## 1023-92-1305 **Glenn Ledder\*** (gledder@math.unl.edu), Department of Mathematics, 203 Avery Hall, University of Nebraska-Lincoln, Lincoln, NE 68588-0130. *Ecological Problems for Undergraduate Research.*

There are a lot of environmental problems that fall under the heading of theoretical ecology. There are also a lot of eager and talented undergraduates interested in doing a research project in mathematics. Undergraduate research projects in theoretical ecology offer students opportunities to work on research problems that interest them mathematically and appeal to their desire to work on something that matters. Many of these problems are accessible to students who have had no courses beyond differential equations and linear algebra. In this talk, I will share some of my experiences in mentoring undergraduate research in theoretical ecology. I'll discuss some of the mathematical work my students and I have done in this area and also discuss what I have learned about successful mentoring of undergraduate research. (Received September 25, 2006)