



Dr. Jessica Light @je_light

14 Mar 19 · 20 tweets · [je_light/status/1105990824414842880](#)

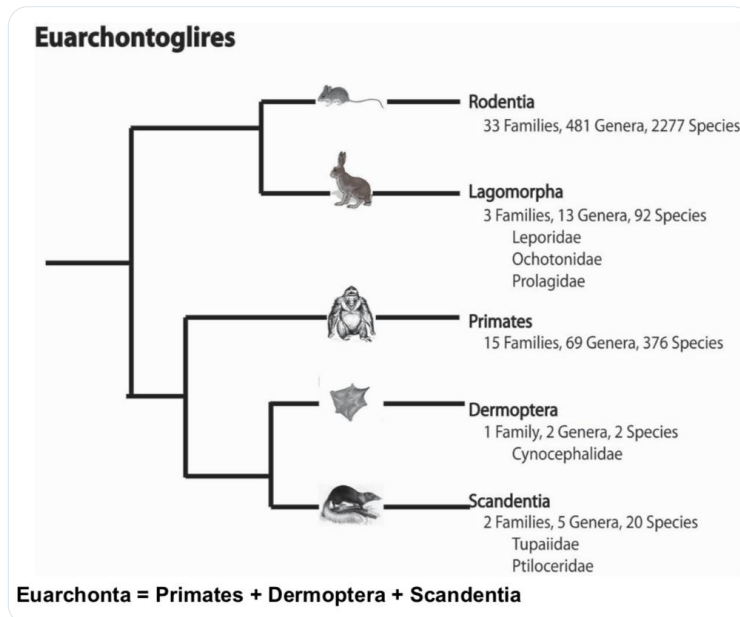


FIRST UP: #8 seed Springhare (Rodentia: *Pedetes capensis*) vs #9 seed Jackrabbit (Lagomorpha: *Lepus californicus*) [#2019MMM](#)



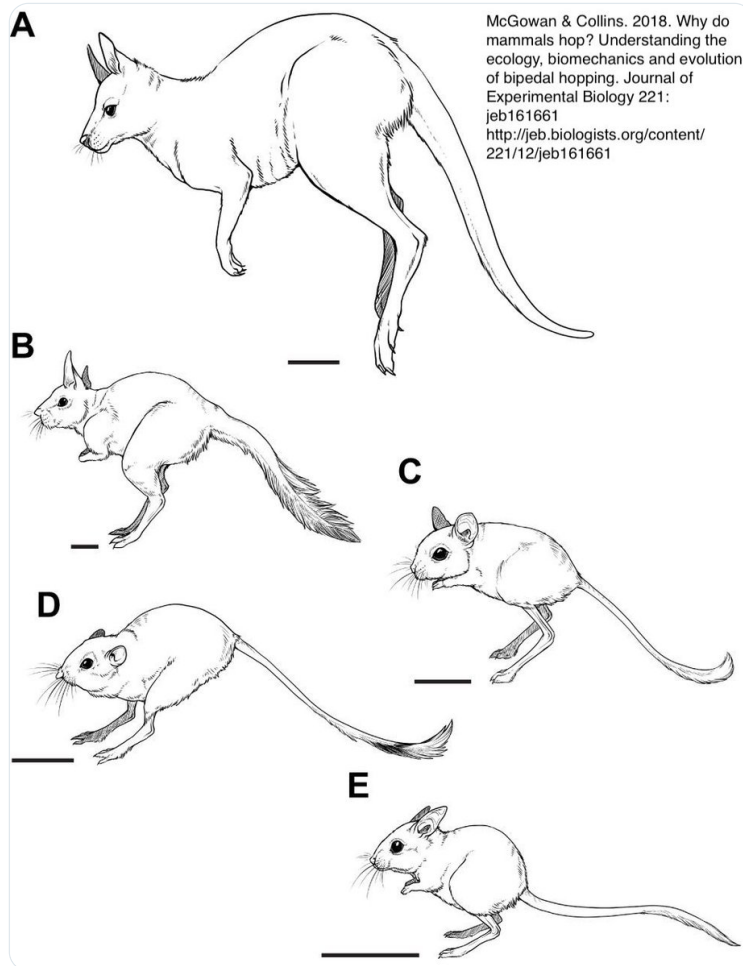
Why are these 2 species in the Jump Jump division? They're highly adapted for saltatorial, or jumping, locomotion. In fact, Springhares belong to the rodent family Pedetidae, which is Greek for "leaper or dancer" [#2019MMM](#)

Although rodents & lagomorphs are closely related (last shared a common ancestor ~80 million years ago; [timetree.org](#)), the adaptations that Springhares & Jackrabbits have for jumping evolved independently [#2019MMM](#)

