EPIC ANIMALS ROUND 1

Sperm Whale (1) vs. Whip Scorpion (16) – Sperm Whale (*Physeter macrocephalus*), the largest of the toothed whales, is physically huge- 55 tons (50,000kg or 227,273 stoats) and literarily huge as Captain Ahab's mortal enemy in Herman Melville's 1851 novel Moby Dick. Sperm whale is named from a case of mistaken identity. The Sperm Whale's massive head contains the spermaceti organ, which does not make male reproductive cells (**gametes**), but instead an oil that humans used in lamps, candles, and lubricants. Whip Scorpion (*Draculoides bramstokeri*) and other schizomids are closely related to spiders with two body segments (**tagmata**) and jointed appendages for walking, grasping, and eating. Their unique tail is called a flagellum and used during courtship. Whip Scorpion's scientific name is a nod to Irish author Bram Stoker and his 1897 novel Dracula, chosen by arachnid expert Dr. Mark Harvey and subterrain biologist Dr. Bill Humphreys at the Western Australian Museum. The name is an allusion for Whip Scorpion's lethal approach to killing and consuming prey.

Sperm Whale, finds itself in preferred habitat of "the open sea"...*pause as narrator spins a globe & randomly places finger on it*... in the Northern Atlantic Ocean. Sperm whale returns to the surface after nearly a 40-minute foraging dive 1000m below the surface, to briefly fill up on oxygen before returning to the hunt. The MMMagically transported Whip Scorpion suddenly finds itself on top of Sperm Whale's head. This seascape is dramatically different from the underground cave systems on Barrow Island, Western Australia that our schizomid calls home (**troglobitic**). The small arachnid scuttles across the slippery surface, searching for any crack or crevice to escape into... it finds a dark, smelly tunnel… WHOOSH!!!!! Sperm Whale exhales a huge breath and water vapor out of its blowhole launching Whip Scorpion into the misty air… and off the Field of Battle! Whip Scorpion splashes into the water and drifts down to Davy Jones's locker. SPERM WHALE THAR HE BLOWS WHIP SCORPION!!! Narrated by Patrice K. Connors.

Giant Squid (2) vs. Tarzan Chameleon (15) – The elusive, mysterious Giant squid (*Architeuthis dux*) is among the largest living invertebrates with enormous eyes, to see better in the deep sea. Their stomach contents reveal that Giant Squid eat a smackeral of mackerel, munch on mora, and hunt many other squid species. These squid may be the source material for legends of the Kraken, a large sea monster. In '20,000 Leagues Under the Sea' by Jules Verne, a humongous squid-like monster attacks the crew of the Nautilus submarine.

Tarzan Chameleon (*Calumma tarzan*) is a medium-sized green lizard that lives in rainforest fragments of central eastern Madagascar. From their teensy bit of extra snoot to the tip of the tail they can reach nearly 6 inches, ~119–150 mm. The species is named for Burroughs fictional man of the forest, as "a Tarzan yell for conservation" to increase protection activities

for not only the rare chameleon but the other species in the Madagascan ecosystem threatened by habitat destruction (Gehring et al 2010).

Our battle begins 300 fathoms below the ocean's surface (550 meters,~1600 stoats!) where a one ton Giant Squid hunts off-shore of the Azores. But he is not the APEX predator of this realm, so he swims vigilantly as both hunter and hunted! About 6000 miles away, Tarzan Chameleon sits in ambush in the Anosibe An'Ala region of Madagascar. Body motionless, tongue spring-loaded to accelerate from 0 to 50+ miles per hour in one hundredth of a second, Chameleon awaits an insect to arrive in reach. In the dark, deep waters, Giant Squid searches for his next meal. Tarzan Chameleon rotates his eyes for panoramic vision, his small forest fragment means few potential mates and he is often on the lookout for a lady. The MMMagic Transportal opens beside him... staring through the portal into the abyss, Tarzan Chameleon takes a hurky, jerky step with his grasping feet toward the dark... CRRRAAACK!!!! The air is aflutter with thousands of insects sent flying from trees falling, as loggers' chainsaws fell forest trees into timber! Tarzan Chameleon's tongue rapid fire captures a flying insect just as the limb beneath him collapses away!!! The adjacent tree's fall demolishes Tarzan Chameleon's tree and he plummets away from the MMMagic Transportal, tiny green legs flailing for a vine to grab. But all of the forest fragment has fallen… and so does Tarzan Chameleon! GIANT SQUID OUTLASTS TARZAN CHAMELEON!! Narrated by Profs. Marc Kissel and Katie Hinde

