

This is a very interesting MS dealing with the potential consequences of Allee effects in population extinction, beyond the ones traditionally considered in the literature (mainly theoretical). The study uses large experimental data and reliable modelling for exploring the consequences of correlated demographic parameters for empirical population subjected to Allee effects. I am not sure whether the temporal frame or scale is sufficient to observe stationarity in the dynamics, but this is just a thought. In other words, whether the occurrence of an initial Allee effect have consequences in the long term (equivalent to the cohort effect at individual level). In any case, there is a reference in the Discussion about this issue and the long-term consequences for extinction when the population has had an initial phase of larger positive density-dependence, which is a very stimulating idea (sort of momentum depending on initial conditions).

Results are very interesting, not only because authors find correlations between demographic rates (that may increase population extinction rates) but also because there is a variability of results among populations that may be also an issue to explore (authors offer some bits of Discussion already).

Another element of discussion is about the limitations of experimental data obtained in microcosmos, where the "environment" is simplified, and other components that likely affect the dynamics are absent (e.g. predators, inter-specific competitors). The presence of Allee effects in more complex systems, such as predator-prey, may also have consequences for Lotka-Volterra dynamics. Anyway, these limitations do not fade the interest of the study, and authors acknowledge this issue properly.

Finally, it would be nice to discuss about the mechanisms producing an Allee effect in some (but not all) populations. These effects may occur in solitary or territorial species, and can be greater for social species for which facilitation processes may be hindered. Even though authors mention this issue in the Discussion, some more specific mechanisms in the study species would be illustrative for an external reader working on different biological systems with other life histories. In fact, the study species has a particular evolutionary strategy that may influence (or deter) the occurrence of Allee effects, and this is something to discuss further in your paper.

Some minor comments:

"...populations with an Allee... have lower maximum growth rate, both of which increase the extinction risk of populations" from an evolutionary point of view, I doubt this is a proper statement. It applies only to small populations, but many organisms have evolutionary stable strategies living at very low densities and having extremely low population growth rates.

Not sure the variables you consider ( $\lambda_{max}$ ,  $N_{max}$  and the mean population size) are Gaussian. They should rather follow other distributions, but perhaps you checked with some normality tests before.

Last sentence in the Discussion: "importance for the prediction of the establishment success of introduced species", that could be generalized to any population that colonizes a patch, independently of its features, and is thus interesting for other ecological topics, such as colonization-extinction rates in metapopulation dynamics, or predator-prey Lot.