Catching names: Folk taxonomy of marine fauna on Takuu Atoll, Papua New Guinea

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Abstract

Folk taxonomies are a critical component for understanding resource use patterns and cultural, social and economic preferences on geographically remote Pacific atolls. To understand how people perceive and make use of their environment, 200 local names for marine vertebrates and invertebrates were collected and the hierarchical classification system was documented on Takuu Atoll in Papua New Guinea. The local nomenclature of the marine fauna of Takuu is based largely on shared fundamental morphological characteristics. Furthermore, all fish (*Te ika*) in the ocean are placed into one of five distinct groups in the hierarchical classification system. These include three functional groups that are categorised by ecological niche, whereas another group encompasses all fish that possess a certain behavioural trait. The fifth group is unique in that it is solely made up of fish that were previously targeted during local *Sii* fishing expeditions. This article presents an analysis of Takuu residents' descriptions and classifications of local fish and marine invertebrates.

Keywords

Folk taxonomy, Takuu Atoll, local knowledge, Polynesian outlier, folk hierarchical classification

Introduction

Takuu Atoll islanders are dependent on and inextricably linked to the marine environment that surrounds them, and fishing permeates almost every aspect of their lives. To gain an understanding of how the people of Takuu observe and make use of their environment, I collected local names for marine vertebrates and invertebrates. As has been shown throughout much of the Pacific region and beyond, folk taxa not only must be established as a baseline for further studies of local knowledge but can significantly aid in participatory monitoring and other conservation measures (Foale 1998; May 2005). This paper provides an examination of local nomenclature and the hierarchical classification system currently in use on Takuu Atoll.

Study area

At 157°E and 4.5°S, Takuu Atoll, also known as Mortlock, lies 273 km northeast of Buka, Bougainville, Papua New Guinea (PNG). Although politically part of PNG, Takuu Atoll is geographically and ecologically part of the Solomon Islands archipelago. The atoll is one of only three Polynesian outliers found in PNG. The others include Nukuria, also known as Fead Island, which is located 160 km to the northwest of the atoll, and Nukumanu, or Tasman, which is situated 315 km to the east. The islanders reside on the small village island of Nukutoa, although the largest island of the atoll ring is Takuu, from which the atoll derives its name. Takuu is uninhabited and serves as a garden plot for the atoll's population. The total land area covers around 90 ha.

The population has decreased markedly over the last few decades. Although the atoll recovered after an unknown ailment that reduced the number of people to 64 in the 1880s, the population steadily increased over the next century, reaching 508 by the time of the 1980 census (Churchill 1909; National Statistical Office of Papua New Guinea 2003). The current population is 316. A variety of factors such as employment opportunities and secondary education on the mainland, lack of adequate shipping services and health concerns are motivating people to relocate from the atoll. All the elders who were interviewed for this paper claimed that this has had a tremendous negative impact on local knowledge

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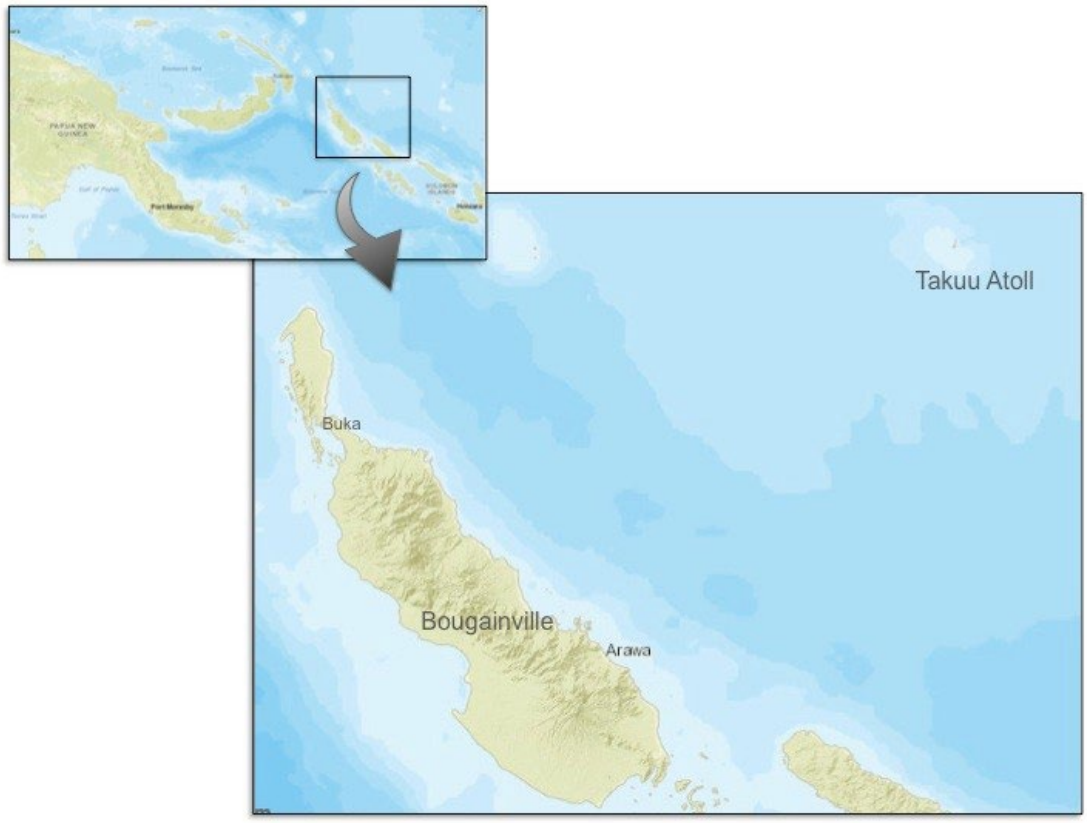

Figure 1. Takuu Atoll, Autonomous Region of Bougainville, Papua New Guinea.

systems that are critical for survival on the atoll. Despite being prominently featured in the film *There once was an Island*, from which the atoll gained international attention as being on the front lines of climate change, Takuu islanders are not at present relocating due to any negative effects of environmental change.

