Geophysical Research Abstracts Vol. 16, EGU2014-4342, 2014 EGU General Assembly 2014 © Author(s) 2014. CC Attribution 3.0 License.



Sebkhet Karkura: an example of a semi-arid Mediterranean wetland rich in biotic sediments

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Habitat wetlands in Libya may be grouped into several distinct varieties, according to climate, water supply, soils, and biotic diversity. They include coastal Sebkhas (salt marshes), karst lakes, Wadi estuaries, below sea-level desert lakes, and balat flats (playas) where the soil is saturated part of some rainy seasons forming a kind of ephemeral, shallow lakes in pre-desert areas. The most prominent, however, are the extensive coastal salt marshes. These have either organic or inorganic soils, or both, depending on their location and climate conditions. Soils common to most coastal wetlands are composed largely of inorganic material in the form of sand, silt, or clay; in addition to organic material formed by decayed plants and various biotic sediments.

For the purpose of the present poster, however, Sebkhet Karkura, an extensive stretch of about 50 km square (20 km long by an average width of 2.5 km) of Sebkha/wetland formation, located about 80 km southwest of Benghazi, will serve as an example of coastal Sebkhas. Here, the sediments are consisting mostly of dark earth brown sandy silt with salt and gypsum. Pure-salt deposits are normally extracted for salt processing in the area. Loams, silt, gravel, and calcareous sand are also present. At the surface of the wetland, calcarenites are fairly common but sand-beach and sand-dunes are representing the major sediments along the coastal wetland area. The recent biotal components of these sediments are described and a number of recent small-sized benthic seashells, belonging to phylum mollusca, have been investigated along the seaside of Sabkhet Karkura and several species have been identified. It is worth noting that Sebkhet Karkura, as well as other similar coastal wetlands, currently face serious threats due to human action, especially over exploitation of their resources, urban encroachments, dredging, and solid waste dumping. Increased awareness on the part of the general public of wetland ecological values and functions is essential as a preventive measure against such threats.