

# 2004 Louisiana's Red Drum Escapement Rate Update

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Louisiana's red drum stock assessment was updated by incorporating recreational harvest estimates through 2002 and fishery independent trammel net samples through 2003. Recreational harvest estimates are typically available in May for the preceding year and was not yet available for this update. The assessment uses historic commercial and recreational harvest and length frequency data along with a red drum growth equation to develop a catch-at-age matrix. The catch-at-age matrix is used in a forward simulation anchored by a recruitment index (trammel net CPUE) to provide F (annual fishing mortality rate) at age. Escapement is calculated to age 5 by the following equation:

$$\text{Escapement (\%)} = \exp -(F_0 + F_1 + F_2 + F_3 + F_4)$$

The results are as follows:

