

Fulbright Hays GPA Senegal Week Two

July 8, 2017

The Mangroves of Senegal

Like some people, I always associated mangroves with fruit orchards. Don't ask me why!! However, the excursion on Lake Saloum during our visit to Toubacouta, provided a great lesson in ecology. I learned not only what a mangrove is but also how important mangrove forests are to ecosystems. Mangroves are small evergreen trees that actually take root and grow in the salty or brackish waters of coastal areas, and



in the case of Senegal, tropical waters. In some parts of the world, these trees can grow well over a hundred feet high. Their trunk and leaves are above water, while the root systems are under water. On our return from Sippo island, the low tide permitted a closer look at the massive roots of the mangroves.

According to the American Museum of Natural History¹, there are 80 species of mangroves that over millennia have adapted to diverse land and water sources. In most cases, the mangroves filter

out salt from the water that passes through its roots and store fresh water in their leaves. Through cell-sized pores in the roots that stick above water, mangroves take in oxygen. Natural bridges between freshwater bodies and the salt water of oceans, mangroves protect shorelines from erosion and storms; provide nutrients and a rich food source for a number of sea organisms, birds, and other species; and serve as a temporary or permanent habitat for fish, shellfish, hyenas, and monkeys. The mangroves on this Senegalese delta, where the Sine and Saloum Rivers converge on the Atlantic Ocean, work overtime.

A spawning area for many fish species, mangroves are important to the livelihoods of many of Senegal's fishing villages. Maneuvering the boat for a closer look at the mangrove roots, many covered with clusters of oysters, the tour guide describes how the local people harvest the oysters. The Serer women are known to participate in these harvests, going out in small fishing boats and sometimes staying out in the mangroves for three to four days. More recently, women have learned through several sustainable development initiatives how to farm oysters to protect the mangroves. Since bees love the nectar and pollen of mangroves, beekeeping has also become profitable.



At the end of the tour, I return with a greater appreciation of the mangroves and the threat that these ecosystems continue to face due to drought, deforestation, commercial development, and other contemporary challenges to our environment.

¹ See "Mangroves: The Roots of the Sea," American Museum of Natural History, New York.

<http://www.amnh.org/explore/science-bulletins/bio/documentaries/mangroves-the-roots-of-the-sea/what-s-a-mangrove-and-how-does-it-work/>