Species composition and habitat preferences of Hydrophilidae (Coleoptera) occurring in Isparta province of Turkey were determined in this study. Field surveys were performed between April-November during 2009 and 2010. Totally, 33 species and 2 subspecies belonging to 14 genera were recorded from the study area. According to the obtained data, 28 of the species were not reported from Isparta province previously. Specimens were collected from various kinds of stagnant and shallow freshwaters, brackish water ponds and wet habitats close to the water. Information regarding to relative abundance and habitat preferences of each beetle were given. General comments on habitat choices of the genera were provided, as well as some distributional notes on some species. Additionally, male genitalia photos of 29 species were presented.