

## **The Atmosphere And Its 21% Free Oxygen**

By: Gerald L. O'Barr

The earth has a very fixed percentage of oxygen in its atmosphere. Scientific measurements of its percentages have been made for over a 100 years or more. To have such a fixed level of a gas that is so dynamic and reactive as oxygen, should be something that catches our attention.

It is proposed that the majority of the free oxygen in our atmosphere is established by the photonic interactions of sun light with water, H<sub>2</sub>O. When there is no ozone, O<sub>3</sub>, in our atmosphere, much of the ultraviolet light of the sun will reach water molecules, both in the atmosphere and in water present on the earth's surface.

Some of these interactions will produce a full disassociation of the water molecules to produce H<sub>2</sub> and O<sub>1</sub>. The H<sub>2</sub> is such a light gas that it quickly escapes the earth's gravity field, and thus leaves behind a true excess of free oxygen. (Note: The hydrogen can be H<sub>1</sub> or H<sub>2</sub>, both can escape into space.) As small amounts of O<sub>1</sub>'s begin to be produced, some of these O<sub>1</sub>'s will combine with other O<sub>1</sub>'s to form O<sub>2</sub>.

As there begins to be some O<sub>2</sub>'s produced, then some of the O<sub>1</sub>'s that come from water will not only combine with other O<sub>1</sub>'s to produce more molecular oxygen, but some of these O<sub>1</sub>'s will begin to combine with existing O<sub>2</sub>'s to make ozone, O<sub>3</sub>. The more O<sub>2</sub>'s that exists, then percentage wise, the more ozone, O<sub>3</sub>, will be made by the O<sub>1</sub>'s being produced.

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Normal ozone is often produced when there are electrical fields around O<sub>2</sub>. Many atmospheric conditions also have electrical fields present, such as with lightning.

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When ozone is being produced in the atmosphere, it eventually forms a layer high in the atmosphere. This layer of ozone, even if it is a very thin layer, will stop (absorb) most of the ultraviolet light from the sun that produces these disassociations of the water. And thus the

production of oxygen is slowed down, and the percent of oxygen can even stop rising and even begin to fall. And thus, the level of oxygen will generally not go above 21%. If the oxygen level drops back below 21%, the production of ozone will begin to drop, and the layer of ozone will become thinner and thinner. And then ultraviolet light will then begin again to reach the water molecules below it. And the oxygen level will quickly come back to a 21% level just as the ozone level also comes back to the level it needs to slow the production of oxygen.

It is thus possible that we have a system that can produce a great amount of oxygen when it is below 21% and is needed, but it is strongly regulated when it reaches this upper level of 21%.

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Now to establish this on a more firm level, one has to come to understand how a gas, like ozone, can form a layer at a specified level. The very definition of a gas is that it takes up a volume in a uniform way, and this mixing cannot be prevented by any other gas that might be present. So to understand this formation of a gas in a layer requires one to understand that ozone is not a stable gas, and it is created within the atmosphere. And therefore, to exist, it must be continuously produced. And produced in the area where it is found.

Therefore, ozone can quickly disappear if it is not being produced, and it appears only where it is being made, etc. So it is important to understand some of these things about ozone to understand how it perfectly causes this regulation of the production of oxygen.

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I encourage everyone to consider this new explanation of the source of our oxygen, and come to understand that we had to have oxygen even before we had trees.

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Thanks for reading.

Gerald L. O'Barr