

*"The greater the
ignorance, the greater the
dogmatism."*

- Sir William Osler

Chapter 22: The Ozone Hole

"The CFC Success story. We have even solved a global environmental crisis before."

There's that 'crisis' word again! Actually no crisis was solved, because there was no crisis to begin with. Since 1971, there have been numerous attempts to blame everything on ozone depletion including but not limited to the supersonic transport, Space Shuttle, hair spray, atmospheric nuclear testing, CFC's and fertilizer.

This crisis began with NASA's Ozone Trend Panel (OTP) proclaiming an ozone depletion trend of about 4% within the time frame between 1969 and 1986. This is shown as the dotted line on Figure 52a. Had the OTP used the time frame between 1962 and 1979, an ozone increase of 4% would have been the result. This is shown as the dashed line on Figure 52a. However, cherry-picking data is important in order to generate a crisis. So, the OTP time frame of 1969 and 1986 is the official ozone depletion trend and the entire basis used by ozone hole alarmists.

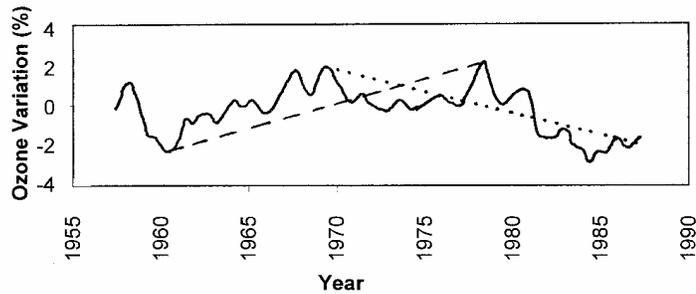


Fig 52a: Global Ozone Variation, 1958 and 1987.

But there is some other data which is of significance since it has a correlation with the ozone variation. This correlation is shown in Figure 52b. The solid line is the ozone variation, the dotted line is the Sunspot Number.

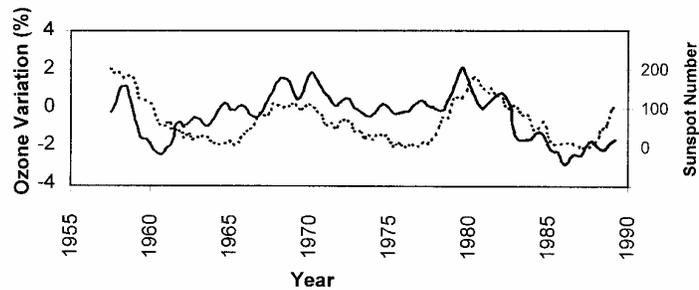


Fig 52b: Global Ozone Variation and Sunspot Number.

This 'crisis' was compounded when chlorine oxide measurements of the atmosphere were conducted with radiosonde balloon launches near McMurdo Station in 1986. Unfortunately, the 33 balloon launches carried the balloons towards and through the venting cloud of Mount Erebus. This active volcano emits about 1,000 tons of chlorine a day into the atmosphere. Not surprisingly, readings of 100 to 1,000 times higher than concentrations projected by computer models were obtained. Unfortunately, this data was used to present an alarmist condition of the atmosphere, when in fact it was recording the condition of a volcanic, plume-corrupted atmosphere.

"We drafted a treaty, secured world-wide agreement on it, and began to eliminate the chemicals that were causing the problem."

There has never been any proof that the supposed manmade chemicals which caused the ozone hole, when eliminated, began the repair of the ozone hole. The only thing that has occurred in the world of refrigerants is that supposed ozone depleting chemicals have been replaced with other supposed ozone depleting chemicals.

“Now all over the world, we are well on our way to solving the stratospheric ozone crisis.”

First a reality check for all you ozone hole fanatics out there. Ozone measurement did not begin with the July 1957 International Geophysical Year. It began in 1927. This was the year when one of the first spectrometers used to measure ozone began operating in Arosa Switzerland. The EPA shows their data between 1927 and 2001. However, the Ozone Concentration measured in Dobson Units (DU) is on the scale between 290 and 370 DU. This data is shown in Figure 52c. The dotted line reflects the ‘alarming’ rate of decline in ozone concentration between 1970 and 2001.

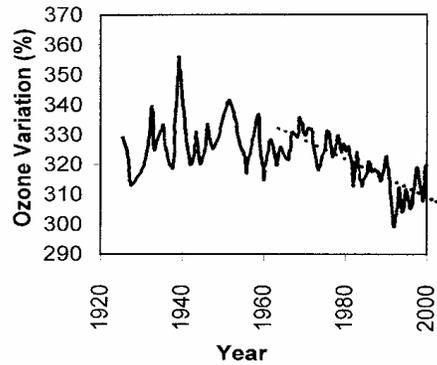


Fig 52c: Ozone Concentration, Arosa, Switzerland, y-axis 290 to 370 DU. <<http://www.epa.gov>>

At first glance the decline in ozone concentration looks impressive. However, when the same data is plotted with the y-axis scaled between 0 and 370 DU you get an entirely different – and more accurate – view of what is really going on. So, what’s the problem?

