Mekong giant catfish Pangasianodon gigas is endemic to Mekong River basin and endangered species. It is urgently necessary to learn more about the movement pattern of the catfish to conserve. We started the Mekong giant Catfish Tracking Project (MCTP) in 2001, which is ecological research cooperated with Thai government. The horizontal and vertical movements of the catfish were measured by ultrasonic depth-sensitive transmitters in the reservoir. Temperature of both the surface layer and bottom, and depth-temperature profile were surveyed using depth-temperature data loggers. The catfish appeared to favor relatively deeper areas horizontally and spent the majority of their time above the thermocline vertically. The catfish exhibited the ascent to the surface at dusk and the descent to the thermocline at dawn in the reservoir. Diel movement patterns of the catfish may be related to the foraging behavior.