

My name is Richard W. Grigg. I am a Professor of Oceanography at the University of Hawaii where I have been active in coral reef research for over 30 years. I recently served as the Managing Editor of the Journal, *Coral reefs*, for a five year period.

This morning Admiral Watkins asked the Coral Reef Panel at the hearing, "Why should coral reefs be important to people in the heartland?" My reaction to his question was to expand it to include the people of the entire world. Why should they care about Coral Reefs? My answer to them would be to use the analogy of the canary in the mine. Coral reefs are often said to be the canary in the sea. If the canary in the mine dies and the miners ignore it, the miners also die. If humankind ignores the plight of coral reefs, what does the future have in store for us?

And while there are many problems with coral reefs, alluded to this morning, such as, over-fishing, pollution, sedimentation, bleaching, eutrophication, etc., all of these problems are symptoms of two much larger issues; over-population and a consumer driven economy. We can't do a whole lot about the latter, at least in a free world economy, but we can do quite a bit about the first problem, over-population. It is often claimed that one child in the US consumes an amount equivalent to 25 or even 50 children in the third world, many of whom are starving to death as we speak. I understand that the US provides only about \$500 million for family planning for the entire world, compared to \$20 billion in foreign aid to just one country, Israel. Family planning should be at least on a par to foreign aid for one country in the world.

It should also be obvious that we need to rein in our numbers and we need to rein in our appetites. For this, a major change in cultural values must take place. The idea of growth must be replaced by sustainability, and the idea of profit must be replaced by quality of life.

Today, the political will for these kinds of changes seems to be weak or altogether lacking. I would hope that the Commission might rewrite the book on Ocean Policy to incorporate measures to stem population growth and strive for sustainability. It would represent a reversal of fortune not just for the oceans, but also for humankind. We stand on the edge of a new millennium which begs for such changes. I hope the canary of the seas, need not die before such action is taken.

Thank you for the opportunity to testify this afternoon.

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