

- Introdução aos Sarcopterygii

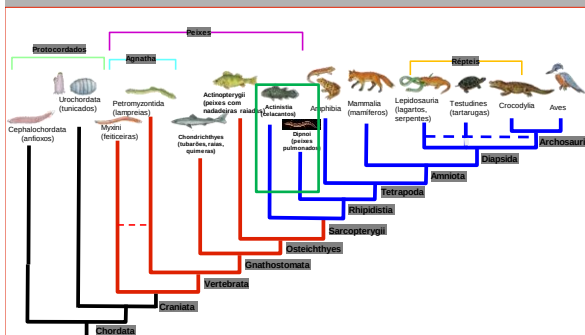
- Actinistia e Dipnoi

Mônica de Toledo-Piza Ragazzo
Departamento de Zoologia - IBUSP
2018

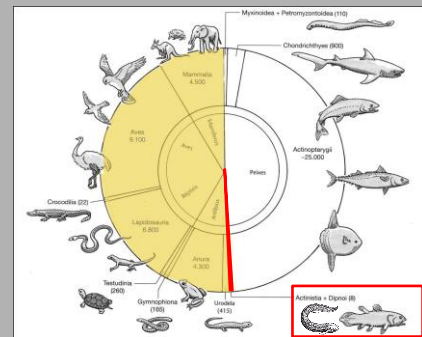
Objetivos desta aula

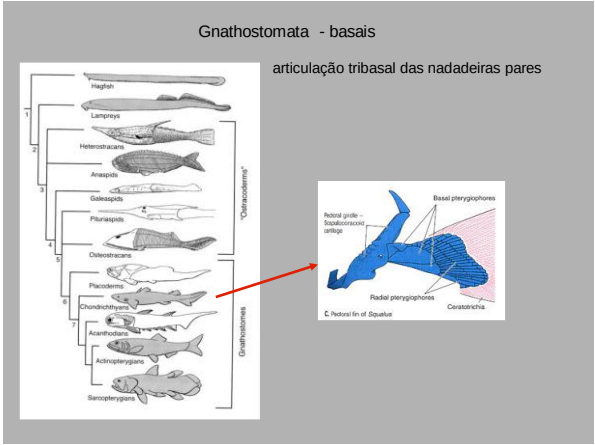
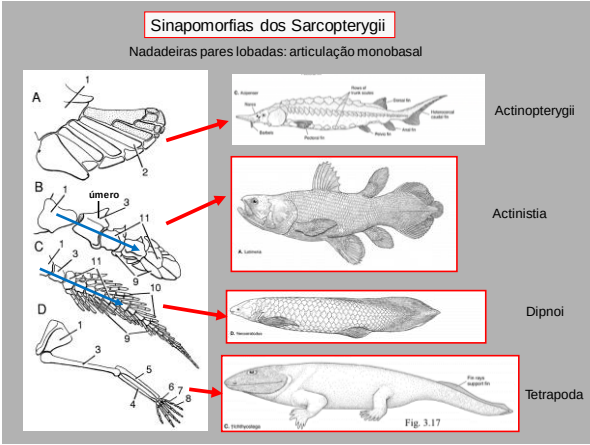
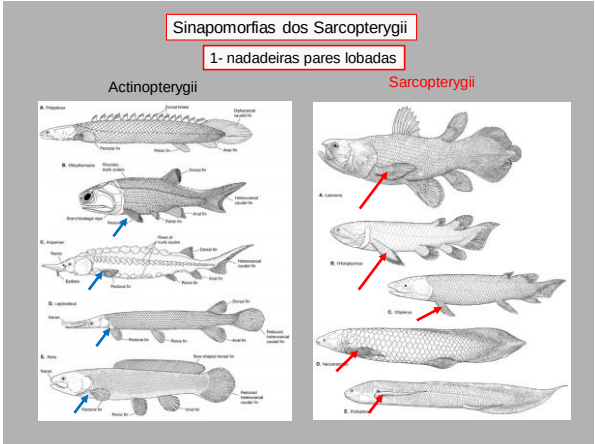
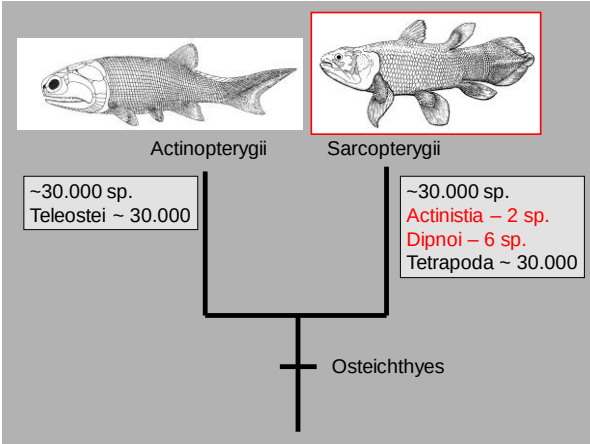
- Caracterizar os Sarcopterygii
- Caracterizar os Actinistia e os Dipnoi
- Discutir as relações filogenéticas dos Actinistia e Dipnoi
- Apresentar a diversidade recente de Actinistia e Dipnoi

