

CHAPTER NINE

FISHES AND MARINE MAMMALS

9.1 Fishes and marine mammals of the central Moluccas

Wallace [Wallace, 1962 (1869)] noted that the fishes of the central Moluccas were perhaps unrivalled for variety and beauty. More than 780 certain freshwater and marine species are known from the area, although the number of species encountered during the course of fieldwork in the Nuaulu area was extremely small. For the most part, this reflects Nuaulu lack of knowledge of maritime fauna, and only secondarily relative geographical distribution. Few specimens were collected, and identifications are based for the most part on photographs, drawings and written descriptions.

A checklist of some of the major fish reported for south central Seram, including those forms with which the Nuaulu are familiar, is presented in table 15.

9.2 Nuaulu categories applied to fish

9.2.1 woku

AM = 'ikan yu' or 'kaluju'; Ind. 'ikan hiu'. Applied to all non-bony fishes other than *PRISTIFORMES* encountered by the Nuaulu.

9.2.1.1 woku ikae

Ikae = 'fish'. Applied to all typical sharks. These are occasionally seen off the coast of south Seram, but never sought after and actively feared.

9.2.1.2 woku sanihuhue

The meaning of this term is unclear. Refers to hammerhead sharks.

9.2.1.3 woku karakaiya

Lit. 'saw shark'. In 1969 Sauute Nepane-tomoien found a sawfish trapped in his net off Rohua. This was an unusual incident. The fish was eaten and the 'saw' preserved as a trophy.

9.2.1.4 woku sonu

Sonu is the term applied to needlefish (9.2.13). Woku sonu is not a shark at all, but swordfish of the perciform family Xiphiidae. None were

observed in the Nuaulu area during fieldwork.

9.2.2 (ika) hari

Glossed in AM as 'ikan pari'. Applied to sting-rays, which are sometimes encountered when fishing or travelling along the coast in an outrigger canoe. In 1970 I had to treat a youth who had been badly stung by a ray.

9.2.3 ama-ama

Lit. 'father-father'; applied to a small anchovy *Thrissina baelama*, glossed in AM as 'ikan lumpa' or 'ikan lompar', and compared with 'ikan nasi'.

9.2.4 ika siori

Cognate with AM 'ikan teri', sometimes also known as **puri**. This fish has a black dorsal surface, silver ventral surface, orange markings on the face and a golden tail. The term is applied to anchovies of the genus *Stolephorus*.

9.2.5 ika mate

Glossed in AM as 'maki, make'; applied to *Clupea schrammi*, *C. stereolepis* and other herrings.

9.2.5.1 mate inae

Inae = 'mother'; applied to *Clupea longiceps* and *Sardinella fimbriata*.

9.2.5.2 mate seran

Seran is often treated as an acceptable variant of 'Seram', though in this case the reference is probably to that part of eastern Seram originally designated by the term. For the Nuaulu Seram as a whole is **nusa ina**, 'mother island'. Applied to *Spratelloides delicatulus* and other sprats.

9.2.6 (ika) petie

Peti is the root of a number of words meaning to tremble, vibrate, beat and knock. Applied to freshwater pikes including *Ophiocephalus striatus* and almost certainly *O. micropelties*. AM gloss = 'ikan gabus'.

TABLE 15 Checklist of fishes and marine mammals recorded in and around the Nuaulu region of south central Seram, 1970-75.

