

ROUND 2 EPIC ANIMALS & CONNOISSEUR CRITTER DIVISIONS

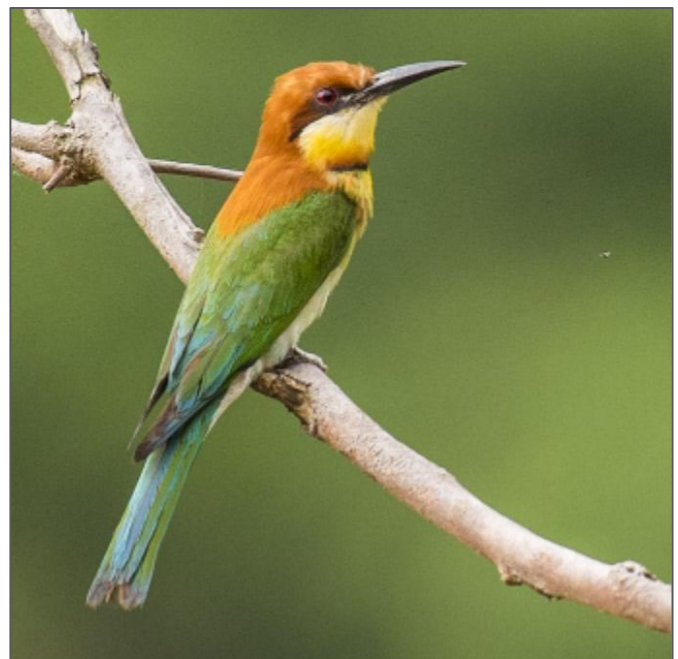
Kob (1) vs. Chestnut-headed Bee-eater (8) – Not just a connoisseur, the kob (*Kobus kob*) is also a bovine bon viveur! Kobs are highly social, sometimes forming herds that can number in the thousands! Once kobs are in high densities, males will defend small territories with resources like salt-licks. Females then choose to mate with males with the best territories.

Chestnut-headed bee-eaters (*Merops leschenaulti*) are also gregarious gastronomes. They typically gather in small colonies of 4-8 breeding pairs, feeding and nesting together from February to April. Chestnut-headed bee-eaters form colonies based on peer aggregation and not habitat quality. Evidence suggests these peer groups help with spotting and deterring predators.



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Kob keeps home-habitat advantage, so the combatants meet in the Borgu Sector of Kainji Lake National Park. Our large male Kob is defending a territory along a river filled with vegetation to nibble and a choice patch of soil to lick. Transported from a mangrove forest, the riparian forest feels similar to home for the Bee-eater, but its breeding partner and all its friends are missing! Concerned, Bee-eater suddenly swoops down and lands within the middle of a large area of exposed soil. Bee-eaters make their nests by burrowing 2 meters into the sandy-muddy banks and flat areas near rivers. With nestlings hatching in March, the Bee-eater is especially worked up. Confused about where its nest went, Bee-eater lands along the embankment.

Kob is nearby performing a “proud-gait”, a display strut with an upright head it periodically performs around its territory. Rarely needing to chase off other males, the Kob focuses on looking its best. Disturbed by the prancy-dancing Kob head-butting the ground, the Bee-eater departs the field of battle to search for its nest. Still lingering on the hoof of the hoofed mammal, Bear's Head Fungi is getting low on remnant conifer. **KOB DEFEATS BEE-EATER!!!!** Narrated by Brian Tanis.

Tufted Ground Squirrel (5) vs. Cobra Lily (13)

– Let's talk about Squirrel's tail, shall we? Tufted Ground Squirrel (*Rheithrosciurus macrotis*) is estimated to have one of the most voluminous tails relative to body size across all mammals. Function? Unclear. But, the large tail may be used as an anti-predator mechanism. How could this work? If pounced on by a predator, large poofy

tails may not give the hunter much hold. Or, large tails could confuse a predator. Squirrel's big tail could serve other functions, but we need more research.