Caspian Tiger (3) vs. Suckermouth Armored Catfish (14) – *Peckoltia greedoi* was discovered in 1998 in the Gurupi River in Brazil & described by #ActualLivingScientists in Armbruster's lab, Auburn University who named it after Greedo, the bounty hunter from Star Wars, because of a shared resemblance. What the *Peckoltia greedoi* catfish lacks in stature (up to 78 mm / 3.1 inches / 0.23 stoats), it makes up for with its dark eyes, teeth (36-77), and large sucker mouth. That mouth makes up about 50% of its head!.

Once the most widely distributed tiger subspecies, the now extinct Caspian Tiger ranged from Turkey through Central Asia into northwest China. The Soviet Union placed bounties on the Caspian Tiger and that brought out the bounty hunters. Caspian male tigers stacked in at 170-240 kg (370-530 lbs) and 270-295 cm (106-116 in), and have fierce claws (80-100 mm) and upper canine teeth (~78 mm in similar subspecies) aka, its canines are the size of Suckermouth armored Catfish. In the oldest forms of Sanskrit poetry and pose, the concept 'mṛga' was specific to "wild animals, namely a tiger (vyāghra), called the foremost among the wild creatures" and other wild species (Sojkova 2022).

MMMagic transports Catfish several hundred years into the past to the muddy banks of the

riparian forest area between the Vakhsh and Panj Rivers in Tajikistan where Caspian tigers once ranged. Today this is called the Tigrova Balka Nature Reserve. Tiger recently gorged and strolls to the river bank to drink water and cool his "meat sweats." Digestion takes energy, and burning energy to digest energy can slightly increase core body temperature. MMMagic translocation has taken the bottom-feeding Suckermouth Catfish from the river in Brazil to Tajikistan, but the Catfish remains at the silty bottom, hoovering up delectable detritus and algae as its meal. Wading near a tangled bank, Caspian Tiger steps on Suckermouth Armored Catfish! Squishing out between tigers toes, Suckermouth Armored Catfish swim darts across the river and off the Field of Battle! CASPIAN TIGER DEFEATS SUCKERMOUTH ARMOURED CATFISH!! #CatfishShotFirst Narrated by Profs. Chloe Josefson and Katie Hinde.

Wolf (4) vs. Eurasian Harvest Mouse (13) - Several hundred years ago, wolves (*Canis lupus lupus*) were "the most widespread large terrestrial carnivores in the northern hemisphere" but centuries of intensive hunting campaigns killed out (**extirpated**) entire populations in Western & Central Europe (Szewczyk et al. 2019). Wolves are in folklore widely: British Isles to Scandinavia, Turkiye, Russia, India, and across the Himalayas into Mongolia. Wolves are variously presented as dangerous, cunning, courageous; sometimes evil & sometimes divine.

Harvest Mouse (*Micromys minutus*) is a very small rodent with brown fur on back and face, with a white fur belly. Widely distributed across Eurasia, the Harvest Mouse appears in stories and myths across many cultures, including the tales of Beatrix Potter. Harvest mice eat seeds all year, but in summer Harvest Mouse can become a hunter, opportunistically eating grasshoppers and caterpillars. Harvest mice are also adept climbers with grasping, opposable big toes.

Tonight's Battle occurs in the Białowieża National Park of Poland where both combatants are found. Here in the Białowieża Primeval Forest, wolves were never fully extirpated, and throughout central Europe, wolf populations are recovering. The little Harvest Mouse searches for scarce seeds in springtime. Born last autumn, this fellow is one of the few Harvest mice to survive the winter and reach the ripe old age of 7 months in the wild. Not being able to hibernate and skittering about on top of the snow exposes the Harvest Mouse to owls and other predators, but the spring thaw has begun. Harvest Mouse scampers through a muddy depression to a clump of dead grass and finds a seed! In the distance a wolf howls. Harvest Mouse's advanced age has worn down his teeth so he sits carefully chewing.

