

A new record of the red-eared slider, *Trachemys scripta elegans* (Wied, 1838) (Testudines Emydidae), in Latium (Italy)

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ABSTRACT

In this work we report for the first time the presence of non-native invasive turtle *Trachemys scripta elegans* (Wied, 1838) (Testudines Emydidae) in the lake of Nemi in the province of Rome (central Latium, Italy).

KEY WORDS

Alien invasive species; Latium; Nemi; Red-eared slider; *Trachemys*.

Received 08.10.2015; accepted 22.11.2015; printed 30.12.2015

INTRODUCTION

The red-eared slider *Trachemys scripta elegans* (Wied, 1838) is a semiaquatic turtle belonging to the family Emydidae (Testudines). It is native to the southern United States and northern Mexico, but actually is established in many other states and has become an invasive species. This turtle is commonly traded all over the world as a pet and for food (Thorbjarnarson et al., 2000), and many specimens are abandoned in natural or artificial ponds and rivers. This slider is considered by the IUCN one of the 100 world's most invasive alien species (Lowe et al., 2000). *Trachemys scripta* Schoepff, 1792 was first introduced in Italy on early '70s (Bruno & Guacci, 1993), but many findings occurred in the whole Italian territory since the '80s (Di Cerbo & Di Tizio, 2006; Ficetola & Scali, 2010).

In Latium this turtle is found in many natural and artificial ponds and watercourses and is known for the province of Viterbo (Vico Lake; Bolsena Lake), Roma (Oasis WWF of Palo Laziale; Oasis WWF of Macchia Grande; Tevere River; ponds in

the urban park of Villa Borghese; ponds in the urban park of Villa Ada; ponds in the urban park of Villa Pamphili; pond of Eur; Orto Botanico; Presidential Estate of Castel Porziano; Albano Lake); Rieti (Belmonte in Sabina; Fosso Arianna) and Latina (Bologna et al., 2000).

STUDY AREA

Nemi Lake (Fig. 1) is a small volcanic lake, situated between the towns of Nemi and Genzano in the province of Rome. It is situated 316 m above sea level, has an area of 1, 67 square kilometers, a maximum depth of 33 m and a perimeter of about five kilometers. Nemi Lake is included in the area of "Parco Regionale dei Castelli Romani".

This natural protected area is located in the Castelli Romani district and includes 15 municipalities. This lake is known because it is the only Italian lake where it's present the Argentinian Silver-side *Odontesthes bonariensis* Valenciennes, 1835 (Atheriniformes Atherinopsidae). This fish coming

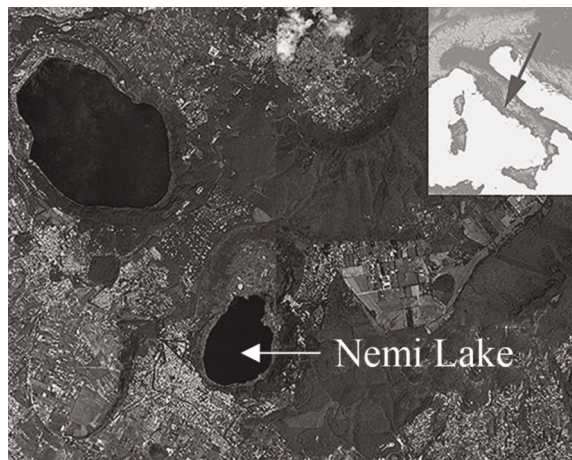


Figure 1. Study area: Nemi Lake, Rome (Latium, Italy).

from South America, was introduced in 1974 for experimental purposes from the Stabilimento Ittiogenico of Rome.

RESULTS

During the month of September 2015 several specimens of *T. scripta elegans* were observed in thermoregulation on some floating logs adjacent to the sides of the lake. All the specimens were big and in apparent good health. Since it has never been previously reported the presence of this exotic turtle in Nemi Lake, it can deduce that the specimens have been deliberately released in relatively recent times. The part of the lake where the red-eared slider were spotted, is a wooded area under the town of Genzano. This area, in contrast to that one in Nemi, is not crossed by a road and even walking is difficult.

CONCLUSION

The introduction of invasive alien species is a major cause of biodiversity loss. The highly invasive red-eared slider has been massively released worldwide with negative consequences on native biota, parasitism, competition, diffusion of diseases and ecosystem modification (Strayer et al., 2006;

Ficetola & Scali, 2010). The release of exotic animals is illegal in Italy and involves the use of large human and economic resources for the removal and management of trapped animals (Zuffi et al., 2015). Since 1992 has been established in Italy the ban on trade of *T. scripta elegans*. The presence of this alien invasive turtle in a protected natural area represents a serious problem. Therefore it should monitor the presence and receive guidance on the impact of this species on the environment. In addition, the local population should be informed on the issue of the release of invasive alien species.

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