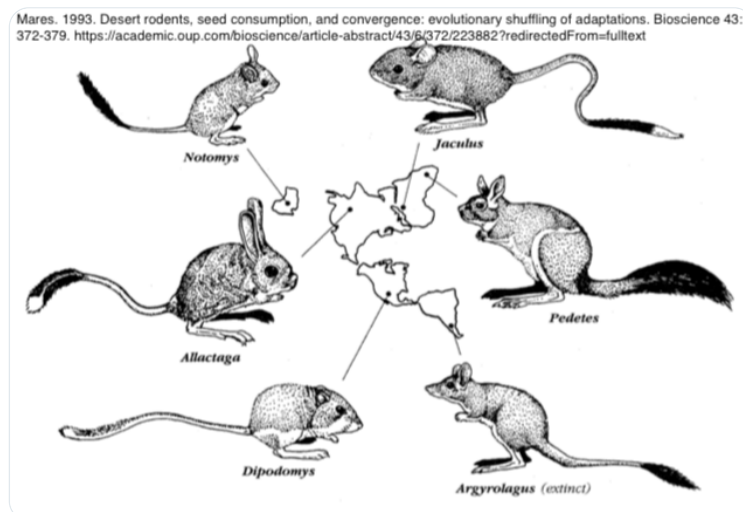


Saltatorial locomotion has evolved independently multiple times across vertebrates &

invertebrates alike (convergent [#evolution](#)), & more times in mammals than you would think. In rodents alone, this jumping locomotion is seen across several, distantly related families [#2019MMM](#)



Most saltatorial mammals have specialized adaptations that allow them to be good & energetically efficient at jumping, such as elongated hindlimbs & long tails (kind of like kangaroos; see images attached to this & previous tweets in this thread) [#2019MMM](#)



The hindlimbs in both the Springhare & Jackrabbit are elongated, as you can see

from these museum specimens from the Biodiversity Research and Teaching Collections at Texas A&M (specimens not scaled; just look at their hind legs)

[@wfsctamu](#) [#collectionsareessential](#) [#2019MMM](#)



Do most of these saltatorial mammals look like kangaroos when they jump? Why yes, yes they do. Here's a Springhare example:

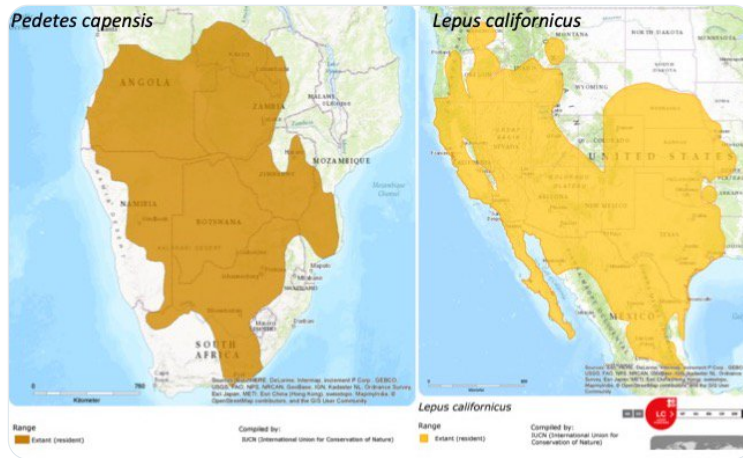


<https://www.youtube.com/embed/hJ6IXRf44gA>

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Many animals that are saltatorial often occur in wide open spaces, like deserts. Both Springhares & Jackrabbits have distributions that encompass desert habitats

[#2019MMM](#)



Desert animals often have additional adaptations to help them survive in these harsh environments. Look at the bottom of these Springhare & Jackrabbit feet! The fur helps with friction & provides insulation against the hot desert sand [#2019MMM](#)



Our battle tonight takes place at Kruger National Park in South Africa https://en.wikipedia.org/wiki/Kruger_National_Park [#2019MMM](#)

It's an overcast & still night; perfect for our nocturnal combatants. Our Springhare is foraging near its burrow for roots & bulbs. Although generally solitary, Springhares often forage in groups because good food resources are usually clumped together (Butynski 1984) [#2019MMM](#)

Group foraging also comes in handy when its mating season, which it is pretty much year-round for Springhares. While foraging, our male Springhare spies a receptive female [#2019MMM](#)

Jackrabbits, depending on their location, also breed year-round. Our Jackrabbit is nearby, foraging for grasses & assessing the novel habitat, flora, & fauna, including the Springhares [#2019MMM](#)

Springhares are generally non-aggressive. But this stranger (that sort of looks like a Springhare) is a little too close to both the Springhare burrow & his potential mate (Anderson 1996; Laird 1993). Anger & aggression begin to build up in our Springhare [#2019MMM](#)



Sensing a bit of danger, Jackrabbit raises its ears attentively (Best 1993) [#2019MMM](#)

Springhare jumps at Jackrabbit



<https://www.youtube.com/embed/GpN0c5MJ-fA>

[#2019MMM](#)

Jackrabbit is startled, jumping 30-60 cm in the air (Best 1993). But Jackrabbit is not one to sit back and take a beating; he rears up on his hind legs



<https://www.youtube.com/embed/H7CXQ4kXI40>

[#2019MMM](#)

Jackrabbit forelimbs are bit longer than Springhare, & he is able to get in some good punches & bites, aiming for the ears of the Springhare (Best 1993) [#2019MMM](#)



Springhare leaps up, & lands big feet first on the Jackrabbit, all 4kg of its frame crushing the Jackrabbit [#2019MMM](#)

SPRINGHARE TROUNCES JACKRABBIT [#2019MMM](#)

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