

Visit to the Carlos Botelho (Lobo-Broa Reservoir) and its watershed

Lobo/Broa reservoir research was established in 1971 as a model of limnological and ecological research in aquatic ecosystems in Brazil. During the visit, participants will be presented to data on the ecological dynamics of the reservoir, the climatological and hydrological interactions, limnological factors and the responses of the aquatic biota to the forcing functions mainly of precipitation and wind. Ecosystem services will be described and management issues and technologies, as well as processes developed to control eutrophication will be discussed.

Fig. 1: The location of Lobo/Broa watershed and reservoir

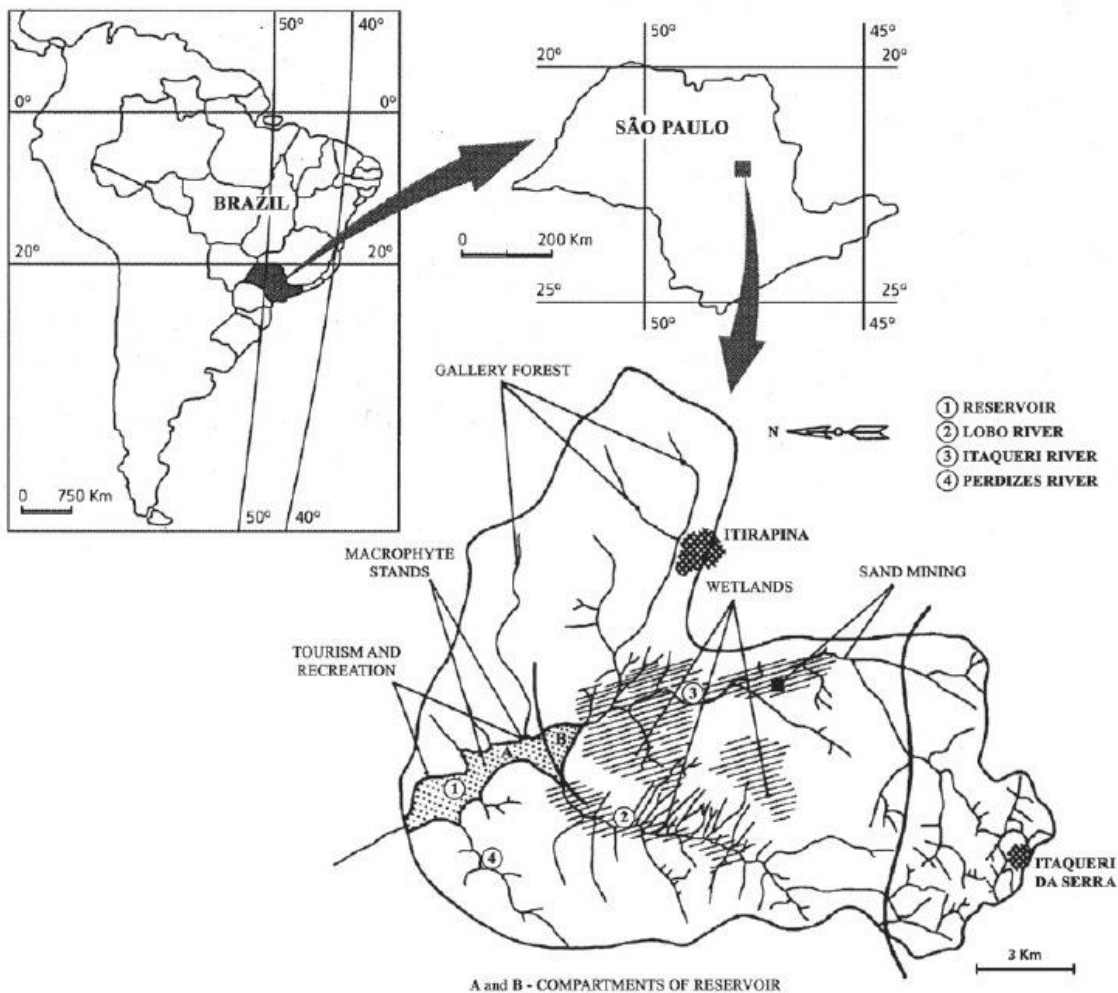


Table 1: Morphometric characteristics of the Lobo/Broa reservoir

Latitude	22°15'S
Longitude	47°49'W
Maximum Length	7 km
Maximum width	2 km
Average width	0.9 km
Maximum depth	12.0 m
Average depth	3.2 m
Surface area	6.8 km ²
Perimeter	21 km
Volume	22 x 10 ⁶ m ³
Area of watershed	230 km ²
Maximum altitude	940 km
Average altitude	770 km
Minimum altitude	680 km

Fig. 2: Broa reservoir showing sampling stations, morphometry, limits of macrophytes, subdivisions, and direction of prevailing winds

