Juvenile Fish of Northwest Florida

Identification Field Guide

SP 509







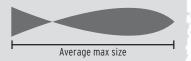
UF IFAS Extension UNIVERSITY of FLORIDA



University of Florida Institute of Food and Agricultural Sciences Sea Grant Program, The Choctawhatchee Basin Alliance, and the B.T. Washington High School Marine Science Academy

Common Name

Scientific name



RANGE: General area where species are found on East coast of U.S. and Gulf of Mexico.

HABITAT: Typical habitats in which the species are found.

FWC REGULATIONS:

Florida Fish and Wildlife Commission and Gulf of Mexico Fishing Regulations on species.

Choctawhatchee Basin Alliance strives to ensure the information in this field guide is accurate, but assumes no liability for any errors that may occur in this publication.

ABOUT THIS GUIDE:

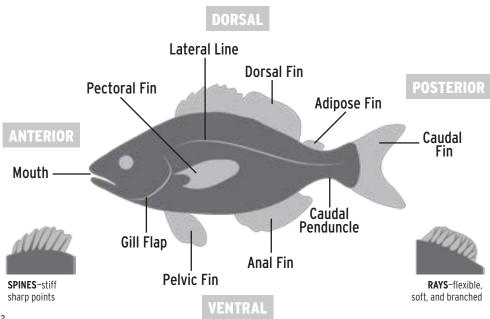
This identification guide was assembled by the Choctawhatchee Basin Alliance in cooperation with University of Florida's



Institute of Food and Agricultural Sciences Sea Grant Program and the Marine Science Academy of B.T. Washington High School to assist individuals along the northern coast of the Gulf of Mexico to identify juvenile fish species that are commonly misidentified. The guide includes photographs of juvenile fish, range and habitat, physical descriptions, key identifying features, size of fish, and Florida Fish and Wildlife Commission fishing regulations where applicable.

This identification guide is organized by caudal fin shape: truncate, rounded, forked, lunate, or continuous. While there are many different ways to identify fish, the caudal fin shape is a universal identification practice to begin distinguishing between fish families. Most of these species were caught between the Choctawhatchee and Pensacola Bay nearshore with a seine or dip net.

Fish Morphology



FISH MOUTH MORPHOLOGY



TERMINAL mouth shapes are positioned in the middle of the fish's head. Fish with this mouth shape

feed throughout the water column–from surface to bottom (e.g., barracuda, snappers).



SUPERIOR mouths are positioned upwards with bottom jaw extending past upper jaw. Fish with this

mouth shape feed on prey above them or on the water surface (e.g., needlefish).



INFERIOR SUB-TERMINAL

mouth shapes are positioned down, towards the sea floor. Fish with this mouth shape feed on prey that inhabit benthic areas (e.g., catfish, searobins).

CAUDAL FIN MORPHOLOGY



TRUNCATE-strong, slow swimmers



LUNATE—fastest, maintain rapid speed for long durations



FORKED-fast, strong swimmers



ROUNDED-strong, slow swimmers



CONTINUOUS—able to swim in and around cracks and crevices

Atlantic needlefish

Strongylura marina

Photo Credit: Sean Murphy



FUN FACT: Despite their resemblance to gars, needlefish are more closely related to flying fish. They leap from the water when alarmed or pursuing prey.

Atlantic needlefish

Strongylura marina

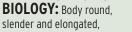


RANGE: East coast of U.S. to Gulf of Mexico and Brazil.

HABITAT: Found in coastal areas of brackish and fresh water.

FWC REGULATIONS: No. current Florida regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION &





slender and elongated. needle-like. Coloration is bluish green dorsally and silvery below. Blue iridescent horizontal lateral line down sides. Two narrow dark lines from top of head to dorsal fin. Long pointed jaws with many sharp, jagged teeth. Dorsal fin located posteriorly. Anal fin aligned with dorsal fin. Pelvic fins small. Pectoral fins small and elongated. Caudal fin truncated with dusky coloration. Superior mouth shape.

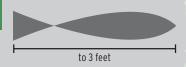
Differs from other needlefish because body is round, not compressed, and lacks a caudal keel ridge (horizontal ridge on caudal peduncle).

Atlantic spadefish Chaetodipterus faber



Atlantic spadefish

Chaetodipterus faber



RANGE: East coast of U.S. to Gulf of Mexico and Brazil.

HABITAT: Occurs coastally over wrecks, reefs, and pilings. Also around buoys and mangroves, in harbors, and under bridges.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION &
BIOLOGY: Body deep and



compressed, disk-like. Juveniles have dark brown colorations with darker vertical bars and white speckles throughout body. Adult colorations silvery to gray with broad dark vertical bars on body; bars may be absent, especially in large adults.

Snout very short, small terminal mouth shape. First spiny dorsal spines tall in juveniles, shorten with age. Secondary dorsal fin tip tapers to point and is continuous to caudal peduncle. Anal fin also tapers to point and is continuous to caudal peduncle. Pelvic fins pointed. Pectoral fins small and oval-shaped. Caudal fin truncate, dark at base, becomes white to translucent towards margins.

Burrfish

Family Diodontidae

Pictured: Striped burrfish, *Chilomycterus schoepfi*, distinguished by various dark blotches and stripes all over body; dark spot on upper mid-body.

FUN FACT: Burrfish are also known as "spiny boxfish." They're important predators of shellfish, which they eat with their beak-like mouth and teeth. Some species can contain tetrodotoxin in their organs, which is toxic to most predators.