Diversidade atual dos Vertebrados



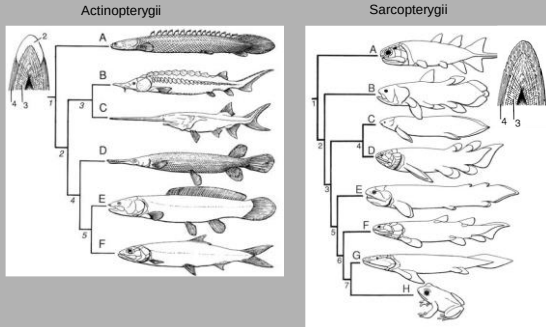
Diversidade atual dos Sarcopterygii



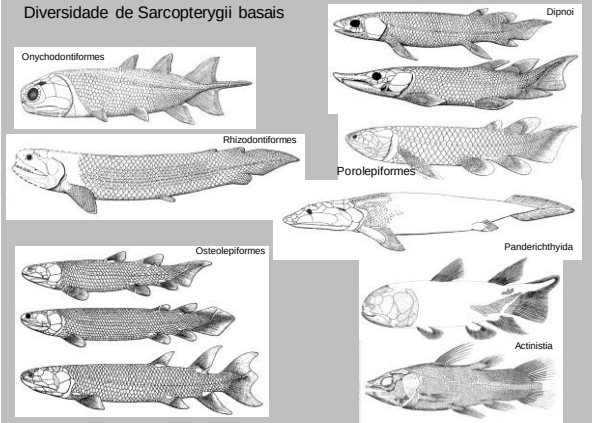


Sinapomorfias dos Sarcopterygii

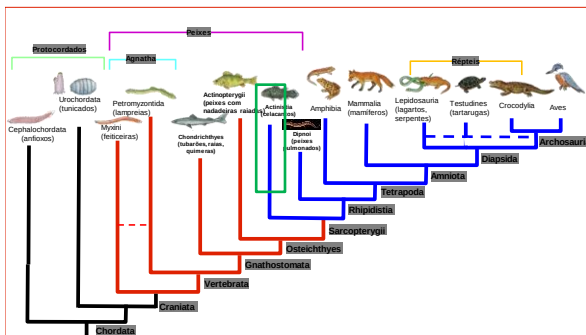
2 - capa completa de esmalte "verdadeiro" (monotípico) nos dentes



