He must devise his own method of approach or adapt one that is presented in some other text. A story-method is usually popular with high school students. Whatever the method adopted, the idea of species and the need that exists for an orderly arrangement of known species of animals and plants should be explained; artificial and natural methods of classification, contrasted; and finally, the Binomial System of Nomenclature, together with the simple rules that govern the system, should be clarified.

Copies of the "International Rules of Zoological Nomenclature" may be obtained from the United States Department of Entomology and Plant Quarantine, Washington, D. C., for the nominal sum of $0.50. They are very helpful in formulating simple, reliable taxonomic rules for the high school student. The following set is used by the author in teaching principles of Taxonomy:

1. All scientific names must be in accord with international rules of nomenclature.
2. There are two names for each species, a generic and a specific name.
3. They are Latin, or Latinized, or treated as such.
4. The generic name, a single word, begins with a capital letter and is treated as a noun.
5. The specific name is written with a small initial letter by zoologists and is considered as an adjective or a substantive.
6. The name of a family of animals ends in *idae;* that of a plant ends in *aceae.*
7. If the author who first described the organism is to be cited, his name follows the specific name in different type.
8. An abbreviation, as *P. domesticus,* may be substituted for *Passer domesticus* when the scientific name is repeated in a paragraph.

Winter and Life

RICHARD F. TRUMP
Senior High School, Keokuk, Iowa

Our purpose in organizing a unit on winter adaptations of plants and animals was to keep biology a science of *living* things. We felt that with the falling of leaves and the freezing of the stream, our courses generally became more and more lifeless. Although crayfish, tadpoles, and native fishes were still swimming in the aquaria, and our white rats continued reproducing, and plants on the window sill were thriving, biology became more a study of charts, models, and pictures than of life.

Introduction to the unit came naturally one day late in autumn when the classes were discussing the question of what happens to various animals when winter comes. Such a question leads quickly to a rather startling idea: *All species of living things survive the winter.* The only exception, of course, would be the possible extinction of some isolated species.

A simple bit of reasoning, but it opens the way to many pertinent biological questions. The problem underlying our winter unit, then, was to discover how living things adapt themselves to the conditions of winter.

Because most of the reference material was not available in quantities, another unit involving use of the text was carried on simultaneously. This arrangement afforded the pupils time to make investigations and prepare reports which were the chief part of the unit. Two pupils worked together, investigating some local winter habitat, and then reported their findings to the class. Here are the habitats that were studied:

Inside rotting logs.
Under shaggy bark of trees.

(*Continued on page 118*)