A TWIG SNAPS! A wolf stands behind the Harvest Mouse. Harvest Mouse is still, not even his whiskers twitch. A distant howl announces that a packmate has scented a roe deer and is

calling wolves to the hunt. Listening intently to the howl, the Wolf steps over the Harvest Mouse, not even aware the rodent is just beneath him. Wolf takes one more step, tensing his muscles, about to lope over to his pack for the hunt… Harvest Mouse sprints off into the underbrush, scrambling deep up into the shrubbery with his grasping feet and semi-grasping tail beyond the Field of Battle! WOLF OUTLASTS HARVEST MOUSE! Narrated by Katie Hinde.

Stag (5) vs. European Starling (12) – The European Starling (*Sturnus vulgaris*) are descendants of dinosaurs and can be found on six continents, although not originally native to all these continents. Starlings are small in stature (3.5oz, 100g, less than half a stoat) with brilliant, iridescent plumage. Mentioned in plays by William Shakespeare, Starlings were introduced to the US by Eugene Schieffelin in 1890… At least we thought so until researchers went digging for the bird's origin story in North America, but turns out this was a complete myth. Starlings were introduced numerous times in various states as early as the 1870s. Science writer, Jason Bittel, covered the Starlings and Shakespeare story in 2022.

From the deer family in the mammalian order Artiodactyla, the Stag (*Cervus elaphus*) is best described as classical, both physically and in literature as far back as Ancient Rome and Greece. Also called red deer or elk in their native European range, Stags max out at 500kg (1100 lbs, 2273 stoats) and sport massive antlers that can reach 1.5m wide (5ft, almost 4.5 stoats) in the autumn.

Our combatants are sympatric with each other, so there is no home habitat advantage for the better-seeded Stag. Tonight the combatants will meet in New Forest National Park, one of Britain's 15 national parks that protects and manages ancient forests, coastlines, and heathland. We find both combatants foraging. Stags switch between browsing on leaves and grazing on grasses to balance his nutrient needs. In the forest, Stag focuses on leaves, while the Starling rummages through low vegetation for insects. At least the Starling would have if there were enough food for everyone! Birds are impacted by deer overpopulation in forested habitats because heavy foraging by the deer reduces the amount and quality of forest habitat close to the ground for insects. <cough, bring back wolves, cough> Not finding dinner in this part of the forest, the Starling alights in the wind to hunt away from the Stag. STAG DISPLACES EUROPEAN STARLING!!!! Narrated by Patrice K. Connors.

Lucy (7) vs. Bigeye Houndshark (10) – Lucy (*Australopithecus afarensis*) probably stood ~105 centimeters tall and weighed 29 kg. She is more closely related to living humans than to any other living primate, putting her in the group known as hominins. After scientists

discovered her fossil in 1974, a spontaneous party ensued. The Beatles "Lucy in the Sky with Diamonds" played & team member Pamela Alderman suggested they name the fossil "Lucy." She's also known as Dinknesh, an Amharic name for "you are marvelous." At the time of Lucy's discovery, she was the oldest fossil evidence for walking upright in hominins. Fossil bone details of the big toe, knee, and hips don't lie... about how a primate locomotes. This year we are celebrating the 50th anniversary of her discovery! In the coming months, there is an incredible line-up of free online talks about the landscape, ecosystems, and behaviors of Lucy and her kin put together by the Institute of Human Origins at Arizona State University.

Bigeye Houndshark (*Iago omanensis*) is a deep-water shark that feeds on fish and crustaceans. It lives in the waters of the Red Sea and along the coast of Oman. Females can be 80 cm, while males tend to be half that size. Although the Bigeye Houndshark is not considered threatened, "the deep ocean is the last natural biodiversity refuge" and fishing for oil and meat is driving deepwater sharks and rays toward extinction (Finucci et al. 2024). Houndsharks gets the genus name from the bad guy from Shakespeare's Othello, as the genus had been "a troublemaker for systematists and hence a kind of villain" (Compagno and Springer 1971).

