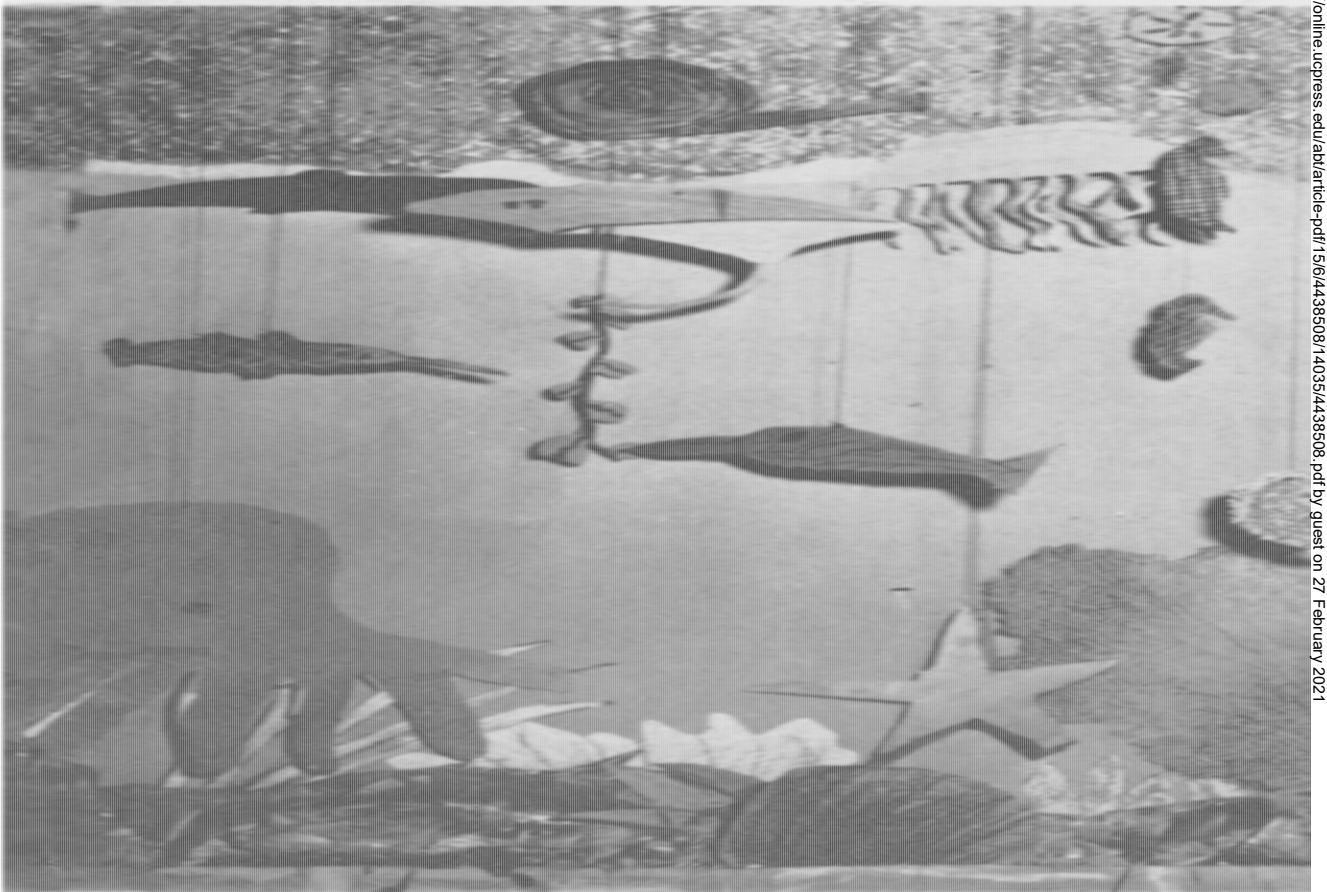


# The Biolo

A PRACTICAL SERVICE AND  
AND THE LIFE SCIENCES

The National

OCTOBER, 1953



A Seashore Project Inshore  
College Students - An Easy  
A Simple Indication of the  
Preparation of Skins of S