Species	Ecological zones					Nuaulu gloss
	1	2	3	4	5	
<i>LAMNIFORMES</i> - sharks)	-	-	-	+	+	woku
typical sharks	-	-	-	+	+	woku ikae
<i>Sphyrnidae</i> - hammerhead sharks						
<i>Sphyraena</i> sp.	-	-	-	+	+	woku sanihuhue
<i>MYLIOBATIFORMES</i>						
<i>Dasyatidae</i> - stingrays						
<i>Dasyatis kuhli</i>	-	-	-	-	+	hari
<i>PRISTIFORMES</i>						
<i>Pristidae</i> - sawfish						
<i>Pristiopsis</i> sp.	-	-	-	-	+	woku karakaiya
<i>CLUPEIFORMES</i>						
<i>Engraulidae</i> - anchovies						
<i>Thrissina baelama</i>	-	-	-	+	-	ama-ama
<i>Stolephorus</i> spp.	-	-	-	+	-	ika siori
<i>Dussumieriidae</i>						
<i>Spratelloides delicatulus</i>	-	-	-	+	-	ika mate seran
<i>Clupeidae</i> - herrings						
<i>Clupea schrammi</i>	-	-	-	+	-	mate
<i>Clupea stereolepsis</i>	-	-	-	+	-	mate
<i>Clupea longiceps</i>	-	-	-	+	-	mate inae
<i>Sardinella fimbriata</i>						
<i>Esocidae</i> - pikes						
<i>Ophiocephalus striatus</i>	+	-	-	-	-	petie
<i>Ophiocephalus micropelties</i>	+	-	-	-	-	petie wae nosite
+	-	-	-	-	-	peti kunie
<i>CYPRINIFORMES</i>						
<i>Cyprinidae</i> - carps	+	-	-	-	-	ika timanne

SILUROIDIFORMES

Plotosidae - catfish eels

Paraplotosus albilabris

Plotosus anguillaris

Various freshwater catfish

+	-	-	-	-	-	wotu-wotu
+	-	-	-	-	-	namue
+	-	-	-	-	-	nam hosu

nam wanae

ANGUILLIFORMES - eels and morays

Anguillidae - freshwater eels

Anguilla bicolor pacifica

+	-	-	-	-	-	awane
+	-	-	-	-	-	awane tunne
+	+	-	-	-	-	ika koa totue

Anguilla celebensis

Anguilla marmorata

Muraenidae - moray eels

Siderea picta

-	-	+	+	-	-	yapato
-	-	+	+	-	-	and other spp.

BELONIFORMES

Belonidae - needlefish

Strongylura

-	-	-	+	+	+	sonu
-	-	-	+	+	+	sonu

Hemiramphidae - halfbeaks, garfish

Hemiramphus marginatus

-	-	-	+	+	+	wanu
+	+	-	-	-	-	wanu

Zenarchopterus - river garfish

Various saltwater genera

-	-	-	+	-	-	wanu
Exocoetidae - flying fish						

Cypselurus spp.

-	-	-	+	-	-	(ika) keuro
---	---	---	---	---	---	-------------

GADIFORMES

Bregmaceros maccolellandi

PLEURONECTIFORMES - flatfish

Unidentified flatfish

+	-	-	-	-	-	ika rina
---	---	---	---	---	---	----------

SYNGNATHIFORMES

Fistularidae - cornet fish

Fistularia eptimba

Syngnathidae - pipefish, sea horses

Hippocampus polytaenia

-	-	+	+	-	-	peskada
---	---	---	---	---	---	---------

MUGILIFORMES

Sphyraenidae - barracudas

Sphyraenella chrysotaenia

- - - + + taniri

Mugilidae

Mugil troscheli

+ - - - hoi waene

- - - + + hoi nueae

Atherinidae - silversides

Pranesus duodecimalis

Melanotaenidae - rainbowfish

+ - - - - hoi manikate

PERCIFORMES

Scombridae - mackerels

Rastrelliger spp.

- - - + - lema

Scomberomoridae

Scomberomorus

taniri

Thunnidae - tunas and albacores

Auxis thazard

- - - + + komu

Thynnus albacares

Katsuwonus pelamis

Kishinoella tonggol

- - - + - pia

Euthynnus

Istiophoridae - sailfish and related forms

Istiophorus orientalis

- - - + - ika nane

Xiphiidae - swordfish

- - - - + woku sonu

Trichiuridae - cutlass fish

Trichiurus haumela

- - - + - tumane-maine

Carangidae - jacks, scads and pompanos

Selaroides leptolepis

- - - + - ika hutua onate

Caranx spp.

- - - + - heti

Alepes mate

- - + + - heti

prob. *Alectis* sp.

Decapterus macrosoma

- - - + - momar

Lutjanidae - snappers

Lutjanus fulviflamma

- - - + - ika ka

Lutjanus rufolineatus

- - - + - ikae msinae, ika iloru

Lutjanus sanguineus

- - - + - ika mala

Caesiidae.

