Ichthyology 2nd Year

3rdLecture

Theory part

2- Chondrichthyes class:

The general characteristics of cartilaginous fish are;

- a) Cartilage makes up the skeleton
- b) Body is covered with triangular placoid scales
- c) Possess ventral subterminal mouth
- d) Fins are stiff and non-flexible
- e) Absence of swim bladder
- f) Found in marine brackish and fresh water

A) Sharks;

Common name is Great white shark Also known as white Pointer, white Shark, white Death and scientific name is *Carcharodon carcharias*

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

Super class: Gnathostomata

Class: Chondrichthyes

Order: Lamniformes

Family: Lamnidae

Genus: Carcharodon

Species: carcharias



B) Rays;

Common name is common stingray and scientific name is Dasyatis pastinaca.

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

Super class: Gnathostomata

Class: Chondrichthyes

Order: Myliobatiformes

Family: Dasyatidae

Genus: Dasyatis

Species:pastinaca



C) Skates;

The New Zealand smooth skate is common name and scientific name is Dipturus

innominatus.

Kingdom: Animalia

Phylum: Chordata

Subphylum: Vertebrata

Super class: Gnathostomata

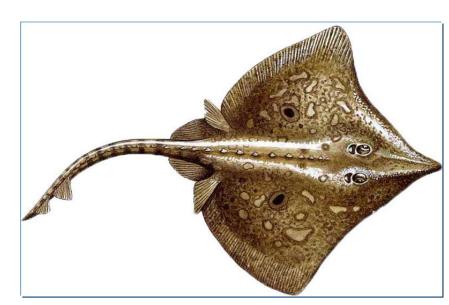
Class: Chondrichthyes

Order: Rajiformes

Family: Rajidae

Genus: Dipturus Species: innominatus

D) Chimaeras;



The spotted ratfish is common name and scientific name is *Hydrolagus colliei*

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Chondrichthyes

Order: Chimaeriformes

Family: Chimaeridae

Genus: Hydrolagus

Species: colliei



3-Osteichthyes Class;

The general characteristics of bony fish are;

- -Bones make up the skeleton
- -The gills are covered with operculum
- -Swim bladder is present
- -Fins are made up of rays and spines
- -This species possess different types of scales

Bony fish has two groups which are; lobe finned group and ray finned group;

A-Lobe finned group

There are two sub classes;

1-Coelacanth

Common name is West Indian Ocean coelacanthand scientific name is *Latimeria chalumnae*.

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

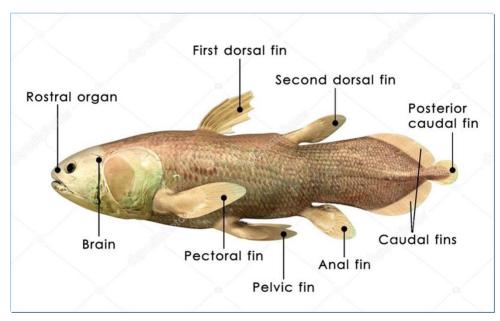
Sub Class: Sarcopterygii

Order: Coelacanthiformes

Family: Latimeriidae

Genus: Latimeria

Species: chalumnae



2-Lungfish;

Common name is Queensland lungfish, Australian lungfish, Burnett salmon, and barramundi and scientific name is *Neoceratodus forsteri*

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

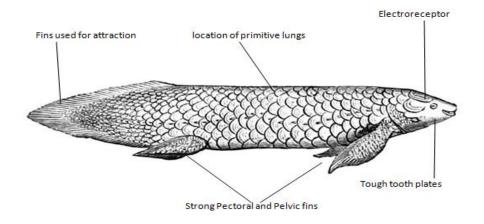
Sub Class: Sarcopterygii

Order: Ceratodontiformes

Family: Ceratodontidae

Genus: Neoceratodus

Species: forsteri



B-Ray finned group

There are three sub classes;

1-Chondrosteans

-Common name is Atlantic sturgeon and scientific name is Acipenser oxyrinchus

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

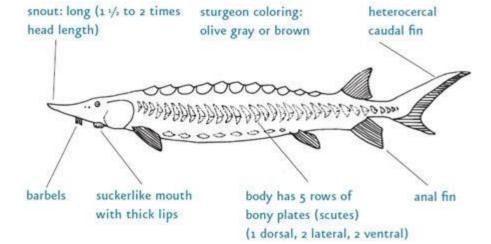
Class: Osteichthyes

Sub Class: Actinopterygii

Order: Acipenseriformes

Family: Acipenseridae

Genus: Acipenser Species: oxyrinchus



2-Holostteans

- Taxonomy (Classification) of Bowfin fish

The Common name is Bowfin fish and scientific name is Amia calva

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

Sub Class: Actinopterygii

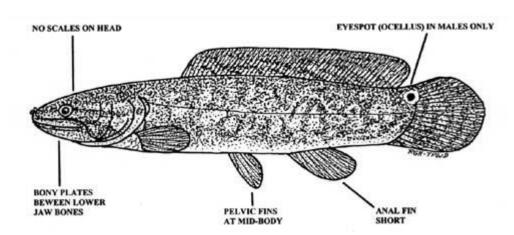
Order: Amiiformes

Family: Amiidae

Subfamily: Amiinae

Genus: Amia

Species: calva



3-Teleosts

Common name is Atlantic salmon and scientific name is Salmo salar

Common name is Dwarf gourami and scientific name is Trichogaste rlalius

Taxonomy (Classification) of common carp

The Common name is common carp and scientific name is Cyprinus carpio

Kingdom: Animalia

Phylum: Chordata

Sub Phylum: Vertebrata

Super class: Gnathostomata

Class: Osteichthyes

Sub Class: Actinopterygii

Order: Cypriniformes

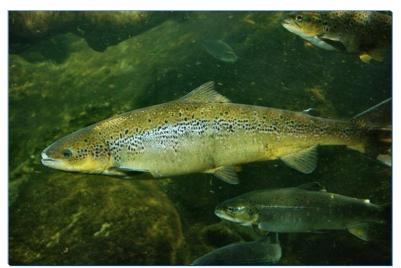
Family: Cyprinidae

Genus: Cyprinus

Species: carpio



Salmo salar



Trichogaster lalius