The Takuu language is Polynesian and belongs to the Ellicean group (Moyle 2011). It comprises 11 consonants, namely f, h, k, l, m, n, p, r, s, t, and v, as well as the vowels a, e, i, o, and u. In addition to the atoll's residents, there are an estimated 1750 Takuu speakers worldwide and the language is not considered endangered.

A combination of methods was used to ascertain local names of the marine fauna. Examining fresh specimens caught and brought back by fishers after their daily trips provided many of the names that are included in Appendix 1. When I was uncertain about the correct scientific name, I took photographs and documented meristic features, such as the number of scale rows and dorsal rays. Interviews with village elders and fishers also yielded many of the local names. Reef fish and reef creature identification guides were used for informal interviews and discussions, and the names that were provided by the locals were cross-checked with a minimum of eight people to ensure accuracy (Allen et al. 2012; Humann and Deloach 2010). There was much debate about the names of certain fish – especially those that are rarely caught or observed, thereby the names of marine fish and invertebrates are only included in Appendix 1 if a consensus was reached. After most the names were documented, I conducted focus groups to discuss the hierarchy and relationships of the marine fauna. Two focus group discussions were held with eight participants and a further two were conducted with seven different participants. Due to the shallow nature of *mee ttai* (literally (lit.) sea thing) taxonomy, we focused largely on the groupings of fish. We were thus able to create the hierarchical graph, which is depicted in Figure 2.

Results

Takuu nomenclature

Humans think in highly structured ways, and the habit of organising and classifying surroundings is claimed to be universal (Brown 1991; Atran 1998). In order to interact with and make extensive use of their environment, Takuu islanders have an established lexicon to distinguish disparate types of marine fauna. As in most cultures, the system for nomenclature on Takuu is based on shared, fundamental characteristics (Foale 1998; Ono and Addison 2009). The classification of organisms that are found

is based on salient morphological attributes such as colour and shape and also on behavioural patterns and habitat. Appendix 1 provides 200 distinct Takuu marine taxa combined with the corresponding English and scientific name(s).

The Takuu system is based on shared basic characteristics between organisms, and there is an extensive overlap with the system that is employed by scientific biological classification. However, unlike scientific classification, if something does not fulfil a biologic, economic, or socio-cultural need or purpose, it is far less likely to possess a name in Takuu. This trend is seen in the various species of Holithuridae (sea cucumbers). Takuu remains, in part, a subsistence economy as it is geographically remote and shipping services are intermittent. Prior to the moratorium that was enacted by the PNG National Fisheries Authority (NFA) in 2009 on the harvesting of sea cucumbers, one of the few ways to benefit economically from their atoll environment was to gather, dry and sell sea cucumbers (beche-de-mer) to Asian markets. Although most marine invertebrates are referred to by a local family name such as *Siakorokoro* (various species of cuttlefish) and *Te ura* (lobsters), sea cucumbers are collectively termed *Naa* (multiple) *lori* and are further divided into seven distinct species; these are *Kavatuitui*, *Lori sarau*, *Saratea*, *Tikava*, *Takusana*, *Kukupo* and *Muripata*.

Fish often possess two names. The first is a generic term that often denotes the family to which an organism belongs whereas the second refers to a descriptive qualifier. *Simu moana* or *Simu kanae* are both classified in the Linnaean system as belonging to the family Balistidae, or Triggerfish (Allen et al. 2012). *Simu* denotes a group of pelagic marine vertebrates, namely fish, that all have a compact, oval-shaped body, a large head, small eyes and strong jaws with large teeth. *Naa simu* have a set of spines on top of their head to deter predators or lock themselves into crevices in the reef. These spines are the reason why they are colloquially referred to as triggerfish, as the spines may pop up or trigger when sensing danger, often inflicting painful injuries to fishers. *Simu moana* is so named because it is blue, large and found deeper on the reef or slightly offshore in the ocean (*Moana*). *Simu kanae* carries its name due to a slight yet obvious physical similarity to the flathead grey mullet (*Mugil cephalus*). In English-language speaking countries, *Simu moana* and *Simu kanae* are classified as the Oceanic Triggerfish (*Canthidermis maculatus*) and the Blue Triggerfish (*Pseudobalistes fuscus*), respectively. While the Linnaean system has identified a collective 40 species of Triggerfish in the family Balistidae, there are 18 types of *Simu* known on Takuu today.

Table 1. Fish and cephalopod names for various developmental phases.

