

The Ends of the World

Mass extinctions in the history of life

Course #	19FEW
Format:	Seminar
Moderator(s):	Dorothy Rosenthal
Co-Moderator:	John Armstrong
Date and Time:	Thursday, 10:00-Noon 10 weeks, starting September 26
Location:	Applewood in Amherst, Lower Meeting Room
Maximum number of participants:	18
Auditors accepted:	Yes, up to 2

Purpose: To learn about the mass extinctions that have taken place in the history of life on Earth during which more than half of all forms of life became extinct, and how those extinctions affected the evolution of life.

Description: Scientists use the term “mass extinction” for a rapid decrease in the biodiversity of life on Earth. Since complex life first evolved on Earth about a half billion years ago, scientists have identified eight extinctions that resulted in the loss of more than half of the species at that time. The best known of the mass extinctions is the one 66 million years ago that wiped out the dinosaurs, as well as many other forms of life on land and sea. At the same time, the event provided opportunities for other groups to emerge, including new species of fish, lizards, birds, mammals, and humans. In this seminar, we will examine these mass extinctions, what they tell us about the evolution of life, and what the future may hold for life on Earth.

Role of participants: Participants will select a topic from a list provided by the moderators and make a presentation on that topic to the members of the seminar. No special scientific background is required to participate in this seminar.

Resources: Participants will be asked to read *The Ends of the World: Volcanic Apocalypses, Lethal Oceans, and Our Quest to Understand Earth’s Past Extinctions* by Peter Brannen, published in 2007 and available in paperback. It is also available through the public library system.

About the Moderator: Dorothy Rosenthal has a background in biology and has moderated or co-moderated over two dozen seminars for 5CLIR. John Armstrong is a physicist who has moderated many 5CLIR seminars in science and technology.