

From aquarium pet to agricultural pest: the Apple snail in the Ebro delta

Title

The Ebro delta in North East Spain is one of the finest wetlands in the western Mediterranean and plays a vital role in the local community while also serving as a stopover site for many migrant birds. Unfortunately, it has become home to many invasive alien species that continue to infect the area and damage endemic wildlife at an incredible rate of one per year. One of the latest to arrive (2009) is the South American Apple snail, an aquarium pet that is very popular because of its size ? as big as an apple, hence its name. An ill-placed exotic pet farm with an inefficient containment system is responsible for its escape and now the species is abundant or superabundant in its new home. It is wreaking havoc on the extensive rice fields that surround the wetlands, feeding on rice plants and causing huge biodiversity losses throughout the region.

The plague has extended across the delta but is currently contained there. Unfortunately, the measures being tested to combat the spread of the Apple snails are having a negative impact on rice-growers who are now forced to abandon their practices that protect the fragile ecosystem. These measures involve drying out the rice fields, which causes the rice-growers to lose their subsidies for conservation-minded practices like keeping the fields inundated with water throughout the winter. Other measures include using salt water to briefly flood the fields and then drying them out afterwards which has further impacts on biodiversity.

Rice-growers in the area are pushing the local government for solutions, which come in three forms: emergency measures following EU plant health regulations, EU co-financing up to € 2.64 m and the signing of an agreement with [SEO/BirdLife](#) to engage volunteers to manually remove adult snails from the complex system of drainage and irrigation canals.

Consequences not only affect the Spanish farmers but also extend over Europe and the whole flyway as this area is crucial to migratory species making their way from Europe to Africa twice a year. Waterbirds, notably migratory waterbirds, are the helpless victims in this crisis. They arrive in flocks by the thousands and use the area to rest and refuel in their journeys. Now they are confronted with a lifeless landscape of endless dry fields scattered with thousands of empty, apple-sized shells.