Growth stages for marine vertebrates

Family	Scientific name	Juveniles	Small size	Adult size	Extra-large size adult
Balistidae	*Balistoides viridescens*		Pareparekaina	Simu taia uri	
Balistidae	*Pseudobalistes flavimarginatus*		Pareparekaina	Simu taia mmea	
Carangidae	*Caranx lugubris*		Lluhe	Tahauri	Sukimana
Carangidae	*Caranx sexfasciatus*	Kainarupo	Taahaki > kaipaa	Matapuku	Paratoko
Carangidae	*Elegatis bipinnulata*			Kamai	Nanauri
Carcharhinidae	*Galeocerdo cuvier*		Riinapa	Kauaerua	Urupou
Cheloniidae	*Chelonia mydas*		Romu	Una mea	Te peva
Exocoetidae	various spp.		Ssipa	Ssahe	
Lutjanidae	*Aprion virescens*		Kamautu	(Te) Utu	
Lutjanidae	*Lutjanus bohar*		Tahanamea	Hanamea	
Lutjanidae	*Lutjanus gibbus*		Rupaia	Taea	
Mugilidae	*Liza vaigiensis*		Kokotarina	Tarina	
Mugilidae	*Mugil cephalus*	Aua	Kokoaua	Kanae	
Mullidae	*Mulloidichthys vanicolensis*	Karokilla	Karo	(Te) Vete	
Scrombidae	*Thunnus albacares*		(Te) atu lliki	(Te) Atu	Lamaoto > Maraorao

Growth stages for marine invertebrates

Family	Scientific name	Juveniles	Small size	Adult size	Extra-large size adult
Octopodidae	various spp.	Piripiri	Sinavere	Toka	
Sepiidae	*Sepia latimanus*		Pukuoho	Siakorukoru	

Identifying the growth or developmental stages of fish on Takuu is more open to interpretation and is not as static as individual fish nomenclature. Fish sizes, or stages of growth, were indicated to me by a fisher who extended out his arm, hand opened, and showed sizes corresponding to the length between one of his fingertips and his chest or beyond using the other hand. A fish, such as the yellowfin tuna (*Te atu*), that is brought back and agreed on as measuring more than 1 m in length is considered to be a *Lamaoto* (an extra-large adult) and especially valuable. The fisher who catches one wins respect among the other fishers and community as a whole. A list of growth stages is shown below in Table 1.

The presumption among Takuu elders is that there were many more types of classified marine vertebrates and invertebrates in past generations. However, due to increased inter-island mobility and migration of locals to urban centres in Papua New Guinea, many of the names that were once employed on the atoll are no longer being widely used or shared. As the village elders pass away and certain factors drive residents from Takuu, much of the folk taxonomy appears to be fading from the collective memory.

The Takuu hierarchical classification system

Naa mee tipu ttai literally means 'everything that can be found in the ocean'. The hierarchical classification system is depicted in Figure 2, on next page. Takuu islanders distinguish between *Te ika* (fish) and *Mee ttai* (sea thing), and all marine organisms can be divided into one of these two groups. A *Mee ttai* is anything not deemed to be a fish, such as sea cucumbers, brittle stars and corals. Stony corals, or *Harero*, are thought to be non-living rocks that simply grow. This is a common belief throughout much of Melanesia and Polynesia (S. Foale, pers. comm.) The only distinction made is between stony corals (*Harero*) and branching corals, referred to as *Harero mananamana* (lit. coral with fingers). Takuu islanders do, however, refer to coral fragments on land as *Te hatu* (stone). Although I noticed *Harero* and *Te hatu* being used interchangeably at times, the discrepancy seemed to be mainly based on where the coral was located. Most *Mee ttai* do not have extensive hierarchical classifications or distinctive names. Sea stars, for example, are collectively classified as *Te hetuu*.

Te ika, or fish, are further classified into five groups of shared characteristics: *Te ika te akau* (lit. reef fish), *Te ika hatu* (lit. stone fish), *Te ika te moana* (lit. ocean fish), *Te ika ttoro* (lit. crawling fish), and *Ika ttea* (fish targeted during *Sii* fishing expeditions). As discussed below, the first three are functional groups consisting of fauna that share an ecological niche, whereas the *Te ika toro* is grouped based on its behavioural traits. *Ika ttea* has the exception that this group consists solely of fish targeted during a ceremonial type of fishing known as *Sii*, which is conducted on extremely large (7 m or more) carved wooden canoes known as *Vakasii* (Figure 3). The aim of this group fishing method is to catch prestigious fish such as *Te atu* (yellowfin tuna), *Kamai* (rainbow runners) and various other large pelagic game fish. It is this functional group that contains many *Ika ttea* without family names. These fish are of such great cultural importance to the community that the majority of these fish names stand on their own. *Sii* fishing is not currently in practice on Takuu, but many schooling fish caught by other means, such as *Paataki* (trolling), are nevertheless still commonly referred to as *Ika ttea*.

Te ika te akau consists solely of reef fish. These fish are shallow water reef fish found on the patch, fore and back reefs of the atoll. Some *Ika te akau*, such as the *Tikuu* (Damselfishes) and *Tipitipi* (Butterflyfishes) are ornamental and not consumed on Takuu. Women and children target other families like *Parani* (Rabbitfishes and Sergeant Majors) as they cast their lines from the beach or off the seawall. *Te ika hatu* (lit. stone fish) refers to a functional group of reef fish that are able to hide in coral. They are distinguished from *Te ika te akau* because they are generally larger and live deeper along the reef slope. Women or children do not commonly catch these types of fish, unless a male fisher takes his wife or teenage son on a fishing trip. These include *Te ume* (Unicornfishes), *Hiloa* (Emperors) and *Natara* and *Tai ava* (Groupers).

