The Indiana Gazette
indianagazette.com in print daily | online always

Climate change extends beyond temperature

- February 16, 2023 5 hrs ago

The impact of climate change, both worldwide and regionally, extends far beyond temperature change.

Dr. Steven Hovan, Dean of IUP's Kopchick College of Natural Science and Mathematics, talked about the many consequences and how we can respond to them in his webinar presented to a local audience on Jan. 26.

Over the last 30 years, changes in precipitation, from extreme droughts to more frequent flooding, have caused altered growing seasons, heat waves and insect-borne diseases. They have resulted in significant economic costs, particularly related to agriculture, energy, tourism, public health, water supplies and transportation.

Decreased food production, increases in some infectious diseases, the need to alter energy use, increased life-threatening heat waves and depleted water supplies are already felt in some parts of the world, including the U.S. The increase in frequency and intensity of very warm weather has a devastating effect on our most vulnerable populations: the very young, the elderly, and especially the economically disadvantaged.

For the last 150 years, temperatures have increased and so has atmospheric carbon dioxide. Research, including core ice and sea coral samples, makes clear that this increase is directly correlated with the use of fossil fuels. The ability of carbon dioxide and other greenhouse gases to trap heat accounts for most temperature increases during this period and that impact is already hitting hard in various parts of the globe.

If we do not decrease carbon emissions, as well as preserve and increase carbon sequestration, it is estimated that by the end of the century, temperatures will increase by up to 10 degrees, and the results will be devastating, resulting in an estimated economic cost of $130,000 per household.

But there’s hope. If we achieve low emissions within the next decade, we can limit the increase to about 2 degrees. But if we continue with high emissions, by the end of the century, Pennsylvania’s climate and animal and plant populations will look like what northern Alabama’s does today. The impact across much of the world will be significantly higher.

To learn more, view the webinar at: https://www.friendsofwhiteswoods.org/events.

Susan Dahlheimer

Indiana