

4. Population dynamics of elasmobranchs in the North Sea

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Intensive fishing pressure on many commercial species has led to declines in catches and diminishing stocks. Elasmobranch species (sharks, skates and rays) are known for their laggard life-history traits (low fecundity and late maturity) which increases their vulnerability to fishing activities. The obligatory movement to sustainable fisheries management is restrained by the lack of knowledge of population size, distribution and life history information in a number of elasmobranch species. This project aims to improve our current understanding of population dynamics of blonde ray, *Raja brachyura*, spotted ray, *Raja montagui*, common stingray, *Dasyatis pastinaca*, and tope, *Galeorhinus galeus*, in the North Sea. The deployment of 'pop-off' data storage tags (pDSTs) and 'pop-up' satellite archival tags (PSATs) will provide new insights into species distribution, habitat use and migration. New data regarding population dynamics of these elasmobranchs will improve our current understanding and result in more effective fisheries management to safeguard viable elasmobranch populations.