Cobra Lily (*Darlingtonia californica*) typically grows in serpentine soils, rich in the toxic elements nickel, magnesium, & chromium but low in essential macronutrients. Those essential nutrients, especially nitrogen, are obtained through carnivory. The cobra lily tongue or "fishtail appendage" is hypothesized to attract prey to the pitcher entrance via nectar glands, color, and short hairs. But, this hypothesis was not supported in a leaf removal experiment.



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Squirrel only occurs on Borneo and maintains home habitat advantage, so the combatants meet at the Cabang Panti Research Site in Gunung Palung National Park where Prof. Andy Marshall has studied Tufted Ground Squirrels. It's morning after a hard rain. Although technically a tree squirrel by taxonomy, Squirrel is primarily found on ground. Squirrel is again foraging for seeds under a canarium tree because that's what squirrels do. MMMagic transports Cobra Lily from the inhospitably dry Australia to the saturated and cool soils of Borneo. Cobra Lily's roots expand as it greedily takes in much-needed water, pumping some of that water into its pitcher in preparation for prey capture.

The abrupt arrival of Cobra Lily startles Squirrel. Cobra Lily is the right size and shape of a KING COBRA (*Ophiophagus hannah*)! King cobras are terrestrial and venomous. They can raise the anterior part of their bodies ~1.5 m high, with hoods extended, the resemblance is frightening! Although king cobras are primarily predators of other snakes, you can never be too careful? Squirrel scurries up the trunk of the canarium tree and "squirrels" at the Cobra (Lily) with vocalizations and agitated tail waves. Cobra (Lily) does not move in response to Squirrel's objections. And yet, Squirrel continues to object loudly. Cobra (Lily) again, does not move and Squirrel continues to fuss. It's a standoff!!!!

Squirrel has had enough. This aggression will not stand! Squirrel launches off the tree trunk towards Cobra (Lily)! And gives Cobra (Lily) a wide berth as Squirrel EXITS THE FIELD OF BATTLE! COBRA LILY OUTLASTS SQUIRREL! Narrated by Jessica Light.

4-seed Wolf (4) vs. Red Deer Stag (5) - A night-time series of recordings in the Bolshebereznikovsky, Chamzinsky, Dubensky, & Atyashevsky districts of the Republic of Mordovia revealed a wolf (*Canis lupus lupus*) howling in reaction to Eurasian eagle owl hoots. The Wolf and Eagle Owl co-vocalizations lasted 4 minutes, and the owl was thought (by the researcher) to be an irritant to the wolf. Dogs and fox also co-vocalize with eagle owl hoots! "There is an opinion that when the cry of an owl or the howl of a wolf is heard in the forest, all other birds and animals calm down. In forests of Eurasia, these two predators can be at the top of the vocal hierarchy among birds and mammals, respectively" (Andreychev 2023).



During the mating season Red Deer Stags (*Cervus elaphus*) produce roars. Common Roars accurately signal the Stag's size, which is a factor in their ability for male-male combat, and allows the competitor to assess the risk of engaging in a fight.

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But at moments of **intense** competition, Red Deer Stags produce a more chaotic "Harsh Roar" that is more likely to intimidate their rivals and causes ladies to pay more attention.

Tonight's battle occurs in the Carpathian Mountains, along the slopes of mountain ridges blanketed in spruce forest with smattering of birch and beech trees above the Sola River Valley along the Poland Polish-Slovakian and the Polish-Czech borders. An adult male Wolf trots alone in the forest. He is on one of his "extraterritorial forays" away from the pack as he explores opportunities to disperse and create a new pack in unclaimed territory. In the Carpathian Mountains, Wolf shares the forest with Red Deer, roe deer, & wild boar.

The deer species are more than 90% of the meat consumed by wolves, and between roe deer and Red Deer, wolves have a hankerin' for RED DEER. In the region, Red Deer are only about 20% of the ungulate population, but are 50% of the animals consumed and during the cold months Wolves are even more keen to hunt Red Deer.