Burrfish Family Diodontidae



RANGE: Northeast coast of U.S. to Gulf of Mexico and Caribbean.

HABITAT: Tropical to warm temperate waters. Benthic, found near grassy flats and reefs.

FWC REGULATIONS: No. current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Inflate their body to a round shape



when threatened.

Round elongated body when not inflated. Spines are visible all over body, are immovable and typically erect. Body covered in loose elastic skin with darker colorations, spots and mottling dorsally, white ventrally. Pectoral fins rounded, behind small slit gills. Dorsal and anal fin small and located posteriorly. Caudal fin truncate. Terminal shaped mouth, referred to as a "beak." Two teeth in mouth (one on top and one on bottom).

Lane snapper Lutjanus synagris

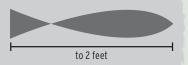
Photo Credit: Sean Murphy



FUN FACT: Yellow horizontal stripes (as seen on adults) and rounded anal fin distinguishes lane snapper from other snappers.

Lane snapper

Lutjanus synagris



RANGE: East coast of U.S. to Gulf of Mexico and Brazil.

HABITAT: Found in shallow waters over rocky areas, coral reefs, sandy seagrass beds, or muddy bottoms.

FWC REGULATIONS:

Open year-round I. Minimum Size Limit: 8 inches (total length) II. Daily Recreational Bag Limit: 100 pounds per harvester per day (Gulf of Mexico); 10 per harvester per day (Atlantic).

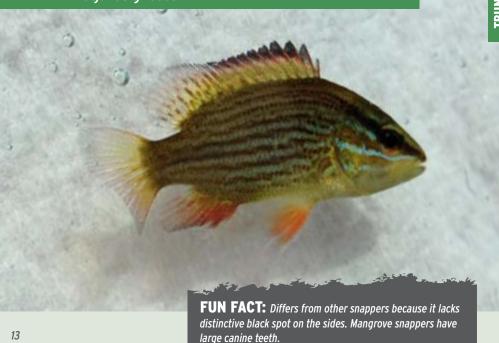
IDENTIFICATION & BIOLOGY: Body compressed,

slender. Pointed terminal mouth shape.

Juveniles have red to orange horizontal stripes from mouth to caudal fin, darker vertical bars behind horizontal stripes. Colorations fade to silvery pink with pink and yellow horizontal stripes along body. Paired pelvic fins and anal fin have red coloration. Dark spot located in posterior dorsal fin region, does not fade as fish matures. Anal fin rounded. Dorsal and pectoral fin elongated. Dorsal fin continuous to caudal peduncle. Caudal fin truncate.

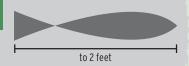
Gray snapper (Mangrove snapper)

Lutjanus griseus



Gray snapper (Mangrove snapper)

Lutjanus griseus



RANGE: East coast of U.S., Gulf of Mexico to Brazil.

HABITAT: Juveniles found in estuaries, mangroves, tidal creeks, and grass beds; may enter fresh water bodies. Adults found inshore or offshore in rocky areas and coral reefs.

FWC REGULATIONS:

Open year-round I. Minimum Size Limit: 10 inches total length (Atlantic and Gulf of Mexico) II. Bag Limit: No more than 5 of 10 snappers per person per day can be gray snappers. IDENTIFICATION & BIOLOGY: Juvenile has



dark brown to black stripe from snout, across eye, fades after gill. This "bandit" marking fades as fish matures. Light blue, iridescent stripe under eye, also fades. Multiple dark brown dotted stripes run horizontally from head to caudal peduncle. Body is olive to dark green to brown. Fins tinted a gold color. Body is slender with a large pointed terminal mouth. Dorsal fin elongated. Caudal fin is truncate in shape. Paired pelvic fins.

Adult has pinkish tint to scales on belly, becomes grayish to dark green/brown dorsally. Faint vertical, blotchy stripes of olive green color.

Longnose killifish

Fundulus similis



dark vertical bars and spot on last bar near caudal peduncle.

Longnose killifish

Fundulus similis



RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Typically benthic in shallow waters of salt and tidal marshes.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day—whichever is more.

IDENTIFICATION & BIOLOGY: Long snout,



superior mouth shape. Body elongate and round. Coloration olive dorsally with silvery, whitish belly. Around 10 or more vertical dark stripes along sides with small dark spot on last bar near caudal peduncle. Dorsal fin located posteriorly. Truncate caudal fin. Pectoral fin rounded. Pelvic fin located centrally. Anal fin long. Fins light to colorless in females, dusky in males.

Males have yellowish coloring around "chin," dorsal fin longer in males.



habitats, which makes them both a popular aquarium pet



and an ecological threat.

Goby Family Gobiidae



RANGE: Near-shore marine, brackish and freshwater environments from tropical to temperate regions.

HABITAT: Found on bottom areas of seagrass, algae, or rocky ridges and reefs.

FWC REGULATIONS: Marine Life Harvest Regulations I. Bag Limit: 20 organisms per person per day; only 5 of any one species allowed within the 20 organisms bag limit. II. Possession Limit: 2 day possession limit, 40 total organisms, no more than 10 of any one species allowed. III. Organisms must be landed and kept alive with a continuously circulat-

ing live well, aeration or oxygenated system of adequate size to maintain organisms in healthy condition.

