing license. I obtained such a permit mainly because some of the fish we collected were under the minimum size limit in our state. I found that we did not need an Indiana permit for the bottom invertebrate samples we collected.

Our game warden did suggest that I get a permit, but he was very sympathetic toward outdoor field projects by biology classes. I believe that most game wardens have the same attitude. I might suggest that any teacher who is working on such a field project include their local game wardens in the project. In the past I have not done this, but I think that a discussion with the local game warden could add another important dimension to the study.

RULES FOR MARGIN MEASURING

I have read and reread the editorial "If It's Worth Doing ..." by Candace Bradford (*ABT* 36[9]:522), in which she expressed a desire for communications and contributions from some of us "clear out in nowhere." I have been a member of NABT and a faithful reader of *ABT* for many years. I have even picked up a few

good ideas I could use from time to time. On several occasions I actually sat down to prepare a short item to send off to you. But then I would begin to read the rules for submitting manuscripts and about half-way through I would have to pinch myself to make sure that I hadn't passed into the great beyond where the Almighty was pontificating to me in a loud, booming voice! By the time I was finished reading the rules, my first thought would be, "Good heavens! Do I sound like that when I am in front of a class?" My second thought was usually, "Forget it, back to the salt mines."

I have noticed over the years that many (or perhaps most) of the contributions are from college instructors. Perhaps they have more time to prepare manuscripts in the painstaking manner you require. But those of us who teach at the high school level and below, especially in the poorer districts, do not have graduate teaching assistants, teacher aides, secretaries, and so on, to do the clerical work for us. We have to write, type, duplicate, accumulate all our own tests and units. We have to figure and record all our own grades. And now in Iowa, we have to prepare our preliminary budgets and equipment orders for approval in early December. All of this along with the other mounds of administrative paper work that has to be done! And we should have time to prepare quadruplicate copies with carefully measured 1½-inch margins?

In short, I do not have the time and the energy to sit down and prepare a manuscript that has to be ultra-perfect down to the last correctly placed hyphen and carefully measured margin. Hats off to those who have the time and desire! You must be better organized than I.

Don Brown
Anamosa High School
Anamosa, Iowa 52205

Candace Bradford comments:

The primary purpose of our "rules" for submitting manuscripts is to minimize the time and expense involved in preparing manuscripts for publication. We do not have graduate teaching assistants, teacher aides, or even a full-time secretary at our disposal either! It would appear that not all our contributors take advantage of such assistance when it is available. We have received material for consideration in all forms—even a few handwritten manuscripts—and if our reviewers feel the content is worthy of publication, we gladly work with their authors to get their manuscripts into a format that can be printed. Hopefully, our "Writers' Handbook," with which we are replacing our earlier (admitted) pontifications, will more

clearly convey the idea that adherence to "rules" for submitting manuscripts is of benefit to the editorial staff and to those authors who wish to have their manuscripts published as quickly and with as few complications as possible. For those who cannot adhere to the "rules," we would rather have a chance to work with you in preparing a manuscript for publication than not hear from you at all!

CITIZENRY COMMUNICATION

Never before in history has mankind faced so many confusing and potentially dangerous problems—confusing because of the complexity of their solutions and dangerous because of their magnitude. The urgency of the situation is causing more and more people to lend a helping hand. Like volunteer fire fighters uniting to stop a wildfire, they are emerging from complacent isolation and gathering their resources to save the world as a fit place to live.

What is responsible for the changing mood of so many people? Could it be an expression of independence arising from the realization that world problems are too urgent to be left to chance or the devices of a handful of politically oriented people temporarily in power? Could it be a kind of missionary zeal compelling the individual to sacrifice himself for the benefit of others? Or is it purely a matter of looking out for one's self? Whatever the reason, these people are supported by precedences throughout history in which citizens on the brink of disaster saved themselves by rising to great heights of accomplishment when bound together by a worthy cause.

To maintain a healthy habitat based on successful environmental interrelationships, this generation of mankind must clearly understand its role in the scheme of things and not overstep its bounds. We are only transients here, just tenants; and we must accept responsibility for what we temporarily hold in trust. To be good stewards, we must also communicate our concerns to other people.

World-changing movements often start at the grass-roots. Indeed, they are likely to be more successful if they have a broad base of public support untainted by the air of being dictated from above. Herein lies a great opportunity for individuals to attack the problems causing the deterioration of our surroundings. The cure is primarily a matter of education. If private citizens assume responsibility for solving the problems, the approach can be labeled voluntary teaching or, better still, citizenry communication—a term I first heard in Nairobi, Kenya, in a conference with an official of the United Nations Environment Programme. What is so appealing about citizenry communication is its adaptability to the talents and interests of individuals. Information may be directed to any kind of audience by any medium. The individual is at his best telling the story he wants to tell with the medium he finds most effective.

If citizenry communication is to be an effective method of influencing public opinion it must stem

from enlightened sources of information. There is no good substitute for first-hand information obtained from on-the-site observations. Such experience gives perspective and insights unobtainable elsewhere.

Because most environmental problems are international in scope, biologists and other educators need training outside their own countries to strengthen the bonds of friendship with peoples who share the same ecosystem. One way to get some training is to join a travel group whose members are bound together by common interests. In a travel group, individuals have at their disposal the collective expertise of all the others in the group. Persons best informed on various subjects, be they archeological, historical, social, political, geographical, botanical, zoological, or photographic, will soon find that they are frequently teaching the others in an informal and relaxed atmosphere. Travel groups offer an adventurous atmosphere, comradeship, cultural exchanges with residents, and opportunities for seminars.

The destination of one on-site training excursion is the big game country of East Africa, where man and beast are unmistakably in conflict for survival space, where there is little or no local concern that the human population is exploding beyond the potential of the land to support it. Would-be participants of this educational junket can obtain information about the selection process and other matters from the sponsoring body, Friends of Africa in America, 330 So. Broadway, Tarrytown, N.Y. 10591. The party will leave for East Africa, where the United Nations Environment Programme is headquartered, on June 5, 1975 (Earth Day). About three weeks will be spent in Kenya and Tanzania participating in a variety of educational activities including excursions into protected wildlife areas and conferences on crucial subjects. Participants must raise their own travel expenses, which will be approximately \$2,000.

C. Leland Rodgers
Department of Biology
Furman University
Greenville, S.C. 29613

Cancer Warning Signals

We can't repeat them often enough—the seven warning signals of cancer:

- Change in bowel or bladder habits.
- A sore that doesn't heal.
- Unusual bleeding or discharge.
- Thickening or lump in the breast or elsewhere.
- Indigestion or difficulty in swallowing.
- Obvious change in a wart or mole.
- Nagging cough or hoarseness.

If you have a warning signal, take the American Cancer Society's advice: see your doctor *now*.