P23.

The Fish Assemblage of the Intertidal Salt Marsh Creeks in North Bull Island, Dublin Bay: Seasonal Changes.

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North Bull Island, an island of recent origin in Dublin Bay, has been designated as a Biosphere Reserve on the basis of its waterfowl, sand dunes, mudflats and salt marsh.

This project aims to describe the fish populations living within the salt marsh creeks and to determine the seasonal distribution of the species in this habitat. To do so, two salt marsh creeks were sampled from June 2000 till May 2002, to provide a 2-year cycle. A trawl net was used. The samples were collected almost every month for the first year and quarterly for the second year to assess the seasonal changes within the fish community. Sampling also included both ebb and flood phases, so as to reduce any sampling bias to a minimum. Water temperature and salinity were measured *in situ* with a ST probe. Water samples were also taken for SPM and Chlorophyll-a determination.

Ten fish species were found in the salt marsh creeks. The fish assemblage was dominated by the common goby *Pomatoschistus microps*, but juveniles of exploited and threatened species such as the bass, *Dicentrarchus labrax* and the catadromous *Anguilla anguilla* were also hosted. Four species (*Pomatoschistus microps*, *Gasterosteus aculeatus*, *Chelon labrosus* and *Platichthys flesus*) contributed almost 99% of all individuals sampled. A marked seasonal pattern was found, for the number of species, the number of individuals, the biomass, as well as for biodiversity [Shannon-Wiener species diversity index (H') & Shannon-Wiener Evenness Proportion (SEP)].

The presence of juveniles of all fish species in the creeks supports the premise that fish use this area as a nursery.