Caesio spp.

- - - + - ika uri hatae

Theraponidae - tiger fish	-	+	-	+	-	ika kutulauno
<i>Therapon</i>	-	+	-	+	-	ika kutulauno
Mullidae	-	-	-	+	-	ikae uri hatae
Unidentified goatfish	-	-	-	+	-	ikae uri hatae
Pempheridae	-	-	+	-	-	ikae kori-kori
<i>Pempheris</i> sp	+	-	-	-	-	eta-eta
Chaetodontidae - butterfly fish, coral fish	-	-	+	-	-	ikae kori-kori
<i>Heniochus acuminatus</i>	-	-	+	-	-	ikae hanu totue
Coridae - wrasses, rainbowfish	-	-	+	-	-	ikae hanu totue
<i>Cheilinus</i> spp.	-	-	+	-	-	punu
<i>Stethojulis kalosoma</i>	-	-	-	+	-	sunu moti
unident. wrass	-	-	+	-	-	ika tuyu hutan
Scaridae - parrotfishes	-	-	-	+	+	ika nakatua
<i>Callyodon</i> or <i>Scarus</i>	-	-	-	+	+	ika nakatua
Blenniidae - blennies	-	-	+	-	-	ika lasiato
Acanthuridae - surgeon fish and related forms	-	-	+	-	-	ika hanu totue
<i>Acanthurus lineatus</i>	-	-	+	-	-	ika hanu totue
Gobiidae - gobies	-	-	+	-	-	ika lasiato
<i>Paragobiodon echinocephala</i>	-	-	+	-	-	ika lasiato
Periophthalmidae - mudskippers	-	+	-	-	-	lasiato
<i>Periophthalmodon vulgaris</i>	-	+	-	-	-	lasiato
Scorpaenidae - scorpion fish and rock fish	-	-	+	-	-	ika sinatane
<i>Parascorpaena maculipinnis</i>	-	-	+	-	-	ika sinatane
Percidae - perches	-	+	-	-	-	ika sa sahune
<i>Anabas testudineus</i> - climbing perch	-	+	-	-	-	ika sa sahune
Lactariidae	-	-	-	+	-	lema
<i>Lactarius lactarius</i>	-	-	-	+	-	lema
<i>TETRODONTIFORMES</i>						
Diodontidae - porcupinefish	-	-	-	+	-	ika tunene
<i>Diodon</i>	-	-	-	+	-	ika tunene

Balistidae - trigger fish and file fish							
<i>Balistes</i> spp.	-	-	+	-	-	ika e uro, ikura	
Monocanthidae							
Tetraodontidae	-	-	-	+	+	sunu	
Unidentified TELEOSTOMI (bony fish)	+	-	-	-	-	wanapoi	
	-	-	+	-	-	ika moti atue	
	+	-	-	-	-	ika ai hata kopue	
	+	-	-	-	-	monosia	

Aquatic mammals

CETACEA

whales	-	-	-	-	+	ika baus
dolphins and porpoises	-	-	-	-	+	ika hahu
<i>SIRENIA</i>						
<i>Dugong dugon</i>	-	-	-	+	-	mata luyun

Key: Zone 1 = freshwater; zone 2 = brackish water, mangrove swamp; zone 3 = littoral, reefs and rock pools; zone 4 = offshore; zone 5 = deep sea.

9.2.6.1 peti(e) wae nosite

Lit. 'petie of the river bottom', referring to the habit of this black and white freshwater fish of laying in the sand of river bottoms.

9.2.6.2 peti kunie

Lit. 'tumeric petie'; tumeric, *Fibraurea chloroleuca*, being a woody climber used widely as a source of yellow dye. The dorsal surface of this freshwater fish is red and black with yellow fin extremities; the ventral surface is yellow with reddish fin extremities.

9.2.6.3 peti rihu-rihue

Rihu = 'fly(ing)'.

9.2.7 ika timanne

Glossed in AM as 'ikan mas' ('gold fish'); applied to various species of freshwater carp.

