

The SNAPPING TURTLE

By CHARLES MACNAMARA



ADULT SNAPPING TURTLE WITH NECK DRAWN IN

In that part of the Ottawa valley where I live only two species of chelonians are found—the painted turtle (*Chrysemys picta*), popularly known as the "mud turtle," and the snapping turtle (*Chelydra serpentina*). Both are entirely aquatic in their habits and rarely leave the water except to lay their eggs. The painted turtle is the more abundant and, from its custom of crawling out on logs and rocks to sun itself, is much oftener seen, and consequently better known than the "snapper," which, though it exists in far larger numbers than is generally suspected, evidently finds concealment best suited to its predacious mode of life. In its business it does not pay to advertise.

The snapping turtle has a very extensive range, being found over the whole of the United States east of the Rockies, and as far south as Ecuador, while to the north it extends probably to 50 degrees north latitude. It grows much larger than its "painted" brother, specimens with a carapace length of two feet being sometimes taken. Besides its strong, thick tail, its chief characteristic is its long neck, which it can dart out with astonishing rapidity to seize its prey or attack an enemy, and from this it gains its popular name. Its powerful jaws, though toothless, are bony and sharp, and are capable of inflicting a serious wound on the careless captor. The carapace of the adult animal is composed of smooth, well defined, greenish brown plates. The plastron and under parts of the animal are yellowish. Very old individuals evidently lead sedentary lives, and thus avoid the proverbial opprobrium of the "rolling stone," for their shells are often thickly coated with moss.

On land they can walk briskly enough on their long legs, but the water is their real element, and they swim easily and well, although, of course, their lines are not designed for speed, and they can remain submerged for long periods.

As the "snapper" is well able, and always more than willing, to take a strong offensive—ever the best means of defense—it does not stand in need of a capacious shell, like many of its milder-mannered relatives, into which to retire out of harm's way. Consequently its carapace scarcely covers its retracted head and folded tail, while its cruciform plastron is narrow and small, and leaves the under parts practically undefended. The animal generally has a very unpleasant, musty smell, and always exhibits a most savage temper. Its favorite habitat is small, sluggish streams and swamps, where it lies concealed in the mud and weeds, darting out its long neck to seize its food. It is purely carnivorous in its diet, and destroys large numbers of fish and, when it can get them, young waterfowl. On this account we must class it as a decidedly injurious animal, although in some places it is regularly used for food, and is said to be often seen on sale in the markets of the southern United States.

About the middle of June the females leave the water at night to deposit their eggs. They crawl out on some sandy beach and scrape shallow, saucer-shaped depressions in the loose, dry surface sand in order to reach the firmer layer of damp sand beneath. On the beach I examined, these depressions were about six inches deep by fourteen or fifteen inches in diameter. The turtles seem to be rather fastidious in their choice of a site, for they always make a number of these hollows before finally tunneling into the damp sand. The tunnel, which is the actual egg receptacle, is an oval section about three inches by four inches, and slopes at an angle of 20 or 30 degrees into the damp sand to a depth of four or five inches. The eggs, which just about fill this tunnel, are all deposited at the same time, and the sand scraped over them again and roughly heaped up. When the "nest" is completed the bottom of the tunnel is about ten inches from the surface. The eggs of nearly all the other chelonians are oval in outline, but



SHOWING LARGE CLUTCH OF EGGS

those of the snapping turtle are perfectly round. They are just about one inch in diameter and have a stiff, parchment-like shell of a creamy white or pinkish color. A friend tells me that he has eaten them as a boy, and to the omnivorous appetite of youth they were very well flavored. Although the dawn of motherly affection is to be seen in animals much lower in the scale of life than the snapping turtle, these latter are entirely devoid of the maternal instinct, and after depositing their eggs they leave them to be hatched out by the heat of the sun, and take no further interest in them whatever.

Three nests that I examined, and for observation purposes designated Nos. 1, 2 and 3, contained 31, 45 and 49 eggs respectively. Another nest, No. 4, was found later to contain none but infertile eggs.

The eggs in nest No. 1 were deposited during the night of June 11-12, the others between June 13 and June 16.

The development of the young is slow.