IDENTIFICATION & BIOLOGY:



Head is short and broad. Eyes sit high,

towards top of head. Dorsal fin is deeply notched, then continuous to caudal peduncle. Colors vary from dark brown bars, blotches, tans, to bright colors. Colorations transition from body to fins. Slim, elongated round body. Sub-terminal mouth shape with disc-shaped sucker mouth. Pectoral fins are larger and rounded. Caudal fin is truncate. Local species typically have mottled coloring of brown and beige colors to camouflage themselves with the environment. Benthic feeders.

Commonly confused with the species of family Blenniidae; however, most gobies have a deeply notched dorsal fin (which appears as 2 dorsal fins), while Blenniidae have a single, continuous dorsal fin. The pelvic fins of the Gobiidae species are fused at the base, whereas family Blenniidae pelvic fins are not.

Pipefish Family Syngnathidae

Photo Credit: Sean Murphy



FUN FACT: Pipefish are in the same family as seahorses, and like them, it is the males who carry the eggs. The opossum pipefish (Microphis brachyurus lineatus) is federally listed as "Threatened" and has protected habitat in the Indian River Lagoon.

Pipefish

Family Syngnathidae



RANGE: Southeast coast of U.S., Gulf of Mexico, Bahamas to South America.

HABITAT: Found in shallow estuaries over seagrass and reefs; also found in Sargassum seaweed.

FWC REGULATIONS: Marine Life
Harvest Regulations I. Bag Limit: 20 organisms per person per day; only 5 of any one
species allowed within the 20 organism bag
limit. II. Possession Limit: 2 day possession
limit, 40 total organisms, no more than 10 of
any one species allowed. III. Allowable Gear:
Hand collection, handheld net, drop net,

barrier net, slurp gun. Use of quinaldine or power tools is prohibited.

IDENTIFICATION & BIOLOGY: Body is long and tubular but thin

MD

long and tubular, but thin. Easily overlooked because

they resemble blades of seagrass. Single dorsal fin near middle of body with several rays. Most have small pectoral fins directly below the dorsal fin. Snout is long and tubular superior mouth shape; similar to a seahorse snout. Caudal fin truncate.

Colors vary, but most commonly caught pipefish are mottled brown. Colors can be reddish, greenish, yellowish, banded, or striped. Males tend to be more colorful than females and have a brood pouch to hold eggs.

There are 9 species in the northern Gulf of Mexico and they can be difficult to distinguish from each other.

Pufferfish

Family Tetraodontidae



Pufferfish

Family Tetraodontidae



RANGE: East coast of U.S. to Caribbean.

HABITAT: Inshore and estuarine waters, near seagrass beds and reefs.

FWC REGULATIONS: Marine Life Harvest Regulations* I. Bag Limit: 20 organisms per person per day; only 5 of any one species allowed within the 20-organism bag limit. II. Possession Limit: 2-day possession limit, 40 total organisms, no more than 10 of any one species allowed. III. Allowable Gear: Hand-held net, drop net, rod, barrier net, slurp gun (use of quinaldine prohibited).

*Pufferfish harvest is prohibited in Volusia, Brevard, Indian River, St. Lucie, and Martin counties.

IDENTIFICATION & BIOLOGY: Body



elongate, round.
Inflates body when
threatened, exposing spines all over body.
Compared to burrfish, puffers have scale-less
and loose skin, giving them a smooth body.
Markings range from spots of darker colors
to mottling of dark and light markings. Lower
sides and belly white. Pectoral fins small. Dorsal
and anal fin small and located posteriorly.
Mouth shape terminal with 4 teeth, two on
top and two on bottom. Caudal fin truncate.

Almost all pufferfish contain tetrodotoxin, a substance found in the skin and organs that makes them taste bad and lethal to most fish.

Sand Flounder

Family Paralichthyidae



the body and they become benthic inhabitants. Flounder can be referred to as

general "left-eyed" or "right-eyed" depending on their family classification.

Sand Flounder

Family Paralichthyidae



RANGE: Northeast coast of U.S. to Gulf of Mexico. Temperate to tropical waters.

HABITAT: Benthic inhabitants of inshore coastal and estuarine habitats over sandy or muddy bottoms or seagrass beds. Occur in saline, brackish, and freshwater.

FWC REGULATIONS:

Minimum Size Limit: 12 inches.
 Daily Recreational Bag Limit: 10 per harvester per day. III. May be harvested by spearing. Snatching prohibited.

IDENTIFICATION & BIOLOGY: Body deeply



compressed, oval in shape.

Dorsal and anal fins continuous
until caudal peduncle. Caudal fin truncate. Large,
protrusible terminal mouth. Blotchy, spotted, or mottled
colorations depend on the environment they are found
in; e.g., beige in sandy areas, darker in mixed sediment
areas. Eyes on left side of body ("left-eyed"). Pelvic
fins are short, same length on the dorsal and ventral
sides. Anterior dorsal fin rays are typically longer than
others and do not have membrane attaching them.

Many can change body colors rapidly.

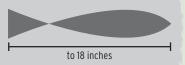
Searobin

Family Triglidae

Pictured: Leopard searobin, *Prionotus scitulus*, distinguished by two dark spots on the first dorsal fin, one between the 1st and 2nd spines, the second between the 4th and 5th spines. All other searobins have no spots or only one on the dorsal fin between spines.

FUN FACT: Contrary to popular belief, larger sea robins are considered excellent to eat.

Searobin Family Triglidae



RANGE: East coast of U.S. to Gulf of Mexico

HABITAT: Bottom dwelling; found in shallow waters of sandy bottom estuaries and Gulf of Mexico.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Searobins get their name from their large



pectoral fins that open and close like a bird's wings in flight.