The combatants meet in what is today the Afar region of Ethiopia, but 3.2 million years ago (or 640,000 stoat lifespans) inland from the Red Sea. Lucy is foraging in the shade of scrappy trees along a slow-flowing seasonal river. Gazelle, antelope, wildebeest, hippo, and Sivatherium (an extinct genus of giraffe!) graze the mixed savanna woodland. Houndshark has been MMMagically translocated across time and space to the seasonal river. The freshwater is not the saltwater she is adapted for, and the water is warm, too warm, for the Bigeye Houndshark that prefers to swim in cooler deep water. Lucy had a wide-ranging omnivorous diet, foraging mostly for fruits, leaves, and plant matter and opportunities for meat, such as eggs, grubs, small vertebrates. At times Lucy would have scavenged meat and bone marrow broken into by hitting bone with a rock. Bigeye Houndshark settles onto the riverbed near the bank where sparse trees give small shade. Underneath Houndshark, river rocks allow her to scrape off her skin parasites. The parasites, also unthrilled in the freshwater, become more easily dislodged. Lucy scans the landscape for predators, well aware of nearby trees as a possible escape route. Foraging in daytime can be thirsty work and Lucy approaches the water for a drink. Lucy, eyes up, scans the LANDscape for danger, as she lowers her hand into the river to scoop up water, not aware of the Houndshark resting below. Bigeye Houndshark, startled by the hominin hand, bursts from her resting spot to swim further into the river, letting the current carry her into deeper, cooler waters downstream. LUCY OUTLASTS HOUNDSHARK!!!! Narrated by Profs Marc Kissel and Katie Hinde.

Common Raven (8) vs. Wandering Albatross (9) – Common Raven (*Corvus corax*), largest of the perching birds (passerine), can have a nearly 5-foot wingspan and is found across the Northern Hemisphere. Often mistaken for the much smaller crow, ravens have thicker, curvier beaks, a wedge-shaped tail and beard-like throat feathers (hackles). Ravens feature widely in folklore across the Northern Hemisphere and prominently in sacred texts of Muslim, Jewish, and Christian religions. The Raven brought light to the Inuit and two Ravens were the 'eyes and ears' of Odin. The Raven's often supernatural role in the realms of life and death reflect their scavenging activities in nature.

Wandering albatross (*Diomedea exulans*), the largest seabird, are widely distributed across the open ocean of the Southern Hemisphere, returning to land for the breeding and nesting season. Historically, sailors had many superstitions about albatrosses, as both spend long periods at sea, most famously evoked in "The Rime of the Ancient Mariner." As the birds mature, their plumage becomes more and more white, with some males becoming all white. Males have larger wingspan (10 feet) and are ~20% heavier than females. Males have a larger crop to bring back more food for chicks. Males will forage for chicks on shorter, more frequent hunting trips, providing 60% of food intake for chicks. Albatrosses are long-lived (up to 60 years), slowly develop (adult at 10 years), and breed every other year. Albatross populations are threatened by the fishing industry due to dwindling fishing stocks and getting caught as bycatch on fishing long-lines. BUT seabird protection by one fishing industry was able to lower bycatch from 5000 birds a year (0.59 birds per 1000 hooks) to fewer than 0.01 per 1000 hooks! The South Georgia Patagonian toothfish industry took the following steps to lower bycatch: restrict fishing season, line-weighting and night-setting, and have compliance observers!

Tonight's Battle occurs in the Białowieża Primeval Forest where the last wild European bison (*Bison bonasus*) was shot in 1921. Captive breeding and species recovery plans have returned this bison to the wild, but few subpopulations exist today. A large male bison, otherwise invulnerable to wolves and winter weather, has succumbed to old age in the forest. "For in that sleep of death what dreams may come, When we have shuffled off this mortal coil" (Hamlet Act 3, Scene 1, Shakespeare, 1602). What comes to a bison carcass in Białowieża Primeval Forest are 14 bird and mammal species including ravens, red fox, wolf, racoon dog, pine marten, white-tailed eagle, boar and buzzards. Animals will variously scavenge from the carcass for 100 days. During this period of decay, minerals from the carcass will leech into the soil. The calcium from the bones will linger for 7 years, but the nitrogen will be used by plants within a year. Earlier wolves had broken open the carcass rib cage, allowing the Raven's beak access to rich organ meat. Raven relies primarily on scavenging through the winter and March is the last month of intense scavenging. Spring will bring more opportunities for hunting fresh rodent meat.