9.2.8 wotu-wotu

Glossed in AM as 'ikan sembilan' ('nine fish'), this species is regarded as dangerous; applied to *Paraplotosus albilabris* and *Plotosus albilabris*.

9.2.9 namue

Term applied to a freshwater fish with a broad mouth and depressed body form, mostly catfish. Commonly fished.

9.2.9.1 nam hosu

Meaning of qualifier unknown. Unidentified black catfish with small orange spots sparsely scattered over surface.

9.2.9.2 nam wanae

Prob. 'child of the namue'. Unidentified freshwater catfish.

9.2.10 awane

Awane, wane = 'lianas, trailers, string'. AM gloss = 'muria air' and applied to freshwater eels (Anguillidae), including *Anguilla bicolor pacifica*. All **awane** are totemic for the clan Pia. Five types are recognised, though the fifth is optional.

9.2.10.1 awane metene

Metene = 'black'. Also known as **awane (muna) nahu, awane unu panane** and **awane mnanahu (mata putie)**. Nahue refers to palm fibre, while **muna** is a verb meaning 'to adversely affect in some way'; **unu panane** means 'the top of the head'. **Awane muna nahu** is sometimes distinguished from other **awane** on the grounds of its much smaller size.

9.2.10.2 awane msinae

Msinae = 'red'. This is also known as **awane tunne, tunne** meaning 'very' as in 'very best'. The term presumably refers to the attractive markings of this animal, *Anguilla marmorata*.

9.2.10.3 awane putie

Putie = 'white', for which there are no recorded synonyms.

9.2.10.4 awane hunanene

Hunane = 'moon' + -ne (third person singular possessive); therefore lit. 'eel of the moon'. Reference unclear.

9.2.11 ika koa totue

Lit. 'pandanus leaf fish', referring to the appearance of this attenuated and extremely laterally compressed form of fresh and salt water. A term apparently applied to Anguillid elvers, but may also extend to other eels.

9.2.12 yapato

Yapato is possibly a recent (re-introduced?) loan word, in view of the fact that the Nuaulu have only been located on the coast for a historically short period. Applies to saltwater eels, probably moray eels (Muraenidae), including the locally present *Siderea picta*. **Yapato** (which is also often glossed with AM 'ikan muria') may sometimes be used to refer to certain seasnakes which resembles eels quite closely. The Nuaulu distinguish two terminal categories:

9.2.12.1 yapato putie

Putie = 'white'. Whitish or yellowish speckled dorsal surface.

9.2.12.1 yapato msinae

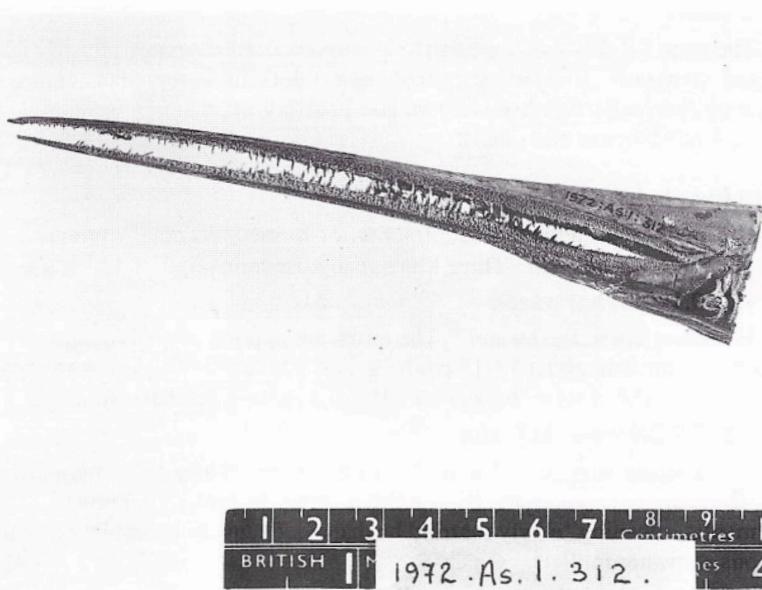
Msinae = 'red'. Reddish speckled dorsal surface.

