

to those of light. Above the Unios was from one to two feet in depth of clear running water, rendering everything upon the bottom distinctly visible.

Believing that the sun's radiation coming directly toward any object so far beneath the surface of the water would have its heat-rays mostly, if not entirely, separated from the light-rays, at or near the surface, through the absorption of these and their removal downwards by the current, while nearly all the rays of light would pass on to the object with only slight refraction, I sought a place where rays of heat from sunlight, striking the surface further up the stream, would not reach the Unio to be experimented upon. This was furnished by a dense growth of trees, shading the stream completely for a considerable distance. Then placing a Unio just at the lower margin of the shade, but quite within the bright sunlight, I awaited the opening of the orifices; then, on quickly intercepting the sun's rays that came freely to it, by passing a screen from above downward, and again from below upward; it responded by closing its orifices as quickly as its fellows had done when my shadow passed over them in the broad open space of sunlight.

Upon the supposition that the light- and heat-rays are divided at the surface of the water, as before suggested, the heat-rays must all, or very nearly all, have passed down below the Unio, by the action of the current, while the light-rays alone reached it, and their sudden interception caused it to close its orifices. Thus in this position the Unio was receiving direct rays of light from the sun, but the rays of heat that might have reached it more or less obliquely, by absorption and the action of the current, if in an open space of sunlight, were here cut off by the long shadow of the trees. Therefore no doubt is entertained that the posterior portion of these mollusks is keenly sensitive to light; but exactly what organs are thus sensitive has not been ascertained.—*Silliman's American Journal*, March 1869.

*The Sea-Elephant (Morunga proboscidea) at the Falkland Islands.*

By Dr. J. E. GRAY, F.R.S. &c.

In the 'Annals & Mag. Nat. Hist.' for March 1868, p. 215, I stated that the sea-elephant had become extinct in the Falkland Islands. Mr. Selater, in the 'Proceedings of the Zoological Society' for 1868, p. 189, says that this statement was a mistake; but in his account of the proceedings of Adolphe Alexandre Lecomte, who was sent by the Zoological Society to collect Sea-lions and Penguins for the Collection, he now confirms my first statement, and observes, "Elephant Island, so called from the former abundance of the sea-elephant (*Morunga proboscidea*), was found to be quite deserted by this animal, which is said to be now entirely extinct in the Falklands." (See Proc. Zool. Soc. 1868, p. 527.)



Gray, John Edward. 1869. "The sea-elephant (*Morunga proboscidea*) at the Falkland Islands." *The Annals and magazine of natural history; zoology, botany, and geology* 3, 400–400. <https://doi.org/10.1080/00222936908695973>.

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