Volume XXV April 30, 1984 Number 12

Native Names of Easter Island Fishes, with Comments on the Origin of the Rapanui People

John E. Randall
Bishop Museum
and
Alfredo Cea Egaña
*Universidad del Norte, Casilla 117, Coquimbo, Chile**

EASTER ISLAND, known also as Rapa Nui and Isla de Pascua, is a speck of land set in the immense Pacific Ocean at 27°S lat. and 109°W long. It is one of the most isolated localities on earth, lying 3,200 km west of the coast of Chile, the country which has governed it since 1888. The nearest inhabited islands are Pitcairn, 2,000 km to the west at 25°S and the Juan Fernandez Islands, 2,600 km east at 34°S. This tiny volcanic island, only 160 km^2 in area, has intrigued western man since the Dutch explorer Jacob Roggeveen discovered it and its Polynesian inhabitants on Easter Sunday, 1722. The origin of its population and how these people came to build their immense monolithic statues have been the subjects of much speculation and controversy.

By Rapanui tradition the first colonizers of Easter Island originated at a place called Hiva. There is archaeological evidence that this may have been the Marquesas Islands. Three of these islands preserve Hiva as a major part of their names today: Hiva Oa, Nuku Hiva, and Fatu Hiva. The legendary chieftain of these settlers was Hotu Matu'a. Father Sebastian Englert, who went as a missionary to Easter Island in 1935 and lived there until just before his death in 1969, concluded from genealogical studies that the arrival of Hotu Matu'a took place in the sixteenth century (Englert 1970). However, the earliest radiocarbon dates indicate the initial human settlement at about 400 A.D. (Ayres 1971).

Tradition also holds that there were two different groups of people on Easter Island, the Hanau Momoko and the Hanau Eepe, sometimes referred to as the "short ears" and the "long ears," respectively. However, as explained by Englert (1970), this was an error in translation, principally as a result of confusion of *epe* (ear) and *eepe* (heavy-set). These two groups should be called the "slender people" and the "heavy-set people." Father Sebastian believed that the latter represented a second immigration. Buck (1938) has postulated that the Hanau Eepe originated from the Marquesas where there was a custom of enlarging the lobes of the ears, and the Hanau

*currently: Corporación Cultural de las Condes, Santiago, Chile

Momoko from Mangareva in the Gambier group of the Tuamotu Archipelago. It is also possible that there were not two separate ethnic groups of Easter Islanders. The Hanau Eepe may have been the ruling class, following the pattern throughout Polynesia of a larger body build (through fattening) of nobility. The legendary great battle between the two groups could have been a clash of the lower ranking class with the ruling class (Patrick C. McCoy, personal communication). McCoy in Jennings (1979) wrote: "Information on social classes [at Easter Island] is sketchy, but there were at least two basic status grades: chiefs (*ariki*) and commoners (*hurumanu*)."

Heyerdahl in Heyerdahl et al. (1961, 1965) and Heyerdahl in Yawata and Sinoto (1968) hypothesized that the Hanau Eepe were originally maritime people from the Peruvian coast. He presented a variety of evidence, such as the Rapanui use of plants of South American origin including the sweet potato (*Ipomoea batatas*), chili pepper (*Capsicum frutescens*), and bottle gourd (*Lagenaria siceraria*), the occurrence of the bulrush (*Scirpus riparius*) in the crater lakes of Easter Island and lakes in Peru, the hieroglyphic script of the Easter Island *rongo rongo* boards (which have the same method of presentation in lines as the picture writing of post-Columbian tribes of Peru), the similarity of the precise masonry of some of the *ahu* (religious platforms) to ancient Peruvian masonry, and the thick stone-walled houses on Easter Island. These were attributed to the Hanau Eepe, in contrast to the typical Polynesian pole-and-thatch dwellings supposedly restricted to the Hanau Momoko.

While prehistoric South American contact with Easter Island cannot be dismissed, there are strong arguments against much of the evidence that Heyerdahl amassed. Yen (1974) and others have expressed doubt that the sweet potato was introduced first to Polynesia via Easter Island. One might also wonder why other South American food plants such as maize, beans, or squashes were not found on Easter Island if people from the continent brought the sweet potato to the island (Bellwood 1978). Emory (1972) believes the early Spanish report of chili peppers on Easter Island was a result of confusion with the indigenous *Salanum insulaepaschals,* the native name of which, *poroporo,* is the same as that given the chili pepper now growing on the island. The Easter Island species of bulrush is not the same one as that from Andean lakes as Heyerdahl believed (Heiser 1974). From a study of pollen it has been shown that the *Scirpus* of Easter Island is endemic and has been present there at least 32,000 years (Patrick V. Kirch, personal communication, after Flenley 1981 and conversation with him). Moreover, Emory (1972) has shown that the Polynesian name for *Scirpus* in Hawai'i, *nanaka,* is equivalent to the Rapanui *naa'atu,* thus suggesting the name came from a common homeland in Eastern Polynesia. Emory (1968, 1972) has suggested that the *rongo rongo* boards, which first came to light 94 years after the Spanish expedition of 1770, may have been an emulation by the Easter Islanders of European writing. There is no evidence that the script existed on the island prior to 1770. It does not appear with any of the early rock carvings. The finest example is on the blade of a European ash oar. The similarity of the stone masonry of Easter Island *ahu* and that of Incan sites at Cuzco might be significant if the latter could be shown to predate the former. The reverse, however, seems to be true. The earliest available date for Peruvian polygonal block masonry is after 1440 A.D., while that for the comparable stonework in Easter Island is about 1200 A.D. (Lanning, in Green and Kelly 1970). McCoy (1976) has suggested that the stone houses of Easter Island developed locally as a result of depletion of forests and reduction of grasslands from overpopulation. Lacking materials for pole-and-thatch houses the Rapanui turned to the readily available stone of the island for construction of dwellings. Also militating against an early South American origin for native Easter Island people is the complete absence of pottery in spite of the availability of clay soil. It is most unlikely that any emigrants from Peru to Easter Island would abandon their expertise in pottery (C.S. Smith, personal communication 1969). Furthermore a study of Easter Island male crania has shown that they are typically Polynesian (Murrill 1968).

