



Environmental Journalism: Covering Environmental Science

*What Are the Major Impediments to Quality Media Coverage
of Science-Based Environmental Issues?*

John Hunter

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 - Any one result in any one paper should be treated in a global context (e.g. 2003 heatwave in Britain)

2003 Heatwave in Britain



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News



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Britain bakes, Europe burns. Is this proof of global warming?

By Michael McCarthy, Environment Editor

05 August 2003

If it isn't proof of global warming at last, it certainly looks like it. As much of Europe burns like a furnace and rivers run dry across the continent, Britain is bracing itself for its own record temperature.

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- **Logging may wipe out endangered plant: Greens**

The Tasmanian Greens have stepped up their campaign against logging at Recherche Bay

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- **Australian stocks being overfished: report**
The Australian Fisheries Management Authority says the latest report on fish stocks is bad news for commercial fishermen

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Uncertainty

- Example from Intergovernmental Panel on Climate Change (IPCC):

"Globally, it is very likely that the 1990s was the warmest decade since 1861."

where "very likely" was defined as having a 90–99% chance of being true.

- An excellent introduction to *uncertainty* in an environmental context, and global warming in particular:

Uncertain Science . . . Uncertain World by Henry N. Pollack,
Cambridge University Press, 2003.

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- Understand **uncertainty**
- Understand that scientists don't always know the answer

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The image is a screenshot of a news website. At the top, the word "LATELINE." is written in a large, white, stylized font against a dark background. Below this, there are two tabs: "Lateline" and "Lateline Business", with "Lateline Business" being the active tab. A navigation menu below the tabs includes links for "Home", "Vodcast", "Archives", "Contact Us", and "About". The main content area features a headline "Rising seas force Carteret Islanders out of home" in a large blue font. Below the headline, it says "Australian Broadcasting Corporation" and "Broadcast: 05/02/2007". To the right of the broadcast date are links for "Print" and "Email". Below this information, the reporter's name "Reporter: John Stewart" is listed. A text box with a thin border contains the following text: "Residents on Papua New Guinea's Carteret Islands are already feeling the affects of climate change and global warming. The entire population is preparing to leave their homeland, forced out by the rising sea."

LATELINE.

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Rising seas force Carteret Islanders out of home

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Residents on Papua New Guinea's Carteret Islands are already feeling the affects of climate change and global warming. The entire population is preparing to leave their homeland, forced out by the rising sea.

Understand that scientists don't always know the answer



The image shows a screenshot of a news article from the website 'Lateline Business'. The article title is 'Rising seas force Carteret Islanders out of home'. The text is enclosed in a red rectangular box. The article discusses the impact of rising sea levels on the Carteret Islands, mentioning that scientists like Dr. John Hunter from CSIRO and the University of Tasmania predict a significant increase in sea levels over the next 20 years, which could force islanders to leave their homes. The article also notes that tectonic plate movements and the destruction of local reefs by fishermen are also contributing factors to the islands sinking.

JOHN STEWART: Scientists, like the CSIRO's Dr John Hunter, say that rising sea levels are one of a number of problems for the Carterets. Tectonic plate movements and the destruction of the local reef by fishermen may also be causing the islands to sink. But rising sea levels remain a key factor. During the past century, sea levels rose by between 10 and 20 centimetres. Scientists say that sea-rise over the next 20 years could be far worse

DR JOHN HUNTER, UNIVERSITY OF TASMANIA: Most agree that it's probably between 60 centimetres and 80 centimetres but with the extra caveat that there's certain things we don't understand very well about the Greenland and Antarctic ice sheets, and we could have a significant increase over those numbers.

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Two Kinds of Coverage – Example of Port Arthur



Port Arthur: Summary

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- Controversy about location of benchmark relative to sea level in 1841

Port Arthur: the BBC

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EDITIONS

Thursday, 7 October, 1999, 10:27 GMT 11:27 UK

Mark of hot dispute



The Lempriere-Ross mark is still visible (Photo by J Daly)

By **Jonathan Amos**

Is this the picture that takes the heat out of global warming? It shows an Ordnance Survey Bench Mark engraved into a rock face on a little island near Port Arthur, Tasmania.