In a small clearing in the forest, Stag is nibbling on some of the first shoots of spring, when out of his peripheral vision he sees Wolf trot into the clearing. Wolf slows, but continues walking toward the Stag. Red Deer Stag have several escalating responses to wolf predation risk. Step 1: Stag moves from the open with richer grazing, closer to the cover of the timberline at the edge of the clearing. Step 2: Stag positions away from environmental impediments to fleeing, such as streams choked with coarse woody debris, large boulders, or areas of many downed trees that ungulates can have difficulty maneuvering through. Step 3: Stag confronts the lone Wolf by charge...THE WOLF HAS LEFT THE FIELD OF BATTLE!

Because even when hunting cooperatively in packs in the Carpathian Mountains, Wolves rarely bring down Stags; fewer than 15% of pack kills are Stags, as wolves more successfully target does and juveniles. Our lone Wolf combatant saves his energy for more likely successes like hunting brown hare, the most common non-ungulate winter prey of wolves in the Carpathian Mountains. Stag resumes grazing. STAG INTIMIDATES WOLF!!!! Narrated by Katie Hinde.

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Crested Porcupine (3) vs. Batfly (11) – Crested Porcupines (*Hystrix cristata*) are monogamous, with both mom and dad contributing to the care of young porcupines (called porcupettes). This includes taking turns foraging and guarding vulnerable babies at the den. Though primarily vegetarian, Crested Porcupines will occasionally feed on carrion, likely as a way to supplement their protein intake.



Batflies (*Eucampsipoda madagascariensis*) reproduce year-round, living in the fur of both male and female Madagascan rousette bats. In the wet season, gravid female flies prefer lactating female bats who's blood is full of important nutrients. *Nycteribid* batflies like *Eucampsipoda* can also act as hosts and vectors for viruses, bacteria, even fungi.



In the quiet darkness of a Madagascar cave, Batfly perches on the shoulder of his bat noble steed (*Rousettus madagascariensis*) and takes a sip of blood. As the bat reaches a clawed foot up to scratch at her shoulder, both are transported away by MMMagic to the Italian foothills. The late afternoon sun is shining bright here in Central Italy, home of our Crested Porcupine. Flustered, the noble steed alights onto a scrubby tree overlooking a hole in the ground. An eye glitters in the hole. It's Porcupine, standing guard! Her two porcupettes, born just a week ago, are tucked in the den behind her. With small bodies and quills still soft, they won't venture out of the den for another few weeks. Porcupine turns and BOTH eyes glitter in the darkness! While tough against insects, turns out Worm slime is water soluble and quickly dissolved, leaving Porcupine's eyes clear to spot the movement just ahead. It's a red fox on the prowl! Porcupine comes fully out of her den, crest and quills raised in warning.

In the tree above, Batfly takes another sip of blood. Noble steed scratches at her shoulder and Batfly scuttles away down her belly. The red fox continues to approach and Porcupine shakes her tail and stamps her feet in warning, the hollow quills of her producing a hiss-like rattle. But this red fox is young and hungry after the long winter. He continues to approach. Turning swiftly, Porcupine drives backwards and her razor-sharp spines pierce right into the fox's neck! Above, noble steed brings a clawed foot up to scratch at her belly - STABBING RIGHT THROUGH BATFLY! Noble steed brings the claw to her mouth and SWALLOWS BATFLY WHOLE. Autogrooming Carnage! Porcupine, alert on the field of battle, watches the fox run away dripping blood. Above her the noble steed takes wing now minus a parasite. PORCUPINE OUTLASTS THE BATFLY!!!! Narrated by Alyson Brokaw.