In his controversial book, *The Lost Caravel,* Langdon (1975) has attempted to revive Heyerdahl's view that "Easter Island's ancient culture was actually an amalgam of influences

from both South America *and* Polynesia.'' Furthermore he proposed an intriguing hypothesis to account for the ''markedly European'' appearance of many Easter Islanders when encountered by early explorers and the curiously high percentage of two blood proteins in both Basque and Rapanui people believed to be of pure descent.

Langdon believes that old cannon with corrugated surfaces found on the outer reef of the atoll of Amanu in the Tuamotu Archipelago may have come from a Spanish ship with some Basque crew members. A likely prospect was the *San Lesmus,* one of a fleet of ships under the command of Garcia Jofre de Loaisa that left Spain for the East Indies in 1525. Four of these ships made it through the Strait of Magellan on May 26, 1526. Six days later during a storm the *San Lesmus* was separated from the other ships and was not seen again. The cannon from Amanu Atoll were of a type used in Europe before 1550. Because other wreckage was not found at Amanu that might be attributed to the same ship from which the cannon originated, Langdon assumed that the ship had gone aground and had been refloated after the cannon were thrown overboard to lighten the vessel. He believed the ship, probably then in bad condition, made it to the Society Islands where the castaways settled. From there some of the men supposedly sailed to Raivavae in the Austral Islands, which might account for the fair skin and European-like appearance of some of the inhabitants when this island first became known to Europeans in 1775. Descendents of Basque crew members from the *San Lesmus* on Raivavae may have been among those who made the voyage with Hotu Matu'a to Easter Island. This hypothesis could account for the arrival of Hotu Matu'a at Easter Island in the sixteenth century, the time calculated from Englert's genealogical studies. It also is consistent with the presumed existence of two different ethnic groups in prehistoric Easter Island, the Hanau Momoko and Hanau Eepe.

The occurrence of the two unique blood proteins is highest in the world in Rapanui people and second among Basques, hardly what one would expect from the long route and extreme dilution by which Langdon explained the infusion of Basque blood to Easter Island. In view of the chaotic history of the island following the first known European contact (see below), it would seem more reasonable to explain the Basque influence at Easter Island (if indeed this is the only explanation for the blood protein similarity) in terms of direct Basque contact via early ships from Spain, or those even later from Peru or Chile. Lacking written records, an informant's contention that his or her ancestral line was pure Polynesian since prehistoric time might be disputed.

From a comparative study of Rapanui and other Polynesian languages Langdon and Tryon (1983) have concluded that words of the precontact Rapanui language fall into four principal categories: 1. those shared with Western Polynesia and not Central Eastern Polynesia, 2. words shared exclusively with a proposed Futunic subgroup, 3. words in common with Eastern Polynesian languages, and 4. words unique to Rapanui. They do not believe there is a simple explanation for this diversity; they have presented the following scenario.

An early Polynesian voyage to the Austral Islands from East Futuna or Wallis Island could have brought the Futunic element to a southern locality in Eastern Polynesia. Raivavae was selected linguistically as the most likely island of the Australs from which a later canoe voyage might have carried Polynesian settlers to Easter Island. Also, it is a high island with fertile soil and had stands of timber suitable for building large sailing canoes. Early Spanish explorers noted that this island's twin-hulled canoes were better constructed than those of Tahiti. The early people of Raivavae carved humanlike figures from stone, as found in some other islands in Eastern Polynesia. From genealogical studies, the gathering of traditions, and study of place names, it is believed there were waves of immigration from Raiatea in the Society Islands to Raivavae. These migrations brought a Tahitic element to the island. Langdon and Tryon then postulate a voyage from Raivavae to Easter Island in about the 16th century, thus accounting for the Futunic and Tahitic categories of Rapanui language.

As mentioned, Easter Island was inhabited as early as 400 A.D. In Langdon and Tryon's view, these early inhabitants could ''scarcely have been Polynesians.'' Whatever their origin,

Langdon and Tryon attribute to them the large component of Rapanui words that cannot be linked to any known Polynesian language. To account for similarities in language and culture with Eastern Polynesians, particularly Marquesans, they hypothesize movements of these early non-Polynesians from Easter Island to the west (as shown on their map of p. 61).

Langdon and Tryon can be complimented for the originality of their explanation of the development of the Rapanui language. There are, however, four important shortcomings. First there is the failure to name an origin of the first human inhabitants of Easter Island (though one might infer from Langdon, 1975, that South America was intended). If, however, the earliest settlers of Easter Island came from South America, then one would expect some linguistic evidence. Langdon and Tryon admit that there is, as yet, none except for the Rapanui word *kumara* for the sweet potato which could be a cognate of *cumar* in the Chinchasuoyo dialect of the Quechua language of Ecuador. There are also other significant contrary arguments, as discussed above, to a South American origin of Rapanui people (as proposed by Heyerdahl).

A second problem with their hypothesis is the stretching of the chance factor in having two prehistoric vessels land at this tiny remote outpost. Regardless of what starting point is chosen and what route is plotted, any voyage to Easter Island is extremely long. That even one such early vessel reached the island is astounding.

More important is the presumption that the language of the people coming in the second vessel (from Raivavae) largely supplanted that of the original inhabitants of Easter Island. Early estimates of the prehistoric population of Easter Island have varied between 2,000 and 4,000. A maximum of 7,000 seems more likely from the amount of arable land (Routledge 1919; McCoy 1976). The language of a canoe-load of people traveling from some distant point (hence probably barely surviving) to a fully populated island with a flourishing culture (the giant stone statues of Easter Island had long been developed by the 16th century) would most likely be absorbed.

This same argument can be used to explain the fourth deficiency, namely the negligible impact on language by a small group of Rapanui arriving by canoe at populated islands of the Marquesas or Society Islands. The earliest carbon dating from the Marquesas indicates habitation at 124 B.C. (Suggs 1961*a*), hence some 500 years before the earliest dating of human activity on Easter Island.

It would seem simpler to postulate that the earliest humans to arrive at Easter Island were Eastern Polynesians who came in a single large sailing canoe. They retained some western aspects of the language such as the "ng" sound (later lost in the rest of Eastern Polynesia). The large component of the Rapanui language which cannot be related to other Polynesian languages could have been new words that developed at this small island during the period of over 1100 years of complete isolation.

