

**SUSTAINING MEMBERS  
THE NATIONAL ASSOCIATION OF  
BIOLOGY TEACHERS**

**ABBOTT LABORATORIES**  
North Chicago, Illinois

**AMERICAN OPTICAL CORPORATION**  
Buffalo, New York

**BAUSCH AND LOMB**  
Rochester, New York 14602

**COMMERCIAL SOLVENTS CORPORATION**  
Terre Haute, Indiana

**DIFCO LABORATORIES**  
Detroit, Michigan

**THE DOW CHEMICAL COMPANY**  
Midland, Michigan 48640

**EDUCATIONAL METHODS, INC.**  
Chicago, Illinois 60611

**ENCYCLOPAEDIA BRITANNICA EDUCATIONAL CORPORATION**  
Chicago, Illinois 60611

**FAUST SCIENTIFIC SUPPLY COMPANY**  
Madison, Wisconsin 53713

**ROBERT FRIEDMAN ASSOCIATES**  
Cleveland, Ohio

**GENERAL BIOCHEMICALS**  
Chagrin Falls, Ohio

**CCM: GENERAL BIOLOGICAL, INC.**  
Chicago, Illinois 60620

**HAMILTON MANUFACTURING COMPANY**  
Two Rivers, Wisconsin 54241

**HARVARD APPARATUS COMPANY, INC.**  
Millis, Massachusetts

**KEWAUNEE TECHNICAL FURNITURE COMPANY**  
Statesville, North Carolina

**LA MOTTE CHEMICAL PRODUCTS COMPANY**  
Chestertown, Maryland 21620

**LANE SCIENCE EQUIPMENT COMPANY**  
New York, New York

**ELI LILLY AND COMPANY**  
Indianapolis, Indiana

**MILLIPORE CORPORATION**  
Bedford, Massachusetts

**NASCO, INC.**  
Fort Atkinson, Wisconsin 53538

**A. J. NYSTROM AND COMPANY**  
Chicago, Illinois

**ORTHO PHARMACEUTICAL CORPORATION**  
Raritan, New Jersey

**STANSI SCIENTIFIC DIVISION, FISHER SCIENTIFIC COMPANY**  
Chicago, Illinois 60622

**E. G. STEINHILBER AND COMPANY, INC.**  
Oshkosh, Wisconsin 54901

**TRIARCH PREPARED MICROSCOPE SLIDES**  
Ripon, Wisconsin 54971

**UNITRON INSTRUMENT COMPANY**  
Newton Highlands, Massachusetts

**WARD'S NATURAL SCIENCE ESTABLISHMENT, INC.**  
Rochester, New York

**SARGENT-WELCH SCIENTIFIC COMPANY**  
Skokie, Illinois 60076

# In My Opinion

## PERSONAL REFLECTIONS OF AN OUTSIDER

My formal training in biology began, and for all practical purposes ended, with a sophomore-year course (taught by the track coach) in a country high school. Academically, this puts me far behind Julian Huxley and C. H. Waddington but some distance ahead of Alfred Russel Wallace.

Yet I have become, quietly and happily, a "biologist" on the speculative side, where questions of zoogeography or of endocrine balance have social overtones (as they did for the scholar Huxley and the untutored Wallace). In the field I'm a bird-watcher who also watches flowers and snails: a delighted, astonished "naturalist." I get my living pleasantly enough, at my desk—partly by putting commas in other people's manuscripts about flowers, snails, and birds.

To equip my mind for an eccentric but self-rewarding life I had to resist the blandishments of an "educational system" that took a poor view of one who merely wished to look around, to think, and to dream.

As a result, I know something about the child who, at age 12 or thereabouts, reads with enormous excitement a beginner's book about fossils or pond life. It is not science to him: it is poetry. He lives in a house where people talk about money and he goes to a school where teachers take attendance; but nobody who can quote Wordsworth or Thoreau ever accompanies him to the marsh or the road-cut. He goes on to college; and there, if he doesn't drop out (as I did), he dies of the discovery that the things he cares about aren't in the curriculum—aren't "career-oriented." He enters the world of wars and bread-winning, and in time he becomes narrowly professional or else settles for a "nice hobby."

How many Bartrams, Audubons, and Muirs are there in America today?

I have remained beyond the pale: just me, a few books, and the birds, out where the intellectual air is clean but the economic weather is rough. And to my outsider's ear comes word of pedagogic reform. What a tease, within a stifling society! The world is *not* permeated with a love of knowledge; it is *not* heedful of "Nature and Nature's God"; it does *not* welcome the inquiring spirit. But who tells the child so? What teacher will help him to create a private world where imagination and reverence—the civilized essentials—can prevail? A pedagogy that offers less is fundamentally fraudulent; and until a braver, more honest pedagogy appears, some children will just have to find their own way—and suffer gladly for it.

*The Assistant Editor*