

Why Care About Biodiversity?*

Why does Government care about biodiversity? *Human activity does relatively little to filter water and air. The vast majority of cleansing occurs through filtering in waterways, healthy soil and plants: These are part of the human life support system. Without these natural buffers, municipalities face higher costs for water and waste management. Healthy freshwater mussel beds, for instance, can filter many thousands of gallons of water daily, and protect other life from waterborne toxins.*

When soil is depleted, and when water is polluted-or when invasive and exotic plants and insects degrade our forests-these places cease to function effectively, leaving people vulnerable to the consequences of deforestation, erosion and food shortages. Political unrest can ensue, and national and food security may diminish, as more foods, fiber and resources must be imported to sustain growing populations.

Why does Business care about biodiversity? *Fifty-nine per cent of major international corporate CEO's list biodiversity as an asset they care about. They recognize the opportunities biodiversity offers for new product development.** This number is even greater when pharmaceutical companies are polled. Even the humblest living thing may have highly sophisticated functions and body parts. Each organism on this planet is the result of prolonged natural modification and development, allowing a species to occupy a difficult or unique habitat. In essence, plant and animal bodies are full of undiscovered trade secrets.*

Why do Physicians care about biodiversity? *Physicians and biologists recognize biodiversity as a measure of the general quality of resources available to people living in a particular region. Better water quality, for instance, is associated with greater mussel variety. It is not always the mussels, *themselves*, that matter to public health; it is the fact that they indicate the state of resources, vital to human well being. Many important substances in modern medicine originate in the natural world. Antibiotics, for instance, were first derived from fungi and bacteria living in healthy soils.*

Why do Scientists care about biodiversity? *Today's rapid technical advances in many scientific fields have resulted in a flood of research possibilities, addressing some of society's most difficult problems. Plants and animals have been studied in new depth, and are yielding insights into biology and engineering that will be translated into new products, advancing medicine and industry. In January 2011 a study of the Monarch Butterfly's nervous system shows how subtle sensory signals can be integrated in the brain, using an internal compass and daylight, and are able to guide their long migration. When biodiversity is lost, it means that some living organisms may be unavailable for study, *forever*.*

Why do Artists care about biodiversity? *We know that the beauty of nature comforts us and may play an indispensable role in healthy psychological functioning. Many artists try to capture that essence in their work. Our responses to nature give us insights that surpass expression, even in the world's most beautiful works of art, music and poetry. Paul Sawyer, renowned for his impressionist depiction of Kentucky's inspiring landscapes, has generations of admirers.*

***Biodiversity: The amount of biological variety within an area of study, such as a state or region.**

** Forbes.com

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