## Report from the field: Global Warming in the schools

## By Meteorologist Art Horn

Since the fall of 2004 I have been traveling across New England and the Nation with my weather programs. One of these is geared towards the elementary and middle schools. The program "How the Weather Works" is a detailed look at how nature makes the amazing weather around our planet. Near the end of the hour long weather lesson I give the kids an alternative look at the global warming issue. At least alternative compared to what they see on television news programs and so called science shows on cable networks. I'm not only doing this for the students. There are of course teachers in the room. I want them to see this as well so they are always on my mind even though I'm primarily focused on the students. I point out some of the predictions that are made of drastic sea level rises in the future, bigger and more frequent hurricanes and devastating droughts. All of this from global warming cause by humans burning fossil fuels.

One of my big points is that carbon dioxide is not pollution. Without it there is no life on earth. Predictions of how much temperature rise will develop are everywhere. Then I show the students how temperature has changed in the recent 110 years. How at times the temperature has gone up and at times it has gone down. I show the fact that even with carbon dioxide levels increasing there has been no rise in global temperature for 10 years. The next slide is the downward trend in temperature for the last 7 years. Finally we look at how bad the recent forecasts from computer models have been, showing rapid warming by 2009 yet the temperature is going down. Oceans contain more than 1,000 times more heat then the atmosphere and I show the students how warming and cooling of the Pacific Ocean has influenced the changes in the global air temperature. The sun undergoes changes as well and through history a weaker sun has resulted in a cooler earth and a strong sun a warmer earth.

There are many "climate disaster shows" on cable television networks. I warn the kids to be wary of these. They may look and sound real but that is what they are trying to do. These programs use the credibility of a documentary format to "sell" the audience that this is real science. Then the producers of the show add drama and extreme images of disaster to create a feeling of impending doom, all in the name of getting people to watch. My point is that these programs are just television shows, not real science.

The reaction to this by the students is interesting and at times enlightening. Most simply sit there and listen. Some don't listen at all and can't wait to get out of the room. A few will have questions but this varies from school to school. Some schools generate many questions. Some of the kids can be quite persistent in asking why I don't believe Al Gore and his famous movie. A very few kids will even come up to me after the program and continue to ask questions. Some are sure the whole global warming scare is a fake. Others are convinced it's real. At times I can almost see a parent standing behind a student who is convinced that we are going to ruin the future by burning coal and oil.

What is very interesting is the reaction of the teachers. All of them that care to share their feelings with me after the program are happy that I have given the kids a different point of view. There are probably teachers who don't want this different opinion to happen but they have never come up to me and said so an I have been in many schools across Connecticut and Massachusetts. The teachers who share their feelings about this may not agree with my opinion all the time but they are willing to hear another side and for this I am encouraged about the future. Children need to know that there are many thousands of real scientists in the United States and around the world who can prove that the burning of fossil fuels influence on climate is so minor as to be insignificant. Our students need education not indoctrination.