There remains the problem of deciding from which island or island group in Eastern Polynesia the early colonizers of Easter Island came. The atolls of the Tuamotu Archipelago can easily be ruled out, but the high island of Mangareva in the Gambier group would seem to be a good prospect in view of its southeastern location only about 2700 km from Easter Island. However, Langdon and Tryon dismissed Mangareva on the grounds that the number of lexical items shared by the Rapanui and Mangarevan languages is too low to suggest a close link between the two. Also they pointed out that the art of building canoes had been lost at the time of European contact. More important, the earliest C-14 dating of human habitation in the Gambier group (at Kamaka Island) is about 1200 A.D. (Suggs 1961*b*).

The nearest high island in southeastern Polynesia to Easter Island is Pitcairn. This small precipitous island lacks any protected harbors. It was not inhabited when first discovered, but Polynesians did reside there. The earliest carbon dating of such habitation is 1335 A.D. (Sinoto 1983), but the samples were not from the lowest layer of the cultural deposit. For nearby Henderson Island, the earliest C-14 date is 1160 A.D. (Sinoto 1983).

The Marquesas Islands have been reported as a major dispersal center for the rest of Eastern

Polynesia (Sinoto, in Green and Kelly 1970). This view is somewhat modified by Sinoto in Jennings (1979). From available archaeological evidence such as the form of adzes (Sinoto and Kellum 1965; Emory 1972), of fish hooks (Golson 1965), the structure of the temple platforms (called *ahu* at Easter Island and in Nuku Hiva and Ua Pou in the Marquesas), the position of the stone statues on them (Emory 1948; Emory 1972), and the similarity of the earliest stone figures of Easter Island to those of the Marquesas, the origin of the Rapanui people seems most likely to be the Marquesas.

The sailing by a double-hulled Polynesian canoe directly from the Marquesas to Easter Island, however, is a most unlikely event in view of the prevailing wind direction and currents. We agree with Finney in Jennings (1979) who wrote, "I think it more likely that Easter Island was discovered by seafarers who sailed south from the Tuamotu, Gambier, or Austral archipelagoes (or through them, after starting from the Marquesas or Societies) and made it across the tradewind zone into more southerly latitudes where westerly winds are common. Then they might have run before the westerlies until, because of cold and hunger, they turned north toward the trades and chanced upon Easter Island."

From an oceanographic and meterological standpoint a canoe voyage from Raivavae to Easter Island is more plausible than one from the Marquesas. The Marquesans would have to sail south some 1500 km just to reach the latitude of Raivavae (nearly 24°S) and go beyond to at least 30°S before sailing east to Easter Island, thus a voyage of nearly 5000 km. The advantage of Raivavae in its more southern location is somewhat lessened by its lying about 900 km west of Fatu Hiva, the southernmost of the Marquesas.

If, then, the choice is either Raivavae on the basis of a shorter sailing distance to Easter Island or the Marquesas from accepting the archaeological and cultural evidence, we tend to favor the latter.

Some discussion is in order on the changes in the Rapanui language in historical time (for a detailed account see Langdon and Tryon 1983). There is evidence that a major cultural and population decline was taking place at Easter Island before Roggeveen landed in 1722. Later voyagers noted that it worsened; the society was dominated by warfare, and most of the stone statues were toppled.

Contact with Europeans, however, brought the excessive deterioration of culture and population decline as experienced by so many insular people of the Pacific. This was accelerated by the Peruvian slave raids in 1862-63 when approximately 1,400 Rapanui people were transported to Peru to work on plantations. The 15 survivors who were finally repatriated to the island brought smallpox with them. In 1865 French Catholic missionaries became established on Easter Island and succeeded in converting the islanders, using religious books printed in Tahitian. In 1871 most of the Rapanui emigrated to Tahiti and Mangareva (Métraux 1940). By 1877 the island's population had dwindled to 111 (Pinart 1878). In 1888 a number of former Easter Islanders returned to their home island from Tahiti, undoubtedly with some impact on the Rapanui language of the residents. With such a small disturbed population, the possibility of modification of language was enhanced. Even by 1868 Palmer (1870) noted considerable effect of the Tahitian language on the Rapanui tongue.

The local names for indigenous plants and animals, however, are less likely to be altered by such outside influence. In view of the value that Rapanui fish names might have in tracing the migration of Polynesian people to Easter Island, a compilation was made of these names.

The senior author visited Easter Island for one month in January-February, 1969, with support of a grant from the National Geographic Society. He was assisted in this field work by Drs. Gerald R. Allen and Bruce A. Baker. The primary purpose was to collect and photograph the fishes. A popular account of this expedition was given by Randall (1970).

As might be expected from its small size, limited habitats, and extreme isolation, Easter Island has a very impoverished fish fauna. The collections of the senior author and those of

previous visitors have totaled only 115 species. Randall (1976) summarized these collections and the research that has been carried out on these fishes to that date. He stated that 27.3 percent of the shore fishes are endemic to the island. Systematic study of Easter Island fishes is still in progress.

An effort was made during the month's stay at Easter Island to record the native names of fishes through interviews with fishermen, though this was secondary to fish collecting and photography. A total of 77 local names of fishes was obtained.

The junior author has been to Easter Island 15 times, the visits varying from 15 days to 7 months. He also collected fishes, adding 14 new records for the island which are included in the list of fishes below. Thus the total number of fish species now known from Easter Island is 129.

The junior author made a special effort to obtain the local names of fishes. His principal informants were Father Sebastian Englert, Mateo Here Veri, Santiago Pakarati, Domingo Pakarati, Leon Tuki Hey, Mario Tuki, Jose Fati Puarakey, Regino Calderon, Pedro Paté Pakomio, Luis Kiko Paté, Alfonso Rapu Haoa and his wife Carmen Cardinale, Sergio Rapu Haoa, Jorge Edmunds Rapahango, Santiago Segundo Pakarati Afán, and Rodolfo Paoa Paté (first four listed now deceased). As a result, we are able to present a total of 130 Rapanui names of fishes. These include two or more names for different growth stages or different color forms of some of the most important food fishes of the island. Not infrequently the same Rapanui name is applied to two or more species of fishes.