On July 30 the embryos in nest No. 1 were perfectly formed, but were small and quite colorless except for the dark eye spots. By August 19 they had assumed the black coloration peculiar to the immature young, but there was still a quantity of the yolk of the egg to be absorbed. On September 8 the yolk was nearly all gone, and on September 12 the young were out of the shells—an incubation period of exactly three months. They all, however, remained buried in the sand, and those I dug up began to burrow again as soon as I laid them down. They were thickly smeared with egg matter and damp sand, but when washed clean appeared as stout little jet black creatures, with ridged and tubercled carapaces about one and a quarter inches long, and quite soft as yet. When their heads were drawn in they looked remarkably like large pickled walnuts. They seemed to be ignorant of the "Kultur" practiced by their elders and made no attempt to bite. A couple of them I brought home could not be induced to eat anything and persisted in burying themselves in the damp sand with which their box was provided. Nest No. 2 hatched out about September 23, but about one-third of the eggs were infertile.

As in the case of nest No. 1, the young made no attempt to leave the sand, and it seemed evident that they intended to spend the winter there, for on September 24 the young of nest No. 1, hatched twelve days before, were still buried. As the thermometer not infrequently goes down to 30 degrees below zero here, I was looking forward with interest to see how the young turtles would stand the intense winter cold, for they were certainly not below the frost line; but at this point my investigations were arrested.

In July and August I had several times noticed skunk tracks on the beach, and knowing the marauding habits of this animal I felt somewhat uneasy for my turtle eggs. But at this time they escaped, for there was no visible mark on the surface of the sand to reveal the position of the nests, and before the young emerge the unbroken eggs have no smell that could give the skunk a clue. But when the young come out they have a strong odor that quickly betrays them to the enemy, even through six inches or one foot of covering sand. And so on September 25 a skunk discovered nest No. 1 and ate all the young turtles. The raider also ate all the infertile eggs of nest No. 4, and dug up and destroyed two other nests near by, which I had not known of before.

Carbonic acid in the air, while the yield of tomatoes was doubled and that of cucumbers increased 12.5 per cent by carbonic acid treatment.

It has generally been held that .03 per cent of carbonic dioxide in the air is sufficient for plant growth, but Mr. Fischer thinks that more than this can be utilized, provided there is ample light, and that experiments in this direction might have valuable results.

On the other hand, L. F. Kidd, an English investigator, finds that an ex-

About October 5 nest No. 2 suffered a like fate. There still remained nest No. 3, which was some distance away from the others. On October 6 only three young had emerged from this nest; two or three had died in the shell, 12 eggs were addled, and insects had attacked others, and the shells were full of small white maggots. But 27 eggs were apparently good, and just on the point of hatching. But some time between the sixth and the eleventh a skunk found this nest also, and ate everything in it—live turtles, dead and decaying turtles, unhatched eggs, addled eggs and maggots. It must be admitted that the skunk seems to lack those discriminating niceties of taste that mark the true epicure.

Thus of the six nests on this beach, containing probably 250 eggs, not a single young turtle survived to reach the water, and if any of them had escaped the land risks, no doubt another set of dangers awaited them in the stream. However, any large increase in the "snapper" population would mean the annihilation of all forms of aquatic life, and in view of their destructive habits and their singularly unattractive personality, we can contemplate their fate with small regret.

KNEW HIS WORLD OF FICTION

Hauptmann Wrote From Experiences Which He Had Gathered in His Own Life.

Hauptmann in one of his many phases may be regarded as the Mürger of Germany, said Andre Tridon in a recent lecture on the German novelist and playwright. No less than six of Hauptmann's dramas have for their subject the struggles of artists and writers before they "arrive" or resign themselves to obscurity. "Lonely Lives," "The Sunken Bell," "Michael Kramer," "The Rats," "Colleague Crampton" and "Gabriel Schilling's Flight" present to us a gallery of types infinitely richer than those in "La Vie de Bohème."

Hauptmann knew the bohemian life from experience; he had studied art in Breslau, opened a sculptor's studio in Rome, spent many hours with the young revolutionists who wrote for Die Gesellschaft and received them in his Enger home.

He delighted in depicting those people at war with their own environment, finding no happiness in their art that disappointed them, in their married life nor in their extra-matrimonial adventures.

The stories are told without bitterness; in fact we find in them an undiscernible humor and satire. Hauptmann knows how the world ought to be, but he recognizes the tremendous fact of the world as it happens to be. The memory of his own struggles does not blind him to the ridiculous side of the artist constantly hampered by his unpleasing affectations.

