

# **Commercially Important Saw-Fishes, Skates and Rays**

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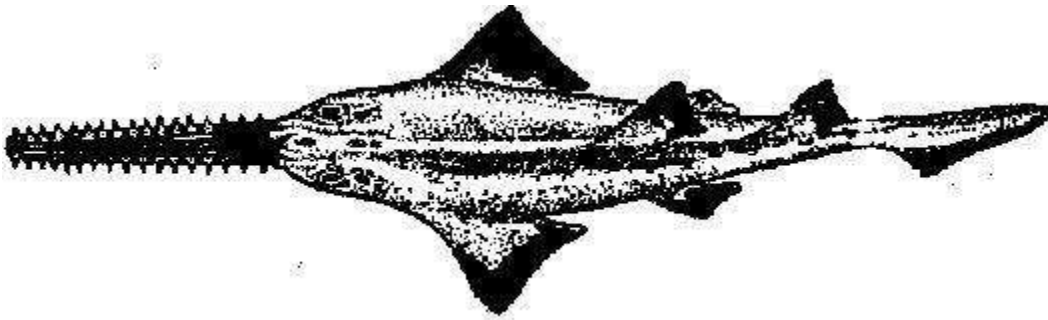
### **Diagnostic Characters of Commercially Important**

Body more or less disc-shaped, rounded or sub-angular, flattened, with the pectorals fused along the sides of the head. Eyes superior. Mouth inferior, more or less protractile. Gill slits 5, inferior. Spiracles present. Dorsal fins, when present, placed on tail. No anal fin. Tail always reduced, sometimes merely a filament. In many cases, the early embryos show shark-like affinities in not having the pectorals joined to the head, a fusion that occurs with development, occasional failures producing monstrosities. In this order are well-known flattened bottom-dwelling fishes, abundant and wide-spread, rather degenerate. The spiracles are of more importance to these than to any other cartilaginous fishes, being used in breathing. Water is drawn in at the gills and out via the spiracles, where the strong current may easily be felt by the hand. Many of these fishes are of importance as food. The group termed "batoid fishes" comprise a variety of forms commonly known as rays, skates, saw-fishes and guitar-fishes.

## 1. Pristidae (Saw-fishes)

- Body rather elongate, snout usually pointed.
- Snout produced and saw-like toothed, bony.
- Posterior most rostral teeth ending well anterior two pairs of rostrum.

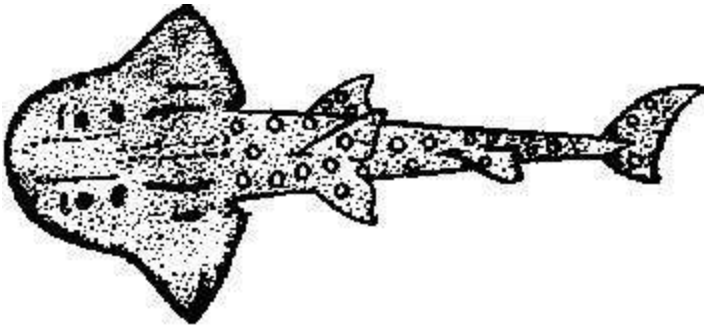
*Eg. Pristis pectinata*



## 2. Rhinobatidae (Guitarfishes)

- Body rather elongate, snout usually pointed.
- Snout broad, soft and rounded. First dorsal fin triangular. It is origin anterior to base of pelvic fins.
- Eyes slightly smaller and entirely separated from spiracles.

*Eg. Rhina ancylostoma*



### 3. Torpedinidae (Electric rays)

- Body either rounded or angular, laterally widened.
- Two Large electric organs in the front part of the disc on either side of head, the eyes are quite small.
- Dorsal surface spotted against a brown background pale below.

*Eg. Narcine timplei*



#### 4. Rajiidae (Skates)

- Body either rounded or angular, laterally widened.
- Body and head greatly depressed; united with pectorals forming a rhomboidal disc.
- Tail ending up in blunt tip without caudal fin.
- Two dorsal fins posteriorly.
- Caudal fairly thick, dorsal fins distinct, small, near and end of caudal.

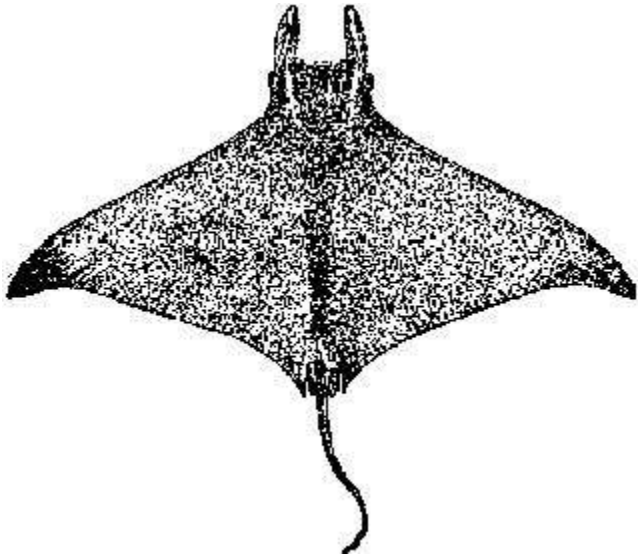
*Eg. Raja mamillidens*



## 5. Mobulidae (Devil rays and Manta rays)

- Body either rounded or angular, laterally widened.
- Winglike, enlarged pectoral fin.
- Caudal thin, dorsal fin feeble or absent.
- Snout produced as fleshy flap each side.
- Distinct modified cephalic organs in pair at head.

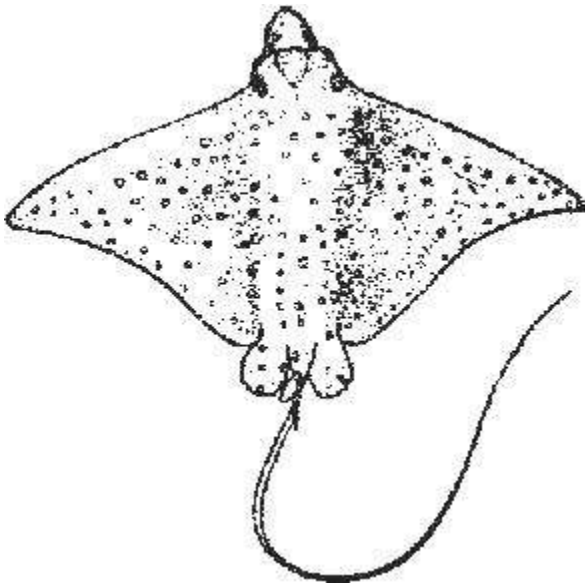
*Eg. Mobula diabolus, Manta birostris*



## 6. Myliobatidae (Eagle rays, Cownose rays)

- Body either rounded or angular, laterally widened.
- Caudal thin, dorsal fin feeble or absent.
- Head elevated above pectorals.
- Tail whip-like, longer than body length.

*Eg. Aetobatus narinari*



## 7. Dasyatidae

- Body either rounded or angular, laterally widened.
- Disc at most 1.3 times as broad as long, tail much longer than disc width, floor of mouth with several fleshy papillae.
- Caudal thin, dorsal fin feeble or absent.
- Snout normal.
- Head not elevated.
- One or two serrated spines in the tail.

*Eg. Dasyatis zugei*

