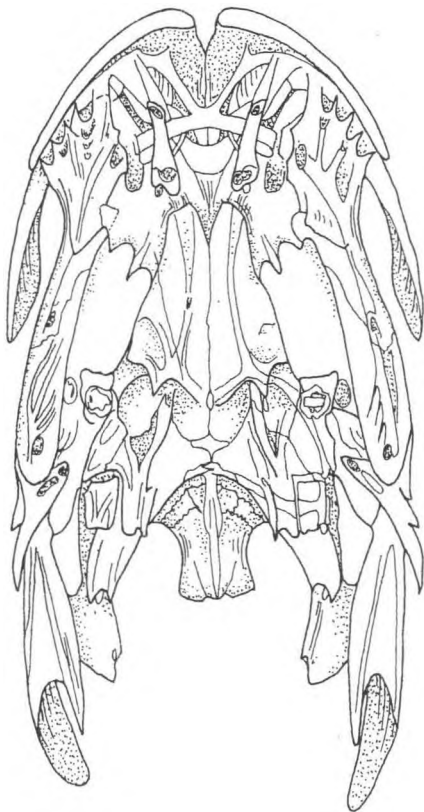


FAMILY SCORPAENIDAE

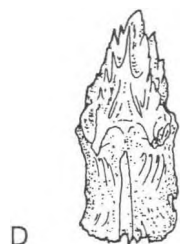


(after Gregory 1933)



SCORPAENIDAE *Sebastes marinus*

OLFACTORY REGION

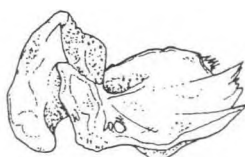


D



L

Ethmoid

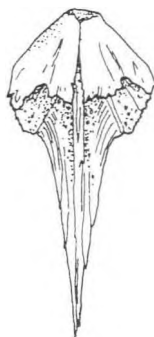


D



V

Prefrontal



D

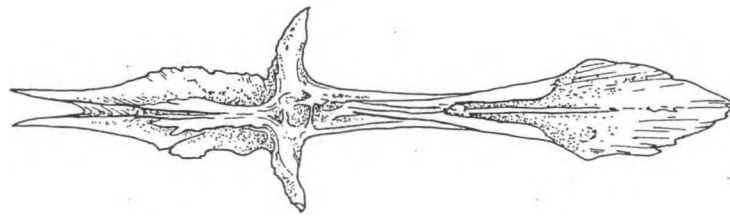


V

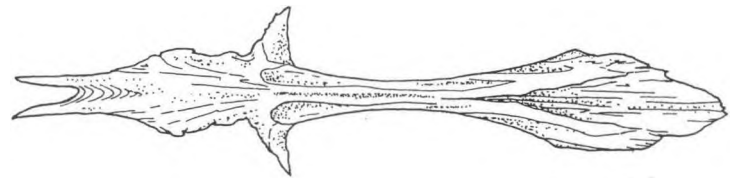
Vomer

SCORPAENIDAE *Sebastes marinus*

ORBITAL REGION



D



V

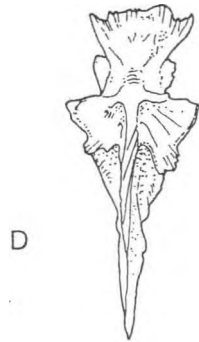
Parasphenoid



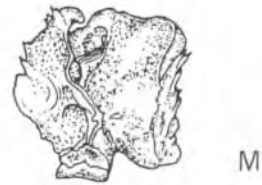
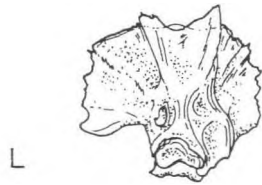
Alisphenoid

SCORPAENIDAE *Sebastes marinus*

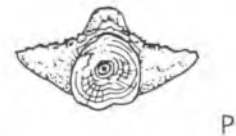
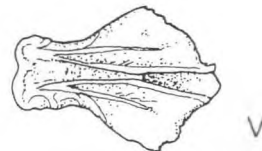
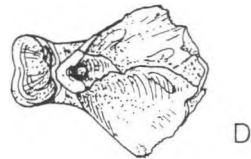
OCCIPITAL REGION