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Sperm Whale (1) vs. Raven (8) - Like other cetaceans, Sperm Whales (*Physeter macrocephalus*) use echolocation to navigate the vast, dark oceans. Sounds unique to Sperm Whales are "codas" which are culturally passed down in matrilineal groups and exemplify their complex social structure. Actual Living Scientist Shane Gero has been studying the behavioral ecology and social structure of Sperm whales, particularly in the Caribbean, for decades.



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Ravens (*Corvus corax*) also have vocal signals, beyond their famous CROAAK and GRONK-GRONK. Ravens are smart at solving foraging brain teasers and savvy at solving conflicts with other ravens. As evidenced last round, Ravens make a meal out of small mammals like lemmings, voles, and even other birds! Researchers saw Ravens digging into rhinoceros auklet burrows, preying on chicks, and even attacking adults. One more epic bird fact: Ravens inspired many place-names across the UK. Unfortunately, we can see the disappearance of raven habitat over time when those locales are compared with modern raven distributions.

Tonight's battle takes place in central Baffin Bay off the coast of Nunavut ("our land" in the Indigenous Inuktitut), Canada. Sperm Whale takes a break from deep-sea hunting to opportunistically feed off discards from a commercial fishing boat! Sperm Whale's foraging from commercial fishing waste is currently considered a rare behavior, but as oceans and fisheries change, this could have big implications for the flow of energy through marine ecosystems. Meanwhile, Raven is feasting on a shark carcass along the Nunavut coastline, when it is suddenly MMMagicked into the open ocean without their meal. It's a feeding frenzy at the water's surface around the fishing boat. Northern bottlenose dolphins, glaucous gulls, hooded seals, and northern fulmars all jockey for the bycatch and discarded bits tossed back into the sea. Raven is a bit surprised and takes in the whole scene while hovering above the melee of splashing and squawking.



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At that moment, Sperm Whale spy hops (or sticks their head out of water) to get a better view of the

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boat and the source of fishy food-scrap. WHOOSH!!! Raven suddenly DIVES at the Sperm whale... And comes up with an adult black-legged kittiwake in their mouth! "Upon examining the area where the raven had lifted off, only a few neck feathers and a little blood were found." (Klicka & Winker, 1991). Raven lands on the roof of the fishing vessel's bridge with their prize, and takes a free ride with the boat further into open water, leaving the field of battle. SPERM WHALE OUTLASTS RAVEN! Narrated by Patrice Connors.

Giant Squid (2) vs. Lucy (7) - Scientists first photographed Giant Squid (*Architeuthis dux*) with an elaborate 1000m fishing line. Lucy (*Australopithecus afarensis*) was an adult, but she was small, standing between 1 - 1.2 m. We know she was an adult since she had her adult molars. This tells us that being 'tall' probably happened after this species evolved. But why we got taller is not 100% clear.



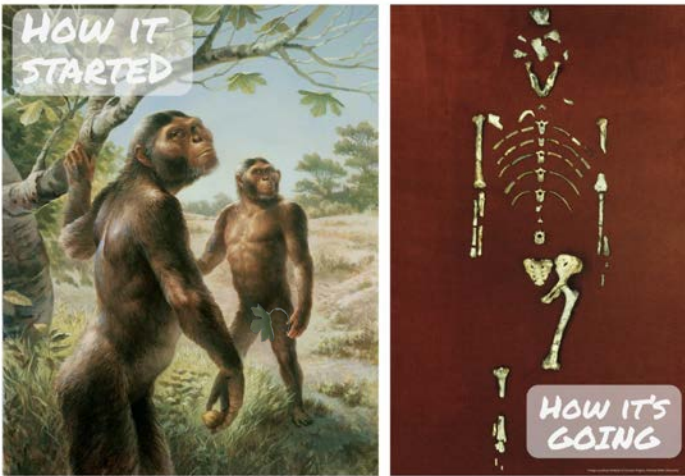
Giant Squid retains home habitat advantage in Round 2 and tonight we find the Giant Squid in the North Pacific, near a steep and canyoned continental slope 650 nautical miles from Osaka, Japan, off the Ogasawara Islands. In the night-time, Squid has risen in the ocean column to hunt 219 fathoms below the surface (400m, 1200 feet).

