

## SWEET SIXTEEN

From the original 65 combatants of March 11th, we now have 16. In this round we spotlight HUMAN IMPACTS on ecosystems and species. The theme of this round harmonizes March Mammal Madness Life Sciences lesson plan with Next Generation Science Standards in the United States. In February 2024, Grumbs and colleagues reported that "Human-driven extinction threatens entire lineages across the Tree of Life." If we continue our current practices of extraction, destruction, and contamination, we can "expect to lose 86–150 billion years (11–19%) of jawed vertebrate evolutionary history over the next 50–500 years."

But humans are not only the problem, if we could transform our world for the worse, you better believe that we can transform our world for the better. Protecting habitats and species, restoring ecosystems and their interconnections are essential steps for planetary health. Environmental health, animal health, and human health are all interconnected. The field of One Health brings together people working in medicine, public health, agriculture, wildlife management, sciences, **Family-level Evolutionarily Distinct and Globally Endangered (EDGE) scores across the jawed vertebrate Tree of Life.** (Figure 7 from Grumbs et al. 2024)



sustainability, conservation, business, and leadership. Each of us can make a difference individually in our choices and decisions. But working together we can transform our approach to one another and our natural world so everyone has the best chance at living an incredible life. By volunteering in our local communities, by talking with our neighbors and contacting our elected officials, we can forge the world we all deserve, from humans to forest elephants to peacock jumping spiders.

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### Peacock Mantis Shrimp (6) vs. 10th-seed Mottled Cup Moth Caterpillar (10) -

Peacock mantis shrimp (*Odontodactylus scyllarus*) are valued in the aquarium trade for their beautiful coloration and in some areas as a food source. While the IUCN hasn't evaluated the conservation status of the peacock mantis shrimp, it's not believed to be threatened/endangered. Mantis shrimp occasional stowaways in live aquarium rock and can end up terrorizing aquarists and their fish while evading capture.



Felt Artwork of 2024 Combatants courtesy of Cheer Stoat!

Mottled Cup Moth caterpillar's (*Doratifera vulnerans*) venom has proven quite the deterrent to primates so far in the tournament, but its "rich diversity of polypeptides" may ultimately provide scientists with inspiration for new anti-bacterial medicines (Walker et al 2021).

Tonight we are in the warm waters off of Babeldaob Island in the UNESCO Ngaremaduu Biosphere Reserve and the Palau National Marine Sanctuary. Established in 2020, the PNMS is one of the world's biggest marine protected areas. The reefs in this region are thermally tolerant and can withstand higher temperatures and heat waves due to the coral's genetic diversity and their special symbiont algae. Mantis Shrimp has home habitat advantage. Just 30 feet below the surface, Peacock Mantis Shrimp burrow receives peeks of sunlight through the corals above. Peacock Mantis Shrimp is squaring off with a rival for the burrow. Mantis Shrimp puts on his most intimidating "meral spread" - he's standing on his hind legs and puffing up his chest while spreading his arms to look as big as possible.

Mottled Cup Moth caterpillar, meanwhile, also has its attention directed to matters of real estate and embiggening. After all, the 2-week caterpillar (larval) life stage that it began before its Round 1 battle on March 18 is now at an end. In the time since its stinging venom sent Red-Shanked Douc fleeing to figgier pastures, Mottled Cup Moth caterpillar has attached itself to a leaf stem and begun spinning a cocoon, "which it agglutinates by the moisture of its mouth" (Duncan, 1841). Mottled Cup Moth caterpillars build their cocoons by weaving a spherical multi-layered mesh of silk in a cup shape around themselves. As the cocoon thickens and hardens it looks not unlike the gum nut of a eucalyptus tree. In the arid Australian habitat, a cocoon forms a protective environmental bubble that helps retain moisture for the metaphorizing Lepidoptera. SHPWUM! As Mottled Cup Moth caterpillar transforms in its cocoon. а MMMagic portal collects the Lepidoptera and cocoon!

