## The first documented finds of *Calliostoma laugieri* (Payraudeau, 1826) (Gastropoda: Calliostomatidae) on the coastal mollusc shell deposit at Ankaran

## Prvi dokumentirani najdbi *Calliostoma laugieri* (Payraudeau, 1826) (Gastropoda: Calliostomatidae) na školjčni sipini pri Ankaranu

Sonja HUČ, Preloge 53, SI-1211 Ljubljana – Šmartno, Slovenia; E-mail: sonja.huc@gmail.com

The snail *Calliostoma laugieri* (Payraudeau, 1826) is an intertidal and infralittoral dwelling species that feeds on animals of the order Actiniaria (Simič 2014). It can be found among the sea grass Posidonia oceanica (Albano & Sabelli 2012) and *Cystoseira* algal associations (Pitacco et al. 2014). The animal is uniformly brown, while the shell varies greatly, from olive green with brown speckles to beige or brown and even to solid purple. The shell is conically shaped with a natural shine, completely smooth or with spiral ribs, the body whorl is rounded and oftentimes the bottom edge of each whorl is thickened. It lacks an umbilicus and has a rounded aperture with mother-of-pearl on the inside (Simič 2014).

C. laugieri is distributed along the European Mediterranean coast and the Atlantic coast of Portugal and Spain (MolluscaBase 2019). It has also been found in Morocco along the Strait of Gibraltar (Conchology 2015a, 2015b). Its presence along the Slovenian coast is known and it is considered to be frequent (De Min & Vio 1997), however, C. laugieri was not observed during previous field work on the coastal mollusc shell deposit at Ankaran (De Min et al. 1997), nor are there any more recent publications to suggest so. The coastal mollusc shell deposit was created due to dredging of deposits at the time the Port of Koper deepened the sea floor close to their docks (Geister 2014). Through time, rain and the tides washed away the silt and a pile of shells was left.



**Figure 1.** The snail *Calliostoma laugieri*, collected on 22. 7. 2018 in coastal mollusc shell deposits at Ankaran in Southwestern Slovenia (photo: Sonja Huč).

Slika 1. Polž *Calliostoma laugieri*, najden 22. 7. 2018 na školjčni sipini v Ankaranu v jugozahodni Sloveniji (foto: Sonja Huč).

During field work done as part of the Biology Students Research Camp »Slovenska Istra«, the marine molluscs group found a single specimen of C. laugieri (Fig. 1) at the coastal mollusc shell deposit at Ankaran on 22. 7. 2018. This is an interesting find, as despite the wide distribution of the species and the amount of previous field work done at that location, this is the first documented specimen from this particular locality. The specimen, with a width of 10.28 mm and a height of 8.66 mm, has a missing apex and faded colours due to sun exposure. The presence of this species on the coastal mollusc shell deposit at Ankaran was further confirmed by a second find of a single specimen during field work carried out on 11. 4. 2019. This shell has a width of 13.26 mm and a height of 13,79 mm, also with a missing apex. Most of the outer calcareous laver has been chipped off, exposing the inner mother-of-pearl.

It is unknown whether these shells belonged to more recently deceased snails and were washed ashore or if they were part of the dredged deposits and only now became exposed. They still, however, expand the known diversity of the malacological fauna of this mollusc shell deposit.

## Acknowledgements

The fieldwork was carried out as part of the Biology Students Research Camp, organized by the Biological Student's Society, Ljubljana, Slovenia. We wish to thank Jan Simič for his support, providing literature, and for confirming the species identification. Thanks also to Simona Prevorčnik for her guidance and support.

## References

- Albano P.G., Sabelli B. (2012): The molluscan assemblages inhabiting the leaves and rhizomes of a deep water *Posidonia oceanica* settlement in the central Tyrrhenian Sea. Sci. Mar. 76(4): 721-732.
- Conchology (2015a): *Calliostoma laugieri* Leg. Ex. C. Bert, 1983. Coll. M. Verhaeghe. https://www.conchology.be/?t=68&u=903542 &g=f289b7d6f3a8a6025c95b28c5e0fdc7e&q= 13c5245fd49bcf5f96aae86f2caf09df [accessed in April 2019]
- Conchology (2015b): *Calliostoma laugieri* Ex-coll. A. Arthur. 29 June 1985. https://www.conchology.be/?t=68&u=216772 &g=f289b7d6f3a8a6025c95b28c5e0fdc7e&q= 274fdbe8ab1fe86333112c08fce00d98 [accessed in April 2019]

- De Min R., Vio E. (1997): Molluschi conchiferi del litorale sloveno. Ann.-Anal. Istrske Med. 7(11): 241-258.
- De Min R., Vio E., Žiža V. (1997): Un eccezionale accumulo di conchiglie presso la baia di San Canziano = Extraordinary ashore shell deposit of molluscs near Škocjan Bay. Falco 11: 41-46.
- Geister I. (2014): Informativne točke spontane in kultivirane narave miljskega polotoka. Ministrstvo za izobraževanje, znanost in sport, Ljubljana, Slovenija.
- MolluscaBase (2019). MolluscaBase. *Calliostoma laugieri* (Payraudeau, 1826). Accessed through: World Register of Marine Species at http://marinespecies.org/aphia.php?p=taxdet ails&id=141759 [Accesed on 6.4.2019]
- Pitacco V., Orlando-Bonaca M., Mavrič B., Popović A., Lipej L. (2014): Mollusc fauna associated with the *Cystoseira* algal associations in the Gulf of Trieste (Northern Adriatic Sea). Mediterr. Mar. Sci. 15(2): 225-238.
- Simič J. (2014): Polži in školjke slovenskega morja: vodič za določanje pogostejših polžev in školjk našega morja. Mediteranum, Zavod za revitalizacijo mediteranske kulture, Piran, Slovenija, pp. 60-61.