MEANWHILE, 3.2 million years ago in the Afar region of Ethiopia, Lucy is up a tree. Still breathing heavily, she has sought refuge in the tree from predatory scimitar-toothed felid (*Homotherium*)...but *Homotherium* has bound into the tree after Lucy! Climbing out to the springy, terminal branches of her refuge tree, Lucy is beyond the reach of the *Homotherium*. Some researchers have speculated that fracture patterns of the Lucy fossil suggest that falling from a tree shuffled her loose the mortal coil. Other researchers are more skeptical of the "Fatal Fall From A Tree" scenario as the fossilization process and millions of years in rock can produce fracture-like patterns long after death.

Lucy's damp fingerprints grip tight to the branch. As she scootches further out on the branch, the MMMagic portal opens on the ground beneath her. Looking down she sees a dark abyss... Lucy balances above the magic portal plunge pool. Does she fancy a swim to the twilight zone of the pelagic ocean? No, Lucy does not want to go swimming. The fossil record of *Australopithecus afarensis* shows clear adaptations for a habitual terrestrial lifestyle. As *Homotherium* jumps down from the tree, Lucy moves to a more stable branch

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and forages for fruit, forfeiting the "opportunity" to experience the immediate pain of depth compression: burst ear drums and rib fracture before passing out and drowning from lack of oxygen. Meanwhile, Squid hunts on the Field of Battle. SQUID OUTLASTS LUCY!!!! Narrated by Marc Kissel and Katie Hinde



Great Skua (2) vs. Pitcher Plant (7)

Great Skua, *Stercorarius skua*, "display their tails during pair formation & courtship" suggesting that these feathers serve a role in sexual ornamentation (Schreven & Hammer 2020). Both male & female Great Skua have elongated central tail feathers & length is associated with reproduction (earlier timing of egg-laying), but this trait is especially exaggerated in males, even though on average males are smaller than females.

The Pitcher Plant (*Nepenthes rajah*) pitcher "lid" exudes "44 volatile compounds, including alcohols, esters, ketones and sulphur-containing compounds" that are typically "present in sweet fruit and flower odours" that attract mountain treeshrews & rats (Wells et al. 2011) *Nepenthes* pitcher plants chemically detect the presence of



invertebrate prey or vertebrate poop in the pitcher & stimulates the production of the digestive enzymes that break down the meal into nutrients that plant can use.

Tonight's battle occurs at St. Kilda, a volcanic archipelago in the North Atlantic, more outer than the Outer Hebrides of Scotland! Here essential seabird nesting habitat exists within the remnants of an incredible archaeological site. A northern gannet (*Morus bassanus*), having returned to the archipelago, has been fishing off the coast and is returning toward the some of the highest cliffs in all Europe, when large female combatant Great Skua begins harrassing the gannet! Great Skua interferes with gannet's flight, grasping the gannet's wing, pulling on the gannet's tail! Gannet dislodges Great Skua with evasive maneuvers, but Great Skua attacks from above, pushing her feet down on the gannet's back until the gannet regurgitates the most recent fish meal! Fishy vomit plummets toward earth *KERSPLATTING* on to Pitcher Plant MMMagically transported onto the shoreline!

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Pitcher Plant lays sideways in the intertidal zone, wilted, with a ripped pitcher & partially dissolved mountain treeshrew, now covered in regurgitated fish! Great Skua, having successfully achieved her aim of stolen fish dinner, lands on Pitcher Plant & begins gorging on the fishy feast! Standing on Pitcher Plant, Great Skua's beak tears into plant, going after every fishy morsel. Pitcher Plant's digestive enzymes leak away into the sand and tidal saltwater. Detecting the corpse of the mountain treeshrew inside the Pitcher Plant, Great Skua rips through the plant to scavenge the mammal carcass on the shoreline. Relaxed, Great Skua preens her feathers as the outgoing tide pulls the Pitcher Plant to sea, never to emit a fruity odor again. GREAT SKUA DEFEATS PITCHER PLANT! Narrated by Katie Hinde.