MEANWHILE, 7000 miles away on the subantarctic Marion Island, South Africa, where half of Wandering Albatross pairs breed, our combatant male Albatross is yammering with his recently returned mate at the nest with their growing, just fed chick. But vicious invasive killers, with a taste for albatross, scurry in the nesting grounds! An invasive house mouse bites deep into Albatross's elbow! JUST THEN #MMMagic translocates Albatross to the bison carcass next to Raven! Disoriented, Albatross awkwardly extends his massive wings, even longer than the dead bison! Raven skip-jumps to the bison's head, closely watching the Albatross for any sign of aggression. Albatross dislodged the house mouse onto the tough, thick fur of the dead bison. Raven's fast beak brutally snatches and crushes the mouse. Albatross departs with a 10-second starting run and 15 wing flaps to achieve lift to the sky. With the right wind shear, he can soar hundreds of miles in a day without even raising his heart rate. RAVEN OUTLASTS ALBATROSS! Narrated by Prof. Katie Hinde.

Common Eurasian Boar (6) vs. Indian Grey Mongoose (11) – The Common Eurasian Boar (*Sus scrofa*) has one of the largest distribution of all land mammals, currently found on 6 continents, but they are native to Eurasia. Humans introduced wild boars in the other areas where they now wreak havoc in new ecosystems. Boars belong to the order Artiodactyla (even-toed ungulates), their social groups of 6-20 are organized around female relatives and young. Solitary males weigh 80+ kg and get sociable during the mating season. In medieval European literature from Beowulf to Chaucer, the boar could allegorically represent the hero or villain, and depending on which, "that determines whether the boar is meant to indicate a mettlesome temper or a malignant one" (Thiébaux 1969).

Indian Grey Mongoose (*Urva edwardsii*) has a long body (38-46 cm) with an equally long tail (35 cm, ~1 stoat), and weighs 0.5 to 4 kg (~1-11 pounds). Their anal sacs produce secretions that reportedly smell like roses. Indian Grey Mongoose are nimble predators of insects, reptiles, mammals, and birds AND skilled at evading and overcoming dangerous foes such as venomous snakes. For these reasons the dual nature of mongoose is both pest and savior and this duality featured in the Panchatantra (collection of animal fables first written in Sanskrit).

Tonight the combatants meet in the Indian state of Uttarakhand at the foothills of the Himalayan mountains at Rajaji National Park, where both species live sympatrically. Mongoose and Boar are foraging in the leaf litter in a patchy forest. The solitary adult male Boar searches snoot first, nose to the ground, sniffing for nuts, fruit, roots, grubs, nestlings, eggs, he’s not picky. Mongoose forages near a rounded, gathered pile of detritus… a rumbling growl-hissing fills the scene. Boar looks toward the growl-hissing as a king cobra (*Ophiophagus hannah*), risen from the pile confronts the Indian Grey Mongoose. Mongoose

bares its sharp, carnivore teeth while its eyes lock on cobra's face! The cobra is a snake-hunter (**ophiophagy**), so the Mongoose isn't her preferred meal. Mongoose is also a snake-hunter, but this cobra is massive, much more than a typical mongoose meal. The two adversaries stare intently at each other. Boar finds a rich patch of delicious mushrooms and snarfles at the base of a nearby tree.

The cobra spreads its hood as an intimidating warning, hoping the mongoose will back down and hunt elsewhere. She doesn't want to waste her venom, but she can't withdraw BECAUSE MARCH IS COBRA NESTING SEASON! Cobra is aggressively defending her clutch of eggs in the nest she has constructed. But her eggs are a perfect mongoose meal! Cobra opens her mouth and bares two glistening venomous fangs. She can't squander her venom too much too fast with her eggs just laid and weeks of nest defense. And her Mongoose adversary has anti-venom defenses in his blood!

Cobra launch strikes at the Mongoose, Mongoose springs back! MISSED! HISSED! Cobra sprint slithers at Mongoose, STRIKE LAUNCHES AGAIN! Mongoose evades her strike! BOAR IS INTO THE COBRA NEST OF EGGS! COBRA FLINCHES TOWARD HER NEST AND BOAR! For only a moment she’s let down her guard against the Mongoose! Mongoose rapidly bites cobra’s head, crushing her skull. With the eggs now a lost cause, Mongoose drags the snake feast into the scrub and OFF THE FIELD OF BATTLE! BOAR OUTLASTS MONGOOSE! Narrated by Chloe Josefson and Katie Hinde.

CITATIONS

Boar vs. Mongoose

Arbuckle, K., de la Vega, R. C. R., & Casewell, N. R. (2017). Coevolution takes the sting out of it: Evolutionary biology and mechanisms of toxin resistance in animals. Toxicon, 140, 118-131.