The pectoral fins have 3 rays, or spiny "legs," on each side that are separate. These legs allow the fish to move around on the bottom and search for food with chemoreception, detection of certain chemical stimuli (prey) in the environment. Large, solid skull, some with armored plates, ridges and spines. Body elongated with darker mottled markings and colorations dorsally and white belly. Dorsal fin near back of skull with spiny rays, some have second dorsal fin that runs along back to caudal fin. Caudal fin truncate. Mouth inferior sub-terminal.

Presence of drumming muscle that makes sounds beating against the swim bladder.

Silver perch

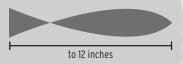
Bairdiella chrysoura



FUN FACT: Nicknamed "silver croaker" or "sand perch." Like the other species in the Drum family, Sciaenidae, they get their common name from a large and elaborate swim bladder that, by using certain muscles, can reverberate to produce croaking or drumming sounds.

Silver perch

Bairdiella chrysoura



RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Found along coast in shallow, sandy, muddy bottoms, seagrass beds, and estuaries. Occasionally found in freshwater. Migrate into estuarine nurseries during summer.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Body oblong and laterally compressed. Silvery



to gold colors dorsally. All fins dusky to pale yellow. First dorsal fin deeply notched with 10-11 spines. Second dorsal fin has 20-30 soft rays connected with membrane. Lateral line visible. Caudal fin truncate with center slightly protruding out more than other points of fin. Anal fin first ray is separate, remaining are connected with membrane. Pelvic fin large. Terminal mouth shape with small visible teeth.

Spot croaker *Leiostomus xanthurus*



to as "Spots." Like the other species in the Drum family, Sciaenidae, they get their common name from a large and elaborate swim bladder that, by using special muscles, can resonate to produce croaking or drumming sounds.

Spot croaker

Leiostomus xanthurus



RANGE: Northeast U.S. to Gulf of Mexico

HABITAT: Adults are common in coastal areas over muddy and sandy bottoms, seagrass beds, and reefs. They tolerate a range of salinities, but prefer moderate salinity. Juveniles utilize low salinity in upper reaches of estuaries, primarily associated with muddy bottom habitats. They progress to higher salinity with age. During winter, they travel to deeper channels and tidal rivers within estuaries.

FWC REGULATIONS: No current
Florida FWC regulations. Default bag limit for
unregulated species: Two fish or 100
pounds per person, per day—
whichever is more.

IDENTIFICATION & BIOLOGY: Silvery gray dorsally, often with deep golden bronze tint.



Narrow, dark lines or rows of spots on back diagonally from caudal peduncle to head. Dorsal fin deeply notched, triangular. After notch, dorsal fin is continuous to caudal peduncle. Dark spot on beginning of lateral line behind gill, hence the name, "spot croaker." Caudal fin truncate to emarginate (tips of fin extend slightly longer than center of fin). Pectoral fins elongated, light golden to translucent. Paired pelvic fins. Anal fin present. Mouth inferior sub-terminal.

Often confused with Atlantic croaker; however, the Atlantic croaker does not have spot on shoulder and is not as golden in color.

Spotted seatrout

Cynoscion nebulosus



FUN FACT: Like the other species in the Drum family, Sciaenidae, they get their common name from a large and elaborate swim bladder that, by using special muscles, can resonate to produce croaking or drumming sounds.

Spotted seatrout

Cynoscion nebulosus



RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Coastal waters and estuary habitats, seagrass beds, rocks, reefs, and marshes. All ages utilize inshore live bottom habitats, primarily estuaries and rivers, but also shallow coastal bays, sounds, and along front beaches of barrier islands. Spawn in bays; juveniles spend first year in seagrass beds.

FWC REGULATIONS:

I. Size Limits: No less than 15 inches or more than 20 inches II. Daily Recreational Bag Limit: 5 per harvester per day; May possess no more than 1 over 20 inches.

> *Management zones are regional; refer to FWC regional regulations for spotted seatrout in your area.

IDENTIFICATION & BIOLOGY: Dark



gray dorsally with bluish reflections,

bluish reflections, silvery white ventrally. Lateral line visible. Numerous round black spots irregularly scattered dorsally and on sides, extends through ends of dorsal and caudal fins. Dorsal fin deeply notched, then continuous to caudal peduncle. Caudal fin truncate. Elongated paired pelvic fins. Pectoral fins narrow. Anal fin present. First dorsal fin with 9-10 spines, second dorsal fin with one spine and 25-28 rays. Terminal mouth shape, large and pointed with lower jaw extending past upper. Two large canine-like teeth at tip of upper jaw.

Combtooth blenny

Family Blenniidae



Combtooth blenny

Family Blenniidae



Average size 3 inches

RANGE: Tropical to warm temperate waters.

HABITAT: Brackish and freshwater environments. Bottom dwellers near rocky reefs, sand, mud, and empty shells.

FWC REGULATIONS:

Marine Life Harvest Regulations: I. 20 organisms per person per day; only 5 of any one species allowed within the 20-organism bag limit. II. Possession Limit: 2-day possession limit, 40 total. IDENTIFICATION & BIOLOGY: Very blunt head.



Bodies compressed, elongated, and scale-less. Coloration ranges from bright colors to mottled browns. Continuous dorsal and anal fin to caudal peduncle. Large, rounded pectoral fins. Caudal fin rounded. Small terminal mouth shape. Noted for the comb-like teeth lining their jaws.

Can be confused with species of the Gobiidae family; for comparison, see Gobiidae on page 18.

