## I. INTRODUCTION

Lake Qarun is a saline water lake among the inland water lakes of Egypt .

Herodotes , the ancient historian , reported that Lake Qarun was during the time of the Ancient Egyptian King Moris (1500 B.C.) a big reservoir for Nile water . It had an area of about 450 miles (724 $Km^2$ ) and a mean depth of nearly 50 fathoms (90 meters ) and was freely connected with the river Nile and was used for the storage of Nile water at the time of flood .

According to Ball (1939) , in early Pleistocene time, a depression was formed by wind erosion in the area west of the Nile, where Fayoum Province lies at present time . The depression remained disconnected with the Nile Valley until the latter part of the early Palaeolithic period when the Nile water during flood period rushed into the depression through the Hawara Channel (now Bahr Youssef ). The repeated flow of the Nile water into the depression formed a natural reservoir known as Lake Mories (Fig. 1 ) . The lake was regulated by the flood water of the Nile until the 20th century B.C. Then , one of the engineer kings of the Twelfth Dynasty , probably Amenmhat I , widened and deepened the channel connecting the Nile and Fayoum depression , thus the volume of water passing annually into it was increased .

Based upon geological and archeological evidences , Caton-Thomposon and Gardiner (1929) concluded that a lake called the Neolithic was present at a level of about 59 meter above the present lake level , before the main Fayoum depression was established . They assumed that , this falling of water in its final stages gave rise to lake Mories at not more than 46 meters above the present level of lake Qarun (i.e. nearly at the sea level ) ( Fig. 1 ) .

Ball (1939) speculated the way in which lake Mories was transformed to lake Qarun , through that lake Mories become disconnected from the Nile which caused the lake surface to fall below the level of the Nile . Also , excessive water evaporation caused further lowering of the lake surface level and thus reaching at Lake Qarun level.

Accordingly , through the centuries , the water gradually reached the low level of the depression at which it is now and large areas of fertile lands were left uncovered , and the lake became a reservoir for agricultural drainage water of El-Fayoum Province .

A volume of water nearly equal that of the influx of drainage water is lost annually from the lake through evaporation while the dissolved salts are left in the water of the lake (Ball,1939) . As a result , the salinity of water of lake Qarun is increasing continuously as time passes . As a result of increasing salinity , fauna of the lake which are fresh water origin have gradually