Back at the burrow, the rival is not intimidated by Mantis Shrimp's display. Rival attacks! WHOOMPHF! Mantis Shrimp flips around and shields himself from the powerful blows with his

tail fins (telson)! The MMMagic Portal transports Caterpillar's cocoon outside the Mantis Shrimp Burrow... but the cocoon immediately rises to the surface, buoyed by the air within! Floating on the surface, Caterpillar's cocoon gets caught on a mangrove seed pod that's been floating for nearly a together they drift toward shore year... Mangroves, superheroes of biodiversity are "nurseries for the world's seafood supply" (Blum & Herr, 2017). MANTIS SHRIMP OUTLASTS MOTTLED CUP CATERPILLAR! Narrated by Lara Durgavich and Mauna Dasari.

**Great Skua (2) vs. Crested Porcupine (3)** -Aggressive, apex predators with a generalist diet, Great Skua (*Stercorarius skua*) populations may be generally increasing across their range, with negative impacts on other seabird species. Crested Porcupines (*Hystrix cristata*) have an unusual distribution - North Africa, parts of sub-Saharan



Africa, and Italy. Archeological and genetic evidence suggests that porcupines were introduced to Europe during the Middle Ages. A protected species in Italy, Crested Porcupines face threat from poaching, partially due to their reputation as crop pests. Currently, porcupines appear to be expanding their range in Italy northward.



The afternoon sun is peeking through the clouds in St. Kilda, shining down on the ancient storage huts built from stones (cleitan) that dot the clifftops and hillsides. MMMagic translocates Porcupine from an afternoon stroll to the remote Scottish archipelago. Though mainly nocturnal, Crested Porcupines will sunbathe and forage during the day, especially in early spring. Porcupine pays no heed to the change of scenery and continues her search for sustenance over the slightly damp and slippery rocks when... JACKPOT! A partially decomposed and already picked through Soay

sheep! Not only will Crested Porcupines eat carrion meat, they also engage in bone chewing (osteophagy). Porcupine begins sifting through the remains, looking to select a few bones pieces to bring back and add to the collection in her burrow.

Great Skua swoops in from over the edge of the cliffside, where it will soon prey on colonial seabird nestlings, to continue scavenging on its sheep carcass. Great Skua has a very particular set of skills: lethal force (attacking/drowning other birds), stealing food, and carcass scavenging, earning them the sobriquet "Pirate." Great Skua dives towards the rustling Porcupine. Startled, Porcupine lifts her head, spiky crest raised in defense. Great Skua swoops avoiding spines before diving back towards the Porcupine from behind! Great Skua flys with feet out to push down on Porcupine who twist-maneuvers defensively! PORCUPINE QUILLS PIERCE GREAT SKUA'S FOOT!

Great Skua flys up and circles to come back down at Porcupine, who spins and backs up to watch the aggressive bird! Porcupine stamps her back feet in warning... but the crumbling rocks at the cliff edge give way beneath the Porcupine! Scrambling with her front paws below the cliff edge, sea spray, and bird poop have made the cliff dangerously slick. Great Skua dives repeatedly at the Porcupine until Porcupine falls from one of the tallest sea stacks in Europe! At the top of the cliff, Great Skua's sturdy, slightly hooked beak grasps a Porcupine quill and she pulls it from her webbed foot. After all, this Porcupine's quills aren't barbed. SKUA PESTERS PORCUPINE OVER CLIFF! Narrated by Alyson Brokaw and Katie Hinde.

Kob (1) vs. Cobra Lily (13) – Kob (Kobus kob) change social and mating behaviors at different densities. With >14 Kob/km, males gather centrally in a lek to display fitness and attract mates. Less than that and males disperse to fiercely defend resource territories solo, acquiring mates that stop by. Solo male kobs are far more likely to become prey in territories vs leks. Being alone in small territories makes it easier to be ambushed by predators. Once kob densities decline, populations are more likely to crash and disappear regionally. And many kob populations are in decline. Living in savannahs near water, kob's preferred habitat is also prime area for farming. Yet despite being uncommon in much of western Africa, people living near \*protected\* areas regularly see kob!



