

Meeting: 1003, Atlanta, Georgia, MAA CP M1, MAA Session on Environmental Mathematics and the Interdisciplinary

1003-M1-1220 **Frank Wattenberg*** (Frank.Wattenberg@usma.edu), MADN-MATH – United States Military Academy, 646 Swift Road, West Point, NY 10996. *Limits to Growth as a Venue for Learning Modeling*. Preliminary report.

In 1972 the book "Limits to Growth" used a computer model to investigate the consequences of unchecked growth on a finite planet. This year the same authors – Donella Meadows, Jorgen Randers, and Dennis Meadows – published a 30 year update revisiting the same questions with the benefit of 30 years of new data. This book is an excellent vehicle for teaching modeling and also for developing citizens and voters of the future who are able to deal with urgent public policy questions based on sound science and mathematics. This talk will discuss using this book for courses ranging from mathematics core courses to a capstone course for mathematics majors. (Received October 04, 2004)