It was put there in 1841 by the famous Antarctic explorer Captain Sir James Clark Ross and amateur meteorologist Thomas Lempriere to mark mean sea level.

What is so fascinating is that the mark appears to some to be 30 centimetres above the current mean sea level. Scientists who are sceptical about the existence of global warming say it clearly undermines oft-repeated claims that sea levels have risen over the past century because of rising temperatures on Earth.

See also:

- ▶ 02 Oct 99 | Science/Nature Iceberg threat to shipping
- ▶ 20 Sep 99 | Science/Nature 'Climate change cancels debt'
- ▶ 10 Sep 99 | Science/Nature Climate disaster possible by 2100
- ▶ 28 Jul 99 | Science/Nature World's carbon pollution falls
- ▶ 03 Jun 99 | Science/Nature Global warming - is the Sun to blame?

Internet links:

- ▶ Still Waiting for Greenhouse
- ▶ CSIRO Port Arthur Research
- ▶ IPCC
- ▶ Southampton Oceanography Centre, UK

The BBC is not responsible for the content of external internet sites

Top Science/Nature stories now:

- ▶ Date for first Australians
- ▶ Fifth closest star discovered
- ▶ Mona Lisa smile secrets revealed
- ▶ The gene that maketh man?
- ▶ Gravity wave detector all set
- ▶ Robots get cheeky
- ▶ The big and the bizarre
- ▶ Botox 'may cause new

Port Arthur: the BBC

Those claims are also based on historical data from tidal stations like the Port Arthur one, but much younger. The record is somewhat patchy, with most of the data concentrated in the Northern Hemisphere.

Nevertheless, taken together, these more modern marks would appear to show sea levels have risen by about 20cm over the past 100 years.

The UN's Intergovernmental Panel on Climate Change (IPCC) has informed world governments that computer modelling suggests this rise will continue well into the next century if global temperatures increase.

"It is a claim which has been repeated numerous times as part of the Kyoto Protocol politics," says John Daly.

"But when we look at the Ross-Lempriere 1841 bench mark, one thing becomes crystal clear: There has been no sea level rise this century - none at all."

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Hot dispute

John Daly's interpretation has been dismissed by Dr David Pugh, from the Southampton Oceanography Centre, UK. Dr Pugh has gone over Lempriere's original work which had been buried in the Royal Society's archives. The Southampton scientist is now assisting CSIRO in their current research programme.

"John Daly has taken the mark, which is a nice clear bench mark, and said 'that is the mean level of the sea at that time', and it wasn't," says Dr Pugh.

"From all the evidence we know it was the high water level at that time - it's like the difference between mid-tide and high-tide. He's wrong."

Port Arthur: the Herald Sun

Herald Sun, Monday, February 14, 2002

Andrew Bolt



Maybe we aren't all going to drown in rising seas after all

THIS picture tells us global warming may be nothing to worry about after all.

Isn't that great news? It shows a mark chiselled into the rock face of the Isle of the Dead in Port Arthur by amateur meteorologist Thomas Lempriere in 1841 to record the mean sea level.

Lempriere's bench mark is exciting evidence that challenges the biggest green scare — that the seas are rising as the world gets hotter and melts the polar ice caps.

It seems to show the opposite — that the seas have fallen. And by a lot.

What a relief, after being so terrified by the United Nation's Intergovernmental Panel on Climate Change. The panel warns that the seas of our over-heating world have already risen up to 25cm, and Red Cross even claims Sydney will drown by 2100.

Thankfully, it now seems that our greenhouse gas emissions are not stifling the world.

Yet, I almost get the impression this doesn't please the CSIRO, which pushes the it's-getting-as-hot-as-hell line.

It has spent four years studying Lempriere's mark, but has published only a press release and a small item in *The Tasmanian Surveyor* about it, without even hinting it may prove the seas haven't risen.