Oceanic pelagic fish are collectively referred to as *Te ika te moana*. It includes the families *Manoo* (sharks), *Te paru* (deep sea groupers), *Te hai* (stingrays) and *Tahoraa* (whales). Several members of this functional group do not belong to a family, as they are distinctive in character and appearance. Many are also considered prestigious fish that are only caught by highly skilled fishers. Three members of sharks, *Manoo tea*, *Manoo ava* and *Moemoeatu* (the blacktip reef shark *Carcharhinus melanopterus*, the whitetip reef shark *Triaenodon obesus* and the tawny Nurse shark *Nebrius ferrugineaus*, respectively) fall into the functional group of *Te ika te akau* because they are always found in shallow reef areas and never in the open ocean. *Kimaota*, or Dolphinfish (*Coryphaena hippurus*) and *Sakuraa*, colloquially known in English-speaking countries as Swordfish (*Xiphias gladius*) are two such distinctive *Tka te moana* without family names. Sea turtles, like *Una mea* (the Green Turtle *Chelonia mydas*) and the critically endangered *Masana* (the Hawksbill Turtle *Eretmochelys imbricata*), are also placed into this hierarchical level owing to their migration patterns.

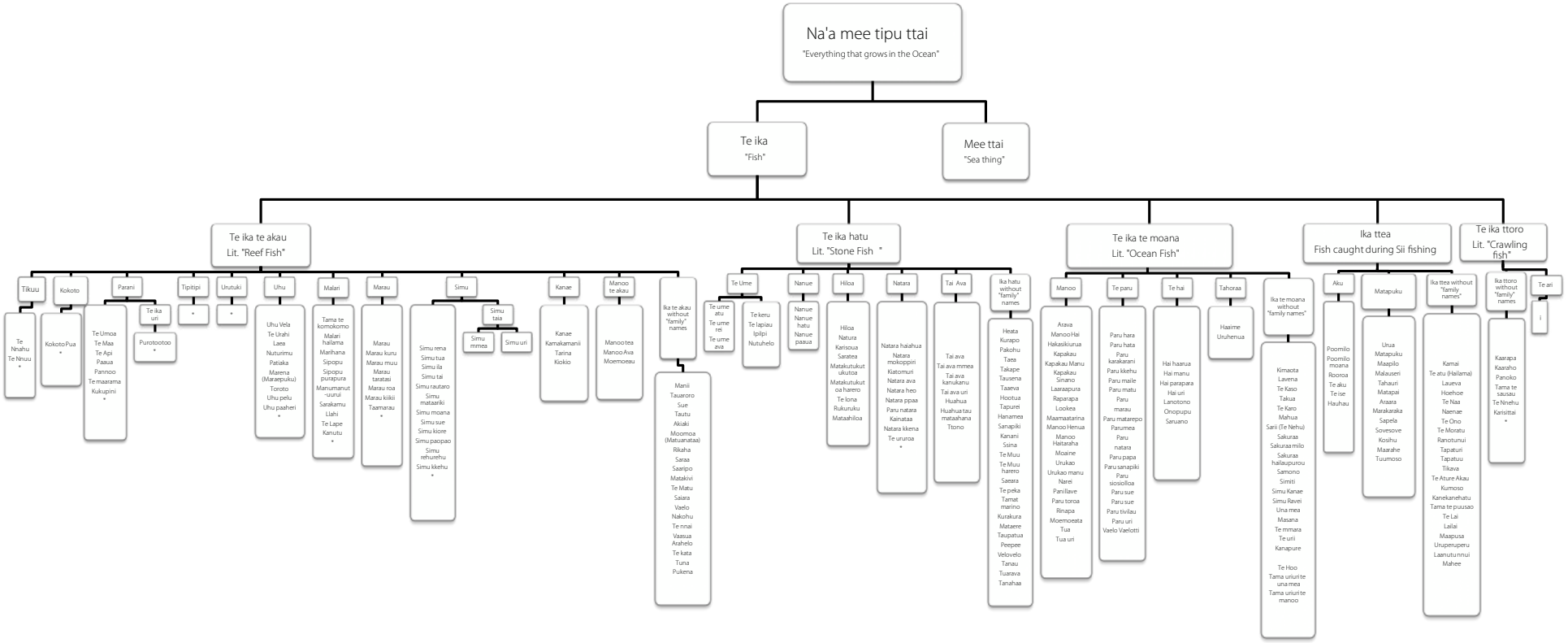

Figure 2. Schematic depiction of the hierarchical classification system of fish. The asterisk below the individual names denotes that all other fish belonging to the family, but not individually identified, are simply referred to by their family name.

Figure 3. Takuu elder carving a new large fishing canoe (*Vakasii*) used to target *ika tte*a during *Sii* expeditions on the southern tip of Nukutoa Island.

Te ika ttoro are the functional group consisting of 'crawling fish'. *Te ari* (flounders and soles) are both thought to crawl along the seafloor and are the only family of *Te ika ttoro* that are consumed on Takuu. The rest of this functional group does not have family names; they are thought to taste bitter and are often simply referred to by their group name. *Karaho*, *Kaarapa* and *Panoko* are types of blennies and gobies that perch themselves on corals with their large pectoral fins and appear to crawl rather than swim.

