Abstract

Big catfish *Silurus biwaensis* is one of the endemic species in the Lake Biwa. However, there is no enough biological information to conserve the big catfish since it is unpalatable so that it is not an object of commercial fisheries in the Lake Biwa. The migration behaviour of the catfish was examined by means of the ultrasonic biotelemetry system to clarify the migration path. Two tracking studies were carried out. One was long period tracking throughout six months from May to December 1995, and another was a 24-hour continuous study. Ultrasonic transmitters were attached to all catfish samples before they were released. In the long period studies, six individuals were released at releasing points before spawning season and five individuals were released to the spawning ground in the spawning season. Only one fish was found in the spawning ground and the others were found around the released points in the former study. All the five individuals were found in their habitat in the latter study. In addition, in the 24-hour study, an individual was released in the midnight. It was settled in the shallow water near the spawning ground in the daytime. These results suggested that the big catfish may migrate from releasing points to the spawning ground and it is the nocturnal habit. The ultrasonic biotelemetry is a powerful technique to investigate fish migration.