This infuriated John Daly, a Launceston marine engineer and author who runs a renowned greenhouse-sceptic internet site. So he took this picture, put it on his site and drew praise from scientists from Oslo to Washington.

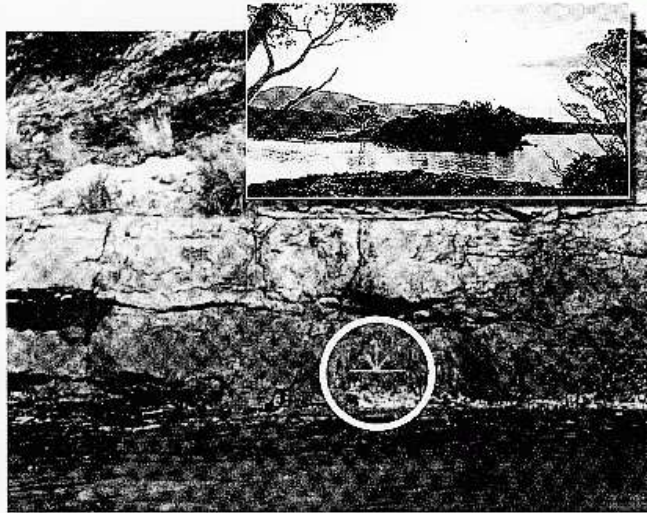
"This shows there has been no rise in the sea level this century. None," Mr Daly said.

THOMAS Lempriere was Deputy Commissary General of the penal colony of Port Arthur, and recorded its weather and tides from 1838.

In 1841, he met Captain Sir James Clark Ross, the Antarctic explorer, who wanted to mark what he called the "Zero Point" of the sea — halfway between high and low tide.

Ross later wrote they had worked out the "general mean level of the sea as determined by the tidal observations which Mr Lempriere had conducted with perseverance and exactness for some time".

They then rowed to the Isle of the Dead and cut the rock at what Ross said was "the exact spot which his tidal observations indicated as the mean



Evidence: the water level mark (circled) on the Isle of the Dead rock in Port Arthur Harbor (inset).

level of the ocean". That mark is now 34cm above the mean sea level today, as the Daly photograph shows.

It now gets confusing. CSIRO scientist John Hunter says Ross misremembered, and in fact carved the mark above mean tide, to show where he'd measured the tide in a tide gauge.

According to a witness last century, a plaque near the mark said it was carved at 4.44pm, or around high tide.

"Cities have grown warmer with concrete and cars"

and that the tide gauge showed a sea height of 6ft 1.

That means Ross and Lempriere for some reason waited until dusk on that mid-winter's day to make the mark while standing waist-deep in the cold high-tide water.

Strange. But Dr Hunter's assumptions — and those figures — allow him to argue the seas have indeed risen, much as the greenhouse lobby says.

The plaque is now missing. But it seems the witness — who said he'd had trouble

reading it — may have written down the wrong time, and maybe sea height, too.

Three years later, in 1831, a yachtsman reported the plaque actually said the mark was struck at "2.44pm" — which was the time of mean tide. Perhaps Ross was right, and the sea has dropped.

Nor is this the only evidence that the world may not be warming or the seas rising.

Satellite data from 1979 show no rise in temperature. Nor do weather monitoring balloons.

The only "proof" that the world is heating comes from ground-based measurements. But many of these readings come from cities, which have grown warmer under all that concrete and all those cars.

AS for the seas, early paintings of Port Arthur seem to show higher shorelines.

Now the University of New England's sea-level research unit has found 10 sites with fossil shellfish above the shore. Lecturer Bob Haworth says this confirms "a net decline of sea level over the last 4000 years" of almost two metres along southern Australia.

The more we learn, the more dodgy bogey-man claims about global warming seem.