Diversidade de Sarcopterygii basais



Diversidade atual dos Vertebrados

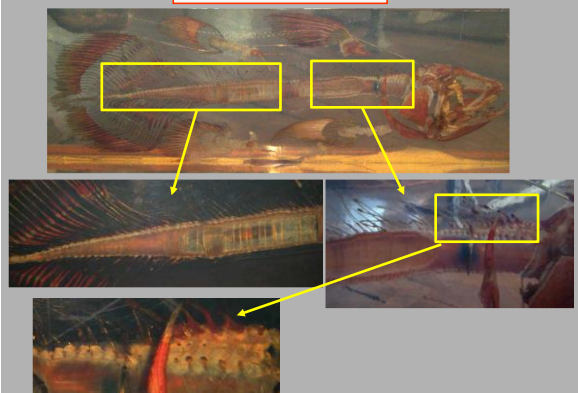
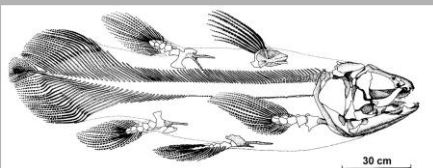


ACTINISTIA (celacantos) - generalidades

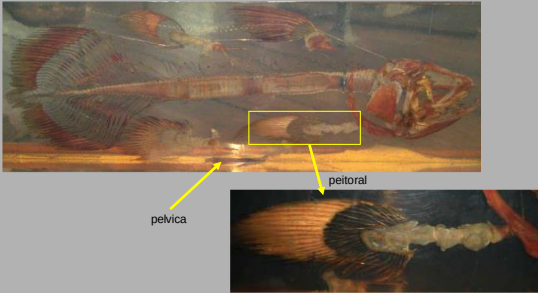
- primeiro fóssil descrito em 1839 por Louis Agassiz: ("espinho oco": lepidotríquias fusionadas na 1a. dorsal)
- Ao longo dos 100 anos seguintes foram conhecidos exclusivamente através de restos fósseis.
- Diversidade no registro fóssil: ca. 85 espécies datando de 360 a 80 milhões de anos.
- Descoberta do primeiro celacanto vivente (*Latimeria chalumnae*) em 1938 na África do Sul (descrita em 1939)
- descoberta de *Latimeria chalumnae* confirmou quase todas as reconstruções e interpretações dos fósseis (exceto em relação às narinas e aberturas do órgão rostral)



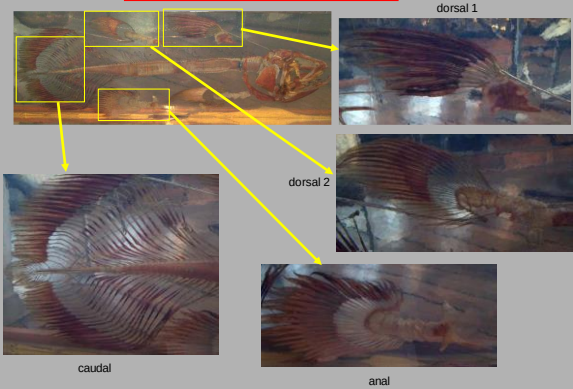
Latimeria: esqueleto: notocorda



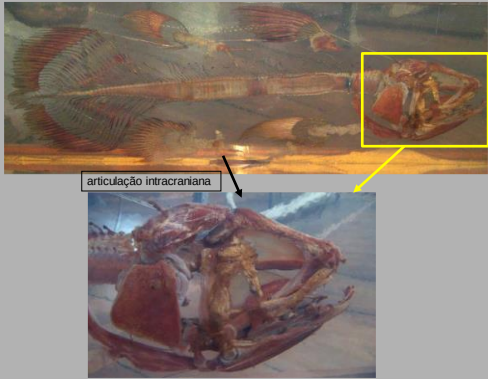
Latimeria: esqueleto: nadadeiras pares



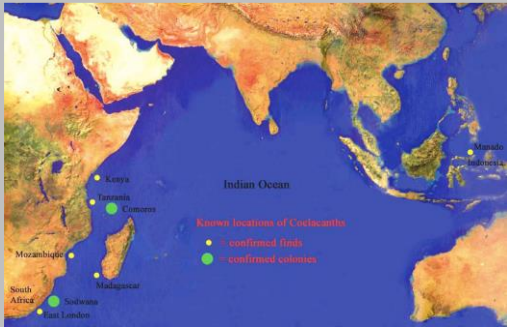
Latimeria: esqueleto: nadadeiras ímpares



