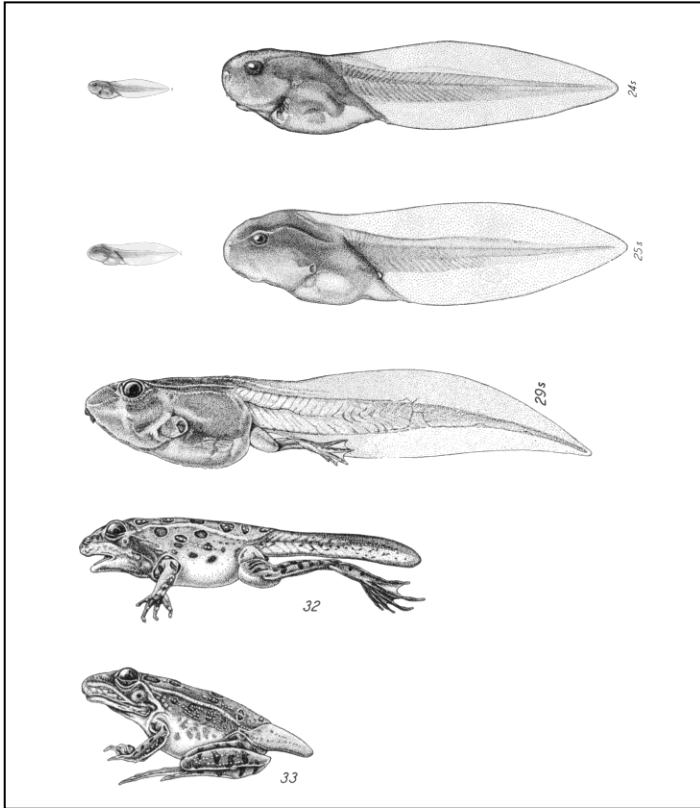
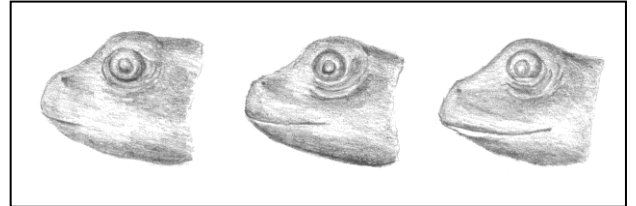


Do Frogs Come From Tadpoles? Insights into Development & Evolution

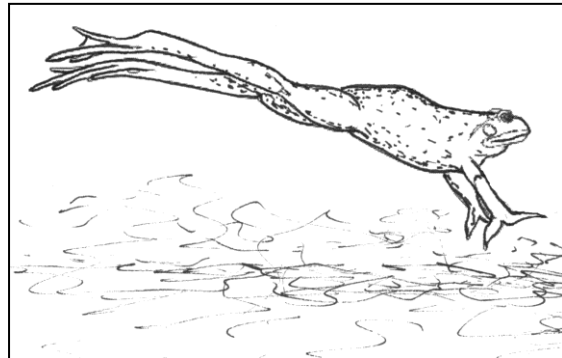
Podcast Illustrations



1. 6 (min):42 (sec) – 11:38. Tadpole metamorphosing into frog (Northern Leopard Frog; *Rana pipiens*). 1a, 2a, 3, 4 & 5 are drawn to scale, about 1.2 times natural size. 1b and 2b are enlargements of 1a and 2a respectively.

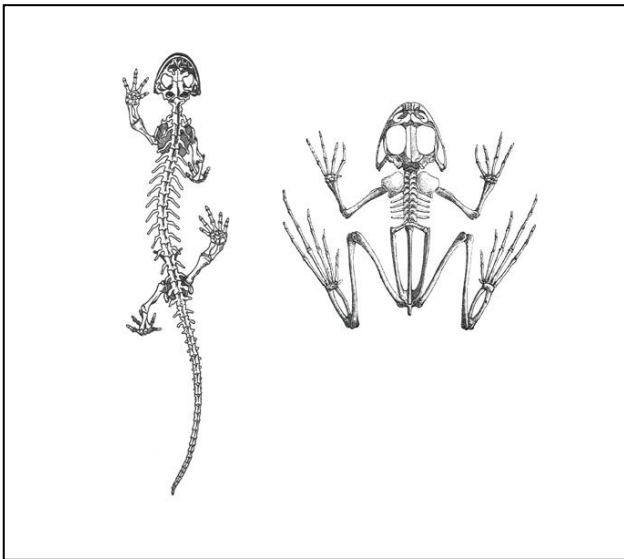


2. 11:38 – 15:26. Changes in the shape of the head during metamorphosis (*Bufo valliceps*)



4. 16:42 – 31:59. Leaping frog

3. 15:26 – 16:42. Skeleton of a salamander (left) and a frog (right)