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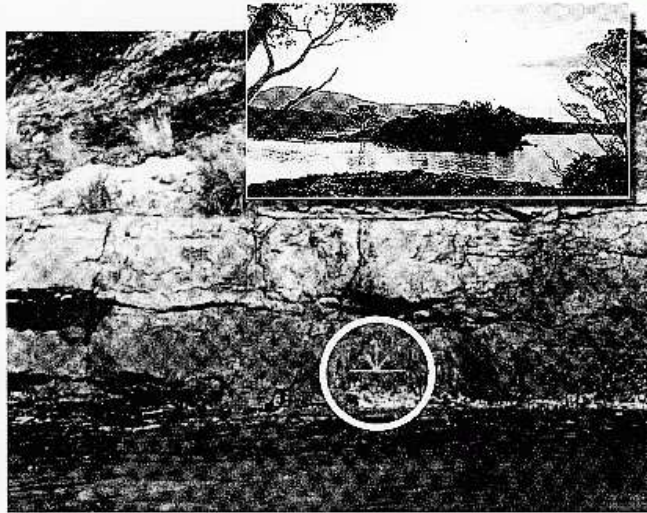
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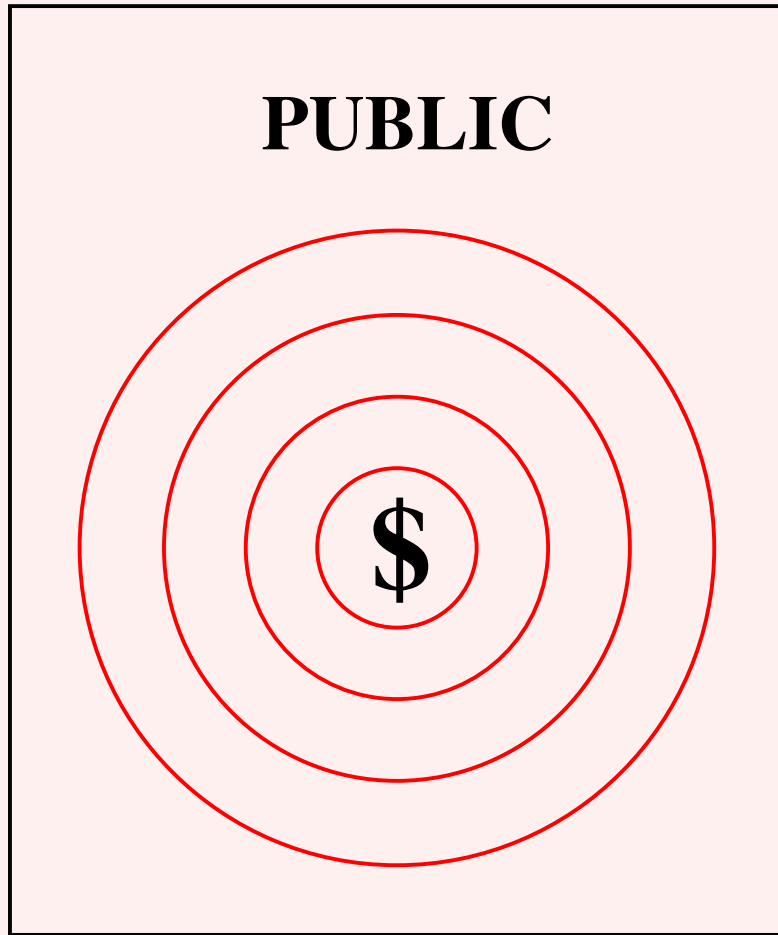
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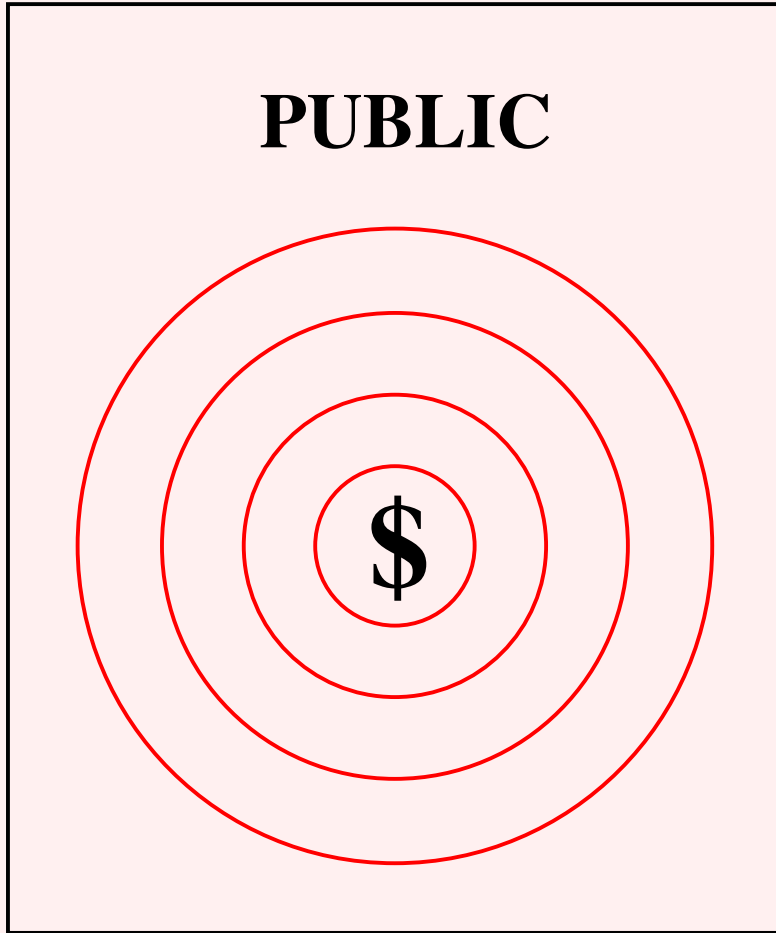
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- The scientist can steer the interview with only a little practice

