

Canadian Natural History.

The Belted Kingfisher.

(Ceryle Alcyon)

The Kingfisher family of birds is a large and interesting one. Members of it are found in all parts of the world. They are all remarkable for the length of their bills, and the comparative shortness of their bodies. As may be inferred from the name by which they are popularly known, they feed chiefly on fish, which they capture most adroitly, darting down upon the surface of the water, and seizing with extraordinary celerity any incautious member of the finny tribes that may be sporting itself within reach of the quick eye, and long beak of the expert feathered fisherman.

All the American species of the Kingfisher group belong to the genus *Ceryle*. One of them, the Belted Kingfisher forms the subject of the accompanying illustration, and may be taken as a representative of the American branch of the family. This bird is found in most parts of the North American continent, from Hudson's Bay to Mexico. It is in the habit of migrating northward or southward, according to the season of the year, and the state of the temperature. According to Wilson, "mill-dams are periodically visited by the feathered fisher, and the sound of his pipe is as well known to the miller as the sound of his own hopper."

The Rev. J. G. Wood says of this bird in his "Natural History." "The sight of the Belted Kingfisher is singularly keen, and even when passing with its meteor-like flight over the country, it will suddenly check itself in mid career, hovering over the spot for a short time, watching the finny inhabitants of the brook as they swim to and fro, and then with a curious spiral kind of a plunge will dart into the water, driving up the spray in every direction, and after a brief struggle will emerge with a small fish in its mouth, which it bears to some convenient resting-place, and after battering

it, prey with a few hearty thumps against a stump or a stone, swallows it, and returns for another victim. Waterfalls, rapids, or "lashers," are the favoured haunts of the Belted Kingfisher, whose piercing eye is able to discern the prey even through the turmoil of dirty water, and whose unerring aim fails not to seize and secure the unsuspecting victims, in spite of their active fins and slippery scale-covered bodies."

Rapid streams, says Wilson, with high perpendicular banks, particularly if they be of a hard, clayey,

those steep and dry banks are the chosen situation of his nest

"In these banks the Belted Kingfisher digs a tunnel, which often extends to the length of four or five feet, employing both beak and claws in the work. The nest is of a very simple nature, being composed of a few small twigs and feathers, on which are laid the four or five pure white eggs. The birds seem to be much attached to their homes, and the same pair will frequent the same hole for many successive years, and rear many broods within the same habits.

The extremity of the burrow where the eggs are placed is always rather larger than the tunnel itself, and is expanded into a globular chamber for the purpose of affording a sufficiency of space for the parents and their young. It is said that when a supposed enemy approaches the nest, the parent birds employ various artifices to draw his attention away from the sacred spot, and by fluttering about as if wounded or disabled, will often succeed in their endeavours. When the young are hatched, the parents are remarkably attentive to them, as might be supposed from the reckless manner in which they expose themselves to danger for the sake of their offspring.

"The colouring of this spirited little bird is rather complicated and not very easy of description. The head is furnished with a crest of long pointed feathers, which can be raised or depressed at will, and the whole upper surface of the body is light-blue, marked with a great number of narrow dark streaks caused by the black-blue shaft of each feather. The wings are blackish-brown, bound with white upon the primaries, and diversified with blue upon the exterior web of the secondaries. The sides are covered with blue mottlings, a belt of the same bright hue crosses the chest, and a broad white band encircles the neck, throat and chin. The tail is black-brown barred with white, with the exception of the two central feathers, which

are blue. The length of this bird is about one foot." The voice of the Belted Kingfisher is loud, dissonant, and startling, like the sound of a watchman's rattle.



Entomology.

Usefulness of Toads.

At a recent meeting of the N. Y. Farmers' Club, Dr. J. V. C. SMITH read a most interesting and valuable paper for farmers, if they will heed its precepts, about the usefulness of toads, and an urgent plea for protection. He made a beautiful allusion to an illustration of the designs of Providence, in forming the complete chain of animals, all of which have their purposes and usefulness. "It is idle to talk about useless animals. All are useful, and many we despise, are necessary to man. Even the common house flies should be ranked among the best friends of man. All dead and decayed matter, which is most abundant in the hottest weather, is detrimental to human health and life. Swarms of flies rapidly convert this matter into living, healthy substance, and thus purify the atmosphere, and make our dwellings habitable. These ever busy workers are actually essential, particularly in the dirtiest portions of cities. They destroy immense quantities of pestilence breed-

ing impurities. Their busy motions pertain to life. With death come foul odors, which flies consume and convert to life and motion. They are underestimated, and so are all reptiles.

The despised toad is one of our most useful domestic animals one of the farmer's and gardener's best friends. We should all learn lessons of useful instructions of the toad, and teach our children and servants never to injure them. They delight in well cultivated grounds, and live long in the same locality, occupying the same nests for many years. Their natural food is bugs and flies, which are injurious to the garden. They catch their prey with wonderful facility, by the power they have of shooting out their tongues, to the length of six or eight inches, striking with lightning quickness whatever comes within the focus of their two prominent eyes. If one eye is destroyed, they lose the power of striking their prey. The tongue is covered with a glutinous substance, which holds every insect it strikes.

Night is the toad's time to work. We have accounts of monster toads in Surinam, with mouths like a hog. All toads and frogs are insect eaters, and the number they destroy can hardly be over-estimated.

They seem to have been predestined for the great work of destroying bugs and insects generally, and as the natural habitation of toads is with man in his cultivated grounds, they are there his most useful co-workers. If not already in the garden, man should collect and carry them there. A few toads in a vine patch soon rid it of its worst enemies, the bugs. The young of frogs, while in the tadpole age, breathe by gills, under water. After they lose their tails, and become perfect frogs, they are air-breathing animals, and not amphibious. If they dive, it is only suspended inspiration. They must come to the surface to breathe. In spite of all Shakspeare has said to sustain the prejudice against toads, they are not poisonous or hateful. Our antipathy all comes from faulty education. We should teach our children not to hate, but to protect toads."

The paper of Dr. Smith, of which the above is only a brief sketch, was listened to with that kind of attention that proves its lessons were received with satisfaction, and several members related anecdotes and commendations of the toad. Prof. Nash recommended making toad houses in the garden, by placing four bricks together, and covering so as to form little caves. Solon Robinson related an anecdote of one that the children learned to re- "father's old toad."