Cobra Lily's (Darlingtonia californica) biggest threats are humans harvesting these plants for personal collections. The fens, bogs, and wetlands where lilies are found also are home to many plant species of conservation concern. Why? Serpentine Soils! Serpentine soils are unique habitats harboring endemic species, found only in these extreme habitats (e.g., Cobra Lily!). Parts of the western US (CA and OR) have some of the largest serpentine areas with large numbers of endemic flora. Serpentine soils are at risk for a variety of human-centric reasons. including fires, deforestation, and mining.



Along a river at Kainji Lake National Park, our Kob is patrolling his territory, the water being especially valuable this time of year (it's the dry season). Several female kob are around & Kob feels safe lowering his head to grab a mouthful of soil and grasses. Cobra Lily's extensive and sensitive root system helps with plant regeneration post-fire and acquires water to its pitcher for prey capture. After Round 2, Cobra Lily is rehydrated and is ready for a meal! Cobra Lily attracts prey via sweet scents and promises of nectar. Diptera are common prey and today is no different. Lily quickly lures in and traps a fly.

SUDDENLY Cobra Lily is MMMagically translocated right in front of Kob!! Kob jumps back in grave alarm at the serpentine looking plant of the serpentine soils! African rock pythons (Python sebae) are known predators of Kob and Cobra Lily resembles a RAISED PYTHON! Kob flicks his ear and rounds his jaw for a slow chew inspecting the possible predator. Cobra Lily is motionless. Both connoisseurs will take a long time to digest their meals, at least a week for Cobra Lily for its fly and hours for Kob to break down plant material (foregut fermentation!). Wasting energy unnecessarily has drawbacks. Typically Kob will rush into water to wait out predators, but is Cobra Lily even a predator!? The weirdly acting "snake" appears much smaller than a typical python and mammalian herbivores are known for predator inspection!

Kob takes another slow chew, eyeing Cobra Lily for intent. The behavior of this "snake" is unusual...African rock pythons are usually ambush

predators and won't sit out in the open. Kob takes a step toward Cobra Lily. Cobra Lily is motionless. Kob takes another step closer. Cobra Lily is motionless. Kob sniffs Cobra Lily. Cobra Lily is motionless. Kob bites Cobra Lily. Cobra Lily is motionless. Kob begins eating Cobra Lily. Still wedged in Kob's hoof, Bear's Head Fungus is down to the last morsels of conifer. KOB CONSUMES COBRA LILY! Narrated by Brian Tanis and Jessica Light.

Great White Shark (3) vs. Honey Bee (15) -Large sharks such as the Great White Shark (Carcharodon carcharias) can shape the ecosystems where they live but fear of sharks have led to severe population declines due to large-scale, indiscriminate cull campaigns. Public education and awareness campaigns that focus on feared animals have helped address misconceptions and improve social attitudes in communities who share their environment in favor of non-destructive management tactics.





Humans and non-human primates have a long history alongside honey bees (*Apis mellifera adansonii*). As one of the most caloric-dense foods in nature, it is no surprise honey and bee larvae have a prominent place in many human diets. Honey Bee hives not only can protect agricultural fields from Elephants, but the bees help pollinate the forest and crops and honey contributes to sustainable income to local communities in West Africa. Bees are long represented in our agriculture as well as our visual arts and literature, evidenced by 8K year old Spanish cave paintings of honey hunting and 4.5K yo Egyptian carvings of beekeeping. Even Shakespeare was a beekeeper.

Our combatants meet at the beach in Del Mar, CA (San Diego County), a popular beach for

r swimming, paddleboarding, surfing and NOAA reports the weather to be clear with a southwest wind. Great White Shark is in the nearshore zone, between the calm waters of a reef break and the shoreline swimming peacefully just like every other day. She feels the vibrations of people recreating in the water and pays no mind to the people. As the diel cycle shifts with the setting sun, a boil of prey fish rises toward the sea's surface and Shark follows in pursuit of a delicious and nutritious meal as seabirds fly above the shoal.

