

Species Extinction - One Million, or Just One?

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Claim: *A million of the world's species "could" become extinct by 2050 as a direct result of climate change.*

A recent **modeling** study published in *Nature*, (Thomas *et al*, v.427 p.145, 8 Jan 04) is **easily challenged** when matched with **real-word data and observations**. The study itself was **not based on real field studies**, but used unvalidated climate models matched against known habitat regions for various species and the **projected** changes to those habitats anticipated by climate models. It was a **speculative** statistical exercise, nothing more. The study focuses on several regions of the world including Australia, Brazil, Europe, Mexico, South Africa, and Costa Rica.

In one example, a BBC report on the study claims that nearly half of all protea flowering plants in South Africa "could" become extinct due to climate change. The habitat range of these plants is the Cape of South Africa, and the temperature record from Capetown, in the centre of that range, clearly shows the **warmest period** of the last 150 years was the 1930s, **not the present**. Equally clear, if the plants survived that period, they cannot be regarded as being vulnerable to "climate change". The claims are therefore entirely **speculative and without scientific foundation**.

In another example, this time a bird species, the BBC report on the study cited the Scottish crossbill as a candidate for extinction due to "climate change". Again, simple reference to real **meteorological records** of the habitat range (Tiree, Scotland) affords the means to determine the credibility of the claim. Tiree is located on Scotland's Inner Hebrides Islands, just off the west coast. The record shows the **warmest years were 1949 and 1959**. Again there appears **no justification** in the climate record to support warnings the Scottish crossbill may be in danger from climate change.

The media reports of "one million" species to become extinct begs the question what species have already become extinct in the wild as a direct result of climate change? A useful website for such a question is http://www.birdlife.org.uk/datazone/search/species_search.html which has a large database of the entire world's known bird species, making it possible to see which are endangered, threatened, or actually extinct. According to the database, "climate change" is **not implicated** in any of them; the small number cited being attributed to **non-climate factors** like hunting, land clearing, pests, etc.

The best Thomas *et al*. have to offer is that "climate change" over the past 30 years has been "implicated" (not proven) in **one** species-level extinction, the golden toad of Costa Rica (even this micro-climate change has been tied to **local land use changes, not global temperature changes**). So after several decades of "climate change" already, where are the extinctions? On their reasoning, there should be hundreds, thousands of them by now, not merely the lone problematic toad species they cite. Many, if not most, of the extinctions they "predict" are admitted by them to be a result of **non-climate factors** like land clearing, pest invasions and habitat loss. Yet the media reports attribute **all** the extinctions to climate alone.

Thomas *et al* also **contradict themselves**. On p.147 of their paper, they say "Many **unknowns** remain in projecting extinctions, and the values provided here **should not be taken as precise predictions** (emphasis added)." That was for the scientific readership. But in their abstract (the only part read by the media), they say "...**we predict** (emphasis added), on the basis of mid range climate warming scenarios for 2050 [these scenarios are themselves under serious scientific assault], that 15-37% of species in our sample of regions and taxa will be committed to extinction." So, is this a firm prediction or just a loose speculation?

Thomas *et al* further muddy their "predictions" or "projections" with this piece of confusing hair-splitting, "We estimate **proportions** of species committed to future extinction as a consequence of climate change over the next 50 years, **not the number** of species that will become extinct during this period." So are we to take this to mean that the "million" might not really be a million after all?

A climate researcher, the late John Daly, concluded, "That such **speculative nonsense** could be published in a major scientific journal is simply further evidence that the greenhouse sciences are collectively incompetent and deserve to be disregarded by the wider public." (<http://www.john-daly.com/press/#species>)