

QUEST - Fish Identification List

Text:

Randall, John E. 1996. *Shore fishes of Hawaii*. Natural World Press, 47227 Goodpasture Road, Vida, OR 97488

Study Aids:

The fishes introduced in this handout can be accessed on the web at <http://www.coralreefnetwork.com/> which is a site created by Dr. Brian Tissot of Washington State University at Vancouver. Enter the site, click on Marine Life, then click on Fishes, and finally, click on the family photo to access species in that family.

Families:¹

1.	Synodontidae	lizardfishes		
2.	Aulostomidae	trumpetfishes		
3.	Fistulariidae	cornetfishes		
4.	Holocentridae (N)	squirrelfishes/soldierfishes		

5.	Serranidae	sea basses	Families #5-17 are in the order Perciformes.	
6.	Cirrhitidae	hawkfishes		
7.	Lutjanidae	snappers		
8.	Lethrinidae	emperors		
9.	Mullidae	goatfishes		
10.	Chaetodontidae	butterflyfishes		
11.	Pomacanthidae	angelfishes		
12.	Pomacentridae	damsel fishes		
13.	Labridae	wrasses		
14.	Scaridae	parrotfishes		
15.	Acanthuridae	surgeonfishes		
16.	Zanclidae	moorish idol (1 sp)		
17.	Blennidae	blennies		

18.	Balistidae	triggerfishes		
19.	Monacanthidae	filefishes		
20.	Ostraciidae	trunkfishes		
21.	Tetraodontidae	puffers		
22.	Diodontidae	porcupinefishes		

¹ Family taxonomy after Nelson, Joseph S. 1994. *Fishes of the world*, 3rd Ed. Wiley & Sons, New York, 600 pp.

SPECIES REVIEW

Fish ID 20135.DOCx

Synodontidae (Aulopiformes) – lizardfishes	‘ulae
<i>Synodus spp.</i> “lizardfish”	
long, tubular, large gape, adipose fin cryptic benthic ambushers	
Aulostomidae (Syngnathiformes) – trumpetfishes	nūnū
<i>Aulostomus chinensis</i> “trumpet fish”	
tubular snout lobate caudal 8-12 isolated dorsal spines	
Fistulariidae (Syngnathiformes) – cornefishes	nūnū peke
<i>Fistularia commersonii (petimba)</i> “cornefish”	
elongate caudal filament forked caudal no dorsal spines Green to olive dorsally, silver white ventrally	
Holocentridae (Beryciformes) - squirrelfishes & soldierfishes	‘ala‘ihi
<u>squirrelfishes</u>	
preopercular spine long anal spine	
<i>Sargocentron spp. (Adioryx), Neoniphon spp. (Flammeo)</i>	
often with longitudinal white lines on body tricolor dorsal sometimes	
<u>soldierfishes</u> (mempachi - Japanese)	‘ū‘ū
no preopercular spine shorter anal spine	
<i>Myripristis berndti</i> – “bigscale soldierfish”	‘ū‘ū
Outer part of first dorsal fin orange-yellow White on leading edges of fins Red, scales paling dorsally	
<i>Myripristis kuntee</i> – “epaulette soldierfish”	‘ū‘ū
Shoulder bar dark and distinct Silver orange-red, not as red as others in family	
Serranidae (Perciformes) - sea basses	
rounded soft dorsal and anal rounded or truncate caudal hermaphroditism common	
<i>Cephalopholis argus</i> “peacock grouper”	roi
dark brown or black body covered with small bright blue spots posterior vertical banding common	

Cirrhitidae (Perciformes) - hawkfishes

cirri on membrane of spinous dorsal

- Cirrhitops fasciatus* –“redbarred hawkfish” piliko‘a
5 wide red bars are wider dorsally
- Cirrhitus pinnulatus* "stocky hawkfish" po‘opa‘a
reddish-brown mottling on body
large, rounded head
- Paracirrhites forsteri* "blackside hawkfish" hilu piliko‘a
head with small reddish spots
black & white areas on posterior
- P. arcatus* "arc-eye hawkfish" piliko‘a
orange ring on posterior eye
3 spots on lower opercal

Lutjanidae (Perciformes) - snappers

most with enlarged canine teeth
maxilla hidden under perorbital bone when mouth is closed

- Aphareus furca* – “ smalltooth jobfish” wahanui
Caudal fin deeply forked
Silvery brown on back shading to silvery grey on side
Mouth large with small teeth
- Lutjanus kasmira* "bluestripe snapper" ta‘ape
yellow with longitudinal blue stripes

Lethrinidae (Perciformes) - emperors (close relatives of porgies (Sparidae))