9.2.13 (ika) sonu

Sonu may be an archaic word for 'sago'. Often glossed in AM as 'ikan sagu', the association between it and a sago palm is clear from an origin myth in which the Dutch are reputed to have first emerged from the trunk of a sago palm (a common Nuaulu mythic theme) and then transported to Holland with the assistance of a friendly **ika sonu**. The existence of such a story, and the apparent fact that the term is not a recent loanword, suggests that familiarity with the fish is longstanding.

Applied to needlefish of the genera *Strongylura* and *Tylosurus*, which are caught using the web of the round-bodied spider **ka(h)uneke wala-wala sonu** (chapter 13.2.12). The head of a caught **ika sonu** is never discarded, but placed between the slats of the wall of a house near the seaward entrance (**mitanunue nuae**). It is regarded as a trophy well worth displaying as well as acting as a charm to bring good fortune in subsequent fishing (see BM specimen As. 1. 312, and plate 14).

PLATE 14: Dried head of needlefish (sonu: *Strongylura* or *Tylosurus*) displayed as trophy on seaward house entrance. L. 13.5 cm. (As 1.312). Photograph reproduced by courtesy of the British Museum.



1	2	3	4	5	6	7	8	9	10
BRITISH									

1972 . As. 1. 312 . pes 4

9.2.14 wanu

Glossed in AM as 'julung-julung'; applied to the halfbeak *Hemiramphus marginatus* and other Hemiramphid genera.

9.2.15 ika keuro

Flying fishes, including *Cypselurus nigripinnis*, known in AM as 'tuing-tuing', No particular focal form identified.

9.2.16 ika rina

Term applied to an unidentified species of freshwater flatfish. It is about 11 cm long, with a black dorsal surface and white ventral surface.

9.2.17 peskada

From Portuguese 'pes' or 'pescada' (fish, kind of fish) modified by a perceived identity between 'cada' and AM 'kuda', meaning horse; lit. 'horse fish'. There is no syllable final /s/ in Nuaulu, nor an /sk/ consonant cluster

(R.B.). Particular focal species of true sea horses, but probably extended to include pipefish. Applied to specimens of *Hippocampus*.

9.2.18 taniri

The term for this fish appears to be derived from cognates of AM 'ikan tenggiri (tengguri, tengjuri, tengjiri)', and refers to barracudas, certainly including *Sphyraenella chrysotaenia*, and possibly the mackerels *Scomberomorus*, *Auxis thazard* and others.

9.2.19 (ika) hoi

Hoi may be an adjectival contraction of hoine ('eczema'), referring to the appearance of this fish. Three kinds recognised, one optional.

9.2.19.1 (ika) hoi waene

Waene = 'river, freshwater'. The terms are applied to a white and silver freshwater fish, about 13-15 cm long, and with a slightly darkened upper surface. AM gloss = 'bulana air': *Mugil troscheli* and other mullets.

9.2.19.2 hoi nuiae, hoi saha

As its name suggests, this is the marine form of ika hoi; nuiae being 'sea'. In the synonym, the qualifier saha is probably derived from msaha, meaning 'newly married husband'. Seems to be applied to various saltwater mullets.

9.2.19.3 hoi manikate, ika manikate

Man ikate means 'bird pattern', referring to the markings of this silver freshwater fish with a dark dorsal surface. Possibly a rainbow fish of the family Melanotaenidae; glossed in AM by the term 'loreng-loreng'.

9.2.20 lema

Cognate with AM 'laima' or 'lemah'. Applied to one of the most commonly caught types in offshore fishing along the Seramese coast, the mackerel *Rastrelliger neglectus*. Those specimens caught by the Nuaulu were generally confined to the young. AM 'lemah' is also known to be applied to whitefish, *Lactarius lactarius*.

9.2.21 komu

Applied to the tuna *Auxis thazard*.

9.2.22 ika pia

Pia refers to the river of the same name 1 km east of the village of Bunara (see figure 3). Glossed in AM as 'cakalan': tuna, focally *Kishinoella tonggol*.

9.2.23 ika nane

Lit. 'sail fish', making it semantically equivalent to the AM gloss 'ikan layar', indicating *Trichiurus savula*; but perhaps also including the spectacular pacific sailfish *Istiophorus orientalis*.

