CREATION MOMENTS

Proclaiming Evidence for Truth

THIS WEEK'S CREATION MOMENT

The Animal that Lives Without Air



Remember his marvellous works that he hath done; his wonders, and the judgments of his mouth; – Psalm 105:5

When little or no oxygen is dissolved in the blood of most animals or humans, death quickly follows. When oxygen runs short, a second, temporary, energy-producing

system kicks in. This system doesn't need oxygen, but it produces lactic acid that can kill living cells. Therefore, this second energy system is an emergency measure, used only when seriously starved for oxygen.

To avoid this dangerous situation, many amphibians and reptiles that hibernate in ponds, lakes and rivers have the ability to remove oxygen directly from the water through special tissue on their throats. However, the painted turtle hibernates as close to the freezing line below the water as possible. How, then, can they hibernate in water where the oxygen is quickly used and have lived completely without oxygen for up to 120 days?

During the summer, the turtle stores large amounts of a carbohydrate that can provide energy without using oxygen. The turtle has a unique built-in system that detoxifies the poisonous lactic acid that is built up. As a result, it can live for months with no oxygen in its blood or in the water around it.

This unique ability is based on a sophisticated understanding of biochemistry. It's clearly not the result of a genetic accident. It can only be the work of the unique creativity of our Creator!

Ref: Janet M. Storey and Kenneth B. Storey. "Out Cold." *Natural History*, 1/92, pp. 23-25. Photo: Painted turtle, courtesy of Jmalik. (GNU Free Documentation License, Version 1.2)

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