Fundulus lima inhabits river drainage systems and is threatened after the introduction of cichlids in the area. To support conservation programs, the spatial and temporal variation of the diet composition of this endangered killifish, was determined in two oasis systems of Baja California Sur, Mexico (San Ignacio and La Purisima river drainages), during rainy and dry seasons. F. lima was captured by using passive and active capture techniques. A total of 192 stomach contents of F. lima was analyzed. The contribution of each prey item in the diet composition was quantified by means of the indices of occurrence frequency (% OF), numerical (%N) and volume (%V) percentages. The relative importance of each prey item was determined according to the percentage of the Relative Importance Index (%RII). The similarity of the diet was calculated between hydrological basins (populations combined by basin), seasons (rainy versus dry months), sexes and size classes, by using Schoeners resource overlap index. We used two ecological indices to determine the type of feeding strategy exhibited by the fish: (1) niche breadth of Levins and (2) proportional similarity of Feisinger. Sand was the most abundant item in the stomach content of killifishes from both drainages (39% and 47%, respectively). Diet composition was similar for both drainages (74%) as well as among their respective size classes; however, it was different between sexes. In both drainages, F. lima predated mainly on diatom algae, dipterous and trichopteran larvae, and fish scales during the dry season; while it preferred dipterous larvae, filamentous algae and ostracods in the rainy season. A feeding strategy of opportunistic type was exhibited by F. lima during the rainy season, changing to specialist type during the dry season. This information will be the basis for future investigations related to the conservation of this endangered species and its habitat.

Keywords
Fundulus lima, diet, feeding strategy, oasis systems, Baja California Sur.