9.2.24 tumane-maine

Lit. 'wriggling axe'; AM gloss = 'ikan mencadu' : 'axe fish'. Possibly an allusion to *Trichiurus haumela* or near, also known in AM as 'parang parang'.

9.2.25 ika hutua onate

Lit. 'large intestine fish'; in AM 'ikan ila (aela). Probably *Selaroides leptolepsis*.

9.2.26 ika heti

The term is glossed in AM as 'ikan bubara, bobara': various trevally of the genus *Caranx* (AM 'kawalinja'), probably including *C. armatus* and *C. melampygus*; also possibly *Alepes mate* and *Alectis*.

9.2.27 momar

Cognate with identical AM term; applied to *Decapterus macrosoma*.

9.2.28 ika ka

One specimen of this marine form was identified as the snapper *Lutjanus fulviflamma*.

9.2.29 ika iloru, ika msinae

Refers to a non-Nuaulu village of that name, possibly Ileri near Nuelitetu (see figure 3) which no longer exists but which is marked on some old maps: Topographische Inrichting 1918, *Schetskaart van Ceram* (Scale 1 : 100, 000), Batavia; and others. In the synonym, *msinae* = 'red'. Glossed in AM variously as 'geropa' and 'ikan merah (gurara)'; applied to the red snapper *Lutjanus rufolineatus*.

9.2.30 ika mala

Applied to *Lutjanus sanguineus*.

9.2.31 ika uri hatae

Lit. 'banana branch fish'. This saltwater fish is dark brown with red bands, and with black spots surrounded by a light grey ring behind the eyes. Glossed in AM as 'pisang-pisang' and 'ikan salmonet'; considered to be related to AM 'lalosi'. Probably *Caesio pisang*, extended to *C. erythrogaster* and *C. chrysozona*.

9.2.32 eta-eta

Term applied to a small silver freshwater fish with a laterally compressed body form, possibly *Pempheris*.

9.2.33 ika kutulauno, ika utu-utu

The name is possibly an allusion to rough (**kutu-kutue**) waves (**kolau**, pl.); **utu** = louse (10.2.8). A term applied to two closely related types of fish which are not terminologically distinguished by the Nuaulu themselves. A spotted form is glossed in AM as 'kerong-kerong', and a non-spotted form as 'ikan lasi'. Both are known to be eaten by storks. The term is applied to *Sphyraenella chrysotaenia*, but may also be extended to include sea basses such as *Epinephelus caeruleopunctatus* and *E. fuscoguttatus*.

9.2.34 ika kori-kori

Lit. 'butterfly fish', which equates semantically with the attributed AM gloss, 'ikan kopu-kopu'. Perhaps unsurprisingly, this is a label applied fairly generally to a wide range of saltwater butterfly and coral fishes, and perhaps also other brightly-coloured fish of the reefs and rock pools.

9.2.35 ika hanu totue

Hanu is a type of *Hibiscus* shrub, so literally this is 'hibiscus leaf fish'. L = about 20-24 cm; possibly an Acanthurid coral fish (nr. *Acanthurus lineatus*), but also applied to the butterfly fish described in AM as 'ikan bendera', flag fish (e.g. *Chaetodon lunula* and *Heniochus* spp.).

9.2.36 (ika) sunu, sunu moti

This term describes fish found in rock pools at low tide (**moti**), and glossed in AM as 'tatu'. Applied to rainbow fish of the genera *Cheilinus* and *Stethojulis*.

9.2.37 ika tuyu hutan

Lit. 'seven forests fish'; cognate with AM, from which it is apparently derived. A small fish of the seashore and rockpools with a dorsal surface of dark brown, black and orange. The ventral surface of the head is yellow, and the dorsal surface markings are dark crimson and canary yellow. The ventral part of the head is bounded by a tourquoise line. The specimens so-labelled were all juveniles: an otherwise unidentified wrass. Secondary totem for clan Numanaita.

9.2.38 ika nakatua

Lit. 'cockatoo fish', being an allusion to the 'beak' of this large parrot fish: *Callyodon* or *Scarus*. 'Ikan kakatua' in AM.