A few native names for Easter Island fishes may be found in systematic papers on fishes by Regan (1913), Quijada (1913), Fuentes (1914), Rendahl (1921), and Wilhelm and Hulot (1957). Martinez (1913) published a list of 39 Rapanui fish names (not including one for a whale, one for a lobster, and one for a mollusk) without scientific equivalents. Although the spelling is often different, being a Spanish version of Rapanui, all but four of these names can be linked to ones presented here. The four are *cacáca, paquia* (possibly a derivative of the Tahitian *pati'a* for *Kuhlia*), *tutáe móro aríqui* (*"pez con cuernos?"*) (possibly an alternate native name for *Lactoria*), and *tóa*. In his *Ethnology of Easter Island* Métraux (1940) listed 28 Rapanui fish names, but only five of these were linked to scientific names. The late ichthyologist Fernando De Buen included 31 native names of Easter Island fishes in his *Los Peces de la Isla de Pascua* (1963). Englert (1974) listed 84 Rapanui fish names (three eliminated which are mollusk or cetacean), apologizing for his inability to provide scientific names. Only two of his names cannot be equated to ones we present in this paper; *raa* (which Englert stated is *pez sol,* hence the sunfish *Mola*), and *rapahango*. Ayres (1981) has used a few Rapanui fish names as they relate to his study of Easter Island fishing gear and methods.

The following Easter Island fishes have no local names due either to their being very rare or to their small size: *Isistius brasiliensis* (Quoy and Gaimard), *Syngnathus howensis* Whitley, *Ellerkeldia rubra* (De Buen) (record from Yáñez-Arancibia, 1975, as *Scopularia rubra*), *Amblycirrhites wilhelmi* (Lavenberg and Yáñez) (described in *Cirrhitus* but may represent a new genus), *Crystallodytes* sp., *Callionymus* sp., *Otophidium* sp., *Gnatholepis* sp., *Priolepis* sp., *Satulinus* sp., *Zanclus cornutus* (Linnaeus), *Acanthurus triostegus* (Linnaeus) (one sight record by the senior author), *Naso unicornis* (Forsskål), and *Canthigaster* sp. They are therefore not included in the list of fishes below.

We have observed no rays of any kind at Easter Island. On questioning fishermen, however, some seemed to know of the presence of these fishes. The names they gave for rays were *pararaha* and *fei'i* (the latter of recent Tahitian origin). We also have not seen any species of *Mola,* but molas are known by Easter Islanders as *repe repe* (meaning flat). This name was recorded by De Buen, 1963.

Chilean names are beginning to augment or replace some of the Rapanui names of fishes at Easter Island. Also a few new Rapanui names for fishes have developed in recent years which are supplanting the ancient names. Examples are *arareipua* for *ra'ea* and *konsome* for *uravena* (the

latter name taking its origin from the consommé made from the flesh of *Ruvettus*). These and the Chilean names will be discussed in a paper similar to the present one to be published by the Universidad del Norte, Chile.

The list of Easter Island fishes given below is presented in approximate phylogenetic sequence with the Rapanui names in **boldface.** The use of the macron (¯) over vowels in the Rapanui fish names indicates a long pronunciation of these letters. This pronunciation is strongest for the words *īvi, pā'ohu, pāroko,* and *pātuki.*

LAMNIDAE (MACKEREL SHARKS)	
Carcharodon carcharias (Linnaeus)	**niūhi**[1]
Isurus oxyrinchus Rafinesque	**māmama niūhi**
ALOPIIDAE (THRESHER SHARKS)	
Alopias vulpinus (Bonnaterre)	**kāve'u**
RHINCODONTIDAE (WHALE SHARK FAMILY)	
Rhincodon typus Smith	**māmatua niūhi**
CARCHARHINIDAE (REQUIEM SHARKS)	
Carcharhinus galapagensis (Snodgrass and Heller)	**māngo**
SPHYRNIDAE (HAMMERHEAD SHARK)	
Sphyrna sp.	**māngo hamara**[2]
SQUALIDAE (DOGFISH SHARKS)	
Squalus blainville Risso[3]	**māngo tara**
ENGRAULIDIDAE (ANCHOVIES)	
Engraulis sp.	**ature'eka**
SYNODONTIDAE (LIZARDFISHES)	
Synodus capricornis Cressey and Randall	**pāpa hakatara**
Synodus lacertinus Gilbert	**pāpa hakatara**
ANTENNARIIDAE (FROGFISHES)	
Antennarius coccineus Lesson and Garnot	**nohu iti iti**
Antennarius randalli Allen	**nohu iti iti**
CONGRIDAE (CONGER EELS)	
Conger cinereus Rüppell	**ko'iro** **ko'iro ava ava** (juvenile) **ko'iro arava tea** (white-bellied) **ko'iro mohi'uri** (dark individuals)

[1]Sometimes called **niūhi tapaka'i;** the second word depicts the aggressive nature of this shark.

[2]No specimens obtained; Easter Islanders recognize illustrations of these sharks, and the junior author once observed an individual of this genus underwater. The word **hamara** is of recent Tahitian origin (a modification of the English word hammer).

[3]Identified by Stewart Springer.

OPHICHTHIDAE (SNAKE EELS)	
Ichthyapus vulturis (Weber and de Beaufort)	**kōreha**[4]
Schismorhynchus labialis (Seale)	**kōreha**[4]
MORINGUIDAE (WORM EELS)	
Moringua ferruginea Bliss	**kōreha**[4]
MURAENIDAE (MORAYS)[5]	
Anarchias seychellensis Smith	**kōreha ruma**
Enchelycore ramosus (Griffin)	**kōreha toko toko'ari**
Gymnothorax bathyphilus Randall and McCosker	**puhi hakanonga**
Gymnothorax eurostus (Abbott)	**kōreha puhi**
	kōreha puhi uri (dark)
	kōreha puhi mea (reddish brown)
	kōreha puhi tea (pale brownish)
Gymnothorax nasuta De Buen	**kōreha tuamingo** (small)
	kōreha mingo (large)
Gymnothorax panamensis (Steindachner)	**kōreha tapatea**
Gymnothorax porphyreus (Guichenot)	**kōreha ha'oko**
OPHIDIIDAE (BROTULAS AND CUSK EELS)	
Brotula multibarbata Temminck and Schlegel	**toke**
BELONIDAE (NEEDLEFISHES)	
Platybelone argalus platyura (Bennett)	**ihe**
	ihe aku (to 40 cm length)[6]
HEMIRAMPHIDAE (HALFBEAKS)	
Hyporhamphus acutus acutus Günther	**ihe**
Euleptorhamphus viridis (van Hasselt)[7]	**ihe ngārara**
EXOCOETIDAE (FLYINGFISHES)	
Cheilopogon agoo rapanuiensis Parin	**hahāve**
Cypselurus pitcairnensis Nichols and Breder	**hahāve**
Exocoetus obtusirostris Günther	**hahāve**
FISTULARIIDAE (CORNETFISHES)	
Fistularia commersonii Rüppell	**toto amo hiku kio'e**
AULOSTOMIDAE (TRUMPETFISHES)	
Aulostomus chinensis (Linnaeus)	**toto amo**

[4]General name for eels; snake eels and worm eels were probably unknown to ancient Rapanui people.

