

Black swans don't exist, do they?

A two-part exploration of effective risk and safety management by Darren Quinlivan, Principal Risk Consultant, Halcrow



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It was long held that the black swan did not exist. Ever since ancient Greece it was regarded by Europeans as an impossibility – in Europe, after all, swans are white. Indeed, a Latin phrase translated as "a rare bird in the lands, and very like a black swan" was a common expression in 16th century London as a statement of impossibility.

Then a Dutch expedition, led by explorer Willem de Vlamingh in 1697, discovered black swans in Western Australia, shattering this accepted belief – as well as permitting a proliferation of English pubs named *The Black Swan*.

In recent years a number of catastrophic incidents have been labelled by some as black swan events, meaning something that was considered impossible before its occurrence.

These include the 9/11 terrorism attacks on New York and Washington, the massive oil spill in the Gulf of Mexico in April 2011 and, particularly, the 2008 global financial crisis. What could this humble bird have to do with such world-renowned disasters?

The concept was first expounded by the financier, thinker and essayist Nassim Nicholas Taleb in 2007 in his book *The Black Swan*.

Taleb succinctly defined it in a later *New York Times* article:

What we call here a Black Swan (and capitalise it) is an event with the following three attributes. First, it is an outlier, as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. Second, it carries an extreme impact. Third, in spite of its outlier status, human nature makes us concoct explanations for its occurrence after the fact, making it explainable and predictable.

From the perspective of risk analysis it is clear that there are a number of problems here – extreme improbability and the perfection of hindsight being but two of them. There is also a more insidious danger – the refusal to acknowledge that ignorance may mask the possibility of swans being black, not white, the ignorance in this case being the historical ignorance of another part of the world.

Let's go back to those three international disasters I mentioned earlier: 9/11, the Gulf of Mexico oil spill and the financial crash of 2008. Can we actually describe those as black swans?

Opportunities to prevent them were missed thanks largely to indifference to their possibility. Who would invest time and resources to avoid the impossible? Yet in hindsight we clearly see that many of these disasters were predictable and, with the benefit of that twenty-twenty vision, the path to the catastrophe now seems obvious.

Surely if we can predict the possibility of a catastrophic event in advance it could not be labelled as a black swan – the risk is definable and, hence, manageable.

We'll explore that further in Part 2 – coming soon! Or if you can't wait – [contact the author at Halcrow](#) to pursue the conversation.