Supraoccipital



Exoccipital



Basioccipital

SCORPAENIDAE *Sebastes marinus*

OTIC REGION



Sphenotic



Pterotic



Epiotic



Opisthotic



Prootic



Otolith

SCORPAENIDAE *Sebastes marinus*

INVESTING BONES



Nasal



Supratemporal



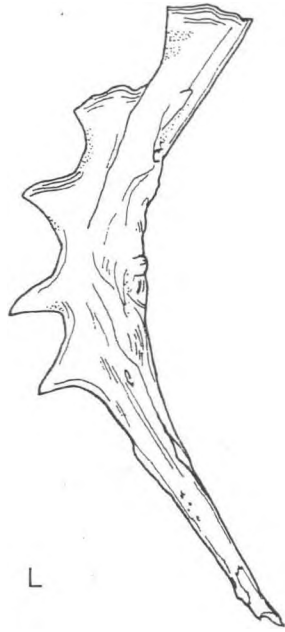
Frontal



Parietal

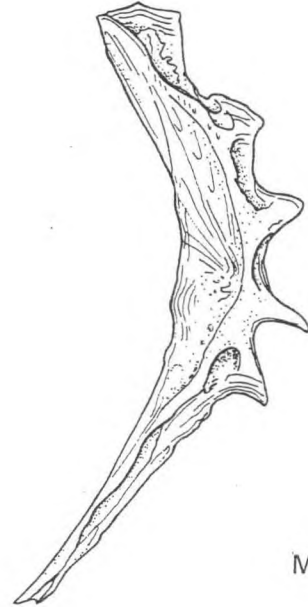
SCORPAENIDAE *Sebastes marinus*

LATERAL SKULL BONES

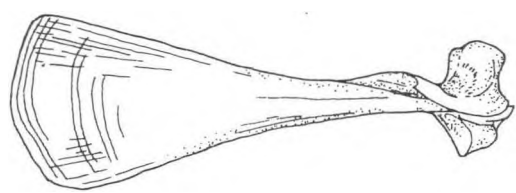


L

Preopercle

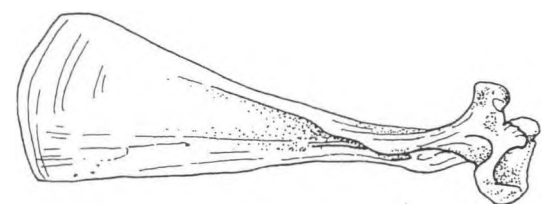


M

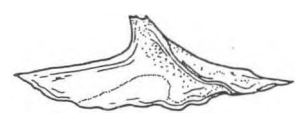


L

Maxilla

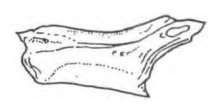


