

Tips for acoustic scientists on exploiting the gold mine: integrated ecosystem assessments.

Mark Dickey-Collas, ICES, Copenhagen.

In this presentation I shall look at what integrated ecosystem assessment (IEA) means to different people. I will show that IEAs make assessments more complex and multi-layered. Understanding the impacts of human pressures on the state of the ecosystem is central to IEA. The challenge for us biologists, ecologists and physicists is that we must now engage with societal governance issues like never before. In the IEA system, science is used to describe and explore the panorama of the ecosystem for decision makers. There is no right answer. When working in the IEA system we must learn to synthesise information of varying credibilities and qualities. Acoustic techniques have many characteristics that are of great value to IEA- they are non-destructive, provide spatial information and provide huge amounts of real time 3D data at varying resolutions. These data are underutilised and deserve more attention. But data are not knowledge; we cannot manage on the basis of data streams only. So the challenge to acoustic scientists is to turn the data gold mine into a knowledge goldmine.

