

The role of the Shatt al-Arab River in the conservation of biodiversity in the northwest of the Gulf and all over Gulf as well

Zooplankton play very important role in the food webs of NW Arabian Gulf in general and Shatt Al-Arab delta which comprise the shallow region of Khor Abdulla and Khor Al-Zubair canal extending to lower parts of Shatt Al-Arab River and Khor Al-Zubair canal in particular (Fig.1). These areas of Iraqi marine, specially coastal water of Khor Abdulla On the opposite side of the Kuwaiti Bubiyan island and brackish environment considered as incubation and hatchery areas for many trade fishes and other economic marine and brackish water crustaceans and mollusks, as a result of its richness in food supply to the food chain of the whole ecological system in this region. Historically Shatt Arab River have played an important source in providing NW Arabian Gulf in high amount of nutrients with the fresh water outflow from Tigris and Euphrates from Mesopotamia, so in addition to the nutrient supply, Shatt Al-Arab have an important role in decreasing a high salinity of this region by dilution of fresh water outflow, where without this dilution, salinity will elevate in the delta region as well as for all the Gulf region, as we notice recently the invasion of saline front towards the lower parts of Shatt Al-Arab River. Now the problem very serious for the whole Gulf and all the Arabian countries to cooperate to find solutions to this problem, unless the renewal resources of the whole Gulf very endangered and threatened by the elevation of salinity as a result of semi-closed water body of the gulf, also its location in subtropical region of less rain fall in addition to the shallowness and the high rate of evaporation at most of the year. In spite of the effect of all these factors Shatt Arab played as a balancing water body for the entire region when the outflow of fresh water were more than 1200 m³/sec. in seventieth years from the last century and now only 75m³/sec. So now the responsibility related to all the adjacent countries of the Arabian Gulf for returning the Shatt Al-Arab fresh water outflow to dilute the high salinity marine water of the Arabian Gulf, unless the Gulf will be convert to dead Gulf ecologically by time as Dead Sea in Jordan Hashimia Kingdom.

So according what we refer to in above, and because of the Zooplankton of Shatt Al-Arab delta region poorly studied except for some groups of zooplankton by post-graduate students and some uncompleted studies by MSC researcher staff, now it is very important to start with a large project comprise all groups of zooplankton including the recent environmental varieties as well as to updated the existent scientific information as a comparative studies.

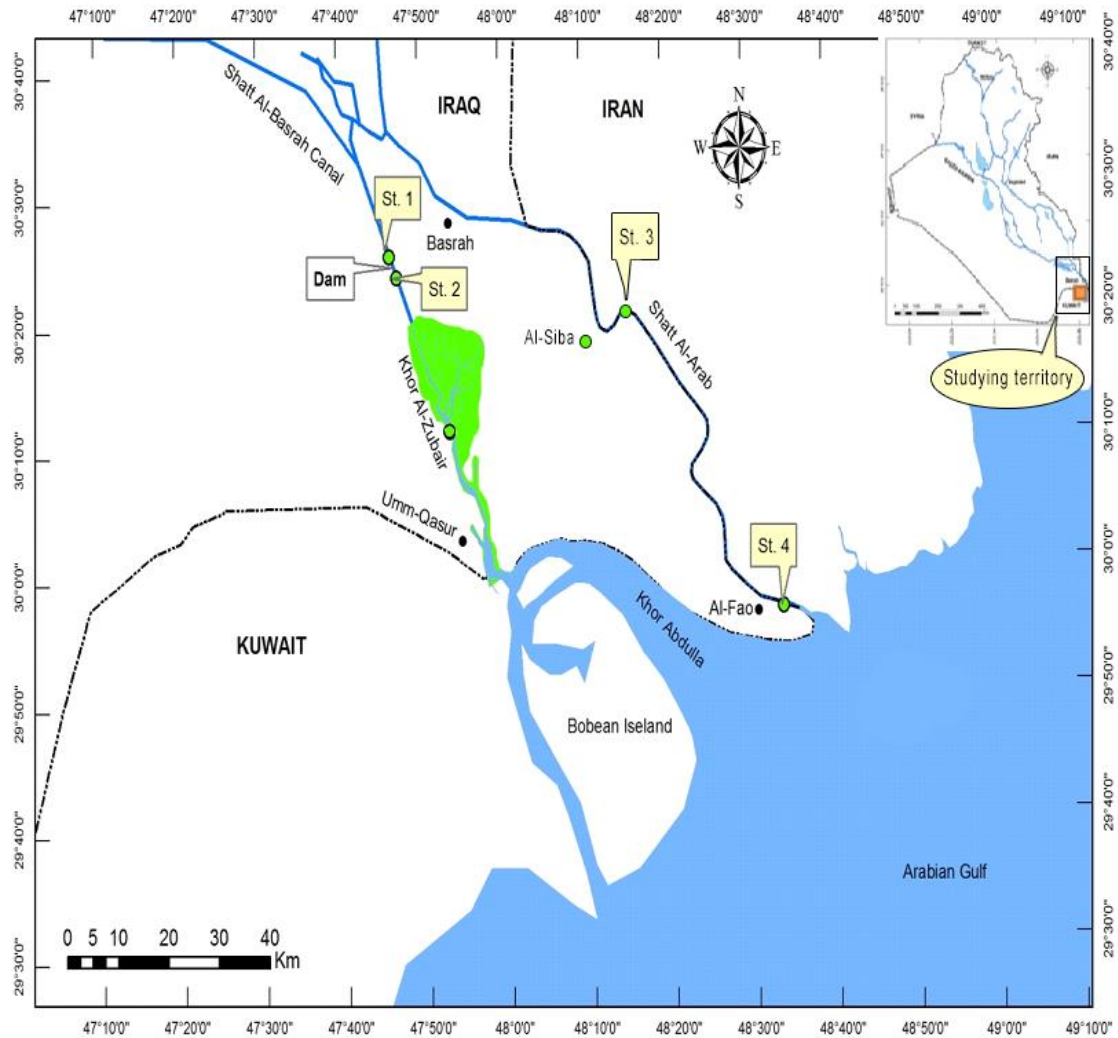


Fig. 1 - Map of biologically and ecologically significant areas