M

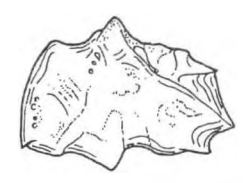


3

Suborbitals



2

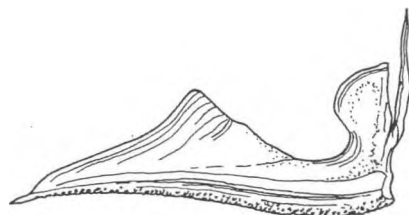


1 Lachrymal

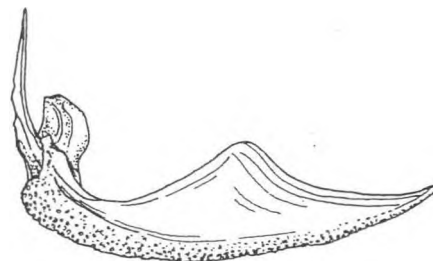
Circumorbital Series

SCORPAENIDAE *Sebastes marinus*

LATERAL SKULL BONES

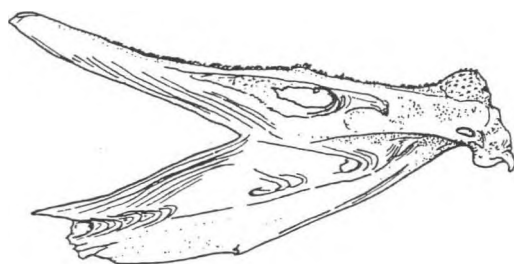


L

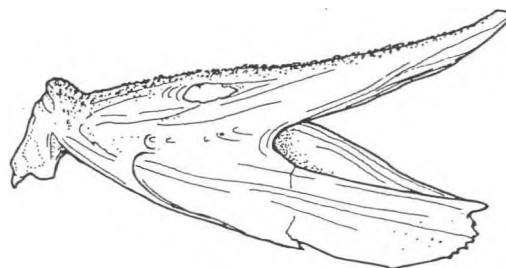


M

Premaxilla



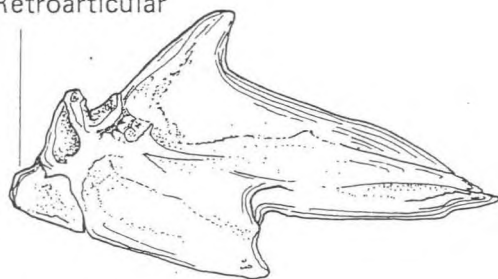
L



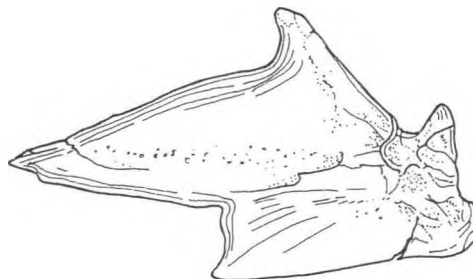
M

Dentary

Retroarticular



L

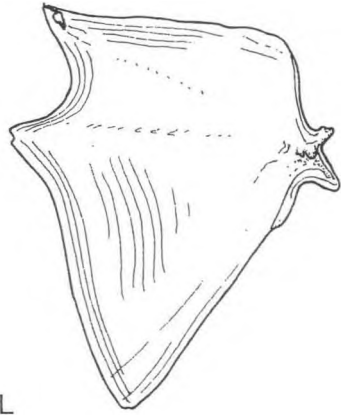


M

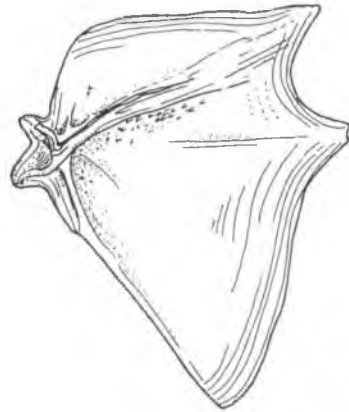
Angular

SCORPAENIDAE *Sebastes marinus*