Ballari, S. A., & Barrios‐García, M. N. (2014). A review of wild boar S us scrofa diet and factors affecting food selection in native and introduced ranges. Mammal Review, 44(2), 124-134.

Lodrick, D. O. (1982). Man and mongoose in Indian culture. Anthropos, 191-214.

Miyazaki, T., Nakata, K., Nishimura, T., Abe, S., Yamashita, T., & Miyazaki, M. (2018). Identification of 2-phenylethanol with a rose-like odor from anal sac secretions of the small Indian mongoose (Herpestes auropunctatus). Bioscience, Biotechnology, and Biochemistry, 82(2), 232-237.

Shankar, P. G., Singh, A., Ganesh, S. R., & Whitaker, R. (2013). Factors influencing human hostility to King Cobras (Ophiophagus hannah) in the Western Ghats of India. Hamadryad, 36(2), 91-100.

Spitz, F., Valet, G., & Lehr Brisbin Jr, I. (1998). Variation in body mass of wild boars from southern France. Journal of Mammalogy, 79(1), 251-259.

Thiébaux, M. (1969). The mouth of the boar as a symbol in medieval literature. Romance Philology, 22(3), 281-299.

van Thiel, J., Khan, M. A., Wouters, R. M., Harris, R. J., Casewell, N. R., Fry, B. G., ... & Richardson, M. K. (2022). Convergent evolution of toxin resistance in animals. Biological Reviews, 97(5), 1823-1843.

Giant Squid vs. Tarzan Chameleon

Anderson, C. V. (2016). Off like a shot: scaling of ballistic tongue projection reveals extremely high performance in small chameleons. Scientific reports, 6(1), 18625.

Gehring, P. S., Pabijan, M., Ratsoavina, F. M., Köhler, J., Vences, M., & Glaw, F. (2010). A Tarzan yell for conservation: a new chameleon, Calumma tarzan sp. n., proposed as a flagship species for the creation of new nature reserves in Madagascar. Salamandra, 46(3), 167-179.

Moulton, D. E., Lessinnes, T., O'Keeffe, S., Dorfmann, L., & Goriely, A. (2016). The elastic secrets of the chameleon tongue. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 472(2188), 20160030.

Regueira, M., Belcari, P., & Guerra, A. (2014). What does the giant squid Architeuthis dux eat?. Hydrobiologia, 725, 49-55.

Lucy vs. Bigeye Houndstooth Shark

Alemseged, Zeresenay. "Reappraising the palaeobiology of Australopithecus." Nature 617, no. 7959 (2023): 45-54.

Compagno, L. J., & Springer, S. (1971). Iago, a new genus of carcharhinid sharks, with a redescription of I. omanensis. Fishery Bulletin, 69(3), 615-626.

Lewton, K. L. (2024). An integrative approach to examining the influences of size, phylogeny, and locomotion on os coxae shape variation in primates. American Journal of Biological Anthropology, 183(3), e24665.

Pearce, J. R., Linley, T. D., Bond, T., & Jamieson, A. J. (2023). Depth distribution of the bigeye hound shark Iago omanensis and other deep-sea species observed by baited-camera in the Red Sea. Journal of the Marine Biological Association of the United Kingdom, 103, e8.

Rastgoo, A. R., Etemadi-Deylami, E., & Mirzaei, M. R. (2019). Feeding habits of Bigeye Houndshark, Iago omanensis (Elasmobranchii; Triakidae); a typical deep water shark from the Gulf of Oman. International Journal of Aquatic Biology, 7(6), 374-382.

Wynn, J. G., Reed, K. E., Sponheimer, M., Kimbel, W. H., Alemseged, Z., Bedaso, Z. K., & Campisano, C. J. (2016). Dietary flexibility of Australopithecus afarensis in the face of paleoecological change during the middle Pliocene: Faunal evidence from Hadar, Ethiopia. Journal of human evolution, 99, 93-106.

Raven vs. Albatross

Boeckle, M., Szipl, G., & Bugnyar, T. (2012). Who wants food? Individual characteristics in raven yells. Animal Behaviour, 84(5), 1123-1130.

Carneiro, A. P., Clark, B. L., Pearmain, E. J., Clavelle, T., Wood, A. G., & Phillips, R. A. (2022). Fine-scale associations between wandering albatrosses and fisheries in the southwest Atlantic Ocean. Biological Conservation, 276, 109796.