A HEATH text is your BEST text

# ADVENTURES WITH ANIMALS AND PLANTS

*A General Biology*

KROEBER and WOLFF

This easy-to-teach text helps you to build and maintain high interest in your biology classes; provides a logical biology course for you; keys laboratory work to subject matter for you; provides you with review questions that cover every text idea, arranged in the same order as the subject matter; provides you with extra activities for your better students. Make your teaching as easy as possible by using the whole program—Text, Teacher's Manual, Workbook-Laboratory Manual, and Comprehensive Tests.

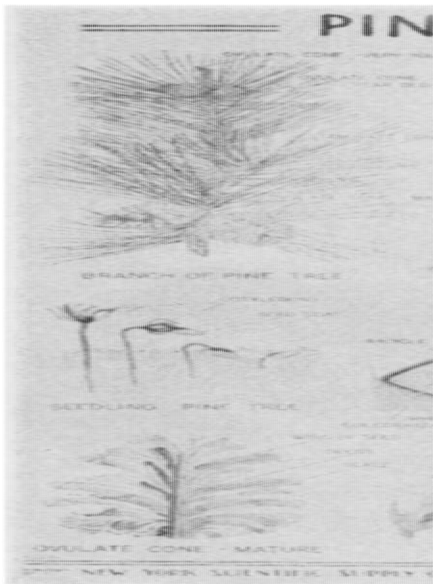
*Write to the nearest Heath sales office for further information about  
Heath Science Texts*

## D. C. HEATH AND COMPANY

Sales Offices: NEW YORK 14  
ATLANTA 3

CHICAGO 16  
DALLAS 1

SAN FRANCISCO 5  
Home Office: BOSTON 16



### NEW NYSSCO BOTANY CHARTS

#### Moss, Fern, Pine

**A** NEW series of three "Nyssco" charts fully colored, and accompanying series of three Laboratory Note Book and Test Sheets.

**L**ARGE, scientifically accurate charts for courses in Biology, Botany, General Science, etc. They are well-planned, showing relative importance of gametophyte and sporophyte stages in each case, with figures beautifully and artistically executed in vivid contrasting colors. These charts are on the N. Y. City Board of Education Supply List, as well as on the approved lists of numerous Boards of Education throughout the country.

**T**HE charts are cloth-backed, size 36" x 50". With wood rollers, \$8.75; Test Sheets (8½" x 11"), \$2.75 per C, \$.50 per dozen of a kind.

Chart No.	Titles	Test Sheet No.
BEC 180	MOSS. Life cycle.	BT 180
BEC 190	FERN. Life cycle.	BT 190
BEC 200	PINE. Life cycle.	BT 200

Ask for Cat. No. 7J—"Nyssco  
Biology Models and Charts."

EST.  1919

**NEW YORK SCIENTIFIC SUPPLY CO., INC.**

General Supplies for Biology and Chemistry

28 West 30th Street

New York 1, N. Y.

## NEW SCIENCE FILMS

16mm sound films for elementary grades

**LIVING SCIENCE SERIES NO. 1**  
(6 min. ea. color \$60. Series \$100)

**ATTRACTING BIRDS IN WINTER  
BUILDING BIRDHOUSES**

**LIVING SCIENCE SERIES NO. 2**  
(6 min. ea. color \$60. Series \$198)

**BIRDS THAT EAT FISH  
BIRDS THAT EAT FLESH  
BIRDS THAT EAT INSECTS  
BIRDS THAT EAT SEEDS**

## BIOLOGY FILMS

Other Biology films available for junior high and up including John Nash Ott's color series, in time-lapse photography on the growth of flowers and trees.