Latimeria: esqueleto: crânio



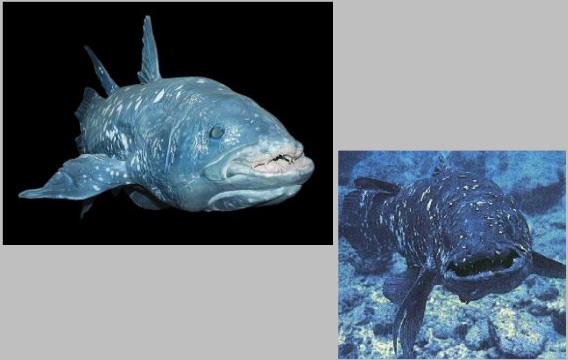
Latimeria: distribuição atual



Latimeria: diversidade atual



Latimeria chalumnae



Latimeria chalumnae

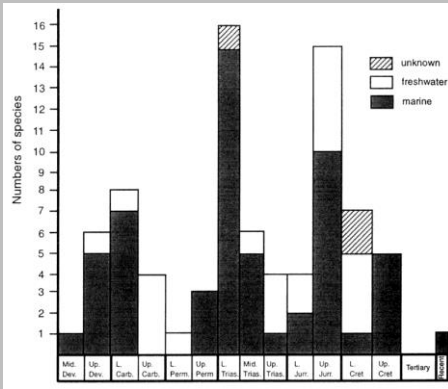


Scientists examine a coelacanth (*Latimeria chalumnae*) that was caught by a fisherman in Kenya. Until 1938 the coelacanth was thought to have vanished with the dinosaurs 75 million years ago. (Photo by George Faller/Reuters/Handout Inc./Corbis. Reproduced by permission.)

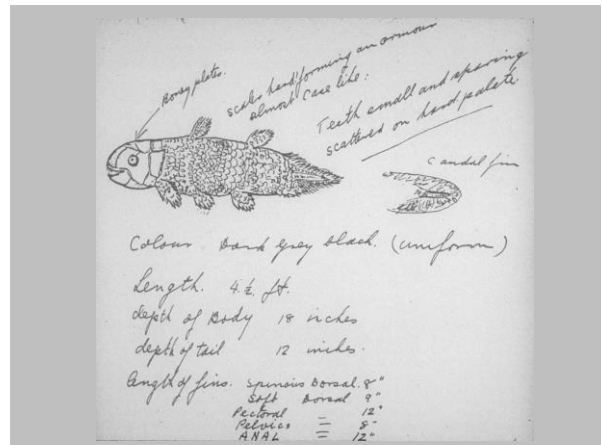
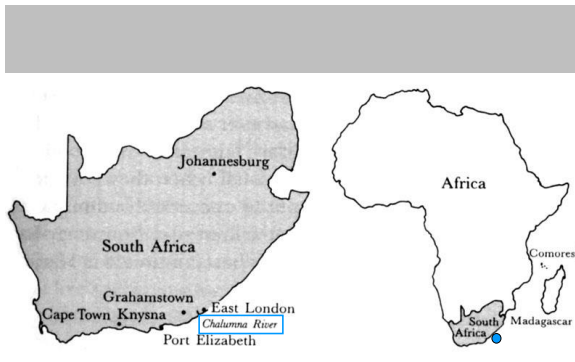
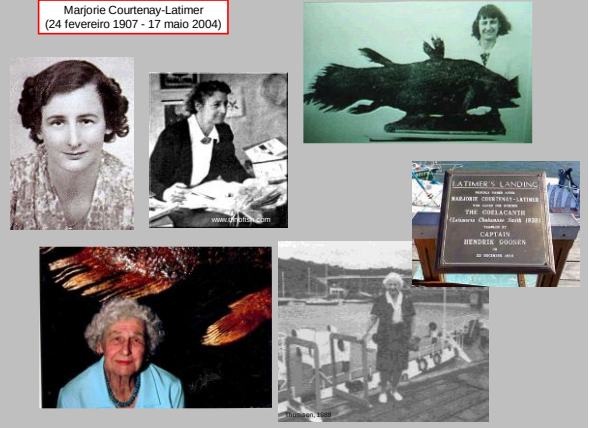
Latimeria chalumnae

