

muscular movement the blood is forced towards the anterior end, and descends to the ventral side by a series of five pairs of tubes often called hearts, in segments seven to eleven (see illustration), and is then carried toward the posterior end by a system of ventral tubes with distributing branches to all the segments and tissues.

The reproductive organs are situated in segments nine to fourteen.

This animal has neither lungs nor gills, but respire by its whole outer surface, which must be kept moist for this purpose. It means suffocation for them to be confined to a dry atmosphere. This may explain, in part at least, why they come to the surface of the ground only during the night and on dark moist days. On the other hand, they cannot live long in water, and as the summer rains flood their burrows they are forced to the surface, and are more literally "rained up" than "rained down," as some people yet believe.

What becomes of the worms that we see on the surface of the ground during a rain?

Prominent among the earthworm's enemies are birds and moles.

Watch the robin as he hops about the lawns and gardens on summer evenings, and you will soon learn why he is out so late. In this case it is the late bird that gets the worm.

Among the relatives of the earthworm may be mentioned the leeches and the sandworm.

The sandworm is a marine form of nocturnal habits. It burrows in the sand during the day. It is much more highly organized than the earthworm, having a distinct head, bearing eyes, and tactile sense organs, such as tentacles, and a pair of fleshy non-jointed appendages for each segment, each bearing several setae.

Leeches are chiefly fresh-water forms. They are very common and make good specimens for school study.

I have found the paper helpful to me in my school work. Especially in the last issue have the notes on the "Ontario High School Reader" and the English History Review been of use.

The Current Events are invaluable.—R. J., N. S.

"If you would be loved as a companion, avoid unnecessary criticism upon those with whom you live. The number of people who have taken out judges' patents for themselves is very large."  
—*Helps.*

## NOTES ON BIRDS

H. G. PERRY.

The Evening Grosbeak is reported from St. Stephen, N. B., February 9th. A report from Queensbury, York Co., N. B., says this bird was first seen at that place on February 18th, and that they remained there in flocks until the first of April; the report further adds, that they "feed on seeds, refusing to pick up grain which was thrown to them." Miss Nessie Ferguson reports that she saw a flock of these birds several times in January, at Richibucto, N. B., and that they fed on the seeds of the Manitoba maple. A report from Amherst says that a flock of twenty-five was seen there on April 15th, and a pair remained as late as April 24th. At Amherst they fed on old crab-apples.

More than ordinary interest is also attached to the report of the White-crowned Sparrow from Charlotte Co., N. B. Mr. J. L. Haley, of St. Stephen, N. B., supplements his daughter's report, by saying that a pair spent the day (May 15th) in his lumber yard. A report from Moore's Mills also mentions this bird for the same date. This bird is quite a stranger in the Maritime Provinces, its path of migration being farther west. I understand that a specimen was seen some few years ago, in the fall, at Yarmouth. The writer has seen the bird but once, during the spring of 1905, at Fredericton, N. B.

Another bird of interest is the Cape May Warbler which was reported by Mr. R. W. Tufts, Wolfville, N. S., May 28th. In company with Mr. Tufts, the writer saw several of these rare birds a few days later at Black River, about seven miles from Wolfville.

Among other rare birds, Mr. Tufts reports during the winter, from Wolfville and vicinity, the Meadowlark (one specimen), and the Lapland Longspur, in numbers, in flocks with the Snow Bunting.

The Bohemian Waxwing is reported from Richibucto. This bird, like the Snow Bunting, etc., is a winter migrant from the north.

I wish to thank all who have contributed to this work. Space forbids me to write further on birds at this time. I reserve my article on Bird Migration, with maps, for some future issue.

In all this bird-work impress upon your scholars the great value of these animals to man in keeping down insect pests. Without their co-operation man would soon be worsted in the struggle.