Honey Bee is transported by MMMagic to the Southern CA coast. HONEY BEE IS ALIVE !! But she is fragile. 48 hours since Honey Bee had her stinger and abdominal muscles torn from her gut in a defensive response to Flame Bowerbird plucking her flower on the field of battle in Round 2 in Indonesia, and the injury is grave. "Contrary to popular belief, worker bees stay alive for 18-114 h after the sting autotomization" and continue doing their role in the hive as well as they can (Pucca et al. 2019). But Honey Bee is tired now and in a slow, downward flight path, she flutters to the ocean surface, drops to the water and floats on the rocking waves. As the sun sets on the California coast, a gentle wake from the Great White Shark's dorsal fin ripples Honey Bee as she slips into her forever sleep. GREAT WHITE SHARK DEFEATS HONEY BEE! Narrated by Mallika Sarma and Tara Chestnut.

### African Painted Dog (1) vs. Marbled Polecat (4)

- African Painted Dogs (*Lycaon pictus*) are one of the most endangered canid species in the world, with an estimated 6000 remaining, and they live in increasingly isolated populations. When they leave their family group, African Painted Dogs disperse in coalitions with same-sex siblings, sisters with sisters and brothers with brothers, to find or form new groups, traveling hundreds of kilometers in a matter of weeks and across international borders. Dispersal mortality can be high from human causes like poisoning, shooting, vehicular collisions, and the species has long experienced human persecution.



Marbled Polecats (*Vormela peregusna*) will kill their great gerbil and jird prey and then appropriate the prey's burrows for themselves as though to say "well you won't be needing this any more." A review of this "refuge appropriating" behavior shows N=14/17 are mustelids! Marbled Polecat populations are decreasing and considered vulnerable due to habitat loss to agriculture and human-caused mortality from road traffic and secondary poisoning by rodenticides ingested by their prey.



Tonight our battle occurs in southern Tanzania. An hour ago, after a cooperative chase, the African Painted Dog pack brought down a blue wildebeest, one of their preferred prey. Accounting for hunting success rate of attempts (38%), distance chased (average 0.7km), and prey body mass (average 93kg), blue wildebeest are the best bang for the buck for African Painted Dogs in this habitat.

MMMagic Translocation brings Marbled Polecat to the scrub-brush near the kill site. His poor eyesight makes assessing the situation tricky, but his nose twitches with all the aromas of African Painted Dog and dead wildebeest. Combatant African Wild Dog was at the front of the pack and gorged as soon as the prey was brought down. Now with a partially full belly he benevolently watches the slower-to-arrive juveniles chow down with nepotistic protected access to the wildebeest. Surrounded by family, feeling sassy, African Painted Dog looks around and spots Marbled Polecat! In a sneaky sprint pounce, African Painted Dog grabs Marbled Polecat in his mouth! African Painted Dog carries the skinny mustelid out of the shrubbery and plops him on the ground, as though to say BEHOLD what I've found! Alarmed, Polecat "exhibits Marbled ล characteristic aggressive posture: raising up on its legs, arching its back, curling its tail over its back with tail hairs erect, raising its head, baring its teeth, and giving shrill & hoarse hisses!" (Gorsuch & Larivière 2005). African Painted Dog slap-bats the Marbled Polecat to the ground & leaps after it! African Painted Dog isn't killing the Marbled Polecat! He "appears to be hunting it in play" like it does with mongoose! (Creel & Creel 1995). All of a sudden there's a new scent in the air... A PACK OF LIONS HAVE ARRIVED TO COMMANDEER THE WILDEBEEST.



The African Wild Dogs stand up at the wildebeest kill, staring at the approaching lions. Combatant African Wild Dog hyper-vigilantly evaluates what's unfolding. With African Painted Dog momentarily distracted by lions, Marbled Polecat has twisted around and "emits a foul-smelling secretion from enlarged anal sacs" in the African Painted Dog's face! (Gorsuch & Larivière 2005). African Painted Dog releases the Marbled Polecat, rubbing his face against the ground to wipe away the Polecat's stinky secretions. Marbled Polecat bolts away from the kill site, just before the grumbling African Painted Dogs automatically relinquish the wildebeest to the dangerous lions. "When lion were present, African wild dogs always got kleptoparasitized." (van der Meer et al. 2011). Looks like the Painted Dogs will have to hunt again soon. PAINTED DOG OUTLASTS POLECAT! Narrated by Katie Hinde and Gretchen Andreasen.