Collaboration or Gamesmanship?

The Almighty Dollar



The Almighty Dollar



AUDIENCE	WHAT DO THEY WANT TO HEAR?	HOW DO THEY WANT TO HEAR IT?
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PUBLIC		

2006 – The Year the "Science of Climate" Debate Ended?

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24 May 2006



An Inconvenient Truth (Al Gore)

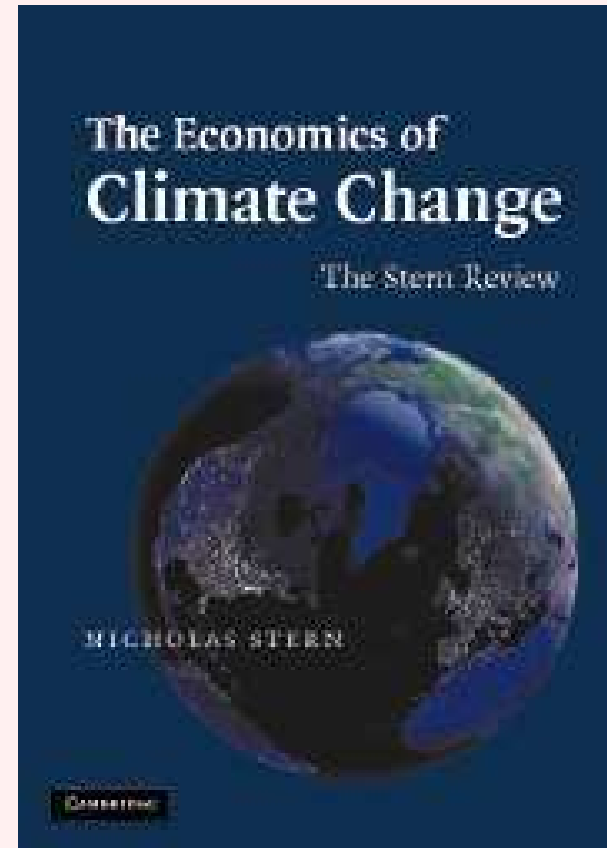
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30 October 2006



The "Stern" Review