Caspian Tiger (3) vs. Eurasian Boar (6)

Tigers' (*Panthera tigris*) roars may be unique to the individual and vary between the sexes (Dunn 2014). Roars are used for long-distance communication to announce large kills, attract mates, or summon cubs & can reach up to 3 km (1.8 mi). Felids can be divided into roarers (Pantherinae) and purrers (Felinae) & likely tied to

the anatomy of the sound-producing structures of the throat (the hyoid bone and associated muscles supporting the pharynx).



Other than laying down, grazing and rooting are some of Boar's (*Sus scrofa*) favorite activities. Smaller boars (~50 kg, 110 lbs) need to consume 4000-5000 calories/day that they get from their highly flexible, omnivorous diets. Boars have large modified canine teeth (tusks/tushes); lower tusks average ~18cm (7 in) in males. Tusks help them root, forage, and fight. Rooting (subsurface foraging) plays an important role in the ecosystem because it disrupts layers of soil.

Our battle tonight is in the deciduous forests of the Golestan National Park in Iran several hundred years ago. The last known Caspian Tiger was shot here in the 1950s. Persian leopard is the only *Panthera* remaining today in Iran. Boar is foraging... as usual, entirely unaware of the Caspian Tiger's hungry gaze affixed on him. Tigers are solitary ambush predators that stalk their prey before they suddenly rush them. Boar rubs his lips and tusks on the bark of a nearby tree to mark it with his scent, as a breeze carries the

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the scent through the trees... but Tigers use sight and hearing to hunt, not their sense of smell (olfaction). All Felids have adaptations for night vision, members of the genus Panthera have rounded pupils that aid in daytime sight. Tiger last meal was before R1's encounter with GREEDO*i*, 8 days ago. Tigers prefer to eat every 6.5 days. While typically preferring deer, in these habitats Tiger will also target Boar.

Tiger rush-charges boar, knocking the boar down with a push from front paws. Tiger CLAWS puncture the boar's hide, as powerful JAWS try to sink CANINES into the MUSCLED NECK of the Boar! Boar rears up, a move from boar male-male wrestling, dislodging Tiger who releases his bite on Boar! Tiger comes in to crush boar's throat as Boar drops to all four hooves, slashing his lower dagger-like TUSKS upward!

<PHSSSSSLK!!!> <GOUPHF!>

Tiger GASPS as Boar plunges his TUSK into Tiger's belly! "Lacerations & penetrating injuries caused by the boar's tushes are the common injuries" (Govind & Jayson 2022) including "wounds penetrating to the internal organs" (Thalgaspitiya et al. 2023). Gruesomely wounded, Tiger crumples to the ground as bleeding Boar flees, squeal-screaming deep into the forest! Tiger gathers his remaining strength, crawling painfully across the field of battle... Tiger returns to the cover of ambush, not to hunt, but seeking refuge for any possibility of recovery. TIGER OUTLASTS BOAR! Barely. Narration by Chloe Josefson and Katie Hinde.



Hubertus Vereniging Vlaanderen
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#2024MMM

RND 2 EPIC ANIMAL &
CRITT CONS



7:16 PM · Mar 21, 2024 · 35 Views

CITATIONS

Giant Squid vs Lucy

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Great Skua vs. Pitcher Plant

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Porcupine vs Batfly continued