[5]We have no specimens of two deep-water morays for which there are Rapanui names. The **puhi rongo rongo** is gray-brown with white markings reminiscent of the **rongo rongo** inscriptions and the **kōreha makohe** is black with a broad tail.

[6]Not seen by us. Fishermen say the **ihe aku** may reach 40 cm, which seems large for *P. argalus*. Possibly a species of *Tylosurus* is present at Easter Island.

[7]Not seen by us but known to Easter Island fishermen.

HOLOCENTRIDAE (SQUIRRELFISHES)	
Myripristis tiki Greenfield	**mārau**
Plectrypops lima (Cuvier and Valenciennes)	**mārau**
Pristilepis oligolepis (Whitley)	**mārau**
Sargocentron punctatissimum (Cuvier and Valenciennes)	**mārau hiva**
Sargocentron wilhelmi (De Buen)	**mārau hiva**
SCORPAENIDAE (SCORPIONFISHES)	
Scorpaena orgila Eschmeyer and Allen	**nohu**
Scorpaena pascuensis Eschmeyer and Allen	**nohu**
Scorpaenodes englerti Eschmeyer and Allen	**nohu**
SERRANIDAE (GROUPERS)	
Acanthistius fuscus Regan	**kōpuku mangaro** **kōpuku ngeha** (large)
Caprodon longimanus Günther	**varevare pua toromiro**
Pseudogramma sp.	**kōpuku**
Trachypoma macracanthus Günther	**kōpuku kava**
KUHLIIDAE (FLAGTAILS)	
Kuhlia nutabunda Kendall and Radcliffe	**māhore** **māhore tua kape** (largest)
PERCICHTHYIDAE (TEMPERATE BASSES)	
Polyprion oxygeneios (Bloch and Schneider)	**kōpuku haharoa**
PRIACANTHIDAE (BIG EYES)	
Cookeolus boops (Bloch and Schneider)	**kāra kāra**
Priacanthus cruentatus (Lacepède)	**mata uira**
CHEILODACTYLIDAE (MORWONGS)	
Cheilodactylus plessisi Randall	**ra'ea**
APOGONIDAE (CARDINALFISHES)	
Apogon sp.[8]	**mārau**
Apogon coccineus Rüppell	**mārau**
LABRACOGLOSSIDAE (KNIFEFISHES)	
Bathystethus orientale Regan	**matiro**
ECHENEIDIDAE (REMORAS)	
Echeneis naucrates Linnaeus	**paerati**
Remora remora (Linnaeus)	**paerati**

[8]A new species for which the description is completed (Fraser and Randall, MS).

CARANGIDAE (JACKS)	
Carangoides equula (Temminck and Schlegel)	**po'opo'o**
Caranx lugubris Poey	**ruhi**
Naucrates ductor (Linnaeus)	**māngo tari tari**
Decapterus scombrinus (Valenciennes)	**ature orare** (small)[9]
	ature (large)
Pseudocaranx dentex (Schneider)	**po'opo'o** (general name, size about 30-40 cm)
	po'opo'o ngau mata ha'uro (juvenile, to 10 cm)
	po'opo'o ngau (to about 20 cm)
	po'opo'o paihere (to about 30 cm)[9]
	po'opo'o tea tea (very brightly colored)
	pe'i (largest, 50-55 cm)
	papara'uri (large, 40-50 cm, with black head)
Seriola lalandi Cuvier and Valenciennes	**remo remo** (juvenile)
	toremo (adult)
CORYPHAENIDAE (DORADOS)	
Coryphaena hippurus Linnaeus	**mahi mahi**[9]
EMMELICHTHYIDAE (BONNETMOUTHS)	
Emmelichthys karnellai Heemstra and Randall	**ature ure**
LUTJANIDAE (SNAPPERS)	
Etelis carbunculus Cuvier and Valenciennes	**pāratoti**
Parapristipomoides squamimaxillaris (Kami)	**pāratoti**
MULLIDAE (GOATFISHES)	
Mulloides sp.[10]	**parahenga**
	pua heu (large)
Mulloides vanicolensis (Cuvier and Valenciennes)	**'a'avere**
	henga (juvenile)[11]
Pseudupeneus orientalis (Fowler)	**hahuu**

[9]Names of recent Tahitian origin.

[10]Probably *M. pflugeri* (Steindachner); no specimens obtained.

[11]The young of one of the goatfishes, most likely *M. vanicolensis;* has not been seen at Easter Island for about 30 years.

KYPHOSIDAE (RUDDERFISHES AND NIBBLERS)

Girellops nebulosus (Kendall and Radcliffe)	**māhaki**
Kyphosus bigibbus Lacepède	**nānue** (general name) **nānue pua** (general name for small sizes) **nānue pua iti iti** (to 10 cm) **nānue pua vaenga** (to 15 cm) **nānue pua mangungu ngungu** (to 20 cm) **nānue pua toki toki** (to 30 cm) **nānue kekeho** (to 40 cm) **nānue hatu** (common gray phase) **nānue para** (xanthic phase) **nānue para aku aku** (yellow with large brown areas) **nānue motea** (albino) **nānue pūoko moni** (dark with a white spot on top of head; new name dating from about 1900)

CHAETODONTIDAE (BUTTERFLYFISHES)

Chaetodon litus Randall and Caldwell	**tipi tipi'uri**
Forcipiger flavissimus Jordan and McGregor	**tipi tipi hoe**

POMACANTHIDAE (ANGELFISHES)

Centropyge hotumatua Randall and Caldwell	**kōtoti para**

PENTACEROTIDAE (BOARFISHES)

