

Abstract: Global climate change is the phenomenon of fluctuating weather patterns over time caused by various factors, including plate tectonics, solar radiation, and human influence. Current climate change is thought to result primarily from global warming, the increase in temperature near the Earth's surface. Although there is substantial evidence that climate change is occurring and that it is primarily caused by humans – a view highly supported by the scientific community – there are deniers who refuse to believe our planet is warming significantly and that this trend is due to anthropogenic factors. In an effort to convey the reality of climate change to nonscientists, we will use data on birds to illustrate some of the effects of climate change. Since birds are so commonplace, using them as vehicles for explaining climate change gives people the ability to see changes occurring in their own backyard. For example, bird phenology, the timing of life cycle events, is closely tied with temperature and constitutes the most well studied ornithological evidence for climate change. There are substantial amounts of data documenting shifts in the timing of critical bird life events, such as earlier spring migration arrivals and earlier reproduction. A recent report by the Audubon society projects that over one half of North American bird species will lose significant portions of their range by 2050 as a result of climate change. We plan to use examples from these studies to develop a presentation for college students of all majors highlighting the effects of global warming.

Keywords: ornithology, birds, global warming, climate change, phenology