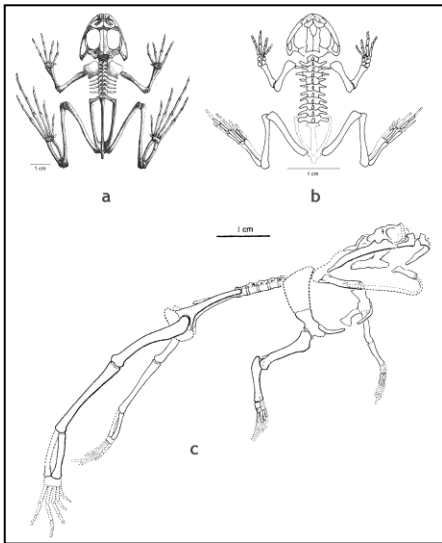


5. 31:59 – 32:46. Geologic time periods—from most recent (top) to the oldest layers of rock (bottom); m.y. = millions of years

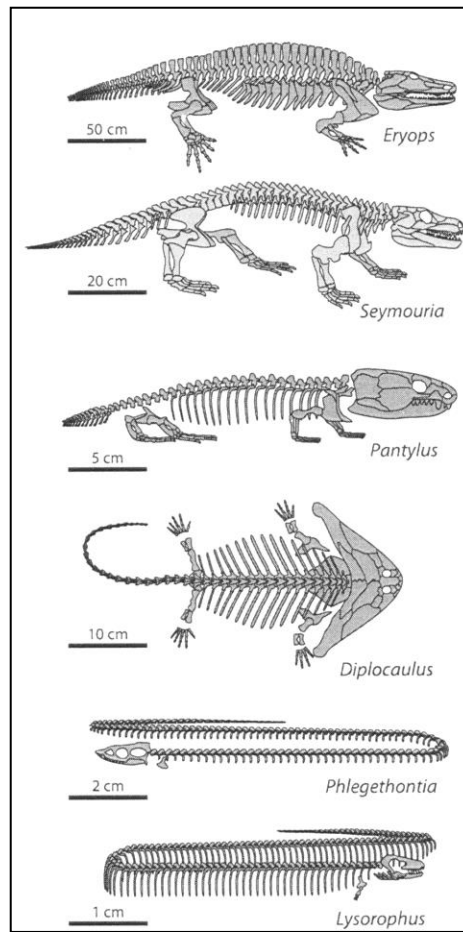
Eon	Era	Period	Epoch	m.y.
Phanerozoic	Cenozoic	Quaternary	Holocene	1.5
			Pleistocene	
		Neogene	Pliocene	23
			Miocene	
		Paleogene	Oligocene	65
			Eocene	
	Paleocene	250		
	Mesozoic	Cretaceous	250	
		Jurassic		
		Triassic		
	Paleozoic	Carboniferous	Pennsylvanian	540
			Mississippian	
		Devonian	540	
		Silurian		
Ordovician				
Cambrian				
Precambrian	Proterozoic		540	
	Archean		2500	
	Hadean		3800	
				4600

Source of Illustrations:
<https://www.natureinstitute.org/book/craig-holdrege/do-frogs-come-from-tadpoles/about>

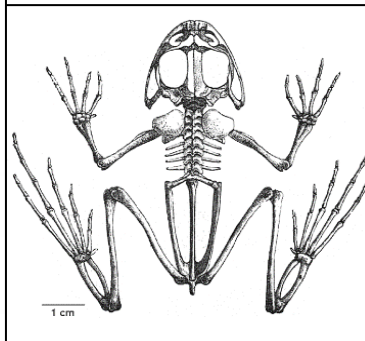
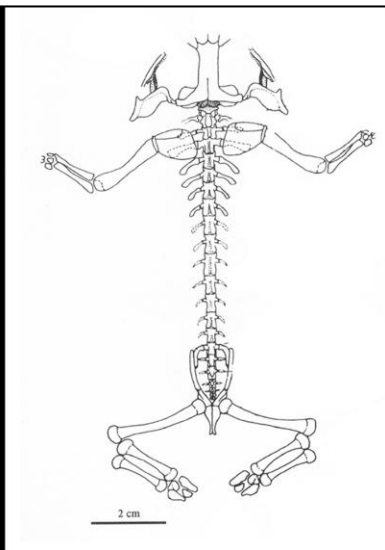
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6. 32:46 – 33:50. a: Modern frog skeleton (common European water frog, *Pelophylax esculentus*); b: reconstruction of a fossil frog (*Viaraella herbsti*) from Argentina, middle Jurassic period; c: reconstruction, shown as if jumping, of the currently earliest known fossil frog, *Prosalirus bitis*, from Arizona, early Jurassic period.



7. 33:50 – 35:35. Some examples of the diverse types of amphibian fossils that have been found in the early Mesozoic and Paleozoic eras, before any fossils of the living groups of amphibians (frogs, salamanders, and caecilians) are found. Not ordered temporally.



8. 35:35 – 37:21. *Triadobatrachus massinoti*; amphibian fossil from the early Triassic period. Left: fossil imprint; middle: reconstruction; right: modern frog.

9. 37:21. a: *Dolesempetron annectens*; amphibian fossil found in Oklahoma, lower Permian period. Body length: approx. 5.5 cm (2.17 inches); b: Partial reconstruction and photo of fossil of *Gerobatrachus hottoni*, amphibian fossil from the lower Permian period, found in Texas. Body length: approx. 11 cm (4.3 inches).

