



Harvest Strategies

The next phase of fisheries management

Traditional fisheries management is a two-step process. First, scientists conduct stock assessments, and then fishery managers regulate measures, such as quotas or time-area closures, to make sure that the resource—the targeted fish—is being used optimally and sustainably. While this seems simple enough, the current approach is anything but.

With imperfect knowledge about fish biology, incomplete fishery data, natural variability, and the inherent challenge in using models to count fish in a population, stock assessments are frequently fraught with uncertainty (see sidebar). That means the results can vary considerably from one assessment to the next. Scientists are asked to provide advice to managers based on these assessments, but given the uncertainties, the advice can be vague or include a wide range of management options.

Most large fishery management bodies have committed to following scientific advice and the precautionary approach, but without a clear framework for making management decisions, negotiations often become contentious, time-consuming, and expensive.

But an alternative approach, known as “harvest strategies” or “management procedures,” is emerging as the next innovation in fisheries management. Incorporating existing tools such as monitoring programs and reference points, harvest strategies bring all the pieces together and provide managers with an improved lens through which to determine the best path forward for the fish and the fishery.