

Copied for
Pa. Mus.

KINGFISHERS.



"I'll clothe and equip each of my creatures for a special work and give him some particular thing to do," says Nature. "I'll give the humming-bird a long bill to suck honey from the flower cups. I'll give the night-hawk a big mouth to catch flies. I'll give the grosbeak a large, powerful bill to crack seeds. I'll give the snipe long legs to wade in the mud and water and find his food. I'll give the woodpecker a chisel-shaped bill to bore holes in the trees. I'll give the owl eyes that see at night time and strong claws and a hooked beak to catch mice and other injurious rodents. Every creature will have its special part to play in the world."

Until we have studied this plan of Nature's and ^{have} seen how especially he is adapted for his life's work and purpose, we can't appreciate the beauty of the kingfisher. You might not notice how closely the color of his coat matches the water until you look at him from above with the blue water behind him.

A kingfisher cannot be high above his reptile ancestors. Young kingfishers are raised in such a dark, damp place you might think at first sight that all of them would die of consumption. They never get even a glint of sunshine till they are old enough to climb out of the cave and take flight. Think of living in a deep well till you are grown! But maybe Nature set the kingfisher to live in a dark hole in order to better adapt him for his work.

A young kingfisher seems to grow like a potato in a

cellar, all the growth going to the end nearest the light. He sits looking out toward the door and of course his face naturally all goes to nose. Everything is forfeited to ^{provide} give him a big head, a spear-pointed bill and a pair of strong wings to give this arrow-shaped bird a good start when he dives for fish. Of course, he seems top-heavy in appearance. His tiny feet are deformities and hardly large enough to support him. I am sure a kingfisher would not pretend to walk, but he is built for a professional fisher and is a success at the business.

If a kingfisher can find a bank, he always has some advantage over other birds, because he can burrow in far enough to get out of reach. For several years we have watched a pair of these birds that nested along the river bank within the city limits. One day we paddled across to the east side above the mill. The bank ran abruptly up and was well wooded. Beyond this was a short, sandy beach where we used to swim, and where a cool spring of water gushed out of the rocks just above the river. Above was a small clay bank where the kingfishers lived. I saw one enter the hole and climbed up just below the entrance. I pounded with a stick to get him out so as to snap his picture as he left the nest. But he was like a baron in his castle. He knew I couldn't drive him out. Then I sat down for fifteen minutes until his mate returned. When she arrived with a loud, clattering cry, out he came and lit on a stump while she entered.

Not long after that, a railroad company bought the franchise along the water front, started a big digging machine, set scrapers to work and slashed the scenery right and left and dropped it into the river. It spoiled the whole place for me, but do you think the railway syndicate drove out the kingfisher? Not much. No sooner had the big digger moved on than he plugged another hole in the new bank. The old roots and the dead tree where he used to sit were gone, but he put on civilization and set himself on a wire where thousands of volts of invisible power were passing through his clutched feet. He perched on the trolley pole and rattled as if it were put there for his convenience. Indeed, it seemed so, for it was squarely over the water's edge where he could watch the swimming minnows beneath.

I have often watched the kingfisher along the river. At times he would occupy an old willow on the bank and he would sit there for half an hour at a time, occasionally turning his head and watching the water carefully. I seldom saw him catch anything from that place; I think he used it more as a lounging tree. He would often come flying down the river about noon-time with his head high in the air, and like the boat coming in at the wharf, he always sounded his rattle before landing.

This old king had several favorite perches for a mile along the river. He was watchful and shy, and I think rather

quarrelsome. Never but once did I see ~~any kingfishers~~ ^{ANOTHER KINGFISHER} about and that was one day when I heard a loud rattling and looking down the river, I saw two kingfishers light in the dead alder, both very much excited. They kept up a clattering fuss for a few moments, as one person will argue with another, then one darted at the other and away they went, dodging and turning as far as I could see. I think it was a fight as to ownership of the property along the river, for the riparian rights seemed to belong to this one bird and all others were excluded.

It was always exciting to me to watch these birds catch fish. I enjoyed it as much as pulling them out myself. I was sitting on the bank one day when ~~the~~ ^{THE} old king came rattling down the river in ~~straight, swift~~ ^{STRAIGHT, SWIFT} flight, and swerving up, caught himself in mid air and came to a stop about fifteen feet above the water. What an eye he must have to see a fish under the water, ~~when going at such a pace!~~ He fluttered for a moment ^{as} ~~like a sparrowhawk goes~~ above his prey, and dropped arrow-like, completely disappearing beneath the surface. The next instant he was in the air again with a cray-fish. He wasn't wet a bit, for his clothes are water tight; the water runs off his satiny plumage as if his coat were thoroughly oiled.

While the kingfisher catches many minnows, he does not live on these alone. He often lives on different kinds of insects and shell-fish. Along some streams, he lives mostly on

frogs, lizards and beetles. In the dry southern states where the streams are few and run dry in summer, this bird takes to a fare of grasshoppers and mice. Think of a kingfisher catching mice! A kingfisher adapts himself to circumstances just as a flicker will dig a home in a ~~clay~~ bank, a telegraph pole or a church steeple when the trees are all cut down.

Where I live, the food of the kingfisher consists largely of cray-fish that are common along the streams. He pulls the fish apart and swallows shell and all, then the indigestible parts are vomited up later, and strange to say, these cast-off bones, scales and shells are used for the lining of the nest. I do not know just why a kingfisher likes to carpet his house with such a rough floor unless he wants to adorn his home with the trophies of his many hunts. He may be too lazy to carry in anything else.

