1. INTRODUCTION

At least 35 alien fish species have been introduced in the Iberian Peninsula in the last century and although not all of them prospered (Elvira and Almodovar; Ribeiro et al. 2007) most are now widespread in this area. To evaluate the extent of this problem in a large Mediterranean basin and as a previous step to determine the impact of non native fish on the ecological status of its watercourses, we have studied the actual distribution of exotic fish species in the Guadalquivir River Basin (S Spain). 

3. RESULTS

To evaluate the state of invasion by introduced species frequency distribution and % average CPUE (n/100m² h for rivers and n/h for reservoirs) was calculated. A total of 9 exotic fish species were captured in this work (Table 1), including three species of recent distribution: Alburnus alburnus, Gobio lozanoi and Phoxinus phoxinus. These three species are usually related to systems with moderate current and they present a restricted distribution within the basin, probably as a consequence of their recent introduction. Some species as the pumpkinseed sunfish (Lepomis gibbosus), the mosquitofish (Gambusia holbrooki), the common carp (Cyprinus carpio) or the largemouth bass (Micropterus salmoides) have become common components of the fish community, not only in reservoirs but also in lotic systems. All, except mosquitofish, tended to occupy more frequently lentic systems than lotic, each covering more than 50% of the total lentic systems sampled and 4-11% of lotic stretches (Table 1).

2. DATA ANALYSIS

240 sites and 35 reservoirs were sampled for fish on spring 2008. The fieldwork was carried out by electrofishing in rivers stretches and passive capture methods (trammel-nets, fyke-nets and minnow-traps) in reservoirs. Gambusia holbrooki was the most abundant exotic species in lotic systems (36% average CPUE) while Lepomis gibbosus was dominant in reservoirs.

The left area of drainage basin is more affected by exotic species. In this area the agriculture is very intensive (channeling of rivers courses and water extraction) and many towns dump directly residual water (pollution of the water)