Interestingly, three of the four species of giant clam regularly consumed on the atoll are considered to be *Te ika te akau* (reef fish). Giant clams, particularly *Nakohu* (*Tridacna gigas*) feature prominently in Takuu mythology. It was believed that *Nakohu*, along with *Vaasua* (*Hippopus hippopus*) and *Te nie* (*Tridacna squamosa*) are capable of separating themselves from their shell and swimming to and settling in another shell at a more desirable location. *Nakohu*, *Vaasua* and *Te nie* are highly prized and are farmed in family plots belonging to female community members in designated areas of the lagoon (Moir 1989). As giant clams also play a prominent role in various ceremonies on the atoll, this elevates them to the status of prestigious fish. The smallest version of the giant clam that is consumed, *Te kunu* (*Tridacna crocea*) is curiously placed into the *mee ttai*, or sea thing, category. A possible explanation for this is that *Te kunu* is the only giant clam gathered solely by woman and teenagers, often together in groups. Fishing is predominately the role of the men, so *Te kunu* is simply thought of as a 'sea thing' that is gleaned from the patch reefs at low tide. *Naa kunu* are also considered of lesser importance and valued mainly as a change of diet when the temptation arises.

Both *Natara* and *Tai ava* are groupers placed in the functional group *Te ika hatu*, but they are further divided based on their observable morphology. Although they share the same habitat that is denoted by the functional group, *Natara* are rather bleak coloured spotted groupers with brown, grey and black hues. *Tai ava*, like the *Tai ava kanukanu* (*Plectropomus oligacanthus*) and *Huahua* (*Plectropomus leopardus*), exhibit a more colourful morphology with shades of red, reddish brown, purple, often with blue spots. *Tai ava* are congruent with several species of the genus *Plectropomus*.

Discussion

Takuu nomenclature and hierarchical classification, much like all local knowledge, has changed significantly through time. The introduction of the *Sii* fishing practice from Manus Island during the late-1800s led to previously unnamed fish being targeted. New economic opportunities, such as the sale of valuable lollyfish and white teat sea cucumber, also necessitated distinctions between multiple species. Thus, there is a strong reliance on identification and separation of *Naa lori* of Takuu. Where a local name was not previously established, common English names were adopted to differentiate between various species of sea cucumber.

While the beche-de-mer trade was the most lucrative economic opportunity for decades on Takuu, the islanders faced a major financial burden from the ongoing nationwide ban that was put in place in by the PNG NFA in 2009. Thus, the residents of Takuu are currently dependent almost entirely on remittances. Inadequate and unpredictable ship-

ping services result in islanders obtaining large surpluses of store bought goods, such as rice, flour and tinned fish when a ship does arrive. After a ship comes to the atoll, there is a marked decline in all fishing practices. Several months after the supply ship leaves, however, the islanders return entirely to a subsistence lifestyle for short periods. The island is in a constant state of flux**,** and many atoll residents have thus decided to resettle in other parts of Papua New Guinea. Poor healthcare services as well as education and employment opportunities also currently drive people away from Takuu. Even in the late-1970s Johannes (1981) noted that increasing connectedness and westernisation of Pacific cultures had accelerated the disappearance of local knowledge during the previous century. While Takuu fishing methods are rapidly disappearing and changing, detailed descriptions of these processes are beyond the scope of this paper. However, I observed that the same effect is taking place on the local taxonomy. The dependence on imported goods leads to less engagement with the island's marine resources. Many of the fish names collected from community elders and fishers could not be identified by most members of the community who were below 30 years of age. The island's youth often cited family names despite the specimen having an established name of its own.

Studies of local knowledge of marine ecosystems necessitate a working lexicon of the marine fauna. Marine folk taxonomy is also especially useful for conservation management planning (Drew 2005). A thorough understanding of local knowledge on Takuu can additionally be used to alleviate some stresses from future rapid environmental change. Furthermore, an analysis of marine organisms provides valuable insight into cultural, social and economic interests of the atoll's population. In sum, the data presented in this paper provides insight into knowledge systems of Takuu as well as establishing a solid foundation for further inquiry.

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Appendix 1

Takuu names of marine vertebrates and invertebrates with the corresponding scientific and English designations. Source: Takuu grammar and dictionary 2011 (names with an asterisk were previously recorded in the Takuu dictionary and verified through this research).