- Monotaxis grandoculis* "bigeye emperor" "mu"
squarred-off snout, big eye

Mullidae (Perciformes) -

goatfishes
two widely separated dorsal fins
two long chin barbels

- Mulloidichthys (Mulloides) flavolineatus* "yellowstripe goatfish" weke ‘ā
yellow stripe
may have black spot under 1st dorsal
fins whitish
- M. vanicolensis* "yellowfin goatfish" weke ‘ula
yellow stripe without black spot
yellow fins
- Parupeneus insularis (bifasciatus)*“ Island goatfish” munu
two dark vertical bars, one under each dorsal
- P. multifasciatus* "manybar goatfish" or moana
vertical black bar between the two dorsals
many blackish vertical bars

Chaetodontidae (Perciformes) - butterflyfishes

strongly compressed body
brightly colored
eye bars common

<i>Chaetodon auriga</i>	"threadfin" (omnivore) thread off soft dorsal "right angle" body barring	kikakāpu
<i>C. quadrimaculatus</i>	"fourspot" (coralivore) two white spots below dorsal	lauhau
<i>C. lunula</i>	"raccoon" black eyeband followed by white (raccoon look)	kikakāpu
<i>C. ornatissimus</i>	"ornate" (coralivore) oval body orangish stipes on whitish body	kikakāpu
<i>C. multicoloratus</i>	"multiband" (coralivore) brownish vertical dots (bands) on whitish body	kikakāpu
<i>Forcipiger flavissimus</i>	"forceps" (omnivore) long rostrum	lauwiliwilinukunuku 'oi'oi
<i>F. longirostris</i>	– "longnose butterflyfish" (omnivore) very long rostrum rows of small black dots behind pectoral fin may also be colored dark brown to black	lauwiliwilinukunuku 'oi'oi
<i>Hemitaurichthys thompsoni</i>	– "Thompson's (or businessman) butterflyfish" (Planktivore) Grey-brown, no conspicuous markings Seen in small aggregations often at reef drop-offs	

Pomacanthidae (Perciformes) - anglefishes
compressed
strong preopercal spine
dorsal & anal often with elongate rays

Centropyge potteri "Potter's angelfish"
orange or reddish fish
bluish lines on body

Pomacentridae (Perciformes) - damselfishes
one nostril on each side
compressed
aggressive usually

Abudefduf abdominalis "Hawaiian sergeant "
vertical black bars on body taper ventrally

- A. vaigiensis* – “Indo-Pacific sergeant” mamo
 5 thick black bars
 Often has bright yellow dorsally on body
- Plectroglyphidodon imparipennis* "brighteye damsel"
 iridescent eye
 small, nervous, pale yellow with greenish undertones
- P. johnstonianus* "blue-eye damsel"
 bright blue eye
 yellowish-green, blackish posteriorly
- Stegastes marginatus* (was *fasciatus*) “Hawaiian Gregory” (“Pacific Gregory”)
 drab gray with orangish-yellow eye
 aggressive
- Dascyllus albisella* "Hawaiian dascyllus" 'alo'ilo'i
 deep bodied
 white below mid-dorsal (white area of variable size)
- Chromis hanui* "chocolate-dip chromis"
 body brownish
 white tail (also posterior dorsal & anal)
- C. agilis* "agile chromis"
 body drab greenish-tan
 tail pale (also posterior dorsal & anal)
 often a black spot at base of pectoral fin
- C. ovalis* "oval chromis"
 uniform bluish to silvery
 dorsal fin darker than body
- C. vanderbilti* "blackfin chromis"
 black on anal and lower caudal fin
 longitudinal bluish stripes
- C. verater* – “threespot chromis”
 Dark brown to black
 3 white dots 1 at rear base of dorsal fin, rear base of anal
 fin and mid base of caudal fin

Labridae (Perciformes) - wrasses

	<u>wrasses</u>	<u>parrotfish</u>
pectoral swimming	mouth protractile	mouth nonprotractile
sexual dichromatism common	teeth separate	teeth fused
sequential hermaphroditism common (protogynous)		

- Oxycheilinus unifasciatus* "ringtail wrasse" (*Cheilinus*) po'ou
 vertical white bar on caudal peduncle
 jutting lower jaw; large head, big teeth