Pentaceros decacanthus Günther	**tipi tipi tara**

POMACENTRIDAE (DAMSELFISHES)

Chromis randalli Greenfield and Hensley	**māmata**
Chrysiptera rapanui (Greenfield and Hensley)	**māmata**
Stegastes fasciolatus (Ogilby)	**kōtoti** **kōtoti iti iti** (juvenile)

SPHYRAENIDAE (BARRACUDAS)

Sphyraena helleri Jenkins	**ti'atao**

LABRIDAE (WRASSES)	
Anampses caeruleopunctatus Rüppell	**mōri** (female) **mārari** (male)
Anampses femininus Randall	**pāhika**
Bodianus vulpinus (Richardson)	**matuku**
Cheilio inermis (Forsskål)	**ure ure**
Coris sp.	**tēteme**
Novaculichthys woodi Jenkins	**kōtea mea**
Pseudolabrus fuentesi (Regan)	**kōtea uri** (dark) **kōtea tea** (light)
Pseudolabrus semifasciatus (Rendahl)	**kōtea hiva**
Thalassoma lutescens (Lay and Bennett)	**mōri vaihi**
Thalassoma purpureum (Forsskål)	**pā'ohu** (juvenile) **pā'ohu 'ava'ava** (larger) **kākaka** (adult initial phase) **ra'emea** (terminal male)
SCARIDAE (PARROTFISHES)	
Leptoscarus vaigiensis (Quoy and Gaimard)	**'uhuhanga**
BLENNIIDAE (BLENNIES)	
Cirripectes alboapicalis (Ogilby)	**pātuki**
Entomacrodus chapmani Springer	**pāroko**
GOBIIDAE (GOBIES)	
Kelloggella oligolepis (Jenkins)	**pāroko**
ACANTHURIDAE (SURGEONFISHES)	
Acanthurus leucopareius (Jenkins)	**ma'ito**
GEMPYLIDAE (SNAKE MACKERELS)	
Ruvettus pretiosus Cocco	**'uravena**
Promethichthys prometheus (Cuvier and Valenciennes)	**va'u** **tepurari** (recent name)
SCOMBRIDAE (MACKERELS AND TUNAS)	
Acanthocybium solanderi (Cuvier and Valenciennes)	**kanakana**
Katsuwonus pelamis (Linnaeus)[12]	**'auhopu**
Thunnus alalunga (Bonnaterre)	**kahi mātatata**
Thunnus albacares (Bonnaterre)	**kahi ave ave**
Thunnus obesus Lowe	**kahi mea**
ISTIOPHORIDAE (BILLFISHES)	
Istiophorus platypterus (Shaw and Nodder)	**īvi heheu**
Makaira sp.	**īvi heheu**
XIPHIIDAE (SWORDFISH FAMILY)	
Xiphias gladius Linnaeus	**īvi heheu**

[12]Often classified in *Euthynnus*.

BOTHIDAE (LEFTEYE FLOUNDERS)	
Bothus mancus (Broussonet)	**rahai**
Engyprosopon sp.	**rahai**
SOLEIDAE (SOLES)	
Aseraggodes sp.	**rahai**
CENTROLOPHIDAE (MEDUSAFISHES)	
Schedophilus labyrinthicus McAllister and Randall	**ra'i ra'ionga**
BALISTIDAE (TRIGGERFISHES)	
Xanthichthys mento (Jordan and Gilbert)	**kokiri**
MONACANTHIDAE (FILEFISHES)	
Cantherhines rapanui (De Buen)	**kōreva**
Thamnaconus paschalis (Regan)	**kōreva ure kikiu**
OSTRACIIDAE (TRUNKFISHES)	
Lactoria diaphana (Bloch and Schneider)	**momo tara**
TETRAODONTIDAE (PUFFERS)	
Arothron meleagris (Bloch and Schneider)	**titeve kapovai**
Sphoeroides pachygaster (Müller and Troschel)	**titeve hue hue**
DIODONTIDAE (PORCUPINEFISHES)	
Chilomycterus affinis Günther	**titeve tara tara**
Diodon holocanthus Linnaeus	**titeve**
Diodon hystrix Linnaeus	**titeve**

DISCUSSION

Four lists of native fish names are available for localities in French Polynesia: Raroia, Tuamotus (Harry 1953, and some names from Stimson's *Tuamotuan Dictionary* 1964), Tahiti (Randall 1973), Rapa (Randall and Sinoto 1978), and the Marquesas (Lavondès and Randall 1978). The comparison of these lists with the fish names of Easter Island is hampered by the small fish fauna at Easter and the occurrence there of some fishes not found at all the other localities (and some, such as *Girellops* and *Emmelichthys,* not known from any). There are some general Polynesian names for fishes which are in use at two or more of the localities in addition to Easter Island. These are: *'a'ahi* or *kahi* (tunas); *ahore, mahore,* or *hōho'e* (flagtails); *ahuru* or *hahuu* (goatfishes); *aku* (needlefishes); *atura* or *atule* (mackerel scads); *auhopu, 'ahuhopu,* or *kauhopu* (little tunas); *hue* or *hue hue* (puffers); *ihe* (halfbeaks); *koiro* or *'oiro* (conger eels); *kokiri* or *'o'iri* (triggerfishes); *kototi* or *'atoti* (damselfishes); *maito* (surgeonfishes); *ma'o, mango,* or *mako* (sharks); *momotara, momoa tara roa,* and perhaps *momohaka* (trunkfishes); *nanue* or *nenue* (rudderfishes); *nohu* (scorpionfishes); *puhi* (morays); *ruhi* or *'uhi* (the black jack); *ti'atao, kaokao,* or *saosao* (small barracudas); *totara* or *taratara* (porcupinefishes); *toto amo, taotao-ama, koko'o'ama,* or *ko'oama* (cornetfishes or trumpetfishes); *uhu* (parrotfishes); *uravena, 'uravena,* or *kuravena* (oilfish).

The Raroia list has the lowest correspondence with the Rapanui. The only name specific to both this atoll and Easter Island and not other localities is *marari* [for the wrasses *Novaculichthys taeniourus* and *Coris angulata (=aygula)*], though *kokire karava* for filefishes is close to the Rapanui *koreva*. Only nine general Polynesian names of fishes are common to the Tuamotus and Easter Island.