Collins, M. A., Hollyman, P. R., Clark, J., Söffker, M., Yates, O., & Phillips, R. A. (2021). Mitigating the impact of longline fisheries on seabirds: Lessons learned from the South Georgia Patagonian toothfish fishery (CCAMLR Subarea 48.3). Marine Policy, 131, 104618.

Connan, M., Jones, C. W., Risi, M. M., Smyth, L. K., Oppel, S., Perold, V., ... & Ryan, P. G. (2024). First evidence of mouse predation killing adult great albatrosses. Biological Invasions, 26(1), 25-31.

Kabak, E. (2019). The raven: An Odyssey through norse mythology (Master's thesis, Sosyal Bilimler Enstitüsü).

Melis, C., Selva, N., Teurlings, I., Skarpe, C., Linnell, J. D., & Andersen, R. (2007). Soil and vegetation nutrient response to bison carcasses in Białowieża Primeval Forest, Poland. Ecological Research, 22(5), 807-813.

Nevitt, G. A., Losekoot, M., & Weimerskirch, H. (2008). Evidence for olfactory search in wandering albatross, Diomedea exulans. Proceedings of the National Academy of Sciences, 105(12), 4576-4581.

Okarma, H., Jędrzejewska, B., Jędrzejewski, W., Krasiński, Z. A., & Miłkowski, L. (1995). The roles of predation, snow cover, acorn crop, and man-related factors on ungulate mortality in Białowieża Primeval Forest, Poland. Acta Theriologica, 40(2), 197-217.

Oosten, J., & Laugrand, F. (2006). The bringer of light: the raven in Inuit tradition. Polar Record, 42(3), 187-204.

Pickering, S. P. C., & Berrow, S. D. (2001). Courtship behaviour of the wandering albatross Diomedea exulans at Bird Island, South Georgia. Marine ornithology, 29, 29-37.

Plumb, G., Kowalczyk, R., & Hernandez-Blanco, J. A. (2020). Bison bonasus. The IUCN Red List of Threatened Species 2020: e. T2814A45156279.

Richardson, P. L. (2011). How do albatrosses fly around the world without flapping their wings?. Progress in Oceanography, 88(1-4), 46-58.

Rösner, S., Selva, N., Müller, T., Pugacewicz, E., & Laudet, F. (2005). Raven Corvus corax ecology in a primeval temperate forest. Ptaki krukowate Polski [Corvids of Poland]. Bogucki Wyd. Nauk., Poznan, 385-405.

Selva, N., Jedrzejewska, B., Jedrzejewski, W., & Wajrak, A. (2003). Scavenging on European bison carcasses in Bialowieza primeval forest (eastern Poland). Ecoscience, 10(3), 303-311.

Shaffer, S. A., Weimerskirch, H., & Costa, D. P. (2001). Functional significance of sexual dimorphism in wandering albatrosses, Diomedea exulans. Functional Ecology, 15(2), 203-210.

Uesaka, L., Goto, Y., Naruoka, M., Weimerskirch, H., Sato, K., & Sakamoto, K. Q. (2023). Wandering albatross exert high take-off effort in weak wind with low wave conditions. eLife, 12.

Wheelwright, B. C. (2013). A Storytelling of Ravens. Jung Journal, 7(1), 4-18.

Sperm Whale vs. Whip Scorpion

Amano, M., & Yoshioka, M. (2003). Sperm whale diving behavior monitored using a suction-cup-attached TDR tag. Marine ecology progress series, 258, 291-295. doi:10.3354/meps258291

Carrier, D. R., Deban, S. M., & Otterstrom, J. (2002). The face that sank the Essex: potential function of the spermaceti organ in aggression. Journal of Experimental Biology, 205(12), 1755-1763. https://doi.org/10.1242/jeb.205.12.1755

Harvey, M. S., Rix, M. G., Framenau, V. W., Hamilton, Z. R., Johnson, M. S., Teale, R. J., ... & Humphreys, W. F. (2011). Protecting the innocent: studying short-range endemic taxa enhances conservation outcomes. Invertebrate Systematics, 25(1), 1-10.

Harvey, M. S., & Humphreys, W. F. (1995). Notes on the genus Draculoides Harvey (Schizomida: Hubbardiidae), with the description of a new troglobitic species. Records of the Western Australian Museum, Supplement, 52, 183-189.