Planehead filefish

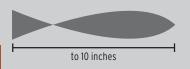
Stephanolepis hispidus



peduncle.

Planehead filefish

Stephanolepis hispidus



RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Found in marine subtropical regions. Common near reefs, seagrass beds, and floating macro algae or seaweed, such as Sargassum.

FWC REGULATIONS: Marine Life Harvest Regulations I. Bag Limit: 20 organisms per person per day; only 5 of any one species allowed within the 20-organism bag limit II. Possession Limit: 2-day possession limit, 40 total organisms, no more than 10 of any one species allowed. III. Organisms must be landed and kept alive with a continuously circulat-

ing live well, aeration or oxygenated system of adequate size to maintain organisms in healthy condition.

IDENTIFICATION & BIOLOGY: Deep,



laterally compressed body. Tan, dark brown

to olive brown with irregular patterns over body. Skin rough with tiny scale plates. Mouth small, slightly pointed, terminal shaped. Eye color brown. Two dorsal spines can be lowered flat against back. First spine barbed, located over back of eye; second spine smaller. Gill slit very small and vertical. Anal and dorsal fins translucent, continuous to caudal peduncle. No pelvic fins; however, pelvic spine present. Unlike other filefish, planehead filefish have no spines on caudal peduncle. Caudal fin rounded.

ROUNDED AUDAL FIN

Hogchoker

Trinectes maculatus



Hogchoker

Trinectes maculatus



to 8 inches

RANGE: East coast of the U.S., Gulf of Mexico to Central America.

HABITAT: Benthic dwellers, found in turbid inshore waters, including rivers, estuaries, and high-salinity coastal waters.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Varying color



and patterns. Shades of brown with darker brown wavy spots, blotches, and lines. Approximately 8 dark, separated vertical bars. White to pale underneath. Dorsal and anal fins continuous to caudal peduncle. Caudal fin rounded. Pectoral fins completely absent. Mouth shape is terminal. Small thread-like projections can be viewed around mouth on eye side and largely distributed on the blind side of the head.

Similar to other flatfishes, hogchokers are born with eyes on either side of their head. As they mature, the left eye rotates over to their right side, making them "right-eyed." Hogchokers are in the American Sole family, all of which are right-eyed.

Topminnow

Family Fundulidae

Pictured: Diamond Killifish, Adinia xenica, distinguished by short, round body with ~15 pale vertical stripes with dark stripes in between on sides. Males have dabbled spots on fins, females lack spots on fins.

ROUNDED CAUDAL FIN

FUN FACT: Fundulidae family species are typically referred to as "killifish." Mosquitofish are commonly mistaken for members of family Fundulidae; however, they are in the family Poeciliidae.

Topminnow

Family Fundulidae



to 7 inches

RANGE: Tropical to temperate, coastal marine to freshwater.

HABITAT: Very adaptable to a range of salinities and temperatures.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Body is alonged

BIOLOGY: Body is elongated and cylindrical in shape. Belly rounded. Colorations vary from



olive green, brown, to yellowish with spots, stripes, or no patterns. Colorations will coordinate with habitat for camouflage. Head flattened, small superior protrusible mouth. Single dorsal fin located posteriorly. Caudal fin rounded. Pectoral fins behind gills. Anal fin located posteriorly towards caudal peduncle. Males have larger anal fins than females, but female's bodies tend to be larger.

Sailfin molly

Poecilia latipinna



FUN FACT: This is the same fish sold in pet stores as the "Black Molly," just a different color phase.

Sailfin molly

Poecilia latipinna



to 5 inches

RANGE: Northeast coast of U.S. to Gulf of Mexico.

HABITAT: Found in slow-moving, vegetated brackish and freshwater. Tolerant to salinity ranges and temperature changes.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Brown to olive



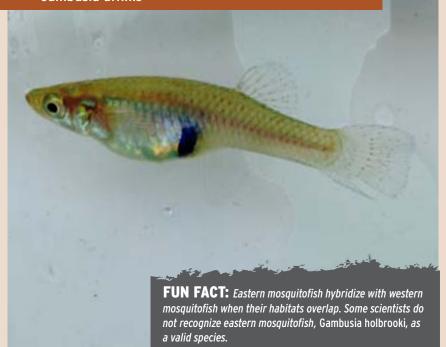
dorsally, white underneath.

Dusky shading on scales forms
diamond-shaped pattern along body. Females have
pale colorings with shortened dorsal fin. Males have tall
and long dorsal fin, resembling a sail, with blue hues
on dorsal and caudal fin and throughout body. Yellow
to orange margin on top of dorsal fin and in center of
caudal fin. Anal fin elongated, with thread-like tips.
Caudal fin large and rounded. Mouth shape is superior.

Member of the livebearers family Poeciliidae; mosquitofish are also in this family.

Western mosquitofish

Gambusia affinis



Western mosquitofish

Gambusia affinis



to 2 inches

RANGE: Northeast coast of U.S. to Gulf of Mexico.

HABITAT: Found in slow-moving brackish and freshwater. Tolerant to salinity ranges and temperature changes.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Olive, brown, tan or silvery dorsally (depending on habitat), lighter underneath.



Scale margins darker forming diamond-shaped pattern. Belly rounded. Dorsal fin in posterior of body with two to three rows of small, dark spots. Anal fin on male is elongate at tip. Superior mouth shape. Females larger and have dark spot on abdomen. Caudal fin rounded.

Member of livebearers family Poeciliidae; sailfin molly is also in this family.

