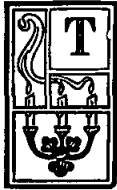


## CHAPTER III

### *The Toads and Frogs*



THE next order of life to study should have been the fishes but as Bobby's mother upon investigation found that the nearest stream which contained fishes was five miles away she decided to go on to the next highest order the frogs and point out as she went, the difference in the two

Of course there was no difficulty in getting toads but just where to obtain and how to keep frogs puzzled the community for a few days until at last it was decided first to make a pond for the frogs to live in and then go to the nearby ponds and capture some

They were especially fortunate in finding in their locality what at one time had been a reservoir which had a pipe leading into it from a nearby spring and another pipe leading out of it into a nearby stream. The pipe connecting the reservoir with the stream it was found could be corked and in a few days there appeared a delightful pond of clear clean and fresh water

Their delight knew no restraint when the afternoon came for them to go in search of some occupants for this nice new home. Accordingly they started out a little late in the afternoon with pails in their hands and eager expectant and happy faces.

As they came within sight of the pond they need search no further for frogs for the air was filled with sounds—queer croaking unmusical sounds but unmistakable sounds of the joy of the existence of frogs.

As they came nearer there was one gulp—Chu u ug—after another one splash after another. Then silence reigned supreme and not a sound could be heard.

The youngsters entered into the spirit of the hunt and scattered about the place. Some sat silently on logs or stones waiting patiently for a frog to appear on the edge of the pond others crouched near the water waiting with pails in hands ready to catch a frog the moment he should appear.

It was great fun catching them for no sooner was the word passed that a frog had been captured when lo! he was gone.

It was not long however before the little procession was marching homeward with frogs a plenty.

Their new pond made a fine place for them to live in and they throve and grew.

For a few days the children made a daily excursion to the pond upon the hill and brought more frogs to the new home they brought frogs eggs too which they carried carefully in their pails

The eggs were watched and each day saw a change so that within a week the pond was swarming with tiny tadpoles or polly wogs as the children called them These too they carefully observed while they fed them and as the tiny legs and feet developed while the tail became absorbed and disappeared—they were told that now the tadpole had changed into a frog and needed air Then stones were placed into the pond so large that their surfaces protruded from the water and upon these the baby frogs hopped and croaked their thanks The tadpole can be kept in a tadpole state a long time if he is not properly nourished Also if his tail is bitten off by an enemy it will grow again

The toads were found to be more interesting because they did more actual service to mankind The children were told that toads live on land almost all of the time only going to the water to lay their eggs that they feed on insects from the garden such as the grub cut worm slug caterpillar worms etc Anything alive he will eat The toad is therefore a great help to the farmer and no little boy would

ever harm a toad if he but understood what a helpful creature he is in the garden

The toad labors under many disadvantages, as well as having many enemies. The first great disadvantage is that he is neither a water creature like the fish nor a land creature like the reptile so that his struggle for existence is very hard. Should he decide to leave one pond where the enemy is overwhelming his only chance is to start on a rainy day to discover a new home for himself and if he has the good fortune to find one before the sun comes out and dries things up he is safe.

At first the children showed a dislike to touch the toad on account of getting warts but they soon learned that the fluid which the toad expels when he is picked up suddenly is harmless—and produced no warts—but there is a liquid which exudes from the toad when he is in severe pain (his means of self defense) that burns the mucous membrane and causes stinging pain.

Animals generally speaking are aware of this fact and if you watch a dog play with or tease a toad you will see that he does not bite him but simply puts his paw on him. The skunk too is most careful and rolls the toad on the grass to wipe off this caustic fluid.

Toads during the process of development shed their outer skins every four or five weeks.

Adult toads shed theirs about four times a year This skin is shed in one piece much as a man removes his shirt and is then swallowed

The tongue of a toad is fastened in front of his mouth which helps greatly to catch his food as he shoots his tongue out and seizes it He does not drink like other creatures but absorbs water through the pores of his skin If kept in a dry place for even a few days he will grow thin and die but if a toad has proper environment he will live to be very old

Toads do not breed or produce their kind until they are 3 or 4 years old When at this age Miss Toad or Frog awakens from her long winter's sleep she feels hungry and glad perhaps that she has lived through the winter for she feels life within her Undoubtedly she is glad and happy to be awake and off she goes to search for food and friends

Perhaps she finds Mr Toad who too feels life stirring within him he also feels the joy of spring so together they go to the breeding pond

Like Mrs Buttercup Mrs Toad has within her body a little nest where little seeds or eggs have been kept and have been growing and now that the time has come for them to awaken to a new life they need life from the Father Frog just as the buttercup needed pollen from the stamen

Mr Toad (or Frog) too is stirred by this

new and wonderful life giving desire within him—this desire to mate—and when Mrs Toad (or Frog) feels the eggs are to be expelled he comes very close to her and in order to fertilize every egg before it goes into the water he holds her fast behind the arm and as they are expelled he pours over them his life giving fluid which enters every tiny egg and gives it life—a new life

In a few days the eggs begin to grow they are all incased in a colorless transparent jelly like substance which serves as food for the tadpole while forming and also for protection They are spherical in shape and in ten days the pond will swarm with tiny tadpoles

Mrs Frog lays between 500 and 1 000 eggs at one time Mrs Fish however is still more prolific for she lays 1 000 000 eggs Mrs Fish lays her eggs in the water She claims a place by blowing all rubbish away with her fins and there she deposits her eggs Many of these float away before they can be fertilized by Mr Fish

Impress the child with the knowledge that here is one of nature's earliest signs of motion.

That the flowers could not move about to seek their mates but the fishes frogs and all higher forms of life do this and are more particular as they ascend the scale of life

Thus the children were taught that the higher in the scale of development living crea

tures go the greater care must be given them Not only to the undeveloped seed within the mother's body but also to the egg after it has passed from her to the nest for as creatures develop and ascend the scale their eggs and offspring become fewer And emphasis was laid on the care Mr Frog took to fertilize the egg BEFORE it went into the water—one step higher than Mr Fish

There is no doubt that the words cold blooded as applied to frogs and toads hit the mark for there is not the slightest affection or sympathy shown or felt for their own kind They give no care or concern to the eggs after they are deposited and the polly wog has to depend on himself

Nature seems to have given them but one instinct relative to their kind and that is the one blind impulse or instinct of reproduction

Early in the summer months the frog orchestra seems well tuned but as the cold days come on the toads crawl into a hole burrowing it as they go while the frogs go into the mud to sleep through the winter out of reach of frost and snow where they lie dormant until the spring air shall again inspire them with the joy of living