Bivalves and gastropods of the Mauritian waters have been less documented despite its numerous uses worldwide more particularly in the pharmaceutical and aquaculture industries. However, precise taxonomical identification of these marine organisms remains an imperative condition for the conservation as well as sustainable exploitation of these marine organisms. To date, because of the numerous taxonomical controversies and dwindling taxonomic expertise, it has become very challenging to understand the state of the marine biodiversity. Additionally in the light of increasing threats to the marine biodiversity, the current knowledge on marine bivalves and gastropods has to be reviewed urgently in order to prevent species extinction. 14 sites were selected including those associated with rocky habitats and sandy beaches with either isolated rocks or scattered continuous rocks. Specimens were collected along randomly placed quadrats, in the intertidal zone, parallel to the shoreline. Live specimens encountered in each quadrat were identified using field guides and data were recorded. The field surveys were carried out over one-year period from March 2016 and March 2017 along the 14 shores of Mauritius. 13 species of marine bivalves and 13 species of gastropods occurring in the waters of Mauritius were collected and identified. The bivalve and gastropods species are not homogenously distributed within the study stations. The coastal characteristic of the study stations could be partly responsible for the deviation in the occurrence and abundance of the species. An analysis of the monthly stationwise distribution of bivalves and gastropods showed that the community structure varied at the different sites along with seasonal variations. The study also revealed a vertical differentiation along the shore in the gastropod communities, whereby some species were never found submersed, other species exhibiting tidal submerison, and other species that were found permanently submersed. This is the first comprehensive taxonomic catalogue of marine gastropods and bivalves.