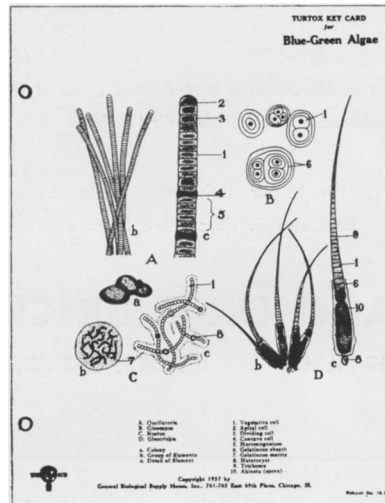
Write Dept. BF for new catalog.



**INTERNATIONAL  
FILM BUREAU, INC.**

57 E. Jackson Blvd., Chicago 4

# Turttox Key Cards and Quiz Sheets



## offer you a choice of more than 350 Subjects

The biological drawings available as Turttox Key Cards and Quiz Sheets offer you many plant and animal subjects not obtainable from any other source. For a handy reference list of all of these subjects, ask for your free copy of *Turttox Three-Way Checklist of Biological Drawings*.

Turttox Key Cards and Quiz Sheets are efficient teaching aids and great time savers for quiz and review periods. The per-subject cost is less than 2 cents per student.

**GENERAL BIOLOGICAL SUPPLY HOUSE**

*Incorporated*

761-763 East Sixty-Ninth Place

Chicago, 37, Illinois

## THE CAROLINA SERVICE OFFERS . . .

- A complete culture collection of Bacteria, Fungi, Algae, Protozoa and Invertebrates.
- Quality Biological and Botanical Preserved Materials.
- Microscope Slides, Kodachromes and Plast-O-Mounts guaranteed to give satisfaction.
- Carefully selected Dissecting Instruments and Supplies.
- Microscopes and Accessories to meet the need of biological laboratories.
- General Laboratory Apparatus including glassware, ovens, balances and other apparatus.
- Chemicals, Inorganic and Organic, Stains, and Solutions.

### DEPENDABLE SERVICE

*A guarantee of complete satisfaction.*  
Quality materials at reasonable prices.

**CAROLINA BIOLOGICAL  
SUPPLY COMPANY**

Elon College, North Carolina

## PHASE FILMS

present the basic, the impressive, the truly significant biological phenomena—the marvelous interrelation of tissue structure and function in living bodies, the beautiful precision of the hereditary mechanism of cells.

Subjects ready: - "Syngamy and Alternation of Generations in *Allomyces a Water Mold*"; "Plant Growth and Mutation"; "Cell Division"; "Meiosis."

Now in our sixth year. Write for previews or descriptive literature.

### ARTHUR T. BRICE

PHASE FILMS

ROSS, CALIFORNIA

## THE AMERICAN BIOLOGY TEACHER

Publication of the National Association of Biology Teachers.

Issued monthly during the school year from October to May. Entered as second class matter October 26, 1939, at the post office at Lancaster, Pa., under the Act of March 3, 1879.

Publication Office—111 E. Chestnut St., Lancaster, Pa.

Editor-in-Chief—B. BERNARR VANCE, Route 1, Box 175, Dayton 5, Ohio.

Associate Editors—ROBERT McCAFFERTY, 371 Broad St., Wadsworth, Ohio; PAUL KLINGE, 246 Ohmer Ave., Indianapolis 19, Ind. (To receive all manuscripts for major articles.)

Managing Editor—MURIEL BEUSCHLEIN, 6431 S. Richmond, Chicago 29, Ill.

Assoc. Managing Editor—ROBERT GERING, Dugway Proving Grounds, Tooele, Utah.

Subscriptions, renewals, and notices of change of address should be sent to the Secretary-Treasurer, John P. Harrold, 110 E. Hines Ave., Midland, Mich. Correspondence concerning advertising should be sent to the Managing Editor.

Annual membership, including subscription, \$3.75, outside United States, \$4.50.

