

## **The BioGoMx Database as a tool for conservation**

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The Harte Research Institute sponsored a comprehensive biotic inventory of the Gulf of Mexico that was published as a book (Felder and Camp, 2009). The inventory was the fruit of the collaboration of 140 taxonomists from 15 countries, who compiled a list of 15,419 species, including 2,455 mollusks. The book was then converted into an online database, the Biodiversity of the Gulf of Mexico (BioGoMx) database, which was released in early 2011 on GulfBase.org. Besides mapping the species richness based on a query, the results can be downloaded for further analysis. Each species has its own page, where there is a map of its distribution in the GoMx, in addition to information about its habitat, ecology, bathymetry, complete taxonomy, key references, and links directly to the species pages in external resources such as the Ocean Biogeographic Information System (OBIS), World Registry of Marine Species (WoRMS) and Encyclopedia of Life (EOL).

Both the book and database serve as a benchmark of the biodiversity that was recorded in the Gulf of Mexico (GoMx) prior to the Deepwater Horizon (DWH) oil spill in 2010. Unlike the book, the database can easily perform queries across taxa and map biodiversity patterns in the GoMx. It is expected that the ongoing research effort on the impacts of the DWH oil spill will generate large amounts of biodiversity data, including new species discoveries, new records, range extensions and conservation status. The new data will be incorporated into BioGoMx as they become available.

Although spatial resolution in BioGoMx is coarse, it may still be a useful tool for conservation, identifying gaps and areas that deserve further research efforts or protection.