Skeleton in the Closet.

"There is a skeleton in the closet."

How often we hear this expression. But do you know how it is supposed to have originated?

There is an old story that a soldier once wrote to his mother, who complained of her unhappiness, asking her to get some sewing done by someone who had no care or trouble. Coming in her search to one who she thought must be content and happy, this woman took her to a closet containing a human skeleton.

"Madam," said she, "I try to keep my sorrows to myself, but know that every night I am compelled by my husband to kiss this skeleton of him who was once his rival. Think you, then, I can be happy?"

The answer is just as obvious today. The skeleton is still a depressing object.

cess of carbon dioxide in the atmosphere retards or inhibits the germination of seeds, but without injuring them. He suggests that the production of carbon dioxide in nature by the decay of vegetable matter may play a part analogous to that noted in his experiments.

To Remove Indelible Ink.

Equal parts of ammonia and turpentine will remove the most obstinate indelible ink. Saturate well and rub hard.

IN THE BREAD LINE

By ELEANOR MORRIS WILMARTH.

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"Stop here, please, Helen."

"You don't mean that you are going into that horrid place!"

"That is my mission, dear. You see, the church guild has taken charge for one day. Poor creatures! My heart so pities them!"

Miss Helen Parr shrugged her shoulders. Her finely chiseled lip curved disdainfully. Only that she was enraptured in getting the brother of Ivy Winsted for a husband, she would then and there have discarded the spot.

She had offered Ivy a lift in her magnificent limousine, and Ivy had directed her, until now they stopped in front of a rickety structure that had once been a cheap lodging house.

A line of men, women and children, perhaps a hundred or more, lined up in front of the place. Tragedy, suffering, hunger spoke in every one of the wan, pinched faces. Ivy lifted her basket from the machine.

"Thanks, dear," she smiled winsomely, and passed inside the lower story of the building.

There were long tables piled high with bread and a steam table holding a coffee boiler big enough for a giant. At some of the tables, as with Ivy, ladies waiting upon them had brought baskets and parcels of dainties such as cake, jellies and sandwiches.

Ivy's tender heart went out in earnest pity as the bread line was started on its march. Those who wished to carry food and coffee away to their homes were given the same in bags



"Why," He Cried, "That Is My Picture!"

and pails. Those who had no home ate and drank standing at the tables.

Ivy cried silently over the poor famished little children who came along in the line, and made it an especial point to give them a full allowance. Long before a tall graceful young man whom she had particularly noticed reached her, she had singled him out as one of a class that had seen better times.

He kept his hat well down over his eyes, but could not disguise the finely chiseled lower face. He was evidently a convalescent, for his shapely hands were almost transparent. He was neat and clean, but his attire threadbare. Ivy could not refrain from speaking to him as he drank a cup of coffee.

He stared at her in wonder and as if it fascinated her beauty, as she said softly, sympathetically:

"Please wait and I will give you something to last you for supper."

Then, strangely affected although she could not tell why, Ivy turned to fill a bag with some of the dainties she had brought from home. She passed it to the young man with a radiant smile of compassion and interest. His whole face lighted up. He bowed his thanks, a choking aspiration in his throat, and passed on.

"Once, such a face as that, and I would have immortalized it!" he breathed huskily as he reached the outer air.

It seemed to place him in a dreamy mood. It was before him all that day. When he sat down on a park bench at dusk, the face of the lady beautiful was still before him.

Gratefully, almost reverently, he partook of the extra meal the dainty hands of the beautiful girl had prepared for him. He shook out the last crumbs from the bag.

Something jangled and glittered upon the bench seat beside him as it came out of the bag. He picked it up. A heart-shaped piece of gold showed, with a tiny sparkling diamond in its center. He traced script letters across its surface, "Mother to Ivy."

"Why, it must have torn free from the bracelet the young lady wore who waited on me," murmured the young man. "I must get it back to her at once."

When he reached the old lodging house building he found its functions of the day disposed of. Two elderly ladies were just getting ready to leave. He approached them respectfully and his gentlemanly bearing impressed them.

"There was a young lady here, right at that table," and the speaker indi-

cated the spot in question. "Can you give me her name and address? She lost something and I found it and wish to return it to her."