False silverstripe halfbeak

Hyporhamphus meeki FUN FACT: Often called "Meek's halfbeak" after the

ichthyologist Seth Eugene Meek.

False silverstripe halfbeak

Hyporhamphus meeki



RANGE: East coast of U.S. to northern Gulf of Mexico and Yucatán.

HABITAT: Found in shallow areas of bays, estuaries, and harbors. Schools at surface and over sandy and vegetated bottoms.

FWC REGULATIONS: No current Recreational Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person, per day—whichever is more*.

*Bag limits and license requirements for commercial harvest are required.

IDENTIFICATION & BIOLOGY: Coloration is

BIOLOGY: Coloration is iridescent green dorsally and silvery to whitish ventrally.



Body elongated with highly pointed snout. Horizontal silver stripe along lateral line from pectoral fin to caudal peduncle. Lower jaw has red coloration towards point and is dramatically longer than upper. Upper jaw very short in relation to lower, with green coloration. Three thin, dark lines on back from head to dorsal fin. Base of dorsal and anal fin scaled. Dorsal fin located posteriorly, very close to caudal fin. Single, small pelvic fin. Pectoral fin short. Caudal fin forked with dark dusting. Superior mouth shape.

Often confused with Atlantic silverstripe halfbeak. To differentiate, false silverstripe halfbeak has shorter snout, smaller eyes and smaller body. Pre-orbital length (from mouth to eye) is greater than 70% of eye diameter, versus less than 70% of eye diameter for Atlantic silverstripe halfbeak.

Florida pompano

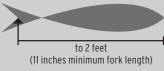
Trachinotus carolinus



growing demand.

Florida pompano

Trachinotus carolinus



RANGE: East coast of U.S., Gulf of Mexico to Brazil.

HABITAT: Found along inshore sandy beaches and in brackish bays and inlets. Adults are pelagic, juveniles occur in beach surf zone. Juveniles form large schools.

FWC REGULATIONS: 1.

Minimum size limit: 11 inches fork length. II. Daily Recreational Bag limit: 6 per harvester per day. III. Allowable Gear: Hook and line, cast net, and beach or haul seine.

IDENTIFICATION & BIOLOGY: Body short and deeply compressed



and deeply compressed. Silvery with blue-green

iridescent body; abdomen white to silvery to yellowish. Anal and caudal fin regions yellow. First dorsal fin spines small and spaced, no membrane. Second dorsal fin, separated by membranes, continues to caudal peduncle. Anal fin elongated and continuous to caudal peduncle. Pectoral fins elongated and small. Caudal fin forked. Head profile somewhat rounded; snout very blunt. Terminal mouth shape.

GruntFamily Haemulidae





Grunt Family Haemulidae



to 12 inches

RANGE: Tropical to warm temperate waters.

HABITAT: Found in shallow coastal waters, brackish and periodically freshwater.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Body shape is



terminal mouth shape, can be short or long. Dorsal fin is continuous and can be deeply notched or without notch. Forked caudal fin. Elongated pectoral fin. Large lips without scales. Colorations vary greatly from bright tropical colors to pale grays. With stripes or lack of distinct stripes/blotches.

Creates grunting noise by grinding their pharyngeal, throat teeth, hence the common name.

Herring Family Clupeidae





Herring Family Clupeidae



to 2 feet. most are smaller

RANGE: Tropical to polar seas

HABITAT: Coastal or estuarine habitats. Schooling species.

FWC REGULATIONS: No. current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Laterally

compressed body, some are

cylindrically round. Deeply

forked caudal fin. Dark, iridescent dorsally; silver underneath. Some have a darker spot or spots behind gill. Superior mouth shape. Single dorsal fin midway.

Most are plankton filter-feeders, "planktivores."



Gulf menhaden

Brevoortia patronus



Gulf menhaden

Brevoortia patronus



RANGE: Northeast central Atlantic

HABITAT: Occur in shallow marine coastal waters; inshore in summer, but may move into deeper waters with cooler weather

U.S. coast and Gulf of Mexico.

FWC REGULATIONS: No current Florida FWC regulations Default bag limit for unregulated species: Two fish or 100 pounds per person, per day-whichever is more*.

*Commercial baitfish regulations apply to Gulf menhaden harvest.

IDENTIFICATION & BIOLOGY: In herring



family Clupeidae.

Greenish blue to bluish gray dorsally with brassy to silvery sides, silver underneath. Body deeply compressed. Black spot behind gills followed by single or double row of smaller spots. Two rows of enlarged scales in front of dorsal fin. Single dorsal fin, short and triangular. Small round pelvic fin. Anal fin narrow and continuous to caudal peduncle. Caudal fin deeply forked with yellow coloring. Terminal mouth shape.

Mojarra Family Gerreidae

Photo Credit: Sean Murphy



FUN FACT: "Silver biddy" is the name used to refer to the Gerreidae (Mojarra) family. They are known as blanches in French and mojarras in Spanish.

Mojarra Family Gerreidae



RANGE: Occur worldwide in tropical to warm temperate seas.

HABITAT: Most are found along the coast; many enter brackish water, some live in freshwater.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Mojarras' bodies



are deep and compressed. Most are silvery in color, some have dorsal mottling. The upper jaw is highly protrusible, meaning that they can extend their jaws downward into the sediment to search for food. Mouth is a pointed, terminal mouth shape. The dorsal fin is notched and continuous to caudal peduncle. Lateral line visible from gills to caudal fin. The bases of the dorsal and anal fins are scaled. Caudal fin is deeply forked. Anal fin has three separated spines, connected by membrane; continuous. Paired pelvic fins. Elongated pectoral fin. Dorsal fin typically has dark margins.

