

# Guadiana nase (*Pseudochondrostoma willkommii*) reproduction in still water

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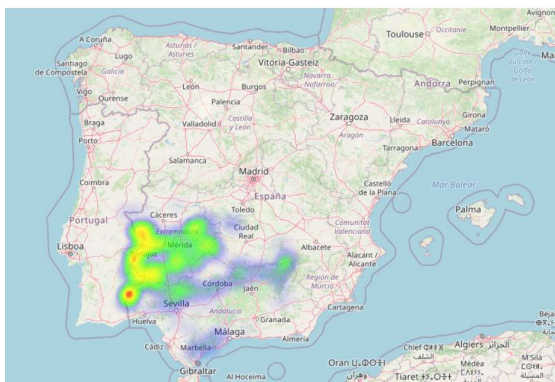
Consejería de Agricultura, Desarrollo Rural,  
Población y Territorio

# Guadiana nase (*Pseudochondrostoma willkommii*)



Conservation / Angling

“Adapted to living” in still waters



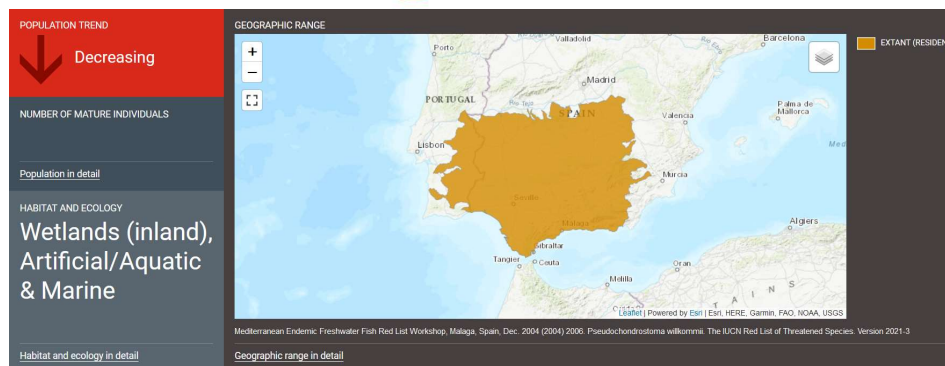
## *Pseudochondrostoma willkommii*

### ABSTRACT

Guadian nase *Pseudochondrostoma willkommii* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2006. *Pseudochondrostoma willkommii* is listed as Vulnerable under criteria A3ce+4ce.

### THE RED LIST ASSESSMENT

Crivelli, A.J. 2006. *Pseudochondrostoma willkommii*. *The IUCN Red List of Threatened Species* 2006: e.T4785A11094178. ...



Proposed **VULNERABLE** Spanish Red Data Book

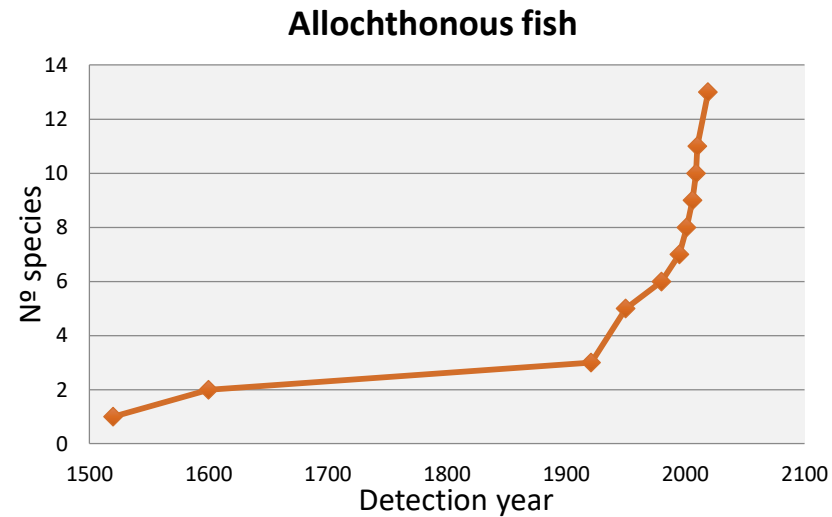


# Guadiana nase (*Pseudochondrostoma willkommii*)

Proposed **VULNERABLE**  
Spanish Red Data Book



- Introduction and spread of allochthonous fishes
- Habitat degradation and fragmentation