- Labroides phthirophagus*** "Hawaiian cleaner wrasse"
yellow, purple, blue longitudinal stripes "jerky" swimming
- Bodianus albotaeniatus (bilunulatus)*** "Hawaiian hogfish" 'a'awa
female - yellow & white, black on head and base of soft dorsal
male - dark reddish to purplish-blue or brown, light blotches on
lower jaw, caudal projections
- Coris venusta*** "elegant coris"
"rainbow" shape under eye
parallel diagonal cross-bars below midline
dark spot at posterior dorsal base
- C. gaimard*** "yellow tail coris" hinalea 'akilolo
juvenile - red with black & white spots (x5)
female - bright blue spots caudally, yellow tail
male - subdued blue spots caudally, yellow tail, bicolor dorsal&anal
small canine, green or yellow bar
- Macropharyngodon geoffroy*** – "shortnose wrasse"
Orange yellow with dark edged blue spot on each scale
- Pseudocheilinus evanidus*** – "disappearing wrasse"
Red with thin whitish lines
White stripe below eye
Very shy
- P. octotaenia*** – "eightstripe wrasse"
Orange-yellow with 8 dark brown to black stripes
- P. tetrataenia*** – "fourstripe wrasse"
Orange dorsally, greenish ventrally
4 black edged bright blue lines dorsally
very shy
- Thalassoma ballieui*** "blacktail wrasse" hinalea luahine
dark tail at peduncle with white posterior caudal
brownish or grayish
numerous short vertical brown marks
bluish on chin and belly
juveniles = monochromatic greenish/yellowish
- T. duperrey*** "saddle wrasse" hinalea lauwili
distinct saddle behind head
- Gomphosus varius*** "bird wrasse" hinalea 'i'wi
female - long rostrum with reddish color and white face
male - long rostrum, dull green

<i>Stethojulis balteata</i>	"belted wrasse"	'ōmaka
female -	greenish, yellow pectoral axil	
male -	longitudinal orange stripe (pectoral to caudal)	
<i>Halichoeres ornatissimus</i>	"ornate wrasse"	'ohua
	Red with bright green spot on each scale	
	Straight line under eye	
	Juveniles with 2 black spots on soft dorsal fin	
Scaridae (Perciformes) - parrotfishes	<u>wrasses</u>	<u>parrotfish</u>
pectoral swimming	mouth protractile	mouth
nonprotractile		
sexual dichromatism common	teeth separate	teeth fused
sequential hermaphroditism common (protogynous)		
<i>Chlorurus spilurus (was sordidus)</i>	"pacific bullethead parrotfish"	uhu
	(symmetrical head on frontal plane)	
male -	dorsal distally blue	
	body greenish-yellow	
female -	drab olive with reddish mouth area	
	dark caudal spot or blotch	
<i>C. perspicillatus</i>	"spectacled parrotfish"	
male -	two blue bars on face in front of eye	uhu uliuli
female -	reddish brown body	uhu 'ahu'ula
	light caudal peduncle	
<i>Scarus rubroviolaceus</i>	"redlip parrotfish"	pālukaluka
male -	squared snout	
	upper lip with red or orange	
female -	brownish color	
	blue on outer dorsal	
	ventral part of pectoral is bluish	
<i>Scarus psittacus</i> –	"palenose parrotfish"	uhu
Male-	green with orange-pink bar at edge of scales	
	Often has dark blue on top of head	
Female-	reddish to pale grayish-brown	
	Front of snout pale	
	Small black spot at upper base of pectoral fin	
Acanthuridae (Perciformes) - surgeonfishes		
	one or more spines on caudal peduncle (fixed or retractable)	
	mouth small, nonprotractile premaxilla	
<i>Acanthurus triostegus</i>	"convict tang"	manini
	silver to yellowish-green, 5 vertical black bars	
<i>A. leucopareius</i>	"whitebar surgeon"	māikoiko
	two white stripes; posterior to eye & caudal peduncle	
	pale brown	

<i>A. olivaceus</i>	"orangeband surgeon" orange "bar" posterior to opercle, above	na'ena'e pectoral
<i>A. dussumieri</i>	"eye-stripe surgeon" or brownish orange stripe through eye white caudal base and knife adults often with dorsal and anal fins yellow	"palani"
<i>A. blochii (mata)</i>	"ringtail surgeon" white band on caudal peduncle horizontal orange stripe through eye posterior caudal with blue color	pualu
<i>A. achilles</i>	"achilles tang" "directive" orange teardrop on knife Blue and white line nearly encircling mouth White streak on edge of operculum Caudal fin with orange zone	pāku'iku'i
<i>A. nigrofuscus</i>	"brown surgeon" brownish with small orange dots on face bluish border on anal	mā'i'i'i
<i>A. nigroris</i>	"blue-lined surgeon" fine blue longitudinal lines on body looks lavender to pale brown	maiko
<i>A. thompsoni</i>	"Thompson's surgeonfish" Dark brown to light bluish grey Short snout, elongate body Often with darker brown spot in base of pectoral fin (Usually found high in water column along drop-offs Feeds on zooplankton)	
<i>Ctenochaetus strigosus</i>	"goldring surgeon" gold ring around eye, brown body with light blue lines juveniles yellow to yellowish-brown	kole
<i>C. hawaiiensis</i>	"black surgeon" looks black, "lobate" dorsal and anal fins numerous fine, yellowish longitudinal lines juveniles orange with narrow chevron markings	
<i>Zebrasoma flavescens</i>	"yellow tang" all yellow white on peduncular spine horizontal light bar sometimes visible in middle of body	lau'ipala
<i>Naso hexacanthus</i>	"sleek unicornfish" No rostral horn Brownish-grey edge of operculum and preopercle dark brown Head with sloping profile, often found at drop-offs	kala lōlō or 'ōpelu kala