Takuu name	Scientific name	English name
Te ika		**Fish**
Te ika te akau		**lit. Reef fish**
Tikuu*	**Pomacentidae**	**Damselfishes**
Te nnahu	multiple spp.	spp. of damselfish
*Te nnuu**	*Pygoplites diacanthus*	Regal angelfish
Kokoto*	**Pomicentridae**	**Sergeant majors**
*Kokoto**	*Abudefduf* spp.	spp. of sergeant majors
Kokoto pua	*Abdudefduf sordidus*	Blackspot sergeant
Parani*	**Acanthuridae + Siganidae**	**Surgeonfishes + rabbitfishes**
Te umoa	*Acanthurus nigricans*	Whitecheek surgeonfish
Te maa	*Acanthurus olivaceus*	Orangeband surgeonfish
*Te api**	*Acanthurus guttatus*	White-spotted surgeonfish
*Paaua**	*Siganus canaliculatus*	White-spotted rabbitfish
*Pannoo**	*Siganus guttatus* and *Siganus lineatus*	Golden rabbitfish and lined rabbitfish
*Te maarama**	*Siganus virgatus* and *Siganus puellus*	Virgate rabbitfish and masked rabbitfish
*Kukupini**	*Acanthurus lineatus*	Striped surgeonfish
*Te ika uri**	*Acanthurus* spp. and *Siganus* spp.	All black surgeonfish and rabbitfish
Tipitipi*	**Chaetodontidae + *Zanclus cornutus***	**Butterflyfishes and Moorish Idol**
Urutuki*	**Cirrhitidae**	**Hawkfishes**
Uhu*	**Scaridae**	**Parrotfishes**
Uhu vela	*Scarus frenatus*	Bridled parrotfish (initial phase)
Te urahi	*Hipposcarus longiceps*	Pacific longnose parrotfish
*Marena (variant maraepuku)**	*Bolbometron muricatum*	Bumphead parrotfish
Paaseri	*Cetoscarus bicolor*	Bicolour parrotfish
Uhu paaheri	*Cetoscarus ocellatus*	Spotted parrotfish
Tama te komokomo*	**Pomacentridae (and *Amphirioprion* spp.)**	**Anemonefishes**
Malari	**Labridae**	**Wrasses**
Malari hailama	*Halichoeres hortulanus*	Checkerboard wrasse
*Marihana**	*Thalassoma hardwicke*	Sixbar wrasse
*Sipopu purapura**	*Cheilinus fasciatus*	Redbreasted wrasse
Sarakamu	*Halichoeres ornatismus*	Oriental wrasse
Marau*	**Holocentridae**	**Soldierfishes and squirrelfishes**
Marau	*Sargocentron tiere*	Tahitian squirrelfish
Marau kuru	*Myripristis berndti*	Big-scale soldierfish
Marau muu	*Myripristis adusta*	Shadowfin soldierfish
Marau taratasi	*Neoniphon samara*	Spotfin squirrelfish
Marau roa	*Neoniphon aurolineatus*	Gold-lined squirrelfish
Taamarau	*Sargocentron spiniferum*	Sabre squirrelfish
Simu*	**Balistidae**	**Triggerfish**
*Simu rena**	*Balistapus undulates*	Orange-lined triggerfish

*Simu tua**	*Rhinecanthus rectangulus*	Wedgetail triggerfish
*Simu ila**	*Rhinecanthus verrucosus*	Blackpatch triggerfish
*Simu tai**	*Rhinecanthus aculeatus*	Picasso triggerfish
*Simu rautaro**	*Melichthys niger*	Black triggerfish
*Simu matariki**	*Balistoides conspicillium*	Clown triggerfish
*Simu moana**	*Pseudobalistes fuscus*	Blue triggerfish
*Simu sue**	*Cantherhines pardalis*	Honeycomb filefish
*Simu kiore**	*Melichthys vidua*	Pinktail triggerfish
Simu paopao	*Amanses scopas*	Broom filefish
Simu taia mmea	*Pseudobalistes flavimarginatus*	Yellowmargin triggerfish
Simu taia uri	*Balistoides viridescens*	Titan triggerfish
Kanae	**Muglidae**	**Mullets**
*Kanae**	*Mugil cephalus*	Flathead grey mullet
*Kamakamanii**	*Polydaytylus plebeius*	Common threadfin
Tarina	*Liza vaigiensis*	Diamond-scale mullet
*Kiokio**	*Albula vulpes*	Bonefish
Manoo te akau	**Carcharhinidae and Ginglymostomatidae**	**lit. Reef shark**
*Manoo tea**	*Carcharhinus melanopterus*	Blacktip reef shark
Manoo ava	*Triaenodon obesus*	Whitetip reef shark
Moemoeau	*Nebrius ferrugineus*	Tawny nurse shark
Sue	**Tetraodontidae**	**Pufferfish**
Sue kaarevareva	*Arothron mappa*	Map puffer
Sue natara	*Arothron stellatus*	Stellate puffer
Ika te akau **without family names**		
*Manii**	*Acanthurus triostegus*	Convict surgeonfish
Tauaroro	*Fistularia commersonii*	Cornetfish
*Tautu**	*Diodon hystrix*	Porcupinefish
Akiaki	*Scolopsis margaritifer*	Pearly monacle bream
Moomoa (variant Matuanataa)	*Ostracion cubicus*	Yellow boxfish
*Rikaha**	*Platax teira*	Longfin spadefish
Te matu	*Gerres oyena*	Blacktip silver biddy
Saaripo	*Lutjanus fulvus*	Blacktail snapper
Saiara	*Pterocaesio digramma*	Double-lined fusilier
Matakivi	*Scolopsis bilineatus*	Bridled monacle Bream
Vaelo (variant Te matu vaelo)	*Gerres oblongus*	Oblong silver biddy
*Nakohu**	*Tridacna gigas*	Giant clam
*Te Nai**	*Tridacna squamosa*	Fluted giant clam
*Vaasua**	*Hippopus hippopus*	Bear paw clam
Tuna	*Gymnothorax javanicus*	Giant moray
Te ika te hatu		**lit. Stone fish**
Te ume*	***Naso*** **spp.**	**Unicornfish**
Te ume atu	*Naso hexacanthus*	Sleek unicornfish
Te ume rei	*Naso lituratus*	Orangespine unicornfish
Te ume ava	*Naso vlamingii*	Bignose unicornfish
*Te keru**	*Naso annulatus*	Whitemargin unicornfish
Te lapiau	*Naso unicornis*	Bluespine unicornfish