# Guadiana nase: Reproduction



Natural reproduction area

Potadromous species

Spawns in April

In shallow running waters with coarse substratum

“Adapted to living” in still waters (but no reproduction)

**OBJETIVE:** Natural reproduction in captivity  
(no hormone treatment)

**POSSIBLE?**



# Guadiana nase reproduction: Methodology



Natural reproduction area



Captured by electrofishing



Pond (30x4x0,7m)



Water inlet



Breeders



Substrate & Refuge

Reproduction pond



# Guadiana nase reproduction: Results 1

## Successful spawning in 1st reproduction season!

- Reproduction 2017-2022
- Selection of coarse substratum
- No current provided (still water)
- Started in March and continued in April-May
- At least 2 bathes of fingerings
- Juvenile production very variable (1,78-90,39 fish/m<sup>2</sup>), not correlated to initial N<sup>o</sup> spawners



## Guadiana nase reproduction: Results 2

- The sooner we introduce spawners the better (acclimatization + complex habitat)
- Group spawning?
- Spawners gathered in group ( $>0,5\text{fish}/\text{m}^2$ ), except in the group with the lowest density ( $0,25\text{fish}/\text{m}^2$ )
- Agonistic behaviour whith low density
- Agonistic behaviour did not affect reproduction success



Higer density ( $>0,5\text{ fish}/\text{m}^2$ )



Low density ( $0,25\text{fish}/\text{m}^2$ )

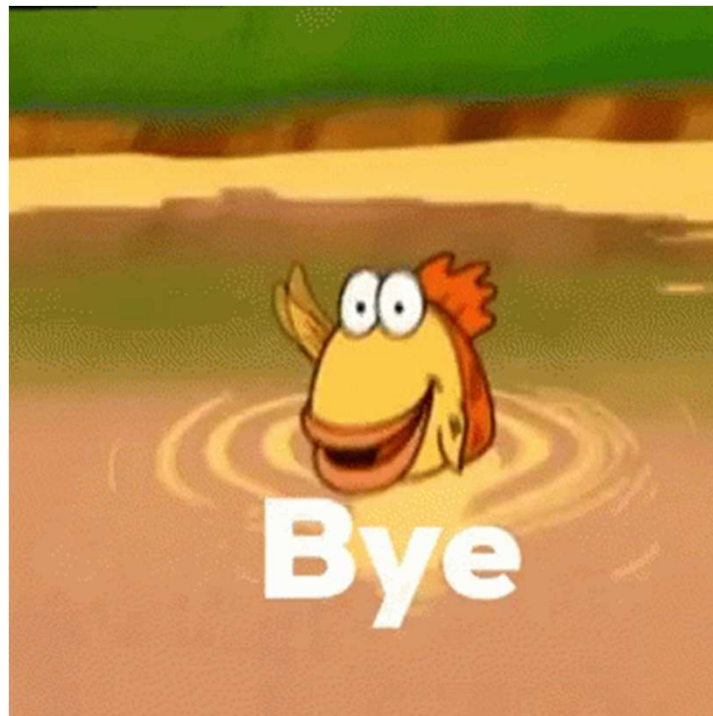


# Guadiana nase reproduction: Conclusions

- Nase can naturally reproduce in captivity
- Running water is not mandatory for reproduction, nase can reproduce in still water
- Nase can reproduce at least until 7+
- Good acclimatization and more complex habitat increases reproduction success



**THANK YOU VERY MUCH!**



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