OPERCULAR SERIES

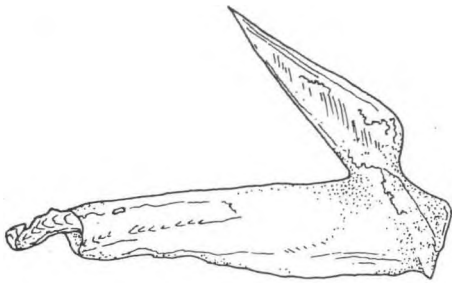


L



M

Opercle

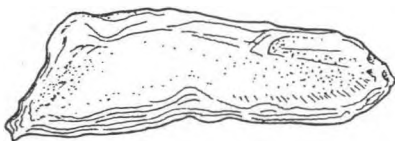


L



M

Subopercle



L

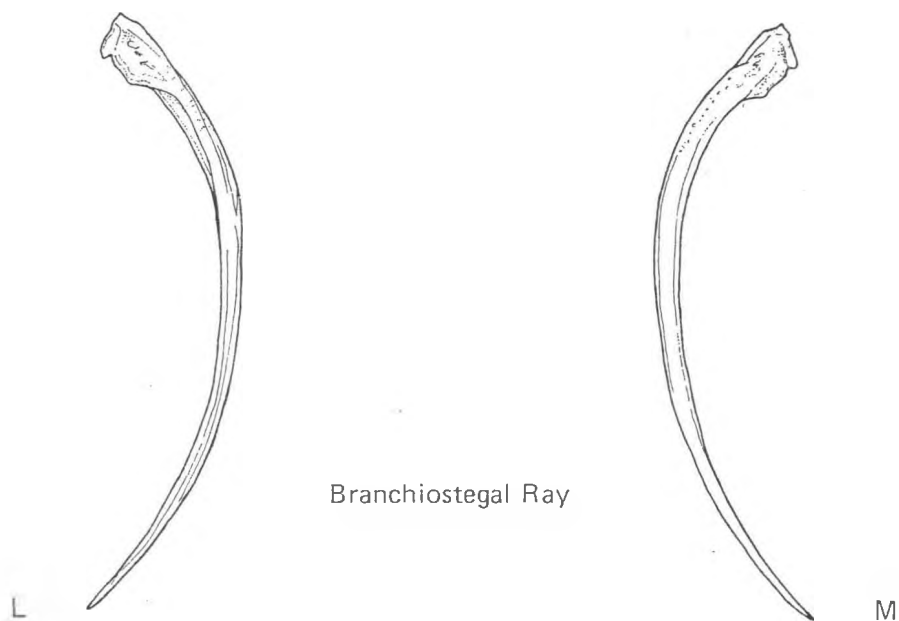


M

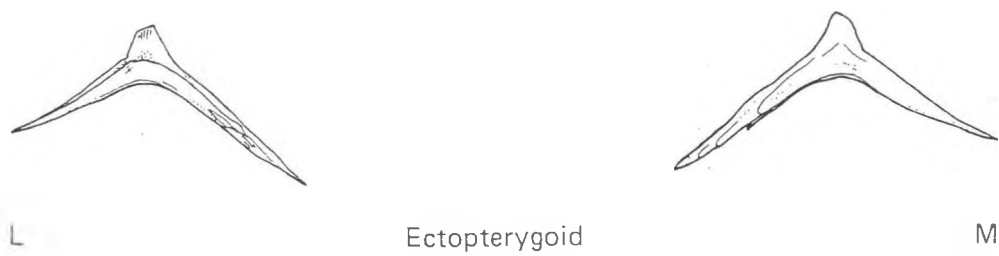
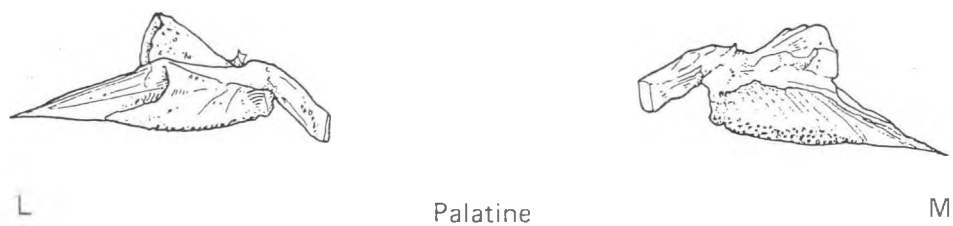
Interopercle

SCORPAENIDAE *Sebastes marinus*

OPERCULAR SERIES

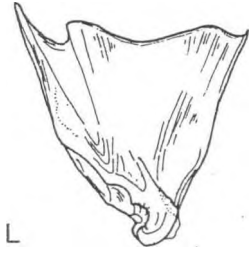


MANDIBULAR ARCH

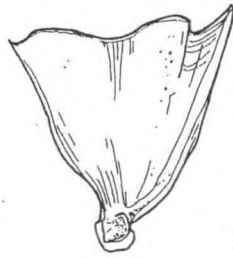


SCORPAENIDAE *Sebastes marinus*

MANDIBULAR ARCH



L



M

Quadrate

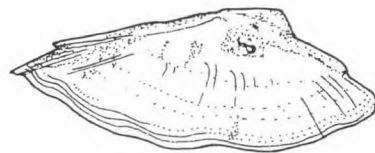
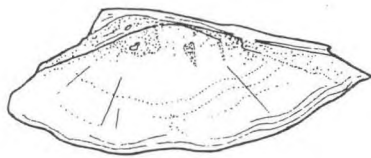