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Squirrel vs Cobra Lily

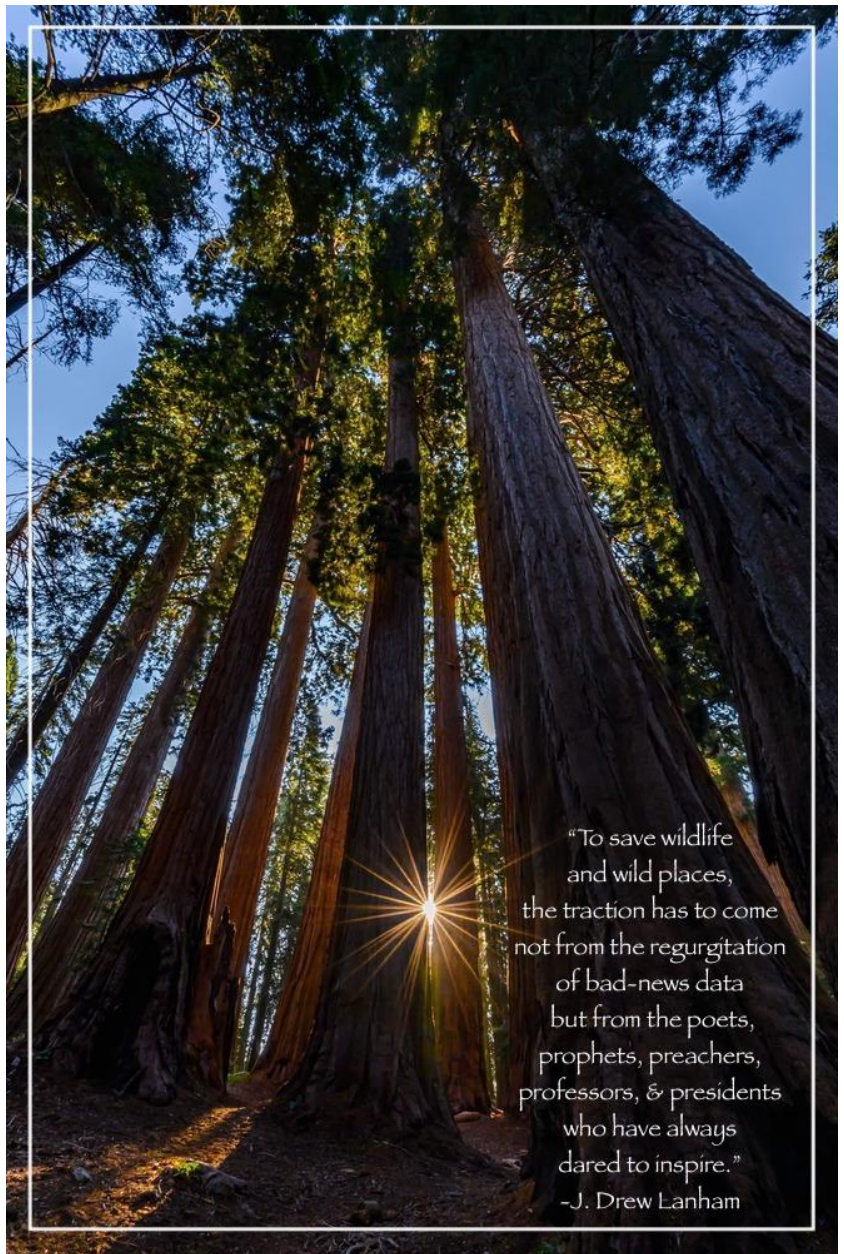
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"To save wildlife and wild places, the traction has to come not from the regurgitation of bad-news data but from the poets, prophets, preachers, professors, & presidents who have always dared to inspire."
-J. Drew Lanham