Ipiipi	*Naso brachycentron*	Humpback unicornfish
Nutuhelo	*Naso brevirostris*	Spotted unicornfish
Nanue	Kyphosidae	Sea chubs
Nanue	*Kyphosus cinerascens*	Topsail drummer
Nanue paaua	*Kyphosus vaigiensis* and *Kyphosus bigibbus*	Lowfin drummer and grey drummer
Hiloa	Lethrinidae	Emperors
Hiloa	*Lethrinus xanthochilus*	Yellowlip emperor
Natura	*Lethrinus olivaceous*	Longface emperor
Karisouna	*Lethrinus harak*	Thumbprint emperor
Saratea	*Lethrinus obsoletus*	Orange-striped emperor
Matakutukutukuto a	*Lethrinus ornatus*	Ornate emperor
Matakutukutukuto a harero	*Lethrinus erythropterus*	Longfin emperor
Te lona	*Lethrinus rubrioperculatus*	Spotcheek emperor
Natara	Serranidae	Groupers
*Natara mokopiri**	*Anyperodon leucogrammicus*	Slender grouper
Natara heo	*Epinephelus melanostigma*	One-blotch grouper
Kainataa	*Epinephelus polyphekadion*	Camouflage grouper
Natara ppaa	*Aethaloperca rogaa*	Redmouth grouper
Tai ava	Serranidae	Groupers
Tai ava	*Plectropomus maculatus*	Spotted coral grouper
Tai ava kanukanu	*Plectropomus oligacanthus*	Highfin coral grouper
Tai ava uri	*Plecropomus laevis*	Blacksaddle coral grouper (only dark variation)
Huahua tau matahana	*Plecropomus laevis*	Blacksaddle coral grouper (only pale variation)
Huahua	*Plectropomus leopardus*	Leopard coral grouper
Tono	*Plectropomus areolatus*	Squaretail coral grouper
Ika hatu without family names		
*Heata**	*Epinephelus fusgoguttatus*	Brown-marbled grouper
Kurapo	*Gymnocranius satoi*	Blacknape large-eye bream
*Taea**	*Lutjanus gibbus*	Humpback snapper
*Takape**	*Lutjanus kasmira*	Bluestripe snapper
Tausena	*Lutjanus rufolineatus*	Gold-lined snapper
Taaeva	*Lutjanus argentimaculatus*	Mangrove red snapper
Hootua	*Lutjanus monostigma*	Onespot snapper
*Tapurei**	*Lutjanus semicinctus*	Black-banded snapper
Tanahaa	*Plectorhinchus albovittatus*	Giant sweetlips
*Hanamea**	*Lutjanus bohar*	Red snapper
Sanapiki	*Lutjanus rivulatus*	Blubberlip snapper
Kanani	*Macolor macularis*	Midnight snapper
Ssina	*Symphorichthys spilurus*	Sailfin snapper
*Te muu**	*Monotaxis grandoculis*	Humpnose bigeye bream
*Te muu harero**	*Monotaxis heterodon*	Redfin bream
Te peka	*Cephalopholis argus*	Peacock grouper
Tamat marino	*Cephalopholis urodeta*	Flagtail grouper
Kurakura	*Cephalopholis spiloparaea*	Strawberry grouper
Mataere	*Cephalopholis miniata*	Coral grouper
Taupatu	*Cephalopholis sonnerati*	Tomato grouper
Peepee	*Cromileptis altivelis*	Barramundi

Velovelo	*Variola louti* and *Variola albimarginata*	Yellow-edged lyretail and white-edged lyretail
Te ika te moana		**lit. Ocean fish**
Manoo*	**Carchacharhinidae, Sphyridae and *Rhina ancylostoma***	**Sharks and shark ray**
*Manoo hai**	*Rhina ancylostoma*	Shark ray
*Lookea**	*Negaprion acutidens*	Sicklefin lemon shark
Maamaatarina	*Shpyrna mokarran*	Great hammerhead
Paru	**Various species of fish targeted during Kkuu fishing**	
Paru marau	*Pinjalo lewisi*	Slender pinjalo
*Paramea**	*Lutjanus sebae*	Red emperor snapper
Te hai*	**Dasyatidae, Myliobatidae and Mobulida**	**Stingrays**
*Hai haarua**	*Manta birostris*	Manta ray
*Hai manu**	*Aetobatus narinari*	Spotted eagle ray
Saruano	*Urogymnus asperrimus*	Thorny stingray
Tahoraa	**Various (order Cetacea)**	**Whales**
***Ika moana* without family names**		
*Kimaota**	*Coryphaena hippurus*	Dolphinfish
*Lavena**	*Katsuwonus pelamis*	Skipjack tuna
*Te kaso**	*Acanthocybium solandri*	Wahoo
Takua	*Istiophorus platypterus*	Indo-Pacific sailfish
*Te karo**	*Mulloidichthys* sp.	Species of goatfish
Kanapure	*Selar crumenophthalmus*	Bigeye scad
Sarii (variant Te Nehu)	*Atherinomorous lacunosus*	Robust silverside
*Sakuraa**	*Xiphias gladius*	Swordfish
Samono	*Stenella longirostis*	Spinner dolphin
Simu kanae	*Canthidermis maculatus*	Oceanic triggerfish
*Una mea**	*Chelonia mydas*	Green sea turtle
Masana	*Eretmochelys imbricata*	Hawksbill sea turtle
*Te mmusa**	*Epinephelus lanceolatus*	Giant grouper
Te uri	*Caeso cuning* and *Caesio teres*	Yellowtail fusiler and blue and yellow fusiler
*Tama uriuri te manoo**	*Echeneis naucrates*	Sharksucker (dark variation)
*Tama uriuri te una mea**	*Echeneis naucrates*	Sharksucker (pale grey variation)
Te hoo	Various	Collective name for all fry fish
Ika ttea		**Various spp. of jacks and needlefish. Fish caught during '*Sii*' fishing.**
Aku*	**Belonidae**	**Needlefishes**
Matapuku	**Carangidae**	**Trevallies**
Matapuku	*Caranx sexfasciatus*	Bigeye trevally
Urua	*Caranx ignobilis*	Giant trevally
Maapilo	*Carangoides orthogrammus*	Yellow-spotted trevally
Malauseri	*Caranx melampygus*	Bluefin trevally
Tahauri	*Caranx lubricus*	Black jack
Matapai	*Carangoides fulvoguttatus*	Gold-spotted trevally
Araara	*Carangoide ferdau*	Blue trevally
Marakaraka	*Alepes djedaba*	Shrimp scad
Sapela	*Carangoides gymnosthetus*	Bludger trevally
Kosihu (variant kumoso)	*Gnathanodon speciosus*	Golden trevally