L



M

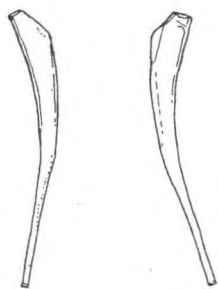
Metapterygoid



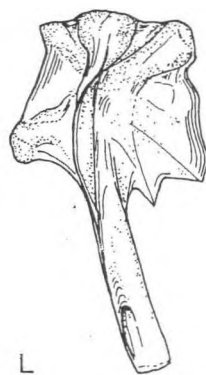
Mesopterygoid

SCORPAENIDAE *Sebastes marinus*

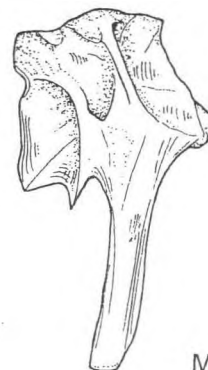
HYOID ARCH



Symplectic

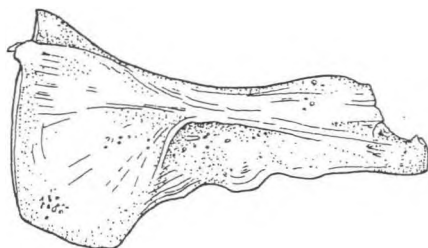


L

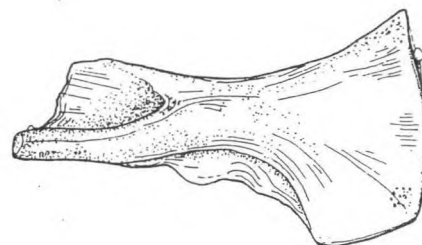


M

Hyomandibular



L



M

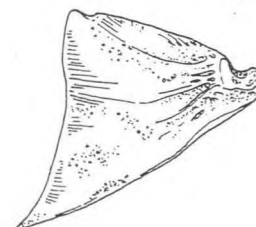
Ceratohyal



Interhyal



L

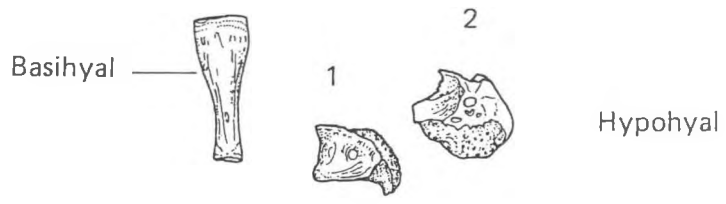