Humphreys, G., Alexander, J., Harvey, M. S., & Humphreys, W. F. (2013). The subterranean fauna of Barrow Island, north-western Australia: 10 years on. Records of the Western Australian Museum, Supplement, 83(1), 145.

Kallal, R. J., de Miranda, G. S., Garcia, E. L., & Wood, H. M. (2022). Patterns in schizomid flagellum shape from elliptical Fourier analysis. Scientific Reports, 12(1), 3896. https://doi.org/10.1038/s41598-022-07823-y

Stag vs. Starling

Fugate, L., & Miller, J. M. (2021). Shakespeare's starlings: literary history and the fictions of invasiveness. Environmental Humanities, 13(2), 301-322. https://doi.org/10.1215/22011919-9320167

Gebert, C., & Verheyden‐Tixier, H. (2001). Variations of diet composition of red deer (Cervus elaphus L.) in Europe. Mammal Review, 31(3‐4), 189-201. https://doi.org/10.1111/j.1365-2907.2001.00090.x

GILL, R. M., & Fuller, R. J. (2007). The effects of deer browsing on woodland structure and songbirds in lowland Britain. Ibis, 149, 119-127. https://doi.org/10.1111/j.1474-919X.2007.00731.x

Hawtree, L.J. (2011). Wild animals in Roman epic. University of Exeter.

Caspian Tiger vs. Suckermouth Armored Catfish

Armbruster JW, Werneke DC, Tan M (2015) Three new species of saddled loricariid catfishes, and a review of Hemiancistrus, Peckoltia, and allied genera (Siluriformes). ZooKeys 480: 97-123.

Chestin, I. E., Paltsyn, M. Y., Pereladova, O. B., Iegorova, L. V., & Gibbs, J. P. (2017). Tiger re-establishment potential to former Caspian tiger (Panthera tigris virgata) range in Central Asia. Biological conservation, 205, 42-51.

Sojkova, B. (2022). Animals in Vedic prose (Doctoral dissertation, University of Oxford).

Wolf vs. Harvest Mouse

Aulak, W. (1970). Small mammal communities of the Białowieża National Park. Acta Theriologica, 15(29), 465-515.

Bhatia, S., Suryawanshi, K., Redpath, S. M., Namgail, S., & Mishra, C. (2021). Understanding people's relationship with wildlife in trans-himalayan folklore. Frontiers in Environmental Science, 9, 595169.

Darinot, F. (2016). The harvest mouse (Micromys minutus Pallas, 1771) as prey: a literature review. Folia Zoologica, 65(2), 117-137.

Karantanis, N. E., Rychlik, L., Herrel, A., & Youlatos, D. (2017). Arboreal locomotion in Eurasian harvest mice Micromys minutus (Rodentia: Muridae): the gaits of small mammals. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 327(1), 38-52.

Kryštufek, B., Lunde, D.P., Meinig, H., Aplin, K., Batsaikhan, N. & Henttonen, H. 2019. Micromys minutus. The IUCN Red List of Threatened Species 2019: e.T13373A119151882. https://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T13373A119151882.en. Accessed on 04 March 2024.

Niedziałkowski, K., & Putkowska-Smoter, R. (2020). What makes a major change of wildlife management policy possible? Institutional analysis of Polish wolf governance. PloS One, 15(4), e0231601.

Nowak, S., Jędrzejewski, W., Schmidt, K., Theuerkauf, J., Mysłajek, R. W., & Jędrzejewska, B. (2007). Howling activity of free-ranging wolves (Canis lupus) in the Białowieża Primeval Forest and the Western Beskidy Mountains (Poland). Journal of Ethology, 25, 231-237.

Nowak, S., Mysłajek, R. W., Kłosińska, A., & Gabryś, G. (2011). Diet and prey selection of wolves (Canis lupus) recolonising Western and Central Poland. Mammalian Biology, 76(6), 709-715.

Szewczyk, M., Nowak, S., Niedźwiecka, N., Hulva, P., Špinkytė-Bačkaitienė, R., Demjanovičová, K., ... & Mysłajek, R. W. (2019). Dynamic range expansion leads to establishment of a new, genetically distinct wolf population in Central Europe. Scientific Reports, 9(1), 19003.

Trout, R. C. (1978). A review of studies on populations of wild harvest mice (Micromys minutus (Pallas). Mammal Review, 8(4), 143-158.