

FishPix: Image Database of Fishes Developed by the Kanagawa Prefectural Museum of Natural History and the National Museum of Nature and Science in Japan

Masanori Nakae^{1*}, Yusuke Miyazaki², Hiroshi Senou³ and Keiichi Matsuura¹

1 Department of Zoology, National Museum of Nature and Science, 4-1-1 Amakubo, Tsukuba, Ibaraki 305-0005, Japan

2 Curator Section, Kanagawa Prefectural Museum of Natural History, 499 Iryuda, Odawara, Kanagawa 250-0031, Japan

3 Planning and Extension Section, Kanagawa Prefectural Museum of Natural History, 499 Iryuda, Odawara, Kanagawa 250-0031, Japan

E-mail: nakae@kahaku.go.jp

The FishPix is an online database of 81,785 photographs of fishes with information about localities, depths, dates, photographers and other data (e.g., water temperatures, bottom substrata and developmental stages of fishes). The Fish Divisions of the Kanagawa Prefectural Museum of Natural History, Odawara, and the National Museum of Nature and Science, Tsukuba joined forces in 1998 to build this database. The Kanagawa Museum of Prefectural Museum provides a base to receive photographs from SCUBA divers and the National Museum of Nature and Science provides and maintain a website of FishPix (<http://fishpix.kahaku.go.jp/fishimage-e/index.html>). FishPix consists primarily of photographs of Japanese fishes but also includes those taken in the tropical western Pacific, the Indian Ocean, the Caribbean Sea, and other parts of the warm and tropical regions of the world. Although ichthyologists have provided many photographs, major parts of photographs have been sent from amateur SCUBA divers. Over the past 10 years the number of photographs provided by SCUBA divers has annually reached 5,000. This image database has been not only enjoyed by the general public to see various groups of fishes but also used by ichthyologists for their taxonomical, ecological and zoogeographical studies. Analyses of locality data in this database enabled two authors (HS and KM) to show important roles of the warm Kuroshio Current in terms of fish faunas in Japan. This experience clearly tells us that FishPix can be a tool for long-term research and monitoring on shallow water fishes in Japan (e.g., changes in distribution of fishes related to climate changes).