Leatherjack

Oligoplites saurus



FUN FACT: Some research suggests that smaller leatherjacks practice lepidophagy, a specialized feeding behavior that involves eating scales of other fish.

FORKED

Leatherjack

Oligoplites saurus



.....

RANGE: Northeast coast of U.S. to South America.

HABITAT: Found inshore near sandy beaches and estuaries, typically in turbid water.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Slender, elongated



compressed body. Metallic green to blue dorsally, silvery iridescent ventrally. Terminal mouth shape. First few dorsal spines small, separate. Second dorsal fin silvery to yellow, has continuous spines semi-attached to caudal peduncle. Pectoral fins translucent. Anal fin silvery, first few spines separate, with continuous semi-attached spines to caudal peduncle. Spines can cause a painful wound and may carry mild venom. Forked caudal fin, yellowish to translucent.

Lizardfish

Family Synodontidae

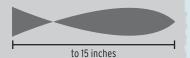
Pictured: Inshore lizardfish, Synodus foetens, distinguished from other lizardfish by extremely pointed snout with eyes close to top of head. Colorations are light tan to dark brown with around 8 diamond-shaped spots along lateral line. No additional colors besides shades of brown.





Lizardfish

Family Synodontidae



RANGE: Northeast coast of U.S. to Caribbean.

HABITAT: Benthic inshore and estuarine habitats over sandy, muddy, shelly, or rocky bottoms. Benthic predators that ambush prey.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Body cylindrical and alapsated Spout pointed



and elongated. Snout pointed with small needle-like teeth.

They get their name from their large terminal mouth that when opened looks similar to a lizard's head.

Dorsal fin located in middle of back. Pectoral fin located directly behind gill, narrow elongated shape. Pelvic fin located near middle of body. Caudal fin forked. Very small dorsal adipose fin, a soft fleshy fin, located towards caudal peduncle. Posterior anal fin. Colorations vary, dark to light blotches or mottling dorsally with light coloration or lack of color ventrally.

Lookdown

Selene vomer



FORKED

Lookdown

Selene vomer



to 12 menes

RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Found near the bottom of shallow coastal waters. Juveniles found in estuaries near seagrass beds and inshore.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Body deeply



laterally compressed, very thin. Silver sides with metallic

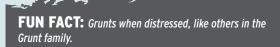
bluish to yellowish sheen. Juveniles have vertical yellow bars on body, while adults' fade to a darker silver. Profile of head extremely steep. First dorsal fin spines elongated; thread-like extensions dark in juveniles, reduced in adults. Second dorsal and anal fin lobes elongated. Pelvic fins elongated and dark in juveniles, very small in adults. Pectoral fins elongated. Caudal fin forked. Lateral line with anterior arch. Terminal mouth, lower jaw protrudes out past upper jaw.

Looks similar to Atlantic moonfish; however, the elongated dorsal and anal fin can distinguish the lookdown.

Pigfish Orthopristis chrysoptera

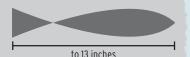
Photo Credit: Sean Murphy





FORKED

PigfishOrthopristis chrysoptera



RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Nearshore in shallow waters over soft bottoms. Often in bays and estuaries.

FWC REGULATIONS: No current Florida FWC regulations Default bag limit for unregulated species: Two fish or 100 pounds per person per day—whichever is more.

IDENTIFICATION &

BIOLOGY: Greenish gray dorsally with iridescent highlights, silvery on sides, pearly below.



Dark orange spots create irregular horizontal lines from mouth to caudal fin. Upper body may have pale to dark gray vertical bars. Fins dusky to yellowish, may have darker margins. Forked caudal fin; upper caudal-fin lobe slightly longer then lower lobe. Terminal mouth shape.

Mainly nocturnal.

PinfishLagodon rhomboides

Photo Credit: Sean Murphy



FUN FACT: It gets its common name from the pin-like rays on its dorsal fin. It is the only member of the genus Lagodon—this means it has no subspecies in its genus.

Pinfish

Lagodon rhomboides



RANGE: East coast of U.S. to Gulf of Mexico.

HABITAT: Adults prefer waters between 30-50 feet deep, while juveniles are more common in seagrass beds, rocky bottoms, jetties, pilings, and mangroves.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day—whichever is more.

IDENTIFICATION & BIOLOGY: Silvery sheen with

five to six dark vertical bars on sides. Many horizontal, silver



to golden lines extending from mouth to caudal fin.
Olive dorsally with yellow and white pigmentation; blue, green, and purple iridescence. Black spot on lateral-line origin near gills. Dorsal fin continuous, with yellowish bands having 12 rigid, spiny, pin-like rays. Pectoral fin elongated. Paired pelvic fins with yellow coloration. Anal fin continuous. Forked caudal fin. Terminal mouth shape.

Used as bait by anglers targeting red drum, spotted sea trout, and flounder.

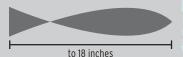
Spottail pinfish *Diplodus holbrookii*



FUN FACT: Also known as spottail seabream. Commonly used as bait.

Spottail pinfish

Diplodus holbrookii



RANGE: East coast of U.S. to northwestern Gulf of Mexico.

HABITAT: Shallow coastal waters, seagrass beds, rocks and reefs, bays, and harbors. Highest populations are found in northwestern Gulf of Mexico and the Florida Keys.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day—whichever is more.

