

Discovery of the Arbroath, Montrose and Forties fields initiated intensive exploration of the Tertiary deep-marine play in the North Sea region. Subsequent discoveries demonstrated the success of this play and the geological diversity of the depositional systems. The play is now mature and in many areas the remaining exploration potential is likely to be dominated by small, subtle traps with a major component of stratigraphic trapping. Economically marginal discoveries need an in-depth understanding of subsurface uncertainty to mitigate risk with limited appraisal wells. Mature fields require detailed geological understanding in the search for the remaining oil. This volume focuses on the regional depositional setting of these deep-marine systems, providing a stratigraphic and palaeogeographical context for exploration, and development case histories that outline the challenges of producing from these reservoirs. The fields are arranged around the production life cycle, describing the changing needs of geological models as the flow of static and dynamic data refines geological understanding and defines the nature of new opportunities as fields mature.