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Climate Change Series Kicks Off At BU

Discussion from various angles

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From left, Jeff Trop, Bucknell University professor of geology, Mizuki Takahashi, professor of biology, Dabrina Dutcher, associate professor of chemistry and chemical engineering, Karen Castile, professor of chemistry and Chris Martine, professor of biology, took part in the first of several climate change and sustainability discussions scheduled for campus this week.
Photo by Matt Farrand/The Standard-Journal.

LEWISBURG — How can the world come to grips with global climate change?

There is no single answer. But the facts are being looked at from several points of view during events this week at Bucknell University. They include presentations by faculty from a number of departments, student works and an outside speaker.

Brief presentations and a question and answer session began the series Monday in the Elaine Langone Center Forum. It included experts in chemistry, chemical engineering, biology and geology.

“Our goal is to pull together from all parts of the campus to have common conversations about things,” said Jessica Newlin, Bucknell Center for Sustainability and the Environment interim executive director. “Our focus in pulling together different faculty experts from different departments is so they can explain how they understand climate change.”

Newlin said answers to the climate change riddle are elusive.

“I don’t think we have answers yet,” Newlin said. “They are all still trying to read the signs that the planet is giving and where are going from there.

Mizuki Takahashi, professor of biology, projected mass extinction of many species. There have been five previous mass extinctions, he noted. Climate change and population growth would be among the major contributors.

World population was 1.8 billion when his grandfather was born, he noted, then increased to 6.9 billion by 2011 and is at a current estimate of 7.6 billion. China, he said, was the only nation to ever officially limit family size and even that has been somewhat rolled back.

Zero population growth, Takahashi maintained, was preferable to increased death rates. When asked by a student for a step to counter the trend, Takahashi recommended taking an online pledge to limit family size.

Karen Castile, professor of chemistry, said there was evidence of climate change in the thermosphere, result of higher levels of greenhouse gases at the surface. The thermosphere, located from about 50 to 350 miles above the earth’s surface, is where the International Space Station and numerous satellites are placed.

Dabrina Dutcher, associate professor of chemistry and chemical engineering, said diesel ships emit so much exhaust that they form man-made clouds large enough to affect the weather.

Chris Martine, professor of biology, Jeff Trop, Craig Kochel and Rob Jacob, professors of geology, also contributed.

Other events upcoming include discussing the human dimension of climate change, 2:30 today at the Elaine Langone Center Forum, a community discussion of climate reality, 9 to 10:30 a.m. Wednesday at the Bertrand Library Traditional Reading Room, “The Mathematics of Uncertainty” with Dr. Graciela Chichilnisky at 7 p.m. Thursday at Trout Auditorium, and all-campus summary, 10 to 11 a.m. Friday at the Bertrand Library Traditional Reading room.