



Bristol Conservation
& Science Foundation

Monthly Conservation Lecture at Bristol Zoo Gardens

Wednesday, 5th September, 5:30 pm (Bristol Zoo Education Centre):

Dr Norman Wood

Aerodynamics and Flow Control Expert, Airbus

“Airbus and Biodiversity? It’s only natural...”

What do Velcro, Michael Phelps’ sharkskin swimsuit and the world’s largest passenger aircraft – the Airbus A380 – have in common? The answer rests in a growing field of scientific study through which modern engineers, scientists and architects are looking not at what we can extract from the natural world but what we can learn from it. This is known as ‘biomimicry’ or biologically inspired engineering. Simply put, it’s the study and imitation of nature’s best ideas to help solve human challenges.

A growing number of aeronautical innovations are inspired by an array of natural structures, organs and materials – and these tried and tested patterns of the natural world will continue to be a powerful source of inspiration in the future. When nature has solutions like this to offer, it’s clear why we all have an interest in protecting the world around us.

Norman Wood joined the wing design team in Airbus in 2005 after a successful career in Academia culminating as Professor of Aerospace Engineering at the University of Manchester. From 1997 to 2003 he was Head of the Manchester School of Engineering and Chairman of the Aerodynamics Committee of the Royal Aeronautical Society. He is also a Fellow of the Royal Aeronautical Society.

While in academia he developed many research interests that include unsteady aerodynamics and flight control technologies for agile aircraft and he has published widely on those and other topics. With a keen interest in the Natural World, he is making the science of Biomimicry a key component of the development of new technologies and integration strategies for Airbus to ensure that future aircraft designs continue to be successful in meeting the demands of safety and environmental impact. The active control of wing shape and performance exhibited by birds and insects is a good example of a natural solution that triggers ‘biologically inspired engineering’ – Biomimicry.

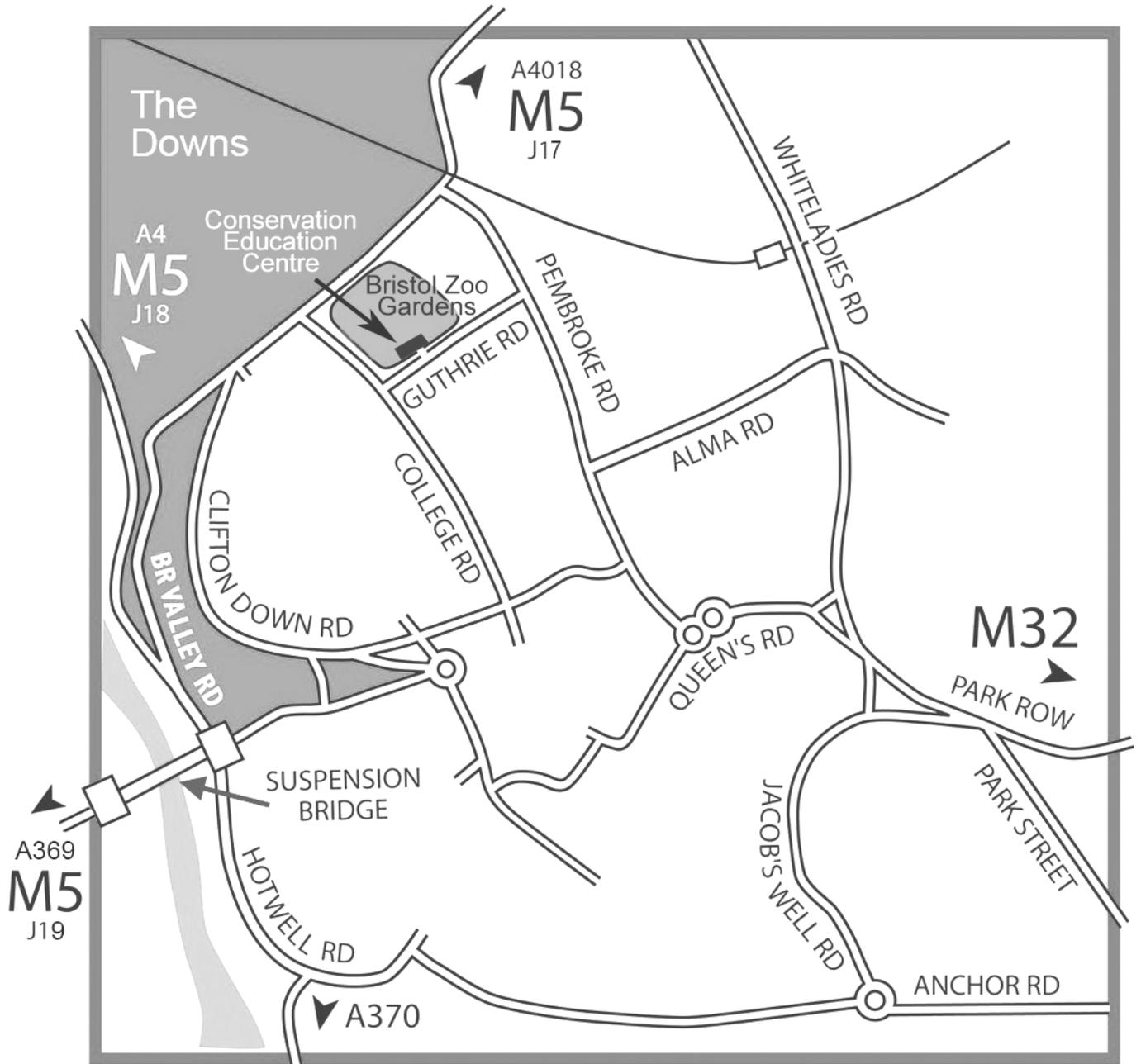


Further information:

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The Conservation Education Centre (on the zoo grounds) is accessible via a separate entrance on Guthrie Road, Clifton, from 5.15 pm. Conservation Lectures are free of charge.