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Confusing Ecology with Environmentalism ¹

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Introduction

It is obvious to anyone pursuing various electronic and print media that the terms ecology and environmentalism are often used interchangeably. This leads to misconceptions and confusion by the general public. To give each group their due credit, I would like to clarify the difference.

Ecology

The word "ecology" entered national consciousness in the 1960s and '70s when public awareness of environmental problems dramatically increased, many environmental organizations were born, and Congress enacted major environmental statutes. Insights from ecologists including Aldo Leopold (*A Sand County Almanac*) and Paul Ehrlich (*Population Bomb*) were so influential to environmentalism that it is often called "the ecology movement" by the media. However there is a clear, simple difference between environmentalism and ecology: the former is a social and political movement; the latter is a science.

Environmentalism

Environmentalism refers to a way of thinking and a movement of political activism based on a common conviction that our natural environment should be protected. It takes many forms, from local homeowners organizing grassroots activities to fishermen banding together to stop pollution, and extends to national and international activities. The motivations of environmentalists are often health-related (preventing contaminant poisoning), economic (maintaining valuable natural resources such as fisheries), or aesthetic (maintaining a more attractive place to live).

Function of Ecologists

Few people realize that the term ecology (the scientific study of the interrelations of organisms and their environments) was coined by German zoologist Ernst Haeckel more than a century before the first Earth Day. Ecologists study populations and communities of living organisms, physiological and behavioral adaptations of species to their environment, interactions among species (for example, competition and predation), and functions of ecosystems such as energy flow and nutrient cycling. Ecologists may study plants or animals in terrestrial, fresh water, or marine environments, and in tropical, temperate, or polar regions.

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Contributions of Ecologists to Environmentalism

Ecological research on populations, communities, and ecosystems has provided scientific insights essential to environmental protection and management. Ecologists' knowledge of the natural world is so pertinent to environmental problems that we now devote much research to the functioning of a world increasingly altered by mankind. Research to reveal the effects of humans on their environment is identified as "applied" ecology. Applied ecological disciplines include wildlife and forest management, conservation biology, landscape ecology, ecotoxicology, and agroecology. It is not surprising that the activities of environmentalists are often based on the findings of ecologists.

Ecologists and Environmentalists Combine Forces

Through activism, environmentalists can get politicians, decision-makers, and developers to be concerned about, and, more importantly, to act on issues of environmental protection. Ecologists can provide information needed by decision-makers. Hence, environmentalists' and ecologists' efforts are complimentary. Many ecologists are becoming environmentalists and are using their scientific expertise to improve environmental quality and use of natural resources. Of course, an ecologist acting as an environmentalist loses the appearance of objectivity. Equally risky is the trend for environmentalists to act as ecologists. Environmentalists lack the formal training of ecologists and can not provide the same scientific legitimacy to their testimony (as accurate as it may be). Frequently they are no match for the "experts" at the command of developers. Thus strong partnerships between ecologists and environmentalists will be the most effective way to protect our environment.