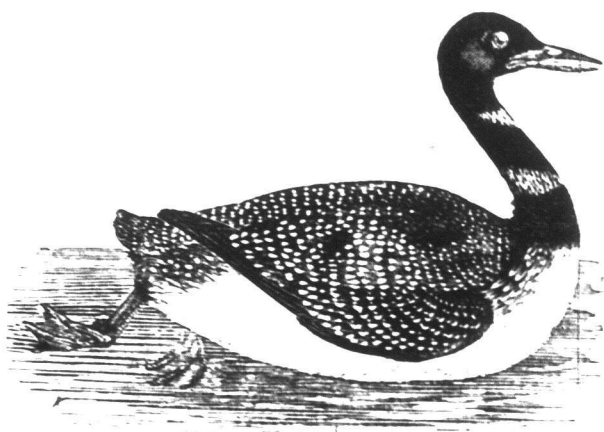


FERNDALE SCHOOL.

No. XXVIII - DIVING SWIMMERS.



THE LOON. (The Loon is called in Gaelic, N. T. A. O. L.)

The wild-fowl nestled in the brake,
And sedges, brooding in their liquid bed.

BYRON—*In Joan, Canto XIII, St. 55.*

T. Here we have a sketch of our common Loon, sometimes called the great Northern Diver. Do you notice anything peculiar about the position of its feet?

S. Its feet are very far back.

JACK. I guess if that bird tried to walk on land it would have to stand nearly upright, its feet are so near one end of the body.

ANOTHER S. It would appear to be walking on its tail nearly.

JACK. Tail! I think it must have been walking on its tail until it was worn off. It has only the rump left.

T. Not so bad Jack. The Greek for "rump" is *pyge*, the *g* sounded hard; and *podes*, you know, is Greek for—

S. Feet.

T. And all birds which have this character which you have noticed so well developed, are called by ornithologists the *Pygopodes*. What is the meaning of the term, will you please guess?

S. Rump-footed.

T. Correct. Which position would be most easy for these birds to maintain—the vertical one on land or the horizontal on water?

S. The horizontal on water.

T. You then see why the water should be their most natural home and why they should be so expert in all aquatic movements.

S. Do they dive?

JACK. The Loon will dive at the flash of a gun and be under water before the bullet can reach it.

T. Quite correct—especially if at long range. You can understand now why naturalists have called them

diving birds. The position of their feet which causes them to move so awkwardly on land is favorable to swimming and diving.

S. Are there many kinds of diving birds in these provinces?

T. About a dozen or fourteen. The following seven are the most common: Holboell's Grebe, Pied-billed Grebe, Loon, Red-throated Loon, Puffin, Black Guillemot, and Murre. The following rarer: Horned Grebe, Razor-billed Auk, Dovekie, and Great Auk. Bunnich's Murre has been reported from Nova Scotia, and the Tufted Puffin and Large-billed Puffin from New Brunswick.

S. How can we distinguish the Loon from the others?

T. First the *Pygopodes* are divided into two sub-orders, those with *tail feathers wanting*, and *tail feathers present but short*.

S. The Loon belongs to the latter.

T. Correct; the Grebes form the first sub-order. *Second*, the latter sub-order is divided into two divisions, those with the *hind toe present* and those with the *hind toe absent*.

S. The Loon belongs to the first of these.

T. Correct; those with the hind toe absent are the Auks, Puffins, Guillemots and Murres.

S. How large is the Loon?

T. From two and a half to three feet long, and weighs about sixteen pounds. Wing from thirteen to fifteen inches. Bill about three inches in length and one inch in depth at base. Eggs three and a half by two and a quarter inches, generally two, of a dirty white or stone color.

Astronomical Notes.

Our shortest day on Dec. 21, a total eclipse of the sun on Dec. 22, and our nearest approach to the sun on Jan. 2, these are the chief astronomical fixtures for the next few weeks.

And the chiefest of these is the eclipse. Belcher's Almanac announces it thus: "A Total Eclipse of the Sun, Dec. 22, 1889. Visible at Halifax."

Visible at Halifax—let us see.

The total eclipse, caused by the sweeping over the earth of the moon's umbra or true shadow, will begin at 7.13 a. m. (608 time) in the Caribbean Sea to the south of Hayti. From there the shadow will sweep southeast along the coast of South America, just touching the land at a few favored spots. At several of these spots observing parties from England and the United States are waiting for it. One of the English parties, sent out by the government, is in charge of the Jesuit Father Perry. When clear of South America, the shadow will curve down and