Please mention THE AMERICAN BIOLOGY TEACHER when answering advertisements

## The American Biology Teacher

Vol. 15

OCTOBER, 1953

No. 6

### TABLE OF CONTENTS

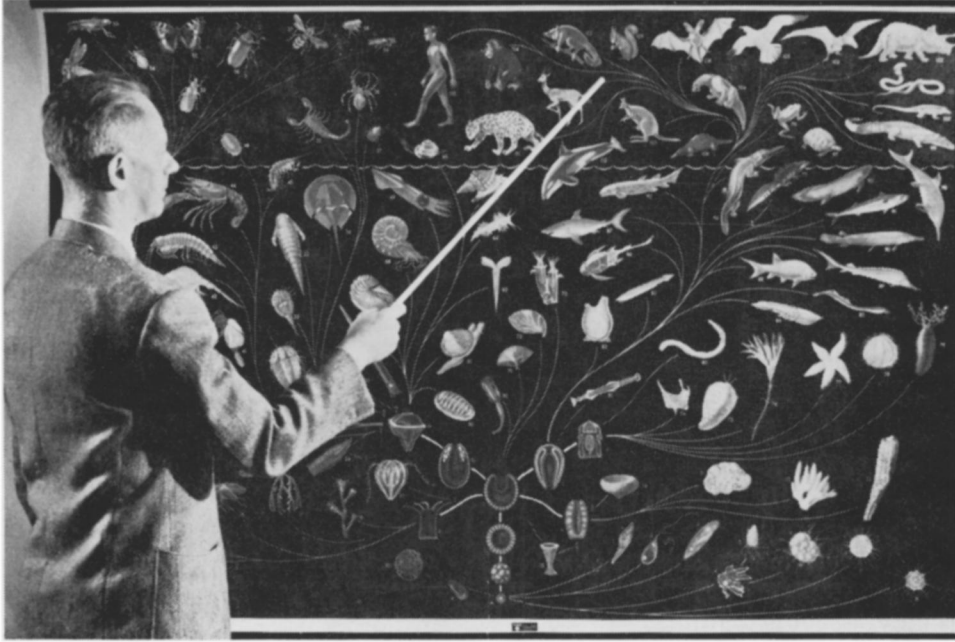
A Seashore Project Inshore . . . Erma Vance	145
The Use of Balsa Wood in the Preparation of Skins of Small Mammals Allen H. Benton	148
Dr. Julian Huxley Wins Kalinge Award	149
Food-Chain Culture of <i>Daphnia</i> E. F. Barrows and Eric Schwab	149
An Easily Constructed Microprojector for Drawing Purposes Leonard R. Davis and George W. Bowman	150
Knowledges of Botany Possessed by High School and College Students George G. Mallinson	151
Inspiration Via The Disc . . . Robert Wheeler	154
Enzymatic Aid for <i>Euglena</i> Howard Baker	154
From the Retiring Editor . . . . .	155
Nominating Committee Report . . . . .	158
New Associate Editors . . . . .	159
Proposed Changes in Constitution . . . . .	159
Across The Editor's Desk . . . . .	160
President's Message . . . . .	161
Letters . . . . .	161
Books For Busy Biologists . . . . .	164
Biology Laboratories . . . . .	165
A Simple Indication of the Efficacy of a Teaching Device . . Charles E. Packard	166
Biology in the News . . . . .	167

The contents of previous issues of *The American Biology Teacher* can be found by consulting the *Education Index* in your library.

### COVER PHOTO

The view shows an "aquarium" of sea animal figures built by third-grade pupils for their "Seashore Project Inshore" (see page 145), using a large mattress box. The background was painted blue-green; animals were freehand drawings, mounted on cardboard and painted or colored according to each child's interpretation. "Seaweeds" and "shells" cover the "ocean floor." The photo was taken by eighth-grader Fred Booher, using a 4×5 Speed Graphic camera with flash.

## *“Relationships of the Animal Kingdom”*



How can you show both the diversity of the Animal Kingdom and its inter-relationship at the same time? It can be done with the aid of a vivid, large wall chart, “Relationships of the Animal Kingdom,” illustrated above. This is a chart of striking beauty and compelling interest, one that will grasp and hold the attention of every student.