Some people advocate shooting the kingfisher at every opportunity and in some places, men have made laws to exterminate him, claiming that he destroys too many young trout. But the kingfisher eats very few trout comparatively. He lives largely on the kinds of fish that are of little or no value to man, ^{even though} But he does catch an occasional trout to eat; is man the self-constituted defender of the trout? Man who never destroys! The kingfisher was here long before man came; he must have some rights, at least the right to live a secluded life along the

water ways where there are no trout.

The kingfisher is not a social bird like the chippy and chickadee, and I ^{have} never found but one pair about a locality. He is a solitary fisher and an outcast in bird society. He seems to go on the supposition that a companion would talk and scare the fish, or else he is too much of a hermit to enjoy the friendship of others. But it would be a poor world if all the birds ~~were~~ alike. I wouldn't want a field without a meadow lark even if it did raise a good crop of hay. It would be a desolate patch of winter woods with no chickadee. It would be a barren orchard without a robin or chippy even if it did bear apples. I would lose much of my interest and pleasure in the river if the kingfisher were not there, for to my mind, he helps to make the place what it is.

The kingfisher is a fellow of expediency. I used to think he always took a site along the river for a home, but this is not so. Perhaps a good nesting site at the river side is not always available. Three years ago, I found a kingfisher living in a bank on the heights back of the city. This was a good mile from his place of business, a kind of a suburban home where he could enjoy the fly after fishing along the river. I often saw him go back and forth and heard his rattle high above the house tops of the crowded city. It seemed to me the most difficult problem of living this far from the river would have to be settled when the youngsters were full grown. How

could the parents get them clear across the city to the river hunting grounds? By watching, I found that young kingfishers do not leave their nests until they are fully fledged and can fly quite a long distance. As near as I could judge, the tousley-headed youngsters sailed almost the entire distance from the high position on the heights to the river in one try.

I was acquainted with another pair of kings that used to keep watch for fish about Ladd's pond. They had an outlook on a dead limb over the water, that was usually held by one of the birds. The first year I found this pair, I was especially interested. The male bird caught my attention because I could see that something was the matter with his bill. I saw him dive, and at first I thought he caught a fish for his mouth was open, but I watched him again and each time he seemed to miss, but his mouth was always open.

This pair of kingfishers dug a nest in the bank of an old railroad cut about half a mile away. I found it by watching them take the overland route from the pond after fishing hours. Near the entrance, I saw two other places where they had begun to dig, but it seemed they had struck hard spots and had tried again till they got a place that was soft and sandy. They chiseled the dirt out with their bills and pushed it along with their tiny feet. As near as I could estimate, it took them a week and a half to finish the borrow. The hallway sloped ^{up} slightly and ran back for four feet where it ended

in a little dome-shaped room. From the door into the nest were two little tracks, worn by the feet of the birds as they went in and out. The female generally does most of the setting while the male returns occasionally and supplies her with food. But in this family, I think the duties were somewhat reversed, for the male seemed unable to do his part.

I have often watched kingfishers plunge into the pools and shallows for fish and wondered if they sometimes did not miscalculate in their hasty, headlong dives. The more I saw of the old king about the pond, the more I thought this was true. So one day we went over to the nest, which was only about two feet below the top of the bank, and measured back to where we thought the home was and dug straight down to the nest. Both birds were at home. We found the male bird had an injured bill, as we had thought. The upper mandible of the bill had apparently been broken some time before and was partially healed, but was shorter than the lower one. From the injured place, the outer end of the beak bent up somewhat, so the bird could not close its mouth except at the base. He could hardly hold a fish if he caught one, and instead of fishing for a living, I think he was doing the woman's work at home and his wife was catching fish. There were six pure white eggs in the nest and after taking a picture of the injured bird, we carefully closed the ^{den}~~nest~~ again.

We were afraid the birds would desert the nest, but ~~Jaen and Jieub flew about and didn't grow so~~ they didn't. The male continued the incubating, and it was sixteen or seventeen days from the time the eggs were laid till they were hatched. The young were blind, naked and helpless. I knew just as well when the young kings were born as if I had crawled back through the underground passage for four feet and struck a match to look. Both birds took to fishing and they kept the air-line trail hot between the pond and the bank.

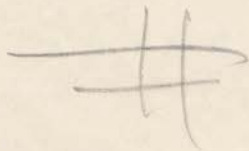
It took almost four weeks of feeding and nourishing before the young kingfishers were able to leave the hole in the bank. We watched the nest pretty closely and were present when they made their debut. Not one of the youngsters was strong on the wing, and we had our cameras ready. That hole in the bank surely held one of the wildest-eyed feathery tribes I ever saw. We tried for a whole day and finally got six of the frowsy-headed fishers in a pose.

Eventually, all the family of young kings made their way to the pond where they perched on the projecting snags over the water. They were not experts on the wing, nor could they spear a fish, but they were not too old to learn. It can't be an easy thing for a bird to hit a fish when it is swimming under water, not at least when the water is rough, or when the fisher has not mastered the law of light reflection by a long diving experience.

The parents fed the young for a time till they knew

how to care for themselves. As soon as they developed strength and experience, the old birds led them to the river about a mile distant where they broke a way for themselves in the great world of bird life.

I never knew just what became of the father with the broken bill. He may have starved to death the following winter or the injured part of his bill may have been gradually replaced by a new growth. The next year I saw two kingfishers about the same locality, but neither had a broken bill.



But ever since the seven left the old alder stump, that has
now fallen to pieces, I never see a flock about this haunt
that they do not greet me with the same song I heard three
years ago, "tsic-a-dee-dee! ~~Seven-are-we-we-we!~~"

TSIC - a - dee - dee!"

Chick-a-dee! dee! Chick-a-dee! dee!