

cc. or nearly a pint of water. That is all there is to it. Just add the euglena and wait a few days. Of course the more organisms you add the sooner you will have a dense population. This method produces a most beautiful green color throughout the liquid. An even denser growth may be produced by adding the equivalent of five or six flakes of cooked oats, seasoned to taste, from your breakfast cooking. If you care to prolong the available food supply, add about six grains of uncooked rice when the culture is a week or two old.

It is not necessary to cook or to salt the oats, or to add the diastase. Good cultures can be produced on starchy foods alone or on diastase alone. The diastase has definite advantages and is much better than other enzymes used.

The following hints may benefit those who are unfamiliar with handling such cultures.

1. When tap water is used, it should be allowed to stand in an open glass vessel for several days before using in order to permit harmful gases to escape.
2. Add several pipettes of euglena immediately after adding the food; otherwise undesirable bacterial and mold growths will take over. With this sort of control it is possible to demonstrate that the euglena can hold down such growths.
3. Stock cultures are easily kept in pint fruit jars. Lids hold down excessive evaporation but several nail holes should be made in the lids. Separate cultures for student use are more convenient in culture dishes.
4. Best results probably will be obtained from cultures receiving light from north windows, or from cultures placed several feet from other windows.
5. To find cell division, draw the specimens from the very bottom of a new and rapidly growing culture. Even then you will not always find cell division.
6. It is not difficult to keep a pure culture of euglena, however several other species of organisms, including rotifers, may thrive in the same culture. Rotifers do well on "euglena pastures."

YOUR ATTENTION, PLEASE!

The Audio-Visual Aids Committee is anxious to be of the greatest possible service to the mem-

bers of NABT. We shall continue to review new A-V materials as they become available, to conduct previews of these materials at national meetings, to note new A-V equipment, and prepare A-V lists for various biology topics at different educational levels, in a continuing evaluative procedure. We would like to serve as a liaison agency between producers of A-V aids and teachers, and plan to report on televising in the field of biology.

To make this program effective, the Committee needs to know how each of you could benefit most from our activities. It asks your advice concerning needs for A-V materials or equipment not now available, and your opinions about new materials and developments. Will you take a few minutes to write a card or letter giving your reactions? Mention also if you would like to assist the Committee in fulfilling its program. Address correspondence to: The Audio-Visual Committee, Emery L. Will, Chairman, State Univ. Teachers College, Oneonta, N. Y.

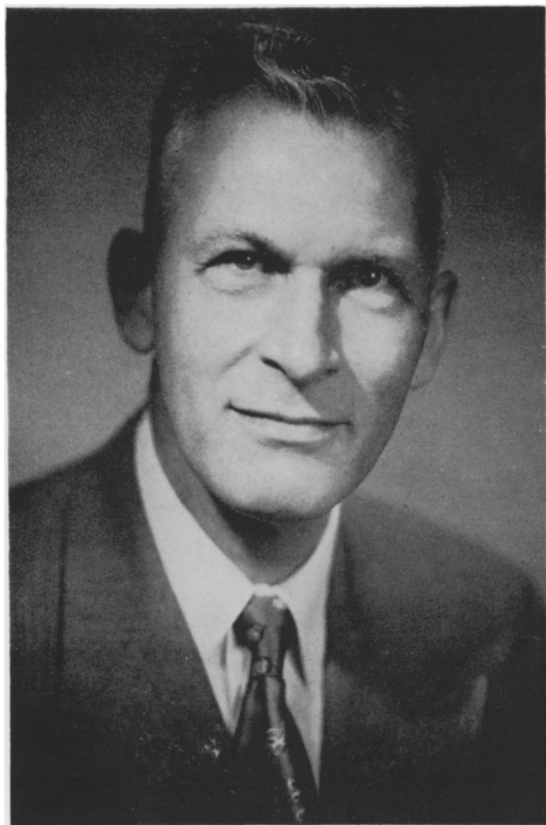
FROM THE RETIRING EDITOR

When in the fall of 1941 I agreed to undertake the job of Editor-in-chief of *The American Biology Teacher*, I had no idea that it would turn out to be an 11-year job, or I might have been scared away. I have enjoyed every bit of it, even though the start was not encouraging. The previous editor was unable to attend the Dallas meeting, where the official transfer of files took place, so all doubts and questions had to be resolved by mail after the meeting.