Squirrel vs Cobra Lily continued

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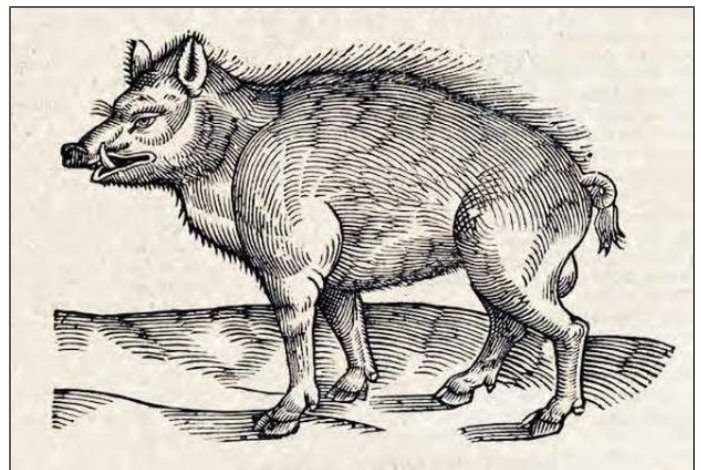
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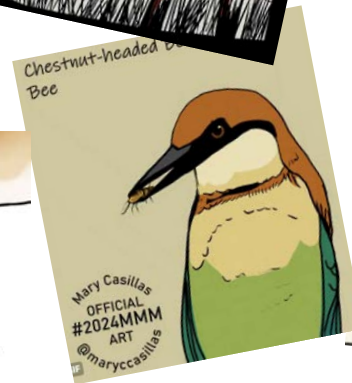
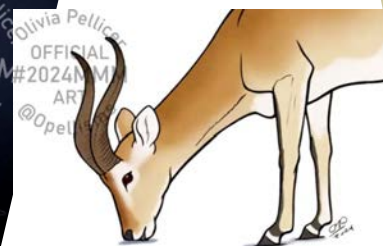
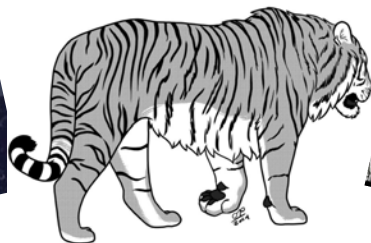
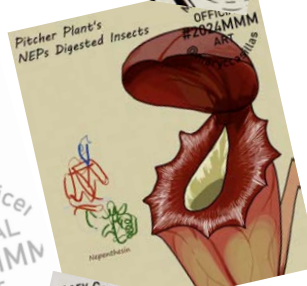
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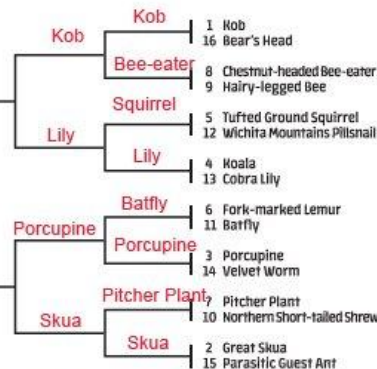
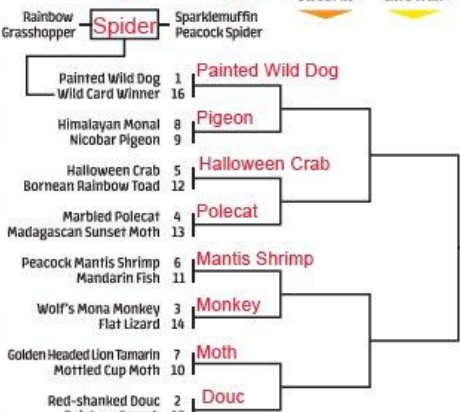
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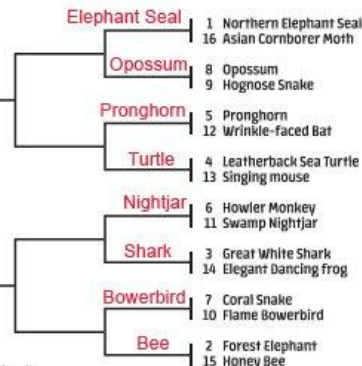


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AND a special thanks to our friends at Society for Integrative & Comparative Biology for their essay on the worst-seeded combatants!

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