**Sperm Whale (1) vs. Red Deer Stag (5)** – Humans have a long history of hunting whales, mostly for oil, and we still see impacts of those cullings on sperm whale (*Physeter macrocephalus*) numbers and demographics today. Modeling suggests there were almost 2 million sperm whales in 1710 pre-whaling, and today just over 800,000 individuals. Moby Dick was based on real-life events of the whaling ship called the Essex, which you can read about in Nathaniel Philibrick's book "In the Heart of the Sea."

Like raccoons and coyotes, red deer (*Cervus elaphus*) have adapted to live within and near human landscapes, changing their behavior based

on our use of space, including hiking and off-trail use in national parks. Deer in Germany's Kellerwald-Edersee National Park ran away from people more often off-trail than folks using trails, highlighting an easy way to reduce human-wildlife conflict. You should always stay on trails!



Tonight we find Sperm Whale far from the coast, sprint-swimming at the water's surface at nearly 8mph. Because Sperm Whale is being pursued by a pod of orcas in hunting formation! Truly the wolves of the sea, orcas regularly hunt whales much larger than themselves and specifically hunt sperm whales by isolating an individual and seriously wounding them before devouring their prey. Sperm Whale can't use the species main defensive maneuver, the rosette, because only GROUPS can form a circle with heads pointing in and tails outs. Sperm Whale is a large, over 40 year old male who swims alone! ORCAS CONVERGE ON THE SPERM WHALE. Meanwhile, Red Deer, the largest surviving land mammal of the British Isles, swims between small islands of the Inner Hebrides, with a maximum swimming distance of ~7km.



MEANWHILE, OCEAN WATERS BECOME CLOUDY RED AS THE SPERM WHALE'S TAIL THRASHES!!! Sperm Whale has deployed DEFECATION DEFENSE and spreads red-colored poop from his diet of cephalopods! ORCAS change direction to avoid the poo cloud... translocation when MMMagic provides opportunistic venison. After all, mammal-hunting transient orca prey on swimming deer and moose! SPERM WHALE OUTLASTS STAG! Narrated by Patrice K. Connors.

### Northern Elephant Seal (1) vs. Leatherback Sea

**Turtle (4)** – Northern Elephant Seal (*Mirounga angustirostris*) males can grow as large as 410cm & top out the scales at  $\sim$ 2000-2200kg ( $\sim$ 10,200 stoats). Hunting for the fur and oil trades brought the Northern Elephant Seal to near extinction. In fact, the species was repeatedly thought extinct in

the late 1800s. Today marine mammal protections have enabled population growth to ~110,000 adults! During prehistory before the arrival of humans into North America, breeding colonies of Northern Elephant Seals would have favored islands over mainland to avoid bears, saber-tooth cats, and dire wolves, among other terrestrial predators.



Leatherback Sea Turtle (*Dermochelys coriacea*) is the largest of the marine sea turtles, her shell length tops out around 179cm with a likely top weight around 563kg (2560 stoats). Although one record leatherback was reportedly 900+kg! Leatherback sea turtles are vulnerable to extinction as their populations decrease due to many factors: ocean pollution and plastic garbage, fishing bycatch, and construction and climate change destroying essential beach nest habitat.

With the breeding season mostly over, our male Northern Elephant Seal will shortly abandon his beach territory once the last females wean their

pups and return to the pelagic zone of the Northern Pacific Ocean. On the Florida coast, Leatherback Sea Turtle is hauling out of the ocean to deposit her last clutch of eggs when MMMagic translocation delivers her to the breaking surf on Northern Elephant Seal's stretch of beach. Sand temperature determines whether sea turtle hatchlings are male or female. By depositing eggs in different beaches, Leatherbacks are likely to produce a mix of sons and daughters. BUT global warming has increased sand temperatures causing fewer male leatherback sea turtles.