The first big job was that of bringing out a National Defense Issue; M. C. Lichtenwalter, now better known as "The Old Fossil" who writes *Biology Laboratories*, volunteered to do what he could in the production of this special issue, so I appointed him Guest Editor. He assembled papers for the April, 1942 issue, while I practiced on the February and March issues.

Although I was a charter member of NABT it was a complete mystery to me how I was chosen as Editor. I was not an Associate Editor at the time; in fact I was not on the staff at all. An article I wrote for the February, 1940 issue had created quite a stir (I have just reread it and cannot see why), and led to my serving on some committees. Anyway, the first thing I knew I was the Editor-in-chief.

It has been a wonderful experience. It has brought me hundreds of personal acquaintances among biology teachers all over the United States. I know on a first-name basis



every one who has served NABT as President, and this is true of most of the other officers. I worked with every Secretary-Treasurer the association has had, and with all the Managing Editors except J. S. Mitchell and Al Fried, who served in the first two years of the Association, 1938-9 and 1939-40. When I took over the Journal, Homer Stephens was President (there had been only three presidents before him—M. C. Lichtenwaller, Malcolm Campbell, and George Jeffers), and P. K. Houdek was Secretary-Treasurer (he was the first to hold that office). "Brad" Price was the Managing Editor; he was the third, having been preceded by Mitchell and Fried.

I have made up 92 of the 120 monthly issues of ABT that have been published. I was the third Editor-in-chief, the two previous ones being A. I. Herskowitz, who edited the issues from October, 1938 to January 1940, followed by E. C. Colin, who turned the journal over to me with the February, 1942 issue. My first issue was February, 1942—Volume 4, Number 5. 92 issues make up several pretty good sized books. Many people have helped regularly and faithfully in the

production of these. To name them all would require several pages, but it may be noted that more than half of the members of the present Editorial Staff were on the staff in 1942.

The four principals of such a magazine as ours are the President and the Secretary-Treasurer of NABT, the Managing Editor, and the Editor-in-chief of the Journal. The historically minded members of NABT will be interested in the accompanying table showing who carried these responsibilities. The addresses given are those at the time of selection for the office.

It is the continuous and efficient service of many individuals that make such a journal as ours possible. With all the personnel on a voluntary basis, no one person can take enough time to do a good job. One major aid has been the cooperation of the Kansas State Teachers College of Emporia, which deserves thanks for office space, for the use of office facilities, for assistance in mimeographing and mailing, for an unknown amount of my time, and for many other items. And of course, the advertisers are of the utmost importance; not only is their financial support essential, but their products are essential to the readers of the magazine.

Throughout the eleven years, ABT policies have not changed in major matters, although there have been many changes in procedure and specific methods. We have throughout tried to meet needs of teachers as we were able to determine those needs. We have tried to steer a middle course between being too strict and being too lax in the selection of manuscripts. We have tried to maintain a balance between articles written by college authors and by high school teachers and pupils; also a balance between "practical" and "theoretical and philosophical" articles. We have tried to maintain some sort of geographic distribution in the sources of the articles. We have refrained from publishing anything that was, or seemed to be, in the nature of a personal attack.

Some queer things happen in the life of a journal. When an Editor receives in the same mail a letter that says "ABT is all right for the West, but we in the East don't get much out of it," and another that says "Why do you publish only articles that are suited to the way they teach biology in the East?" he wonders what he has been publishing; then, when he writes to both persons and asks what

they would like to see in the Journal, and he gets almost identical answers from them, he can only conclude that they copied their answers out of the same education textbook! And speaking of copying, how does an Editor handle a manuscript almost word for word a chapter from Harrington Wells' book on *Elementary Science*? What does he do about one that he knows is being submitted simultaneously to about a dozen journals? On one occasion, within a few days of each other, I received a vigorous letter saying "Why in heavens name do you publish junk like _____'s article?" and a request from a state conservation agency for 3000 reprints of the same article. Another time, when I received from a reader a strong protest against a certain article, I replied that this particular article had drawn more favorable comments

than any other published recently, his answer was: "Those comments were not typical; mine are." From the Editor's viewpoint, the only logical comment is: "It takes all kinds of people to make a world."

