

students are urged to use initiative in their research. After a sufficient time has been given for research, during which committee conferences are held with the instructor, round table sessions are held for one, two or three hours during which the textbook assignment, the results of the library research and further queries are talked over. The laboratory furniture is all movable, so it is easy at any time to arrange for round table discussions. At these sessions the instructor is prepared with interesting, additional information and some demonstrations to fit into the picture. After six to eight clock hours have been spent on the unit much helpful information has been exchanged, the students' horizons have been widened beyond the textbook and laboratory and their interests in biology have been increased. During the remainder of the year, and we hope for life, all will be encouraged to watch for new information and new books on the topics included in the unit.

The syllabus has a unit on "Arthropods" in which emphasis is placed on "Insects." After the laboratory work has been done on the crayfish for the unit in general and on the grasshopper for the insects in particular, a discussion is conducted to develop a list of insects that are harmful to man to the extent that they constitute a real problem. The list will probably include clothes moths, potato beetle, termites, mosquitoes, grasshoppers, locusts, bedbugs, ticks, lice and many others. These are assigned to groups of two or three students each and, with the aid of a bibliography on insects, problems are assigned to determine the history, habitat, breeding habits, extent of harmfulness to man, methods of control and life cycles of those listed. This is followed by a series of round-table dis-

cussions at which specimens are shown, and demonstrations made.

Colby Junior College is situated in the country where there is access to natural conditions any time. The college owns a plot of twenty-five acres of woodland bordered on one side by a brook. This affords a wide variety of fauna and flora only three miles from the campus. The biology groups are taken in units of ten to this plot for field work, which is tied up as much as possible with biological relations to man. Teaching beneficial aspects of bacteria of decay is easily vitalized with the group sitting on a rotting log, with leaf humus underneath and foliage above. The carbon and nitrogen cycles are explained and their material values to man discussed.

As the course goes on through the year other units and parts of units suggesting particular consumer interest are the relation of bacteria to the preparation of dairy products for the consumer's taste, the economic aspect of fungus diseases on fruit trees or monocot crops, the economic loss involved in unnecessary illness, the study of an adequately nourishing diet at moderate cost and the history and economic value of such staple foods as corn, potatoes, and wheat.

#### FOR THE COMMITTEE ON "CONSUMER BIOLOGY"

In answer to a questionnaire thirty teachers indicated their willingness to work on a committee in "Consumer Biology." All members were contacted twice by mail; only one letter was returned. This member had moved and no forwarding address was given. Two members were chairmen of other committees and begged to be excused. Six members sent letters stating that the press of other work made it impossible for them to contribute an article on con-

sumer biology. Five members contributed articles on various phases of consumer biology.

“Consumer Biology” may have been a somewhat vague and misleading title. It might have been better had we said, “Biology in Consumer Education.” It was quite evident from the letters received from the committee members that consumer biology was a topic on which many were seeking knowledge and some were not sure what might be included under such a term. Practically all were agreed, however, that consumer biology had a part in the biology program.

Since December 7, 1941, changes have been rapid and our emphasis on many things has changed. It now becomes more evident daily that the biology teacher must assume a greater role in the education of our young people. Rationing and restrictions have made people more conscious of their everyday needs. The interest in rubber and sugar has never been as great, and more of our students are reading about sugar and rubber producing plants than ever before. The government has found it necessary to place restrictions on these two articles and because of this the people are becoming more interested in other articles, the use of which may also be restricted. The public has been made aware of the need for conservation to aid the war effort. This state of mind is reflected in the classroom and many teachers have noticed the change. Since rationing has been in effect more interest has been directed toward problems in economic biology. The search for substitutes is what interests many at present. The boys and girls have been aroused and the opportunity for giving them correct information about products and their manufacture has never been greater. To make our boys and girls wise consumers, so that they are able

to discriminate among any number of products which may serve the same purpose, and be able to discriminate among them on the basis which will meet their needs most adequately is one aim biology teachers can achieve by teaching consumer biology.

