



What Can I Do to Decrease Acid Rain?

by Lee Carroll, Demand Media

Acid rain contaminates soil, pollutes water and even causes the death of plants and fish. Before carbon dioxide took center stage, acid rain was a major topic of discussion among environmental groups. Two pollutants, sulfur dioxide and nitrogen oxides, combine with water vapor and oxygen to make acid rain, which has higher concentrations of sulfuric and nitric acids than normal rain (see References 1). By understanding the source of these pollutants, individuals can make a few lifestyle changes to reduce these emissions and, in turn, acid rain.

Emissions from Electricity

Most electricity in the United States comes from burning coal, which produces sulfur dioxide. Burning any fossil fuel for energy production, including oil and natural gas, releases nitrogen oxides. (See References 2) The result of efforts initiated in 1990 to reduce acid rain resulted in reductions in sulfur dioxide by 1998, while nitrogen oxide emissions remained at about the same levels, according to a General Accounting Office analysis released in 2000 (see References 3, page 7). Efforts to control nitrogen oxide emissions from power plants, however, showed measurable success by 2004 (see References 5, page 4).

Vehicle Emissions

The apparent success of efforts to control nitrogen oxide emissions from power plants led researchers to conclude in a 2006 report that further reduction efforts should focus on mobile emission sources (see References 5, page 4). On-road vehicles, followed by non-road equipment, electricity generation, fossil fuel combustion and industrial processes accounted for most of the nitrogen oxide emissions in 2005 (see References 4).

Reducing Electricity Consumption

Reducing the amount of electricity the average home uses is a simple, direct method of decreasing emissions that cause acid rain. Supporting renewable-energy initiatives that reduce the dependence on fossil fuels is a bigger-picture solution. Overall, one of the best things you can do is upgrade old appliances; the Energy Star program identifies energy-efficient models of many products. Avoid wasting electricity when you use any appliance. For example, remove everything you need from the refrigerator for cooking once and put it back once. Use one oven cycle to bake several dishes at the same time. If you use a clothesline, the sun and the air will dry laundry free. Strive to reduce heating and cooling costs. Planting shade trees to block the sun eases the burden on your air-conditioner. Installing insulation helps maintain your home's temperature and reduce electric cooling or heating. (See References 2)

Reducing On-Road Vehicle Exhaust

Every step you take to reduce the amount of nitrogen oxides emitted into the air from vehicles will help reduce acid rain. Walk or bike whenever possible. If you must ride, carpooling and using public transportation reduce the number of cars on the road. When you buy a vehicle, choose one with low emissions and maintain it. (See References 2)

Other Considerations

Manufacturers ship nearly everything you purchase at a store in trucks, planes or trains that produce nitrogen oxides, and acid rain; shopping for almost anything can have a ripple effect. Also, consider your personal use of non-road sources of nitrogen oxides, including recreational activities such as boating, snowmobiling or using an all-terrain vehicle. Other non-road sources to curtail the use of include equipment such as chainsaws, lawnmowers and leaf-blowers. (See References 6)