There are certain chronic difficulties that have remained more or less constant throughout the years. One is the difficulty in obtaining good "practical" articles, and the ease with which one accumulates "theoretical and philosophical" ones. Another is to keep up the supply of good articles written by high school teachers. Another is to get good illustrations for the articles that need illustrations, if they are to measure up their possibilities.

I cannot refrain from saying once more, "A magazine belongs to its readers." Regardless of the Editorial Staff, the readers can make a

PRESIDENTS AND SECRETARIES OF NABT, AND EDITORS OF THE
AMERICAN BIOLOGY TEACHER, 1938 TO 1953

	President	Secretary-Treasurer	Editor-in-Chief	Managing Editor
1938-39	M. C. Lichtenwalter Chicago, Ill.	P. K. Houdek Robinson, Ill.	I. A. Herskowitz New York City	J. S. Mitchell Lexington, Ky.
1939-40	Malcolm Campbell	P. K. Houdek	I. A. Herskowitz, and E. C. Colin Chicago, Ill.	A. A. Fried New York City
1940-41	George W. Jeffers Farmville, Va.	P. K. Houdek	E. C. Colin	A. A. Fried, and Charles B. Price Chicago, Ill.
1941-42	Homer A. Stephens Atchison, Kan.	P. K. Houdek	E. C. Colin and John Breukelman Emporia, Kan.	Charles B. Price
1942-43	Merl A. Russell Highland Pk., Mich.	P. K. Houdek	John Breukelman	Charles B. Price
1943-44	Merl A. Russell ¹	George W. Jeffers	John Breukelman	Charles B. Price
1944-45	Helen Trowbridge Glen Ellyn, Ill.	Merl A. Russell	John Breukelman	Charles B. Price
1945-46	Prevo L. Whitaker ² Bloomington, Ind.	Merl A. Russell	John Breukelman	O. D. Roberts Oak Park, Ill.
1947	E. Laurence Palmer Ithaca, N. Y.	Merl A. Russell	John Breukelman	O. D. Roberts
1948	Howard Michard Lafayette, Ind.	John P. Harrold Midland, Mich.	John Breukelman	O. D. Roberts and Irving C. Keene Brookline, Mass.
1949	Ruth A. Dodge Johnstown, N. Y.	John P. Harrold	John Breukelman	Irving C. Keene
1950	Betty Lockwood New York City	John P. Harrold	John Breukelman	Irving C. Keene
1951	Richard L. Weaver Chapel Hill, N. C.	John P. Harrold	John Breukelman	Betty Lockwood and Muriel Beuschlein Chicago, Ill.
1952	Harvey E. Stork Northfield, Minn.	John P. Harrold	John Breukelman	Muriel Beuschlein
1953	Leo F. Hadsall Fresno, Cal.	John P. Harrold	John Breukelman and B. B. Vance Dayton, Ohio	Muriel Beuschlein

¹No annual meeting, due to war; all officers held over, except Secretary-Treasurer; upon resignation of P. K. Houdek, Executive Board appointed George W. Jeffers.

²Prevo Whitaker served from October 1945 to December 1946, when the fiscal year was changed from the school year to the calendar year; since then officers have assumed duties on Jan. 1.

magazine what they want it to be. If not enough of them are interested in it, or if not enough of them express their interests, the Editorial Staff does the best guessing job of which it is capable and sets up the magazine according to that guess.

And, finally, I wish to thank all of you personally—whether you are officer of NBT, contributor of articles, member of the Editorial Staff or a committee member, Guest Editor, advertiser, reader of ABT, or anyone else who helped, and in whatever way you may have made your contribution—who have helped to give *The American Biology Teacher* whatever success it has had in the past 11 years and to make my term of service pleasant. And I wish to bespeak for Mr. Vance the same fine cooperation from all of you which for these 11 years you have been giving to me.

The Nominating Committee Reports

For President-Elect

1. **Brother H. Charles**, F.S.C. (Charles F. Severin). Prof. of Biology, St. Mary's College, Winona, Minn. B.S., M.S., Ph.D. Univ. of Chicago; 16 yrs. high school and 20 yrs. college teaching; author of high school biology textbook, a workbook, and a handbook for biology teachers; founder of Chicago Catholic Science Teachers Ass'n; member of numerous educational and scientific societies; charter member of NABT; author of many articles in *The American Biology Teacher* and other journals; contributor of column "Biology In The News"; Assistant Editor since 1940.