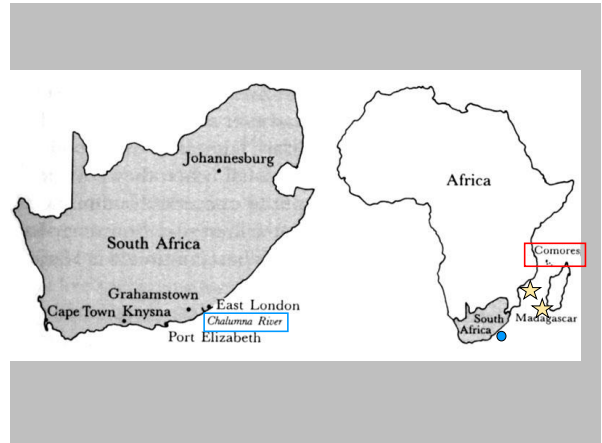
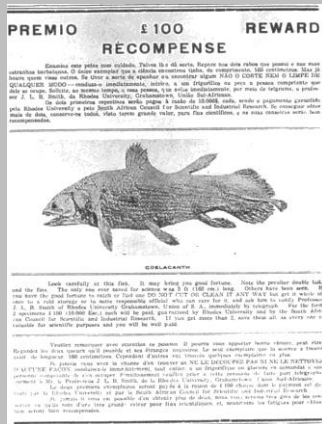


Registro fóssil: número aproximado de espécies conhecidas: 85



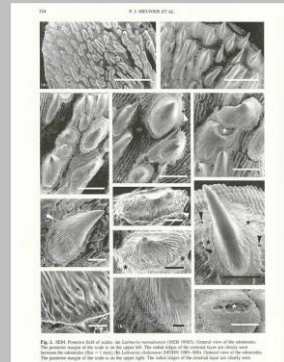
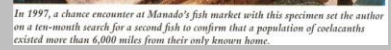
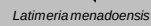
Marjorie Courtenay-Latimer
(24 fevereiro 1907 - 17 maio 2004)