9.2.39 ika lasiato

Term cognate with Sepa 'lasiato', from which it is almost certainly derived. Meaning unclear. Focally, probably mudskippers (*Periophthalmus vulgaris*), but also applied to some local gobies and blennies.

9.2.40 ika sinatane

Sinatane are nettles, including *Laportea stimulans* and *Procris frutescens*; apparently an allusion to the sting this fish is capable of giving (but see also **kori-kori sinatane**; chapter 10.2.34.9). Applied to a scorpion fish of the rockpools, and glossed by the AM terms 'ikan bia' and 'ikan suangi'. May also refer to a separate freshwater species. **Ikae sinatane** is mashed with red coconut to give a hunting potion for the clan Matoke.

9.2.41 ika sa sahune

Lit. 'climbs sa(h)une', the pandan *Pandanus conoideus*. Probably refers to the saltwater climbing perch, *Anabas testudineus*, which is known to be able to live outside water for lengthy periods with the aid of a labyrinth organ. **Sa sahune** is applied to pond skaters (10.2.15).

9.2.42 ika tunene

Tunene is the durian, *Durio zibethinus*. This name appears to be an allusion to the prickly skin of porcupine fish, though the precise species to which it is applied are unknown.

9.2.43 sunu

Includes the pufferfish *Tetraodon*, and possibly also triggerfish and filefish (Monocanthidae). Notable for toxicity and venomous fin spines; flesh considered poisonous. Note that this is not the same category as 9.2.36.

9.2.44 ika uro, ukura

Meaning unknown; applied to a species of *Balistes*.

9.2.45 wanapoi

Unidentified large freshwater fish.

9.2.46 ika moti atue

Moti refers to rocks and coral areas exposed at low tide; ika moti is therefore, in a general sense, 'reef fish'. The meaning of atue in this context is unknown. The term is applied to fish of many species not distinguished terminologically which are found in rock pools at low tide.

9.2.47 ika ai hata kopue

Lit. 'rotting sago tree fish'. This freshwater fish is glossed in AM as 'gabus'.

9.2.48 (ika) monosia

Term identical in AM; a freshwater species.

9.2.49 (ika) pono

This fish, reported for both marine and freshwater localities, is glossed in AM as ikan tanira.

9.2.50 (ika) unone

Glossed in Sepa as 'iano meme wailo'; unknown freshwater species.

9.2.51 ika baus, baus baus

From AM 'ikan paus', paus fish', lit. 'pope fish'. A term applied to all whales seen, heard or heard of by the Nuaulu. I have one report of the term arauwane for 'whale', but its status is unclear. The most common whales sighted in Seramese waters appear to be the sperm whale, *Physeter catodon* and various baleen whales, *Balaenoptera* spp. Occasional strandings are known.

9.2.52 ika hahu

Lit. 'pig fish', semantically cognate with AM 'ikan babi' for the same; although it is also known as 'lumba-lumba'. The term is applied to dolphins, most of which are probably of the genus *Stenella*. However, the distinction between dolphins seems unlikely to be a clear one, not only for the Nuaulu. Indeed, the people of Lamalera on Lembata use the term 'temu' to include short-finned pilot whales (*Globicephala macrorhynus*), the grampus (*Grampus griseus*), the false killer whale (*Pseudorca crassidens*), as well as most dolphins [Hembree, 1980: 11-6].

9.2.53 (mata) luyun

Cognate with AM term meaning 'moon eye', and applied to the dugong, *Dugong dugon*. Few Nuaulu have ever seen this creature, which is rare in the waters of south central Seram. Sauute Nepane-tomoien caught a dugong in the fifties, and his son Sekanima caught a stray female off the Mon headland in January 1990. Nowadays dugong are best known from the shallow waters around the Seram Laut and Gorom archipelagos, where their teeth and ribs are still occasionally carved into objects such as smoking pipes. Dugong has a reputation for human-like behaviour and was formerly valued for the tusk-like incisors of the male which were made into ear-rings and obtained by the Nuaulu through trade. Its flesh is eaten by the Nuaulu when available, the teeth and 'tears' (the copious emission from the lachrymose gland) sold to Chinese traders, and the ribs and skull kept for magical purposes. Nuaulu consider it to be the ancestor of all Chinese.