M

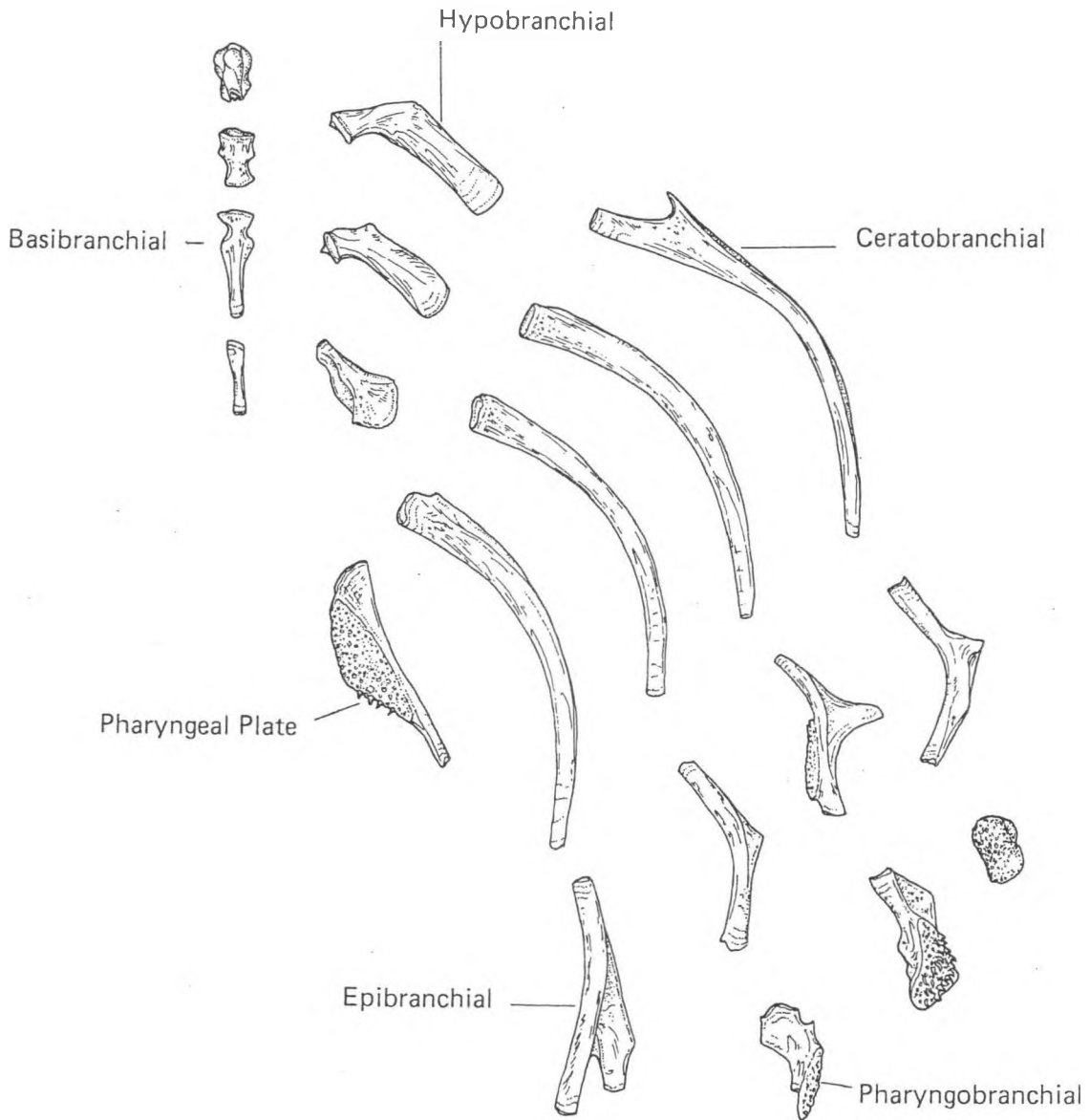
Epihyal

SCORPAENIDAE *Sebastes* sp

HYOID ARCH

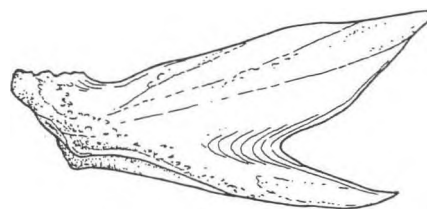
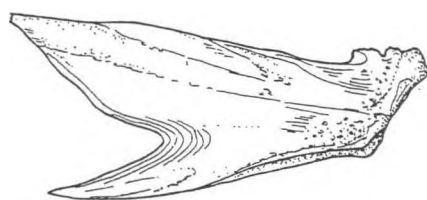


BRANCHIAL ARCH



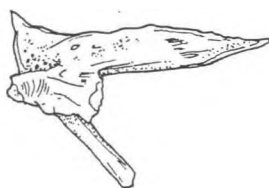
SCORPAENIDAE *Sebastes marinus*

BRANCHIAL ARCH

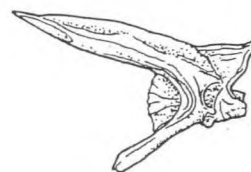


Urohyal

PECTORAL GIRDLE

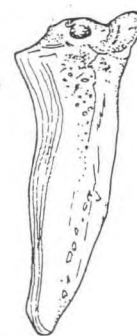
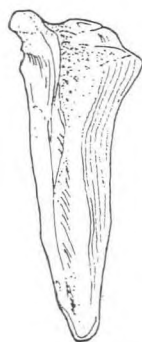


