Icthyodiversity of San Jose, San Francisquito, and El Pardito islands in the southwestern Gulf Of California, Mexico

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Background. The San Jose and San Francisquito Islands and El Pardito Islet are important for recreational tourism, sport fishing, and commercial fishing. They are part of an “Area Natural Protegida” and “Area Prioritaria Marina”; however, studies on the composition and diversity of their marine floral and faunal communities are limited. To provide information vital for management and conservation of these islands, a check-list of the ichthyofauna was compiled based on original data and the data extracted from other sources. Materials and methods. Field methodology involved direct collecting of the specimens using a gill net or a charalera net and/or visual censuses. Records of fish present near the islands were either directly solicited from museum curators of national and international scientific collections or obtained by using online database collections. Additionally, an exhaustive literature search for fish records was carried out, including scientific articles, books, and theses. Finally, the preferential habitat and zoogeographic affinity of fishes were analyzed. Results. The data yielded 298 species representing 201 genera and assigned to 86 families, 36 orders, and two fish classes. The most numerous families in terms of the species number were Serranidae (23 species), Gobiidae (15 species), and Carangidae (14 species). The most numerous genera were Lutjanus and Halichoeres, with eight and six species, respectively. On average, there were 3.5 species per family. The fish community was dominated by tropical eurythermal species with wide distribution in the Eastern Pacific. An important component of endemic Cortez Province species was found, represented by 24 species from the families Chaenopsidae, Gobiidae, Labrisomidae, Tripterygiidae, Gobiesocidae, Dactyloscopidae, Kyphosidae, Opistognathidae, and Ophidiidae. Conclusion. The fish richness of the San Jose and San Francisquito Islands and El Pardito Islet represents 32% of the ichthyofauna recorded for the Gulf of California and includes 24 endemic species.

Palabras clave: Serranidae, checklist, Cortez Province, endemic species, Abudeufduf troschelii

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