9.3 The social and economic significance of fishes and marine mammals

Fish of all kinds constitute a sizable proportion of all animal protein consumed by the Nuaulu, around 25 percent consumed weight judging from the results of a four month dietary survey [Ellen 1993: chapter 6.3]. Most fish eaten by the Nuaulu are either of freshwater origin or bought from other fishing peoples along the coast. This includes virtually all tuna (*ika pia*) consumed by the Nuaulu. Freshwater fish are obtained through traditional methods employed in the mountain homelands: fish-trapping, mud-scouring, stunning with plant poisons, and using bow-and-arrow. Since coming to the coast, a few individuals have taken to marine fishing: night-time lamp fishing for squid, and the use of light surrounded by a net for catching bait fishes such as *Stolephorus*, *Caesio*, *Sardinella* and *Caranx*. A type of purse seine fishing ('giob', in AM) is also sometimes employed for *Caranx*, *Decapterus*, *Hemiramphus* and *Sphyraena*. Pole and line live-bait fishing takes place from the beach, and fishes stranded in rock pools are collected at

low tide using basket traps.

There is virtually no ritual restriction on the consumption or procurement of particular species, and almost anything available will be eaten, although no attempt is made to catch the larger fish and marine mammals, which are only eaten when they are occasionally thrown up on beaches, get caught in nets or stray out of their natural habitat. This catholic attitude to the consumption of marine fish in particular, and the absence of strong traditions relating to marine species, reflects the fact that the Nuaulu have been a coastal people for less than 100 years.

TABLE 16 Some non-assimilated Sepa fish terms occasionally used by Nuaulu.

Species	Sepa	AM gloss
<i>SYNGNATHIFORMES</i>		
Fistularidae - cornet fish <i>Fistularia petimba</i>	tuano	ikan trompet
<i>PERCIFORMES</i>		
Chirocentridae <i>Chirocentrus dorab</i>	tahula	ikan parang-parang
Trichiuridae - cutlass fish <i>Trichiurus haumela</i>	pulala/papalo	palala/papalo
Carangidae - jacks, scads and pompanos <i>Selar boops</i>	wau'uno	lalosi
Lutjanidae - snappers <i>Caesio cuning</i>	matenu	ikan papua
Pomacentridae - damselfish <i>Abudefduf</i>		

9.4 Some general features of Nuaulu knowledge and classification of fishes

The category *ikae* is approximately co-terminus with AM 'ikan'. It includes all marine mammals, but there is a fuzzy area of overlap with respect to eels, sea-snakes and perhaps freshwater snakes. Marine coelenterates and echinoderms, such as sea-stars, are closely linked to *ikae* by ecological association and the term is sometimes used to describe them. When appearing as the first element in a binomial, *ika* and *ikae* appear to be used more-or-less interchangeably, though some terms seem to display one more

frequently than the other. In presenting the terms here I have made no attempt to systematize this usage and have usually given the form as elicited.

Nuaulu terminology for fish is very restricted when compared with the richness of the fauna of the inshore waters of Seram, and the terminologies of other coastal peoples. Broadly-speaking, only those fish which are commonly consumed or which are in other ways salient are accorded Nuaulu names. The traditional extraction of freshwater fish is reflected in a relatively more detailed lexicon for these fish given their total numbers than for marine forms. When faced with a marine fish for which there is no Nuaulu term, a Sepa or AM term may be used instead, if these are known. There are an indeterminate number of Sepa fish terms which are occasionally used, though they are not sufficiently shared to constitute what we might describe as 'assimilated' Nuaulu terms. For this reason they have not been listed in section 9.2, and some are presented separately in table 16. In this case it is difficult to know where the Nuaulu lexicon begins and that of other language groups end. If a term is introduced from another language it is clearly being used as a Nuaulu term. Whether a term is accepted as part of the Nuaulu corpus, must in the end depend on judgements as to general acceptability, shared use and conscious recognition that it is a Nuaulu term ('our word'), rather than one borrowed for the occasion. This matter is discussed in more general terms in chapter 2.6 of *The Cultural Relations of Classification*.