L



M

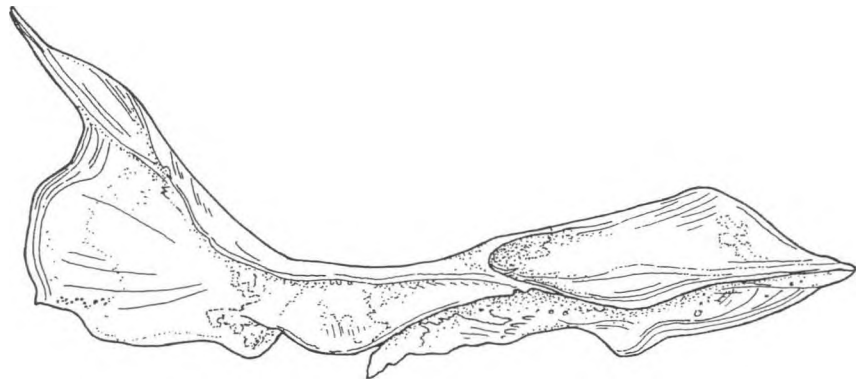
Posttemporal



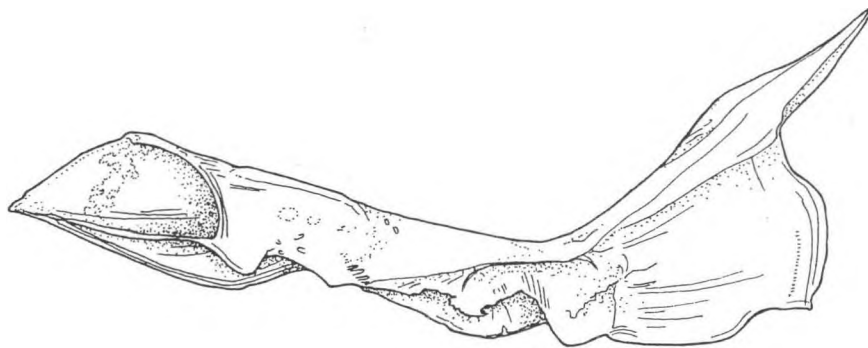
Supracleithrum

SCORPAENIDAE *Sebastes marinus*

PECTORAL GIRDLE



L

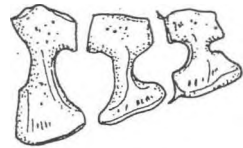


M

Cleithrum

SCORPAENIDAE *Sebastes marinus*

PECTORAL GIRDLE



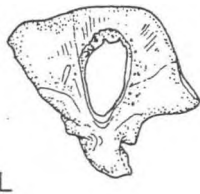
Radials



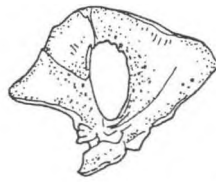
1 upper



2 lower



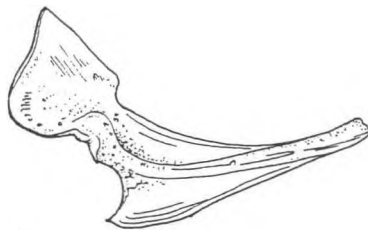
L



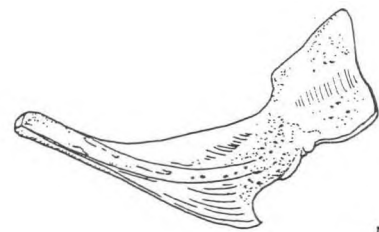
M

Scapula

Postcleithrum



L

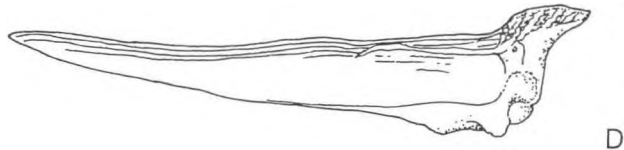


M

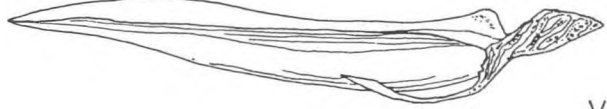
Coracoid

SCORPAENIDAE *Sebastes marinus*

PELVIC GIRDLE

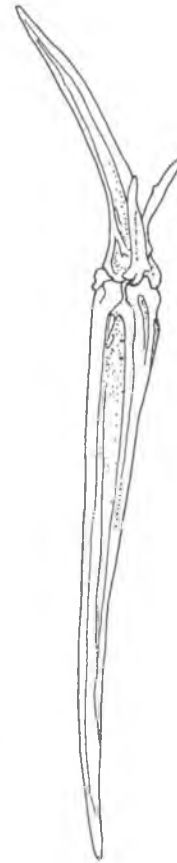


D



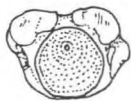
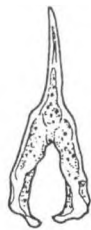
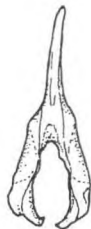
V

