

GENE FLOW AMONG EUROPEAN POPULATIONS OF DOVER SOLE (*SOLEA SOLEA*, TELEOSTEI)

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The Dover sole (*Solea solea*) is a commercially important flatfish inhabiting the continental flat of the warm-temperate parts of the northeast Atlantic and the Mediterranean Sea. Spawning takes place in spring at several spawning grounds along the European and African coast. Eggs and larvae spend several weeks in the water column before settling and moving to the nursery grounds. Although marine organisms have a high potential for dispersal, physical and behavioural factors often limit dispersal and facilitate the maintenance of a population structure. The question rises to what degree gene flow occurs between different spawning populations of Dover sole. This species might show some kind of homing behaviour and thus structuring of populations. In order to evaluate genetic discreteness in Sole stocks, six microsatellite loci were genotyped. Microsatellite diversity is high. Neighbouring samples differ slightly from each other and follow a pattern of isolation by distance. Future research will focus on southern North Sea populations.