IDENTIFICATION & BIOLOGY: Body deeply

BIOLOGY: Body deeply compressed. Large black spot on upper caudal peduncle,



hence the name "spottail." Faint, thin, darker stripes may be visible. Iridescent coloration on sides, silvery white ventrally. Dorsal and anal fin continuous with yellow to gold dusting. Approximately 9 dark, faint, and narrow vertical bars dorsally (fade with age). Caudal fin forked. Pectoral fin elongated. Paired pelvic fins with dusky margins. Terminal mouth shape.

Scaled sardine

Harengula jaguana



FUN FACT: The scaled sardine is much sought-after as a bait fish for several inshore fishing methods. This fish is sometimes called "white bait" by fishermen.

FORKED AUDAL FIN

Scaled sardine

Harengula jaguana



to i mene

RANGE: East coast of the U.S., Gulf of Mexico to Brazil.

HABITAT: Pelagic, found in shallow coastal and estuarine waters near sandy to muddy bottoms along coast.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day–whichever is more.

IDENTIFICATION & BIOLOGY: Body deeply



compressed. Bluish green, iridescent dorsally. Silver sides with faint horizontal streaks. Small, faint spot behind gill. Pale yellow dorsal fin. Forked caudal fin with yellow base and dusky margins. Large eyes. Superior mouth shape with dusky margins.

Silverside

Family Atherinopsidae "New World silversides"



FUN FACT: Some refer to silversides in general as planktivores—schooling fish that eat plankton—or tidewater silversides. It can be very difficult to distinguish species within the family Atherinopsidae.

Silverside

Family Atherinopsidae "New World silversides"



to 6 inches

RANGE: Northeast coast of U.S. to Gulf of Mexico.

HABITAT: Inshore along coast and in estuaries. Typically found near surface of water column. Schooling species.

FWC REGULATIONS: No. current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Body colorations



are silvery to bluish green, translucent. Elongated, round body. Thick, silver, iridescent stripe down lateral line, hence the name "silversides." Scales rough to touch. Superior mouth shape. Two dorsal fins-first is small and short halfway down dorsally; second is larger, located towards caudal peduncle. Pectoral fins small, elongated, and directly behind gills. Pelvic fins paired. Anal fin aligned closer to second dorsal fin. Caudal fin forked.

FORKED AUDAL FIN

Striped anchovy

Anchoa hepsetus

Photo Credit: Sean Murphy



FUN FACT: Anchovies are an important food source for every predatory fish in its environment, including marine mammals, birds, and even humans!

Striped anchovy

Anchoa hepsetus



to 6 inches

RANGE: East coast of U.S., northern Gulf of Mexico, to south Brazil.

HABITAT: Found in estuaries and along coast to about 200 feet deep. Tolerant of varying salinities and temperatures.

FWC REGULATIONS: No current Florida fishing regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day-whichever is more.

IDENTIFICATION & BIOLOGY: Translucent



with darker gray shading dorsally. Abdomen area pale to translucent. Silver horizontal mid-body stripe. Caudal and dorsal fin may have darker dusky edges. Large eyes. Jaw extends past first gill cover; bottom jaw shorter than upper. Terminal mouth shape. Caudal fin forked.

Found in large schools.

FORKED AUDAL FIN

Striped mullet

Mugil cephalus



Striped mullet

Mugil cephalus



RANGE: Northeast coast of U.S. to South America

HABITAT: Benthic dwellers in shallow waters over sandy or muddy bottoms. Temperate to tropical waters from salt, brackish, to freshwater habitats; highly tolerant to salinity changes. Schooling fish.

FWC REGULATIONS:

I. Minimum Size Limit: None. II. Daily Recreational Bag Limit: 50 aggregate per person per day. III. Aggregate vessel limits: September to January -50 fish per vessel; February to August-100 fish per vessel.

IDENTIFICATION & BIOLOGY: Olive, gray



to brown dorsally; silvery, iridescent sides; white

ventrally. Darker scales form stripes horizontally down sides. Larger scales. Head flattened and broad. Large eyes. Terminal mouth shape, short. Caudal fin forked, dusky gray. Two dorsal fins, first one located dorsally, midway down the body. Second dorsal fin located posteriorly, slightly longer. Pectoral fins elongated and translucent. Terminal mouth shape.

Tonguefish

Family Cynoglossidae

Pictured: Blackcheek tonguefish, Symphurus plagiusa, distinguished by dark patch on gill plate, hence its name "blackcheek."

FUN FACT: Most tonguefish do not grow more than 12 inches. Some are used as food, but most have no commercial value.

Tonguefish

Family Cynoglossidae



to 12 inches

RANGE: Northeast coast of U.S. to Gulf to South America.

HABITAT: Temperate to tropical waters. Live and feed near the bottom, or demersal. Found in shallow estuaries over sandy and muddy bottoms and seagrass beds.

FWC REGULATIONS: No current Florida FWC regulations. Default bag limit for unregulated species: Two fish or 100 pounds per person per day—whichever is more.

IDENTIFICATION & BIOLOGY: Very compressed





body, "flat fish," with oval or tongue-like shape. Dorsal and anal fins continuous with tail fin. White underneath, coloration is similar to environment in which it's found; e.g., beige in sandy bottoms. Long hook on snout overhanging mouth; terminal mouth shape. No pectoral or pelvic fins.

Eyes rotate from both sides of body to left side of body in early stages of life. Tonguefish are known as "left-eyed," while soles are "right-eyed." Flatfishes like these can be distinguished by at least the family order by determining this.

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