

Chara canescens lives in shallow brackish waters in the northern hemisphere. It has been described as an annual species that mostly reproduces by parthenogenesis, being the only species of *Chara* able to do so. However, much is still unknown about its life cycle and the differences between the sexual and the parthenogenetic populations. We monitored the life cycle of a parthenogenetic population growing in a brackish interdunal pond in the Albufera de València Natural Park (Spain). Approximately 30 specimens were harvested every 15–30 days throughout 2015. The longest polar axis and the largest equatorial diameter were measured, and the isopolarity index was calculated for the oogonia and the oospores. The non-swollen and the swollen oogonia were distinguished by size. This population had a short life cycle, but two types of shoots with different life history traits were found. A few small individuals overwintered underneath the emergent vegetation. In early March, new shoots appeared from the germinating oospores, growing fast and colonizing more open waters. The first oogonia appeared in April, enlarging and ripening along the first five whorls of the shoots. The oospores were produced in less than 15 days after the first oogonia emergence. The ripe oospores were small (average size \pm SD: $392 \pm 34 \times 219 \pm 24 \mu\text{m}$; isopolarity index: 181 ± 22). Parthenogenetic reproduction lasted 5 months. No new fructifications were produced from September onwards. Although the oospores were smaller than those described in the literature for the species, they were clearly viable and enabled the persistence of the population through the winter.