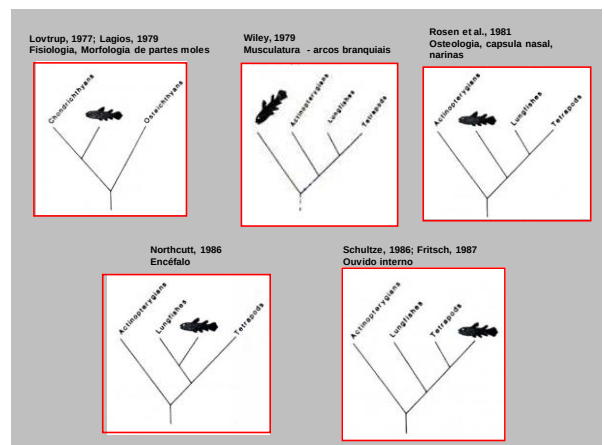
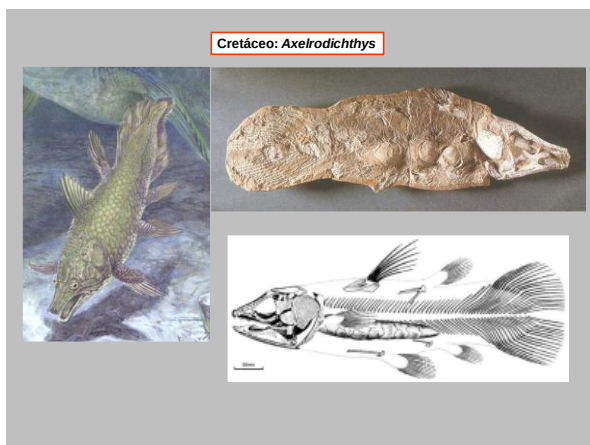
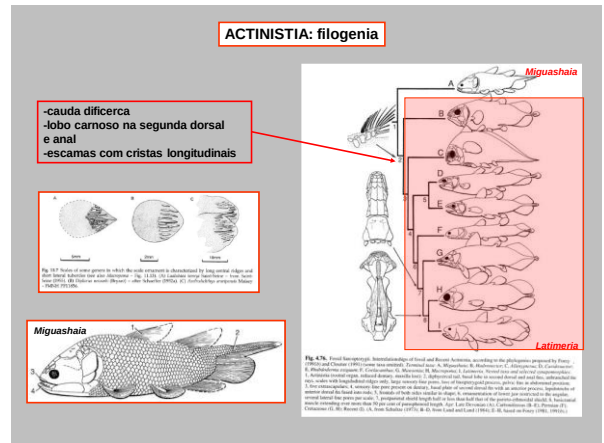
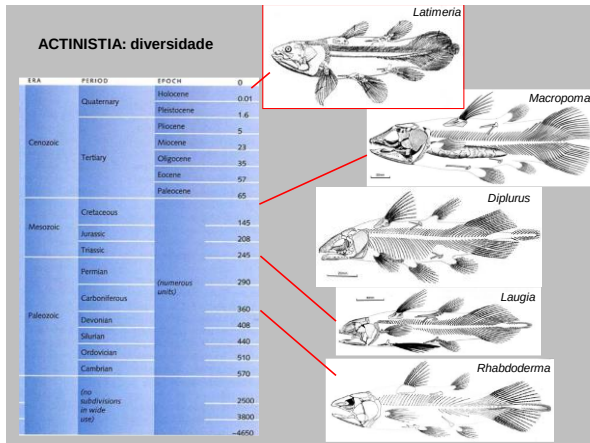




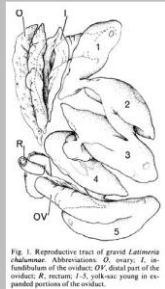
James Leonard Brierley Smith (26 outubro 1897 – 7 janeiro 1968)

*Malania anjouae* Smith, 1952 (= *Latimeria chalumnae*)*Malania anjouae* Smith, 1952 (= *Latimeria chalumnae*)



