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*Decentralized Multinational Management of a Highly Migratory Marine Fish Stock.*

Many valuable harvested marine fish stocks, such as swordfish and many species of tuna, are classified as "highly migratory". That is, their range is vast, including thousands of miles of international waters and intersecting the "extended economic zones" of many coastal countries. Furthermore, the fishing fleets that harvest such a stock may represent many additional countries, often far distant from the range of the harvested fish stock.

It is well understood (i.e. the "tragedy of the common") that these multinational "stakeholders" must coordinate their harvest policies to avoid overharvesting and achieve long-term bioeconomic sustainability of the fishery.

Worldwide, multinational "regional fishery management commissions" (RFMCs) have been created within which these stakeholders negotiate the terms of their policy coordination and the mechanisms for achieving their agreed goals. Some of these commissions have been effective in carrying out these responsibilities, but too many have not.

Here I describe a multidisciplinary study, based on game theoretic analysis, of the operation of such a RFMC-managed fishery, comparing the effectiveness of alternative management policies and mechanisms, especially in an environment of uncertain and incomplete information. (Received September 09, 2008)