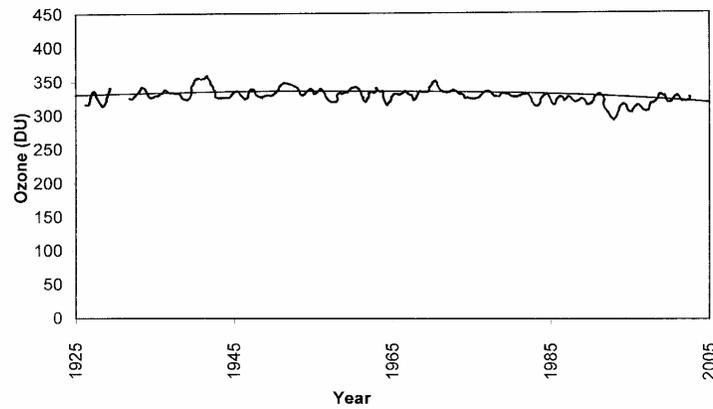


Fig 52d: Ozone Concentration, Arosa, Switzerland between 1927 and 2001, y-axis 0 to 450 DU.
<<http://www.johnstonsarchive.net>>

“Healing the Ozone Layer”

I love NASA’s traditional color photo depicting the Ozone Hole as a giant purple bruise on the bottom of planet Earth.

It is time for a reality check; time for some recent headlines:

- August 31, 2006: NASA says ozone layer is healing.
- September 9, 2006: VOA News, Global Efforts to heal Antarctic Ozone Hole Working, and finally,
- October 23, 2006, BBC News, Ozone Hole Is Biggest On Record”

It is both comical and pathetic to witness the news media spreading its hysteria about the ozone hole getting big every October. What you never hear is that the ozone hole gets smaller every March. But then this isn’t news and would negate last October’s hysteria. Not to worry. The media will hope you have a short memory, and again tell you next October about the Ozone hole getting bigger than ever. This cycle happens every year; get used to it.

“Midgley’s previous claim to fame was the creation of leaded gasoline.. “

It is unfortunate AIT takes a swipe at Thomas Midgley for his developing leaded gasoline. Leaded gasoline has never been proven to be detrimental to mankind. To the contrary, this invention eliminated ‘knocking’ and pre-ignition which increased gas mileage, increased horsepower, and reduced valve seat wear.

The junk science used to kill leaded gasoline was the creation of C. C. Patterson in 1926, and was pure speculation based on a 'global normal level' fabricated from extrapolations, absurd calculations and wild assumptions.

Lead detoxification in mankind began 120 years ago with the elimination of lead in tableware, utensils, containers, plumbing, medicines, cosmetics, and paints, and had nothing to do with the elimination of leaded gasoline.

The catalytic converter which replaced leaded gasoline is a reactor which does little to reduce the sulfur dioxide and nitrous oxide emissions they were designed to eliminate. Instead, these killer devices create hydrogen sulfite and cyanide both used for executions, and God-knows what other poisons.

"Then Rowland and Molina (R&M) theorized that as CFC's rose into the upper atmosphere, their molecules would be broken down by the Sun, releasing chlorine into the ozone layer and setting in motion a dangerous chain reaction."

There are a number of sources of chlorine besides CFCs. Here is a breakdown of the inventory of atmospheric sources of chlorine available around the world <www.eurochlor.org/rcei>:

Seawater	1,968,000,000 tons
Soils	16,500,000 tons
Biomass Burning	6,945,000 tons
Fossil Fuel Burning	5,071,000 tons
Volcanoes	2,205,000 tons
Waste Incineration	2,205,000 tons
Industrial Processes and CFCs	1,803,000 tons
Total	2,001,947,000 tons

Figure 53a below shows all Inorganic Chlorine Contributions to the Atmosphere in Terra Grams (1Tg = 1,102,311 tons). These include sea salt, soils, and volcanoes (all natural), and biomass burning, fossil fuel burning, and waste incineration (all manmade). As you can plainly see, the bulk of inorganic chlorine is provided by sea salt from the oceans. Natural soils provide more inorganic chlorine than from all manmade biomass burning, fossil fuel burning, and waste incineration

combined. Ultimately, only 0.71% of all inorganic chlorine contributions are manmade.

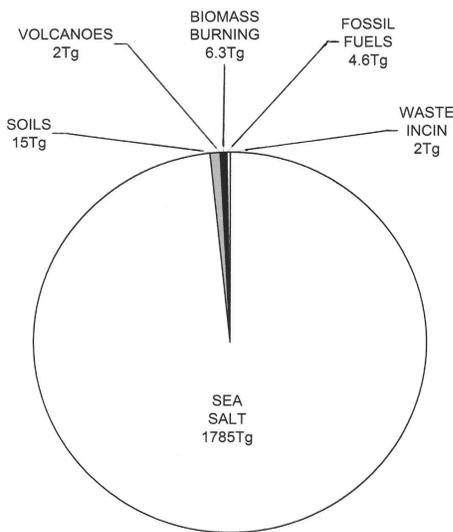


Fig 53a: Inorganic Chlorine Contributions to the Atmosphere <www.urochlor.org/rcei>

Figure 53b below shows all Organic Chlorine Contributions in Tg. These include oceans and soils/fungi (all natural), and biomass burning, fossil fuel burning, waste incineration, and industrial processes (all manmade). Nature provides 34.063% and Man provides the remaining 65.937%.