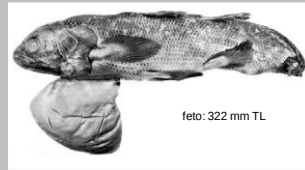


Latimeria: reprodução

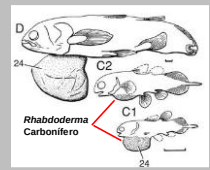


fêmea adulta: 160 mm TL

Latimeria: reprodução



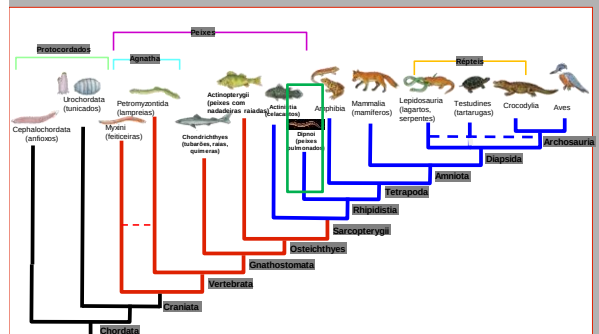
feto: 322 mm TL

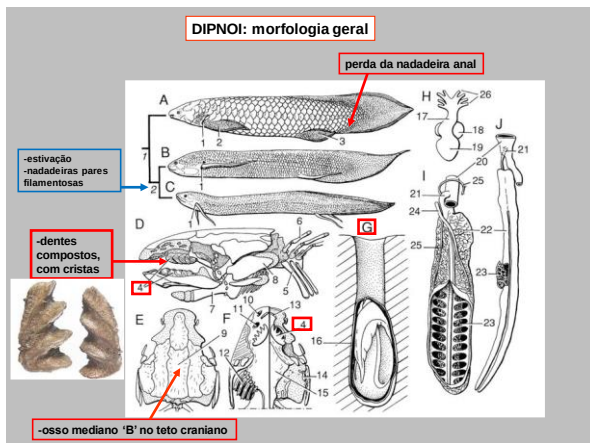
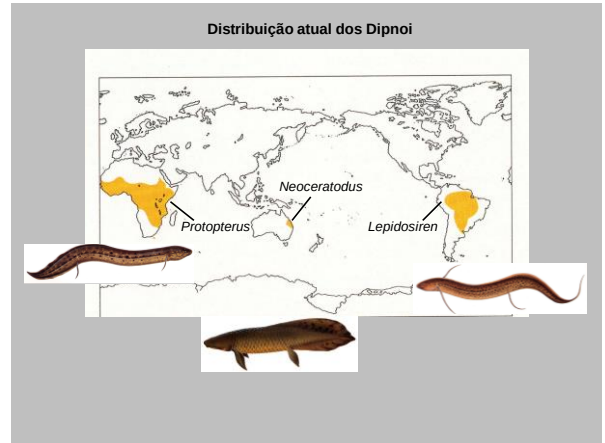
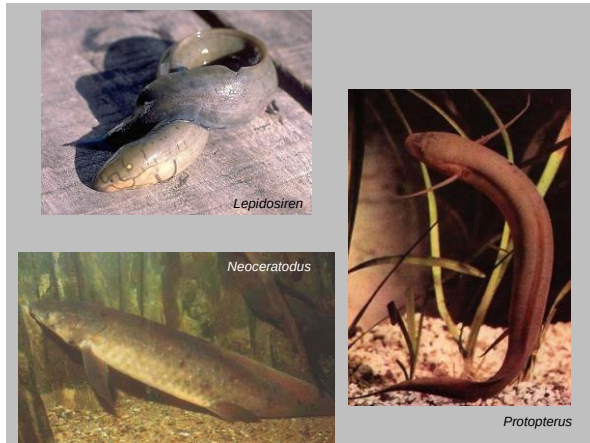


Espécime de *L. chalumnae* da Tanzânia: 23 fetos



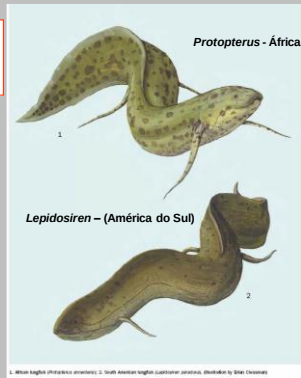
Diversidade atual dos Vertebrados





Lepidosirenidae

- respiração aérea ~ pulmões
- brânquias reduzidas
- realizam estivação
- possuem brânquias externas na metamorfose
- guardam os ovos



Protopterus – peixes pulmonados africanos - 4 espécies

*Lepidosiren paradoxa* - pirambóia

Lepidosirenidae: estivação



- respiram ar obrigatoriamente
- machos guardam os ovos
- metamorfose mais complexa,
- brânquias externas



