In this study we investigated the factors effecting nest-site choice of white-headed ducks (*Oxyura leucocephala*) at three wetlands (Lake Erçek, Lake Arin and Lake Norşin) in the Van Lake Basin, during 2007-2010. Selecting a nest site is an important decision in the annual cycle of ducks. This species preferred to breed in the habitats having tall and dense reeds (*Phragmites* spp.) and cattails (*Typha* spp.), far from the shore and human effects which are sheltered from wind and precipitation. It was observed that 19 old nests of coots (*Fulica atra*) were repaired by male and female ducks throughout the study period. The most important factors found in the nest site selection by white-headed duck were reed height, elevation of nest from water, distance from shore and open lake. Nest preference was 51% affected by reed height, 48% by elevation from water, 55% by distance from shore and 42% by distance from open lake. Norşin Lake, where breeding success of white-headed duck was greatest, was determined as most favourable nesting site in Van Lake Basin because of the fact that nests were far away from human activity. Such informations can be effectively used for the management and conservation of white-headed duck and other waterfowls breeding in the area.