<i>N. lituratus</i>	"orange spine unicornfish" No rostral horn caudal spines orange snout with straight dorsal profile	umaumalei
<i>N. unicornis</i>	"blue spine unicornfish" horn caudal spines blue	kala
Zanclidae (Perciformes) -	"moorish idol" (one-species family)	kihikihi
<i>Zanclus cornutus</i>	"moorish idol" Orangesakkle over snout yellow on side eye well above mouth	
Blennidae (Perciformes) -	combtooth blennies blunt head pelvics anterior to pectorals body unusually naked	
<i>Cirripectes vanderbilti</i>	- "scarface blenny" Dark brown with red dots and lines around head Red ring in outer part of eye	pāo'o
<i>Exallias brevis</i>	"shortbodied or common blenny" dark spots on face often reddish posteriorly	pāo'o kauila
Balistidae (Tetraodontiformes) –	triggerfishes 3 dorsal spines, start behind eye no pelvics; pelvic spine sometimes	humuhumu
<i>Rhinecanthus rectangulus</i>	"reef (wedge) triggerfish" humuhumunukunukuapua'a black through eye, bending posteriorly to anal fin black triangle at caudal peduncle	
<i>R. aculeatus</i>	"lagoon triggerfish" humuhumunukunukuapua'a similar to <i>R. rectangulus</i> no sharply defined large black areas	
<i>Sufflamen bursa</i>	"lei triggerfish" "lei" behind eye may be yellow or black dorsal animal = brown-dark gray ventral animal = whitish-light gray	humuhumu lei
<i>Melichthys vidua</i>	"pinktail durgon" pinkish tail dorsal & anal clear with black margins or fins may be yellowish	humuhumu hi'ukole

M. niger "black durgon" humuhumu 'ele'ele
all black
base of dorsal & anal white (looks blueish)

Xanthichthys auromarginatus – "gilded triggerfish"
brownish-grey with small whitish spot on scales
males- margins on median fins yellow
females- margins on median fins dark reddish brown

Monacanthidae (Tetraodontiformes) - filefishes

1 or 2 dorsal spines, 1st over eye & large
no pelvics; pelvic spine sometimes

Cantherhines dumerilii "barred filefish" 'ō'īli
vertical bars on body

Pervagor aspricaudus "yellowtail filefish" 'ō'īli
Brown, shading to orange-yellow posteriorly
Caudal fin yellow

Ostraciidae (Tetraodontiformes) - trunkfishes

body encased in a bony carapace
no pelvic fins
no spinous dorsal

Ostracion meleagris "spotted boxfish" moa
male - orange with white spots dorsally, blue laterally
female - dark brown with white spots dorsally and laterally

Tetraodontidae (Tetraodontiformes) - puffers

body rounded in X-section or ovoid
1 or 2 nostrils on each side

Tetraodontinae - gill opens below midportion of pectoral
fin

Canthigastrinae - gill opens at or above midportion of
pectoral fin

Canthigaster amboinensis – "ambon toby"
Olive to light brown
Small light blue spots on body
Blue lines radiating from eyes

C. jactator "Hawaiian whitespotted toby"
small fish with pointed snout
brown lines surround white (bluish) spots

Arothron meleagris "spotted (guineafowl) puffer" o'opu hue
dark brown
body covered with small white spots

Diodontidae (Tetraodontiformes) - porcupinefishes

scales enlarged to spines

spines erectile when body inflated

Diodon hystrix

**"porcupine fish"
body covered with small blue-black spots
spots on fins**

kōkala

D. holocanthus

**"spiny puffer" or "longspined porcupine"
fewer small spots, fins usually without spots
6-7 large brown spots dorsally**

kōkala

Fish ID master QUEST 2013.DOCx