The category of Industrial Processes includes hydrogen chloride, nitrile chloride, chloromethane, chloroform, methyl chloroform, tetrachloroethane, trochloroethene, dichloromethane, and chlorodifluoromethane (HCFC-22). Unbelievably, about 60% of this toxic brew is created by nature, mostly in the oceans.

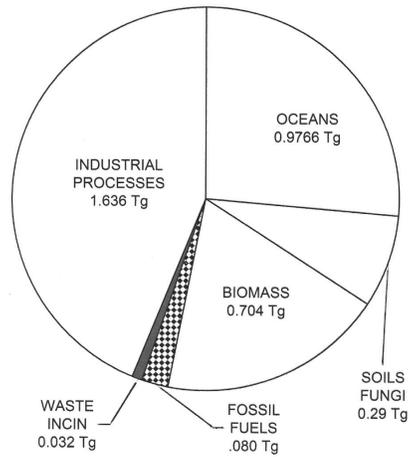


Fig 53b: Organic Chlorine Contributions to the Atmosphere. <www.urochlor.org/rcei>

Figure 53c below shows the 0.080 Tg Chlorine Contribution from HCFC-22 as a percent of the 3.7186 TG of Total Organic Chlorine. HCFC-22 represents 2.1% of the total organic chlorine contribution.

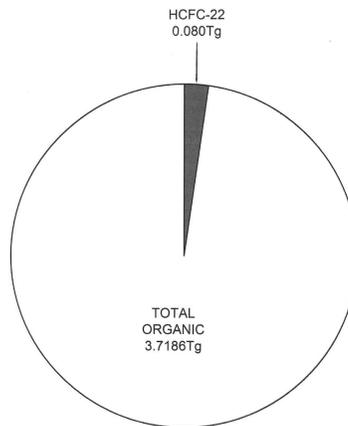


Fig 53c: Chlorine Contributions from HCFC-22 to the Atmosphere as a Percent of Total Organic Chlorine. <www.urochlor.org/rcei>

Figure 53d below shows the percent of HCFC of the Total Chlorine Inventory available to the atmosphere. Finally, we arrive at what we have really been looking for. HCFC-22 comes in at 0.00439% of the total world inventory of available chlorine

to the atmosphere. So, how does the ozone layer above the Antarctic have the intelligence to discriminate between each one of those manmade chlorine atoms from HCFC and the 22,779 atoms of chlorine from nature to allegedly destroy the ozone molecules that protect us from ultraviolet radiation? This is a question which perhaps only R&M can answer!

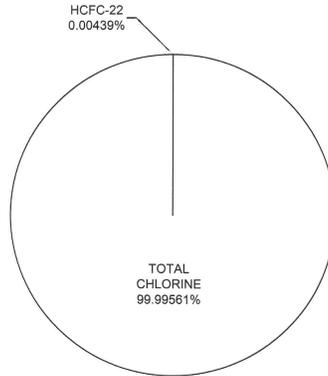


Fig 53d: Chlorine Contributions from CFCs to the Atmosphere as a Percent of Total Chlorine.
<www.eurochlor.org/rcei>

Finally, the reactions claimed by R&M have never been demonstrated in the lab. In fact the 'constants' for their reactions have never been determined. Without the constants it is impossible to know how much of anything is created

"These scientists (R&M) along with Paul Crutzen shared the Nobel Prize in 1995 for their work in atmospheric chemistry"

Actually, RM&C were given the Prize not for any work in chemistry, or the Nobel's basic conditions for awarding the prize (ie: "for outstanding achievements in science that leads to industrial progress and the benefit of mankind"). They were awarded the Nobel Prize for the "political implications that saved mankind from an impending catastrophe". So there you have it. The Nobel Prize is for political implications, and has nothing to do with science.

"In 1984 a dramatic hole in the ozone layer was discovered above Antarctica, just as the scientists (R&M) forecasted."

Not True! Extreme variations occur from a maximum every March to a minimum every October. Dobson discovered the

supposed 'ozone hole' before it became a fashionable crisis decades later. (Dobson, 1968)

And one last thing. Scientists have discovered an ozone rich lower atmosphere at the equator in the Atlantic just west of Africa <www.nasa.gov>. Studying this data from four satellites, scientists were surprised to find this was a result of lightning, not the previously thought cause of inland biomass burning. Here we go again. Scientists can only be 'surprised', if their theories and agendas are not being backed up by data.