Maarahe	*Caranx bucculentus*	Bluespotted trevally
Ika ttea **without family names**		
*Kamai**	*Elagatis bipinnulatus*	Rainbow runner
*Te atu (hailama)**	*Thunnus albacares*	Yellowfin tuna
Laueva	*Katsuwonus pelamis*	Skipjack tuna
Hoehoe	*Euthynnus xanthochilus*	Yellowlip emperor
Naenae	*Grammatorcynus bilineatus*	Double-lined mackerel
*Te ono**	*Sphyraena jello*	Pickhandle barracuda
Te moratu	*Gymnosarda unicolor*	Dogtooth tuna
Tapaturi	*Sphyraena barracuda*	Great barracuda
Tapatuu	*Sphyraena forsteri*	Bigeye barracuda
Te tenaa	*Rastrelliger kanagurta*	Long-jawed mackerel
Te ature akau	*Selar boops*	Oxeye scad
Uruperuperu	*Decapterus macarellus*	Mackerel scad
Tikava	*Sphyraena obtusata*	Yellowtail barracuda
Kanekanehatu	*Trachinotus blochi*	Snubnose pompano
Tama te puusau	*Alectis ciliaris*	African pompano
Te lai	*Scomberoides lysan*	Double-spotted queenfish
Lailai	*Trachinotus blaillonii*	Small-spotted dart
Maapusa	*Aphareus furca*	Small-toothed dogfish
Ika ttoro*		**lit. Crawling fish**
Te ari*	**Bothidae and Solidae**	**Flounders and soles**
Ika toro **without family names**		
Panoko	*Paraplotosus albilabris*	Whitelipped eel catfish
*Te nnehu**	*Synanceia verrucosa*	Reef stonefish
Karisittai	*Malacanthus latovittatus*	Blue blanquillo

Mee ttai		**lit. Sea thing**
Lori*	**Holothuroidea**	**Sea cucumbers**
Lori sausau	*Thelenota anax*	Amberfish sea cucumber
Muripata	*Stichopus chloronotus*	Greenfish sea cucumber
Saratea	*Actinopyga miliaris*	Hairy blackfish sea cucumber
Tikava	*Actinopyga palauensis*	Panning's black sea cucumber
Takusana	*Holothuria atra*	Lollyfish sea cucumber
Kavatuitui	*Thelenota ananas*	Pineapple sea cucumber
Kukupo uri	*Holothuria noblis*	Black teatfish sea cucumber
Kukupo	*Holothuria fuscogilva*	White teatfish sea cucumber
Mee ttai **without family names**		
Hare urahi	*Nautilus pompilius*	Emperor nautilus
*Komokomo**	Order Actiniaria	Various species of sea anemones
Hatuke	*Heterocentrotus trigonarius*	Dark slate-pencil urchin
Te fanka	*Diadema setosum*	Black longspine sea urchin
Te pamu	Sipunculidae	Large species of peanut worm
Te upo	Sipunculidae	Species of peanut worm
Te kina	Sipunculidae	Species of peanut worm
Te ura	*Panulirus versicolor*	Painted spiny lobster

*Siakorukoru**	*Sepia latimanus*	Broadclub cuttlefish
Toka	Order Octopoda	Various species of octopuses
*Karea**	Order Gastropoda	Various species of gastropods
Karea manamana	*Lambis scorpius*	Scorpion spider conch
Taniope	Suborder Balanomorpha	Various species of acorn barnacles
*Aramea**	*Acanthaster planci*	Crown-of-thorn starfish
Te hetuu	Asteroidea	All species of sea stars except crown-of-thorn sea star
*Te ane**	*Millepora* spp.	Various species of fire coral
*Harero**	Order Scleractinia	Various species of boulder corals
*Harero manamana**	Order Scleractinia	Various species of branching corals
Hare tui	Class Polychaeta	Species of polychaete worm (possibly *Diopatra* sp.)
*Kaipea**	Infraorder Brachyura	Various species of crabs
Varo	*Odontodactylus scyllarus*	Peacock mantis
Te kunu	*Tridacna crocea*	Boring giant clam
*Hare atu**	Class Hydrozoa	Various species of stinging hydroids
*Hare tui**	Amphinomidae	Various species of bristle worms
*Hatu mata**	*Ovula ovum*	Common egg cowrie