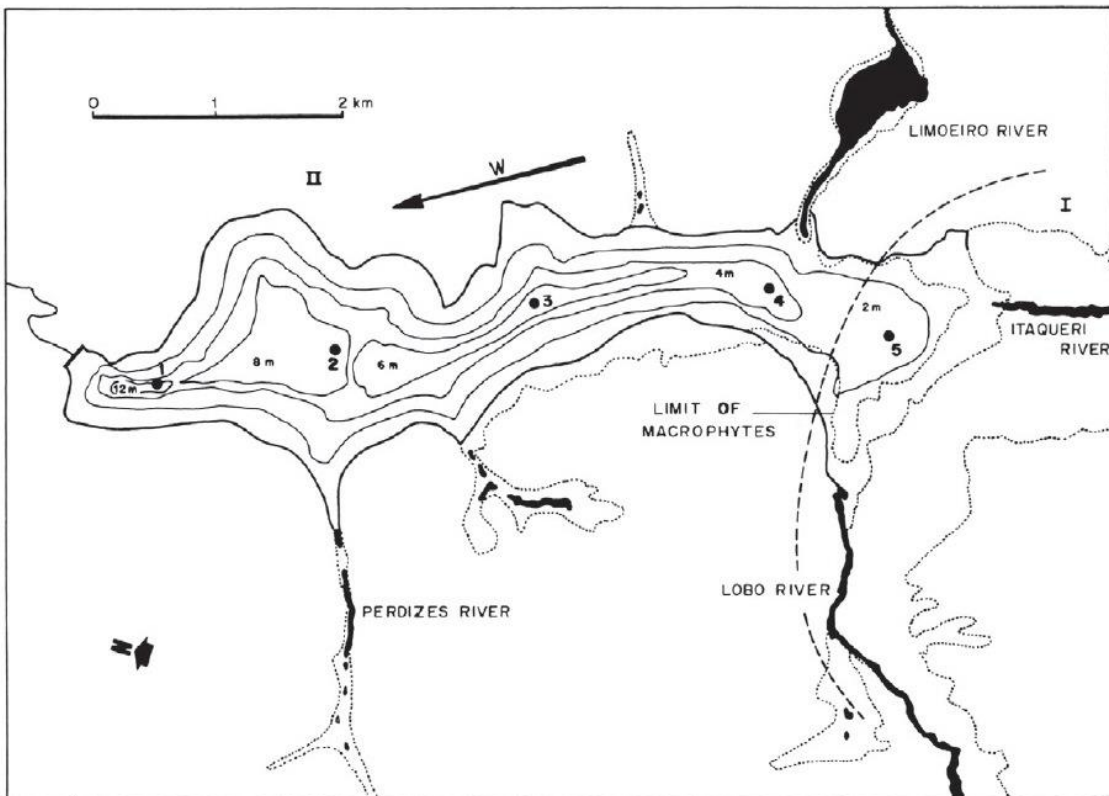


Fig. 3: Soils of the Lobo/Broa watershed

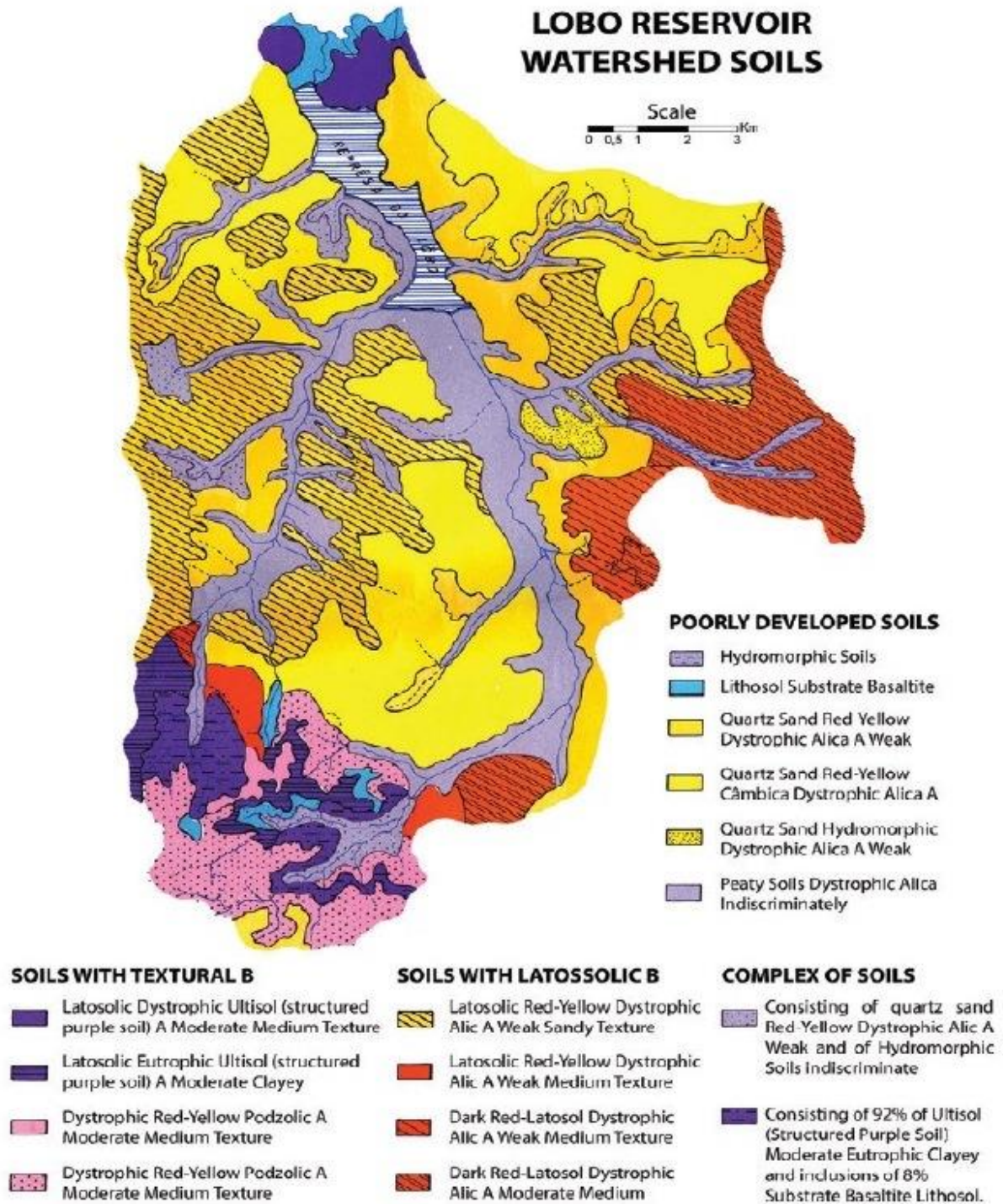




Fig. 4: The reservoir and its watershed



Fig. 5: An overview of the reservoir

Figure 6: Direct and indirect drivers of change in the Lobo Reservoir ecosystem services (Adapted from the Millennium Ecosystem Assessment, 2005)