Two Rapan fish names (both for groupers), *apuku tarao* and *haroa,* appear to be equivalent to the Rapanui *kōpuku mangaro* and *haharoa*. In addition 12 general fish names are shared with other French Polynesian areas and Easter Island.

The Tahitian list has only one native fish name exclusive to both Tahiti and Easter Island within French Polynesia: *ature* (the mackerel scads *Selar* or *Decapterus*—though this is equivalent to the Samoan *atule*). Twenty-one general names are shared by the two localities. However, at least six of these were introduced from Tahiti in the nineteenth century or later. For example, Randall (1973) (after Nordhoff) showed that the present day Tahitian name *'auhopu* has replaced the ancient Tahitian *atu*. *'Uravena* is another probable recent substitution. *Kuravena* is the Tuamotuan form (Stimson 1964) and since Rapanui preserves the "K," *'uravena* would seem to be a borrowing from the Tahitian.

The Marquesan fish names *ko'eva* (for filefishes), *ko'otea* or *'otea* (for the wrasses *Anampses caeruleopunctatus* and *Coris gaimard*), *paoko* (for blennies), *pōpō* (for small jacks), and *uhuhaka* (for the parrotfish *Scarus rubroviolaceus*) are the unique equivalents of the Rapanui names for these or similar fishes. There are 13 general fish names common to both the Marquesas and Easter Island.

A checklist of Samoan fishes with native names by Richard C. Wass (1984) has provided the opportunity to make a comparison with Rapanui fish names. As might be expected, there is not much similarity in Samoan and Rapanui fish names. The Samoan *pusi, nofu,* and *sue* correspond to the Rapanui *puhi, nohu,* and *hue* for morays, scorpionfishes, and puffers, respectively. The Samoan *taoto-ama* for the cornetfish (*Fistularia*) is equivalent to the Rapanui *toto amo* for the related trumpetfish (*Aulostomus*). Similarly, the Samoan *malau* for the squirrelfishes corresponds to the Rapanui *mārau* for these fishes. *Tifitifi,* the general Samoan name for butterflyfishes (*Chaetodon*), may be equated to the Rapanui *tipi tipi* for these fishes, and *naiufi* for the tiger shark (*Galeocerdo*) to *niūhi* for the great white shark (*Carcharodon*) at Easter Island.

This analysis fails to demonstrate a close correspondence of Rapanui fish names to any other Polynesian area. They seem closest to the Marquesan in view of the five names unique to both the Marquesas and Easter and 13 general Polynesian fish names common to both areas. Although the Tahitian language shares 21 fish names with Rapanui, only one is unique to both Easter Island and Tahiti within French Polynesia (but even this name has a cognate in Samoa). Six Rapanui fish names are known to be recent acquisitions to the Easter Island tongue from Tahiti; it is likely that this is true of still more of these names because of the major impact Tahitian has had on Rapanui.

In view of the suggestion of Langdon and Tryon (1983) that the Polynesian people who immigrated to Easter Island came from Raivavae in the Austral Islands, a listing of the fish names from this island is needed and could be illuminating.

The relatively low correspondence of Easter Island fish names to those of any island group of Eastern Polynesia is more comprehensible when one realizes that the Rapanui language seems to have developed in isolation for at least 1,200 years. Any changes that may have taken place at islands of French Polynesia after about 400 A.D. would not have been transmitted to Easter Island. An example is the dropping of the "ng" sound in eastern Polynesia but its retention at Easter Island (in such words as *mango,* the Rapanui word for shark). The "ng" sound is common today in the Samoan language and presumably was in Proto-Eastern Polynesian from which the Rapanui language was derived (Green 1966).

ACKNOWLEDGMENTS

The senior author is grateful to the National Geographic Society for providing support for his visit with colleagues Gerald R. Allen and Bruce A. Baker to Easter Island. In addition to the principal informants on native fish names mentioned above, we would like to thank the following persons for assistance: William D. Anderson, Jr.; Guillermo Blanco; Edmundo Edwards; Jaime

Figueroa; Mark Gross; Douglass F. Hoese; J. Barry Hutchins; Roberto Ika; Robert Langdon; Carlyle S. Smith; William F. Smith-Vaniz; Stewart Springer; Jeffrey T. Williams; and Gerardo Velasco. William S. Ayres, Edward C. Creutz, Samuel H. Elbert, Kenneth P. Emory, Patrick V. Kirch, Patrick C. McCoy, Yosihiko Sinoto, and Jack H. Ward kindly reviewed the manuscript.

LITERATURE CITED

Ayres, W.S. 1971. Radiocarbon dates from Easter Island. *Jour. Polynes. Soc.* 80(4): 497-504.

Ayres, W.S. 1981. Easter Island fishing. *Asian Perspect.* 22(1): 61-92.

Bellwood, P. 1978. *Man's Conquest of the Pacific.* Auckland: William Collins.

Buck, P.H. 1938. *Vikings of the Sunrise.* New York: Frederick A. Stokes Co.

De Buen, F. 1963. Los peces de la Isla de Pascua. *Bol. Soc. Biol. Concepcion* (Chile) 25-26: 3-80.

Emory, K.P. 1948. Polynesian stone remains. *Pap. Peabody Mus. Amer. Archael.* 20: 9-21.

Emory, K.P. 1968. Review of Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific. Volume 2: Miscellaneous Papers by T. Heyerdahl et al. (1965). *Amer. Anthro.* 70: 152-154.

Emory, K.P. 1972. Easter Island's position in the prehistory of Polynesia. *Jour. Polynes. Soc.* 81(1): 57-69.

Englert, S. 1970. *Island at the Center of the World: New Light on Easter Island.* New York: Charles Scribner's Sons.

Englert, S. 1974. *La Tierra de Hotu Matu'a: historia y etnología de la Isla de Pascua.* Second ed. Santiago: Univ. de Chile.

Flenley, J.R. 1981. The late Quaternary Palino-Flora of Easter Island. Abstracts XIII Intern. Botanical Congress, Sydney. 21-28 August.

Fuentes, F. 1914. Contribution al estudio de la fauna de la Isla de Pascua. Pisces. *Bol. Mus. Nac. Hist. Nat.* (Chile) 7: 295-312.

Golson, J. 1965. Thor Heyèrdahl and the prehistory of Easter Island. *Oceania* 36(1): 38-83.

