Development of a biodiversity information system: a case study

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The Atlantic Reference Centre (ARC), a joint operation established in 1984 between the Huntsman Marine Science Centre and the Department of Fisheries and Oceans, houses unique, extensive collections of marine life. These collections -are well known both nationally and internationally. Presently, the catalogued and computerized ARC collections hold a total of 125,222 lots of invertebrate and fish specimens ranging from freshwater, estuary, and marine environments. The process of developing a Canadian Atlantic Biodiversity Information System based on these collections has spanned decades of trial and error. In the beginning, the collections of the parent organizations were in various stages of computerization. Various database restructuring has occurred over time, and in recent years the museum-dedicated MUSE software was adopted, followed by its successor SPECIFY. Biodiversity funding programs in Canada and the US together with various government internships and summer employment programs have allowed completion of the database. With the prospect of future funding in GeoConnections, the database will be transformed into an accessible, online version. Ultimately, the ARC will be linked to complementary biodiversity initiatives, both nationally and internationally, as well as to environmental data and tools to analyse these records. This will provide a comprehensive and easily accessible biodiversity information system, allowing researchers and managers to better protect the natural environment and promote sustainable use of natural resources.