Basipterygium



Interhaemal Spine

VERTEBRAL COLUMN



A



P

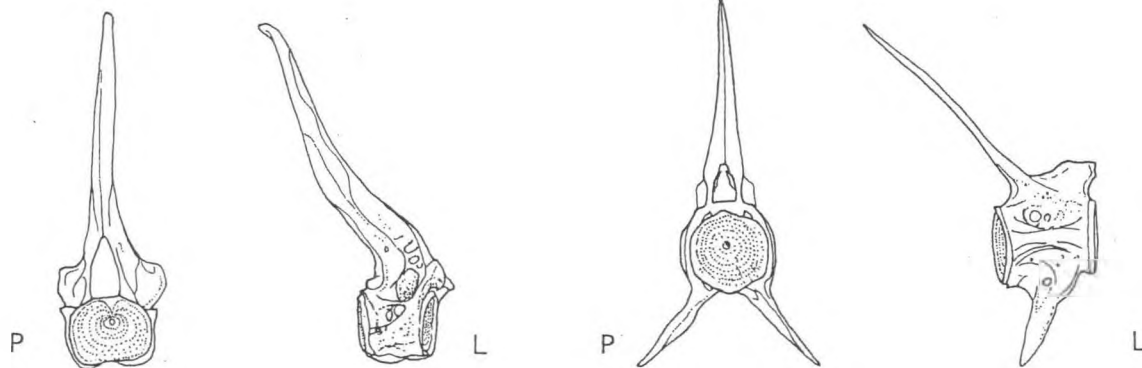


L

Atlas Vertebra

SCORPAENIDAE *Sebastes marinus*

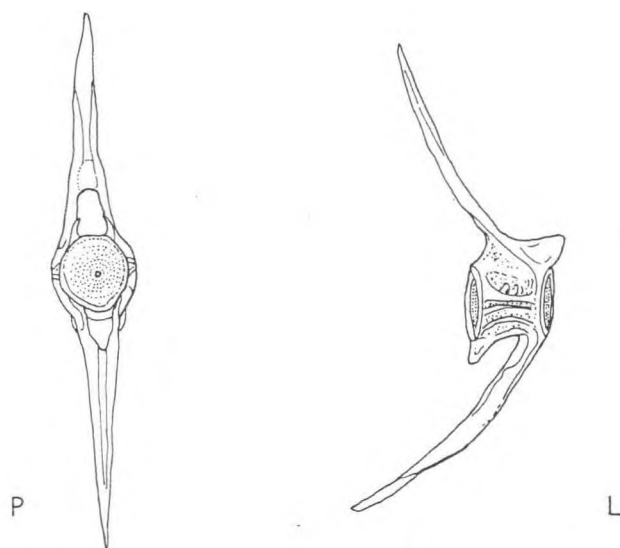
VERTEBRAL COLUMN



Thoracic Vertebra

Precaudal Vertebra

CAUDAL SKELETON



Caudal Vertebra

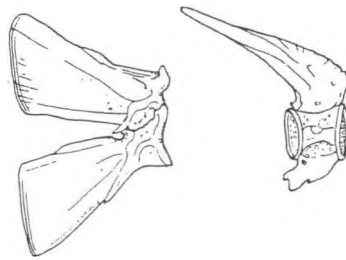
SCORPAENIDAE *Sebastes marinus*

CAUDAL SKELETON



Penultimate Vertebra

Ultimate Vertebra



Lateral View

KEY TO ELEMENT VIEW

- L Lateral
- M Mesial
- A Anterior
- P Posterior
- D Dorsal
- V Ventral