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Some Home-Made Teaching Models

J. E. Guthrie

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Guthrie: Some Home-Made Teaching Models IOWA ACADEMY OF SCIENCE

characteristic of the leading textbooks. Each book has as author or as a co-author an experienced High School teacher. The style and grading to reading difficulties seem quite alike in the several texts.

None is either a strictly type or a strictly principle book. Taxonomy and collections are dealt with lightly. Physiology, behavior and habits of plants and animals are emphasized. Very little microscopic work and not much dissection are required. The laboratory manuals permit of many pupil and teacher demonstrations although provision is made for individual notebook records. The exercises contain many diagrams some of which are only to be labelled while some are to be completed before the labelling. The numerous questions require considerable observation of specimens and study of written material before the answers can be recorded. Relatively few original drawings are required.

IOWA STATE COLLEGE.

Ames, Iowa.

400

COMPARATIVE GROWTHS OF INFUSORIA-FREE AND NORMAL LAMBS

E. R. Becker and R. E. Everett

The digestive tracts of all ruminants are normally inhabited by Protozoa.

It has been held by some that these are harmful; by others that they may be helpful in the digestion of cellulose and protein.

Experiments in defaunating lambs by the use of copper sulphate indicated that the infusoria are not of importance, nor necessary for normal digestion in lambs.

SOME HOME-MADE TEACHING MODELS

J. E. GUTHRIE

Models are of great value in teaching certain biological subjects. Nearly every teacher feels the need of certain models not obtainable from dealers.

With practice and a fair degree of skill, these may be made for the occasion.

1

MATERIALS DEMONSTRATED

- 1. Plaster of paris, easily molded, fairly easily carved, rather brittle and heavy.
- 2. "Macalite," a commercial building block used for inside partitions, composed of plaster of paris and wood dust. It is easily carved, finishes fairly well and holds paint. Its wood content makes it much lighter than the preceding, though almost as brittle.
- 3. Modeling clay. Easily and quickly handled, suitable for demonstrations before classes. Makes a fairly permanent model in thick masses, becomes too brittle for delicate parts, loses oil, discoloring any absorbent matter in contact with it.
- 4. Balsa wood. The lightest wood known. Easily carved and finished. Has little tensile strength but lasts well when painted. It is so light that large models are relatively light and not top-heavy.