"Miss Ivy Winsted, Twenty-two Mowbray Terrace"—over and over the young man repeated the address, fearful of forgetting it. At the end of a four-mile walk he felt his strength giving way. He could scarcely climb the marble steps leading up to the mansion he had finally reached.

As he stood catching his breath at the open vestibule door, a sudden faintness possessed him. He had overtaxed his feeble strength. He sank to the railing to recover himself. A young man about his own age ran smartly up the steps.

"Hello—I say!" he hailed the strange visitor. "What's this—sick?"

"If you please, I have a message for Miss Ivy Winsted," spoke the caller, with difficulty arising to his feet, but forced still to cling to the balustrade for support.

"Oh, you have, indeed?" retorted the young man dubiously.

"Miss Winsted lost a bracelet pendant," was the faint explanation. "I found it. Please give it to her."

"Hello! Hold on! I declare!" and Jerome Winsted, the brother of Ivy, caught the other just in time to prevent him from going hurtling headlong down the steps. "You need attention, you do. He's gone under!" and young Winsted bodily carried the insensible burden into the house, depositing him on a couch in his own cozy private study.

At length the convalescent opened his eyes. The first object his dazed vision took in was an oil painting hanging upon the wall opposite him. He stared, he forced himself to arise. Wonderment, joy, pride commingled in his eager face.

"Why," he cried, "that is my picture!"

"Out of his head, poor fellow!" soliloquized Jerome Winsted, but indolently he observed aloud: "Your picture, eh?"

"Yes. I am Paul Rivers," declared the other, almost wildly. "You will find my initials in the lower right hand corner: 'P. R.' It was before I got so ill. I had to sell it to Moreau, the picture broker. He said it was a dud, but gave me ten dollars for it. Out of pure charity, he said."

"The infamous scoundrel!" cried young Winsted indignantly. "Why, it took the prize at the art exhibition and I gave two thousand dollars for it. See here, my friend, you've got a story to tell and I want to hear it."

It was over a refreshing meal that the life of Paul Rivers was told. Artist struggles, sickness, a swindling picture broker, almost starvation. One thing Paul did not tell—that he had been in "the bread line," and Winsted asked no questions as to how he had found the bangle.

Jerome Winsted adopted the artist as his protege. It was for his pictures.

Ivy had gone on a long visit to relatives. In the bright, happy, well-dressed Paul she never recognized her pensioner. But she did find an ideal.

One beautiful evening, as they sat on the cool shaded porch, Paul told her his love. Her eyes encouraged him. Then he held her hand, as he said:

"Ivy, I have a confession to make," and he told her the whole story. "What do you say?"

"Oh, that I love you more dearly than ever after all your sufferings!" she said simply, and with truth.

WHERE WAS GARDEN OF EDEN

Authorities Differ as to Location of Spot Where Man Lived in Innocence.

Some authorities who have devoted themselves to this subject have rendered the opinion that the Garden of Eden was on the peninsula between the Tigris and the Euphrates, and this position has been stoutly maintained. In fact, a number of locations in that region, which was the olden land of Mesopotamia, cherish the tradition that their site was that of the great garden. Some fruitful and determined writers have insisted that the Garden of Eden was in the Vale of Cashmere in India. Others have contended that it was on an island which has disappeared from the face of the earth. Many localities in all parts of the world have inhabitants so proud of their climate, scenery and products that they insist to all strangers that the Garden of Eden blossomed there.

The removal of the Garden of Eden by means of scientific speculation to the far southern part of South America has, says the Washington Star, the merit of novelty and audacity, but the weight of opinion is that the most beautiful and the most famous garden of the world and of all time was somewhere down in the lands watered by the Tigris and the Euphrates.

Bachelors Sensitive.

"Bachelors," confided a widow, "are the most sensitive people on earth. At any rate, the bachelors I know are. I dined with one not long ago. During the first part of the meal he seemed uneasy. 'If any of my friends see me,' he said, 'they will think I am dining out with some other man's wife.' 'Why?' I asked. He pointed to his wedding ring. 'Shall I take it off?' I asked, as he pointed to my wedding ring. 'Would you mind?' said he. 'Not at all,' I said, and slipped off the ring. Since then when going anywhere with that bachelor, or any other bachelor, I have him from embarrassment by taking off my wedding ring before we start. I find they appreciate my consideration for their feelings. Now, if that isn't sensitiveness raised to the ninth power, I'd like to know what it is."

Put Well Away From the House.

The