

1010-35-122

**Suzanne Lenhart\*** ([1lenhart@math.utk.edu](mailto:1lenhart@math.utk.edu)), University of Tennessee, Math Dept, Knoxville, TN 37996-1300. *Optimal Harvesting in a Fishery Model*. Preliminary report.

We find an optimal harvesting strategy in a fish population modeled in a parabolic setting with logistic type growth. The issue is to decide the existence and the location marine reserves - areas of no harvesting. We consider the need for reserves in maximizing harvesting yield. Joint work with H. R. Joshi and M. Neubert. (Received August 23, 2005)