C. Sousa-Santos et al.: Endangered Iberian cobitid

THREATENED FISHES OF THE WORLD: *Cobitis vettonica* Doadrio & Perdices, 1997 (Cobitidae)

Carla Sousa-Santos*1, Joana Isabel Robalo1, Ana Pereira1, Ignacio Doadrio2

1 Eco-Ethology Research Unit, ISPA University Institute. Rua Jardim do Tabaco 34, 1149-041 Lisbon, Portugal
2 Museo Nacional de Ciencias Naturales, CSIC, José Gutiérrez Abascal 2, 28006 Madrid, Spain
*Corresponding author, E-mail: carla.santos@ispa.pt

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COMMON NAME
Vettonian spined-loach – Fig 1.

CONSERVATION STATUS
Endangered according to the IUCN guidelines (Crivelli, 2006).

IDENTIFICATION
This small cobitid (maximum 10 cm in total length) is distinguishable from the phylogenetically close (*Doadrio and Perdices, 2005*) *Cobitis paludica* and *Cobitis maroccana* by having shorter barbels and fins, seven branched rays on the dorsal fin and posterior lamina of the cleithrum not round (nearly making a right angle) (Doadrio and Perdices, 1997). The colour pattern is very characteristic with four rows of dark pigmented blotches along the sides. The fourth row (the more ventral one) has 9-13 rectangular blotches transversally elongated, reaching ventral pigmentation. In males, blotches are fused in a marked dark stripe wider than in other *Cobitis* species.

Fig 1. *Cobitis vettonica* (Photo credit: Ignacio Doadrio)

SAŽETAK
*Cobitis vettonica* je endemski cobitida ribljak iz Iberijskog poluotoka s opredijeljenom oblasti razmnoževanja vod v rečeh Alagón in Eljas (Paščimni tributar v Taguski dolini) in reči Águeda (Douro). Zmogljivost je zagrožena z poljupito, uščenjem prostočsta od zemljevida in gradnjo vodnih zidov, kot tudi prenos eksotičnih vrst.

DISTRIBUTION
Endemski iz tributarjev Alagón in Eljas (Paščimni tributar v Taguski dolini) in reči Águeda (Douro).

ABUNDANCE

HABITAT AND ECOLOGY
Zgodovinsko podlage je tekoča, vendar je najbolj pravilna *Cobitis paludica* (Doadrio, 2011), ki je prikazana, da so se dve poglavni podvrsti *C. vettonica* različito (Doadrio in Perdices, 2005). *C. vettonica* ima čudnega oblikovanje z vrečko na spodnji strani hrana s usnjevalcem ter razperom na spodnji strani delom, ki je odpr. Doadrio in Perdices (1997).

REPRODUCTION
Spavaije med aprilom in junijom. Markirana zneskovna različica: muški so manjši od žensk in imajo večjo razdaljo med odprtskih kril, veča parna štirje razpršenih štirje kot vrečke (Doadrio in Perdices, 1997).

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THREATS

Introduction of exotic fish species and crayfish Procambarus clarkii, pollution, water abstraction for agriculture, habitat destruction by sediment removal and construction of dams. Another threat to this species is the low water level in the upper sections of some tributaries of the Álagon River (such as the Árrago River) due to the diversion of water into a treating station located downstream. In the summer when the population increases, this situation is aggravated due to the need of treatment of higher sewage volumes.

CONSERVATION RECOMMENDATIONS

Water quality improvement namely by adequate treatment of urban, agricultural and industrial wastes. Being a filter feeder, it is crucial that sediment beds are available to allow for adequate feeding, reproduction and burrowing. Particularly in the Alagón River, the occurrence of C. vettonica should be considered in environmental impact studies and the legal removal of sediments should only be allowed in contaminated river stretches from where the species is currently absent. Regarding exotic species, for some areas of the Alagón river basin (especially in tributaries such as the Árrago River), their dispersal might be controlled by the selective removal of individuals and, in the case of Lepomis gibbosus and Micropterus salmoides, by the destruction of nests. Protected areas should also be created in river stretches where the species is currently abundant, as in the upper sections of the rivers Hurdano, Ladrillar, Árrago, Ángeles, Acebo and Gata. Although illegal, fishing is traditionally consented and may be locally intense (used for human consumption and as bait) but should be prohibited at least in protected areas.

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UGROŽENE VRSTE RIBA U SVIJETU: Cobitis vettonica Doadrio & Perdices, 1997 (Cobitidae)

Sažetak

Cobitis vettonica je endemska vrsta s Iberijskog poluotoka ograničene distribucije na rijeku Águeda (sliv rijeke Douro) te rijeke Alagón i Eljas (sliv rijeke Tagus). Vrsta je ugrožena zbog zagadenja, destrukcije staništa iskorištavanjem sedimenta, gradnjom brana i unošenjem egzotičnih vrsta.

Ključne riječi: Cobitis vettonica, endemske vrste, zaštita

REFERENCES