Green, R. 1966. Linguistic subgroupings within Polynesia: the implications for prehistoric settlement. *Jour. Polynes. Soc.* 75(1): 6-38.

Green, R.C., and **M. Kelly (Eds.)** 1970. Studies in Oceanic Culture History, vol. 1. *Pac. Anth. Rec.* 11.

Harry, R.R. 1953. Ichthyological field data of Raroia Atoll, Tuamotu Archipelago. *Atoll Res. Bull.* 18.

Heiser, C.B., Jr. 1974. Totoras, taxonomy and Thor. *Plant Sci. Bull.* 20: 22-26.

Heyerdahl, T., E.N. Ferden Jr. (Eds.), W. Mulloy, A. Skjölsvold, and **C.S. Smith.** 1961. Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific, Volume 1: Archaeology of Easter Island. *Monogr. School Amer. Res. and Mus. New Mex.* 24(1).

Heyerdahl, T., E.N. Ferden Jr. (Eds.), W. Mulloy, A. Skjölsvold, and **C.S. Smith.** 1965. Reports of the Norwegian Archaeological Expedition to Easter Island and the East Pacific, Volume 2: Miscellaneous Papers. *Monogr. School Amer. Res. and Kon-Tiki Mus. New Mex.* 24(2).

Jennings, J.E. (Ed.) 1979. *The Prehistory of Polynesia.* Cambridge: Harvard University Press.

Langdon, R. 1975. *The Lost Caravel.* Sydney: Pacific Publications.

Langdon, R., and **D. Tryon.** 1983. The language of Easter Island: its development and Eastern Polynesian relationships. *Inst. Polyn. Stud. Monogr.* 4.

Lavondès, H., and **J.E. Randall** 1978. Les noms de poissons marquisiens. *Jour. Soc. Océanistes,* 34(60):79–112.

Martinez, E. 1913. *Vocabulario de la Lengua Rapa-Nui, Isla de Pascua.* Santiago de Chile: Impres. Inst. Meteorol.

Métraux, A. 1940. Ethnology of Easter Island. *Bull. B.P. Bishop Mus.* Vol. 160.

McCoy, P.C. 1976. Easter Island Settlement Patterns in the late prehistoric and protohistoric periods. *Bull. Easter Is. Comm. Intern. Fund Monu.* Vol. 5.

Murrill, R.J. 1968. *Cranial and Postcranial Skeletal Remains from Easter Island.* Minneapolis: University of Minnesota Press.

Palmer, J.L. 1870. A visit to Easter Island, or Rapa Nui in 1868. *Jour. Roy. Geogr. Soc.* 40:167–181.

Pinart, A. 1878. Exploration de l'Ile de Paques. *Bull. Soc. Geogr. Paris.* 16:193–213.

Quijada, B.B. 1913. Catálogo illustrado i descriptivo de los peces chilenos i estranjeros conservados en el Museo Nacional. *Bol. Mus. Nac.* 5(1):1–139.

Randall, J.E. 1970. Easter Island: an ichthyological expedition. *Oceans* 3(3):48–59.

Randall, J.E. 1973. Tahitian fish names and a preliminary checklist of the fishes of the Society Islands. *Occ. Pap. B.P. Bishop Mus.* 24(11):167–214.

Randall, J.E. 1976. The endemic shore fishes of the Hawaiian Islands, Lord Howe Island and Easter Island. (*in* Colloque Commerson la Réunion, 1973) *Trav. Doc. O.R.S.T.O.M.* 47:49–73.

Randall, J.E. 1983. A review of the fishes of the subgenus *Goniistius*, genus *Cheilodactylus*, with description of a new species from Easter Island and Rapa. *Occ. Pap. B.P. Bishop Mus.* 25(7):1–24.

Randall, J.E., and **Y.H. Sinoto.** 1978. Rapan fish names. *Occ. Pap. B.P. Bishop Mus.* 24(15):291–306.

Regan, C.T. 1913. A collection of fishes made by Professor Francisco Fuentes at Easter Island. *Proc. Zool. Soc. London,* 368–374.

Rendahl, H. 1921. The fishes of Easter Island. In *The natural history of Juan Fernandez and Easter Island* edited by C. Skottsberg. Uppsala.

Routledge, S. 1919. *The Mystery of Easter Island: the Story of an Expedition*. London: Hazell, Watson, and Viney, Ltd.

Sinoto, Y.H. 1983. An analysis of Polynesian migrations based on the archaeological assessments. *Jour. Soc. Océanistes,* 39(76):57-67.

Sinoto, Y.H., and **M.J. Kellum.** 1965. Preliminary report on excavations in the Marquesas Islands, French Polynesia. Prepared for National Science Foundation. Manuscript in Department of Anthropology, B.P. Bishop Museum.

Smith, J.L.B. 1964. Fishes of the family Pentacerotidae. *Ichth. Bull.* 29:565–579. Rhodes Univ.

Stimson, J.F. 1964. *A Dictionary of Some Tuamotuan Dialects of the Polynesian Language*. The Hague: Martinus Nijhoff.

Suggs, R.C. 1961a. Archaeology of Nuku Hiva, Marquesas Islands, French Polynesia. *Anthro. Pap. Amer. Mus. Nat. Hist.* 49(1):1–205.

Suggs, R.C. 1961b. Polynesia. *Asian Perspect.* 5(1):88–94.

Wass, R.C. 1984. An annotated checklist of Samoan fishes. *NOAA Technical Report,* National Marine Fisheries Service, Special Scientific Report—Fisheries 781, v + 43 pp.

Wilhelm, O.E. and **A.L. Hulot.** 1957. Pesca y peces de la Isla de Pascua. *Bol. Soc. Biol. Concepcion,* Chile. 33:139–152.

Yáñez-Arancibia, L.A. 1975. Zoogeografia de la fauna ictiológica de la isla de Pascua (Easter Island) *An. Centro Cienc. Mar Limnol. Univ. Nal. Autón. México.* 2(1):29–52.

Yawata, I., and **Y.H. Sinoto** (Eds.) 1968. *Prehistoric Culture of Oceania*. Honolulu: Bishop Museum Press.

Yen, D.E. 1974. The sweet potato and Oceania: An essay in ethnobotany. *Bull. B.P. Bishop Mus.,* Vol. 236.