Consumer education courses should be part of the science department. Biology, chemistry and physics should each make their just contributions. Biology will play a greater role, because consumer education in food, clothing, shelter, and health are more essential to everyday living than the purchase of cars, radios, etc. A definite program for consumer science should be worked out with all science teachers co-operating. The particular needs of a community must be the guiding factor if any practical program is to be worked out. The biology teacher has an opportunity to demonstrate to the boys and girls the real application of the biological principles, governing all living things, to meet the needs of daily life. Too many teachers are satisfied if they can teach their pupils to understand the scientific principles, but we must not stop here. We must make these principles applicable to their everyday needs. When this is accomplished boys and girls will take more interest in biology because they can readily see the important part it plays in the life of an individual, the community and the nation.

School administrators admit a need for consumer education in our curriculum. In some schools consumer courses are in the social science department, in others the domestic science department, in too few they are in the science department. In discussing consumer courses with some administrators I have come to the conclusion that biology should assume a major role, because the nature of the topics mentioned fall in the field

of biology. Health, food, and clothing are the three most important topics discussed. I was asked this question: "Can your biology students, especially the girls, tell what dangers lie in the use of certain cosmetics?" Another asked: "Can the boys in your class tell what should and what should not be used on the hair? Do they know how to keep their hair and the scalp in a healthy condition?" These two questions can be best answered by students in a biology course which makes its applications to problems of everyday living. One of the most interesting class room debates I have ever heard was a debate on the need for sound biological knowledge in interpreting advertising. The participants in the debate selected advertised goods of various types and the affirmative side proved in a very clever way how a knowledge of biology helped to analyze the product rather than the psychology used in selling the product.

Biology teachers today have a challenge and one which they will meet. We must not only think of the present, but plan for the world to come after the peace. All of us admit that changes will be made and as science progresses so also must the teaching of science progress, but it also must meet the needs of the type of world we are to live in. Herein lies the great work of the biology teacher. We cannot be satisfied to give to the boys and girls the facts as they are revealed to us by research and experimentation, but we must apply this new knowledge to meet their needs. Consumer biology has a place in every biology course; the nature of its success will depend on the responsibility the teacher assumes.

MELVIN A. HINTZ, Chairman  
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## REGIONAL MEETINGS

### Detroit, Michigan

The Detroit Regional Meeting of the *National Association of Biology Teachers* will be held October 10, with headquarters at the Book-Cadillac Hotel. Details of the program are essentially as published in the May issue of *THE AMERICAN BIOLOGY TEACHER*, except that Dr. Steere will not be able to be present. The mailing list will include all members living in Michigan, Indiana and Ohio. The Chairman of the Detroit Regional is Miss Betty Lockwood, 18420 Wisconsin Avenue, Detroit.

### Chicago, Illinois

The Chicago Regional Meeting will be held at the Morrison Hotel October 31. Plans are shaping up toward a worthwhile inspirational and informational conference, attendance at which should have a place in your wartime budget. Exhibitors will be on hand with the latest ideas in texts and apparatus. The program chairman has announced the following speakers:

Sister Mary Henry: Scientific Aspects of the Race Problem

Dr. R. W. Gerard: New Cell Developments

Dr. Charles Kraatz: Subject to be announced. A speaker from Illinois Division of Child Welfare.

The meeting will be brought to a climax with a banquet which no one will want to miss. For further information address Mr. E. C. Marquart, 1217 Hood Avenue, Chicago.

## AMERICAN EDUCATION WEEK

EDUCATION FOR FREE MEN is the theme of the 22nd annual observance of *American Education Week*, Nov. 8-14, 1942. This theme is most fitting at a time when the entire world is at war to determine whether freedom or tyranny shall prevail among men.

*American Education Week* is a time for a concerted effort on the part of all school systems throughout the nation to help the public understand why education is more and not less important as a result of the urgency of the war effort. It is a time for interpreting to the people what the schools are contributing to the war effort and the part that they must play in the peace that is to follow after military victory is achieved.

The Association has prepared materials to assist local school systems. Write to the National Education Association, 1201 Sixteenth Street, N.W., Washington, D. C., for complete information.