

# Family Etmopteridae "The Lantern Sharks"

Kingdom: Animalia

Phylum: Chordata

Class: Chondrichthyes

Order: Squaliformes

Family: Etmopteridae

Genera: 5 (*Aculeola*, *Centroscyllium*, *Etmopterus*, *Miroscyllium*, *Trigonognathus*)

Species: > 50

## Diagnostic Characteristics of the Family Etmopteridae

- Small body size (adults 10-107cm)
- Luminous organs usually present on body
- 2 dorsal fins with long, grooved spines (2<sup>nd</sup> dorsal fin and spine usually larger)
- Caudal fin with subterminal notch
- No anal fin
- Continental and insular slopes (rarely on shelves)
- Benthopelagic bathyal
- Tropical to temperate
- 5 genera, 3 monotypic

## Distribution and Habitat

- Occur almost worldwide in deep water
- Some wide-ranging, many endemic
- Most spp. benthic in deep water (200-1500m; range from 50-4500m)
- Some semi-oceanic

## Behavior and Biology

- Some are social, forming small to large schools/aggregations
- Reproduction (where known) is ovoviparous (aplacental viviparous)
- 3-20 pups/litter

## Diet

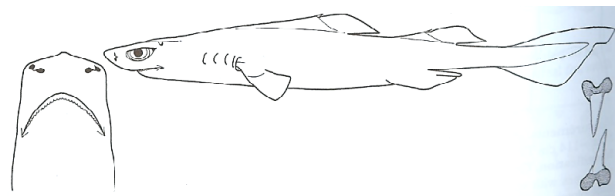
- Macroplankton/micronekton, teleost fish, cephalopods
- Dietary shift between juveniles and adults
- Juveniles feed on eurybathic crustaceans
- Adults feed on teleost fish and cephalopods

## Status

- Most common, but poorly known
- Few are large enough to be of commercial value
- When caught, discarded as by-catch

### Genus *Aculeola* – Hooktooth dogfish

- o Monotypic *A. nigra*
- o Small hook-like teeth in both jaws
- o Very small, equal-size dorsal spines



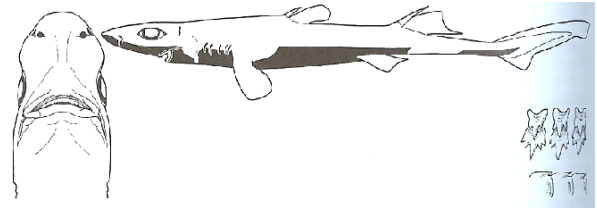
### Genus *Centroscyllium* – Combtooth dogfish

- o Short to moderately long snout
- o Comb-like teeth with cusps and cusplets in both jaws
- o Strong grooved dorsal spines



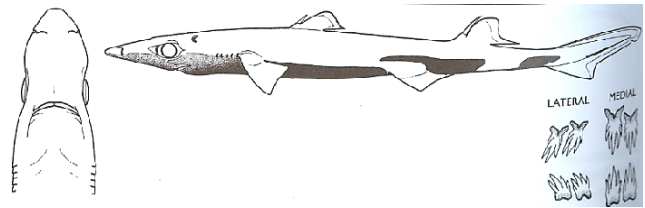
### Genus *Etmopterus* – Lantern sharks

- often have photophores on underside
- Upper teeth with a cusp and 1 or more pairs of cusplets
- Lower teeth are blade-like
- Some spp. with lines of denticles along dorsal side of body
- Perhaps the smallest known species of sharks *E. carteri* and *E. perryi* matures and gives birth to live young at 10-20cm TL



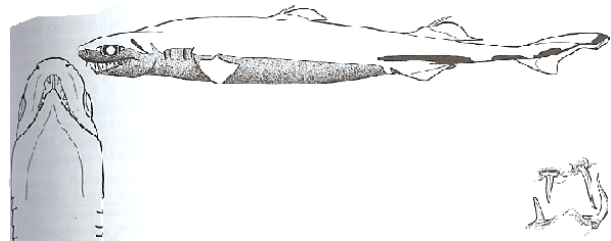
### Genus *Miroscyllium* – Rasptooth dogfish

- Dark brown dorsally, black ventrally
- Black photomarks on caudal fin and caudal peduncle
- Long, flat snout
- Short mouth with comb-like compressed teeth w/ cusps and cusplets in both jaws



### Genus *Trigonognathus* – Viper dogfish

- "triangle mouth"
- Terminal, snake-like mouth
- Huge, curved fang-like teeth
- Body dark brown above, black below
- Black photomarks on caudal fin and caudal peduncle
- Large, diagonally elongated spiracle



### Bibliography

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