The chart is the work of Drs. Anatol Heintz and Leif Stormer of the University of Oslo. Relying strongly on embryological evidence, they have illustrated the relationship of 115 representatives of the major animal phyla, unified by the concept of evolution. The chart is extremely simple in its basic design, but is worked out in sufficient detail to meet the needs of the especially interested or advanced student as well as the beginner.

Starting from a single cell, the trunk of the outline coincides with a series of embryological stages. Branches occur at points where major groups begin their independent lines of development. Existing species are portrayed in natural color, fossil forms in black and white. A wavy blue water-line in the upper part of the chart separates aquatic from terrestrial animals. An accompanying booklet provides 24 pages of explanatory comment.

*Chart Size:* 68 x 45" . . . *Mounting:* On cloth, wood rollers top and bottom. *Shipment:* via Express (wt. 6 lbs.). *Price:* (including packing) . . . \$19.50

An 8½" x 12½" black and white reproduction of this chart will be sent free to teachers on request.

**WARD'S NATURAL SCIENCE ESTABLISHMENT, INC.**  
**3000 East Ridge Road, Rochester 9, N.Y.**

# DENOYER-GEPPERT ANNOUNCES . . .

Newly Revised General Biology Charts  
with all structures fully identified and labeled

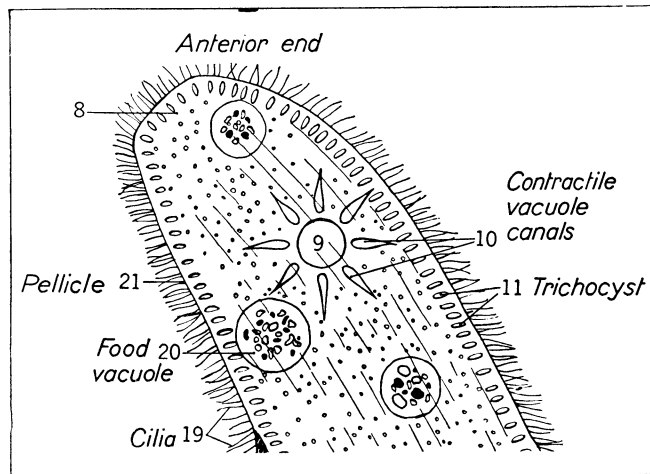
NOW AVAILABLE

28 Large Wall Charts

Each 44 x 35 Inches

Printed in Two Colors

Edited by Goddard, Kenoyer, and Hinds of Western Michigan College of Education, this new series of wall charts is prepared especially for use in the classroom and laboratory, the separate drawings being large enough to be seen at average classroom distance. Prices of the charts vary according to the mounting style selected. For complete details, write for Circular S4TAB.



Portion of Chart GB1, showing identification of structures

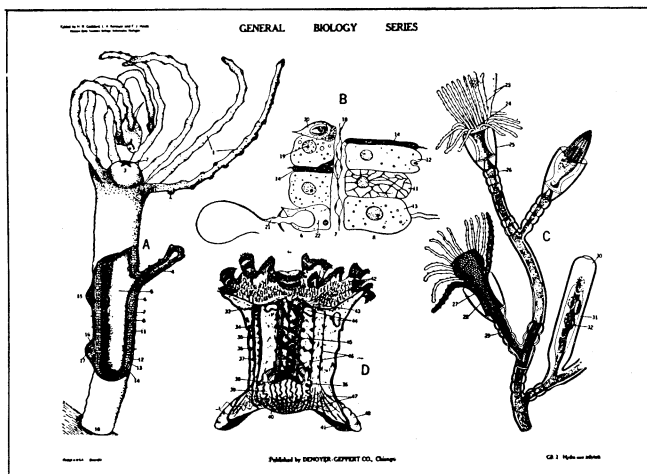


Chart GB2 Coelenterates

## DENOYER -GEPPE COMPANY

5241 Ravenswood Avenue  
Chicago 40, Illinois

If you do not have the new  
D-G 53B catalog, please write  
for it.