2. **Malvina Trussell**, Florida State Univ., Tallahassee, Fla. B.S., M.S., Ph.D. Cornell Univ.; has taught from 1st grade through university level; 23 yrs. at Georgia State Teachers College as Head of Biology Dept.; Science Consultant in Florida, Georgia, and at Univ. of Minnesota; author of content material for various sciences, and methods and techniques for presentation, published in *Georgia Educational Journal* and others; Editor of *News Letter*, American Nature Study Society; Florida State Chairman, NABT Conservation Project.

For First Vice-President

1. **John Breukelman**, Head of Biology Dept., State Teachers College, Emporia, Kansas. A.B., M.S., and Ph.D. Univ. of Iowa; 4 yrs. high school and 23 yrs. college teaching; author of a manual for college general biology; a popular booklet on Kansas fishes, and about 30 scientific and educational articles; Past Pres. Kansas Academy of Science; member of 12 professional societies; charter member NABT; Editor-in-Chief of *The American Biology Teacher*, 1942–1953.

2. **Howard E. ("Howdy") Weaver**, Assoc. Forestry Educator, Texas Forest Service. B.S., Ph.D. Cornell Univ.; Regional Chairman, NABT Region 7; native Hoosier, with "a foot on the curb and a foot in the furrow," transplanted to Texas; 3 yrs. army service; publications include 633-page "State Park Naturalist Programs—Their History, Present Status, and Recommendations for the Future," 260-page "Manual of Forestry," revision of popular 130-page bulletin "Forest Trees of Texas and How to Know Them," "Trees as Poets See Them," and numerous articles for scientific, educational, and industrial periodicals; affiliated with many professional education, scientific, and service organizations; hobbies include natural history and nature photography; Member Phi Kappa Phi, Phi Delta Kappa, Xi Sigma Pi, Gamma, and Alpha Phi Omega.

For Second Vice-President

1. **Rex Conyers**, Biol. Instructor, Senior H.S., University City, Missouri. B.S., M.Ed. (Conservation Education), Univ. of Missouri; 16 yrs. high school teaching; developed one of first large-scale H.S. conservation demonstration areas; pioneered project method of teaching conservation and biology; students consistently hold top-rank at 1800 Project Greater St. Louis Science Fair; member numerous educational and scientific organizations; Pres. Missouri Science Teachers Ass'n, 1949; charter member NABT, State Membership Chairman, 1950–1953; member Conservation Project Committee; Consultant, summer camp work; Instructor of Adult Evening Class in Nature Recreation; author "Flight Schedule of Birds, Jackson County, Missouri"; co-author "Guide to Birding Areas of St. Louis Region"; Editor, St. Louis Audubon Society *Bulletin*; local representative for NABT Nat'l Convention, 1952.

2. **Dorothy Miller Matala**, Iowa State Teachers College, Cedar Falls, Ia. A.B., M.A., Ph.D. in Nature Educ. at Cornell Univ.; high school teacher of biol.; 3 yrs. junior college; Critic Teacher at Univ. H.S., Bloomington, Ind.; now teaching life sciences for elementary teachers; on Staff of Iowa Teachers Conserv. Camp since beginning; Park Naturalist, Ind. State Parks, 3 yrs.; member Phi Kappa Phi, Sigma Delta, Iowa Acad. of Sc., and Am. Nature Study Society; interests in outdoor education, nature recreation, school camping, birds, etc.; member State Committee on School Camping and Outdoor Education, NABT State Committee on Conservation; helps prepare and present weekly program on elementary science over WOI-TV.

3. **Stanley Mulaik**, Univ. of Utah. B.S., M.S., in Nature Study at Cornell Univ.; teacher and supervisor, Jr.-Sr. H.S. and Jr. College, 11 yrs.; Vice-Pres. and Pres., Western Div. of Am. Nature Study Society 1951, 1952; member Phi Sigma, Tex. Acad. of Science (Fellow), Utah Acad. of Science, Biol. and Ent. Societies of Washington, Am. Soci-