Northern Elephant Seal sees the big brown Leatherback Sea Turtle... is this a subadult male attempting to infiltrate his territory for mating with the few remaining females?! Male Northern Elephant Seal gives a warning SNORT! Leatherback Sea Turtle has difficulty locomoting on land, her "front flippers push against the substrate to lift body up and the rear flippers push forward. The imbalance created and the horizontal component drags the turtle forward" (Walker 2010). Northern Elephant Seal escalates his vocal warning with a "clap-threat... an extremely loud, resonant, clapping sound with a metallic quality which suggests the exhaust noise made by a diesel engine" (Stewart & Huber 1993).

Leatherback Sea Turtle, after 5 pulls of her front flippers, has to take a brief rest, before continuing forward. Elephant Seal rises up to his full upright battle-imminent 'this is your absolutely last warning' stance and a chest-to-chest, body blows and canine slashes are headed your way... unless a rival backs it up on out of here! Leatherback Sea Turtle begins digging her nest. Northern Elephant Seal CHARGES, undulating his body by pushing off with his front flippers and flexing his spine. This pinniped sprints at 2.56 meters/second (5.7mph).

Northern Elephant Seal TRAMPLES over Leatherback Sea Turtle... BUT Northern Elephant Seal's many months of fasting while defending his section of the beach have taken a toll on his body mass and he's lost over 1000kg by the end of March! LEATHERBACK TURTLE IS UNCRUSHED BY THE ELEPHANT SEAL! Leatherback Sea Turtle tangle with the predatory bite force of big sharks and can survive (although not always). BUT between the aggressive Northern Elephant Seal and the active gulls, this beach is hostile terrain for Leatherback's nestlings and she slowly withdraws back to the sea to swim to a better nesting site. NORTHERN ELEPHANT SEAL OUTLASTS LEATHERBACK TURTLE! Narrated by Katie Hinde.

**Giant Squid (2) vs. Tiger (3)** – For the general public, other than butterflies, invertebrates are rarely the charismatic species that motivate conservation priorities. UNFORTUNATELY! Giant Squid (*Architeuthis dux*) may be the flagship that 'vulnerable marine ecosystems of submarine canyons' have needed! Ocean acidification, global warming, unsustainable deep-sea fisher harvest, and the effects of acoustic waves produced during seismic surveys are all impacting Giant Squid.



In the early 1900s, 100,000 and 9 subspecies of tigers lived in areas across Eurasia, including Caspian Tiger (*Panthera tigris virgata*). By 2000, fewer than 3600 individuals and 4 subspecies in only  $\sim$ 7% the historic range remained. Though Caspian Tiger once occupied the largest geographical range, tiger bounties in the Soviet empire and habitat/ecosystem destruction for

agriculture caused Caspian Tiger extinction by 1960. BUT ALL HOPE IS NOT LOST! Through landscape conservation efforts, Nepal and India have increased tiger populations (up 61% and 31%, respectively) and conservationists are working to re-introduce related tiger subspecies into Caspian Tiger's former habitats.



Giant Squid retains home habitat advantage and hunts in the ocean deep. MEANWHILE... in the Golestan National Park in Iran, Tiger lays curled next to a streamlet. R2's fight against Boar left Tiger with a jagged-edged, tusk puncture wound in his belly. Wounded and unable to hunt, the water streamlet has hydrated Tiger, but he can't consume the minimal 5.2kg/day of prey to avoid starvation. Instead, Tiger is breaking down his own body fat and muscle to provide fuel for his brain and other key organs. Tiger's body is "eating" itself, a process known as catabolism, that allows animals to endure during short-term periods of food disruption.

But Tiger is not alone. TIGER'S WOUND IS CRAWLING WITH MAGGOTS! Flesh flies (Sarcophaga), coffin flies (Megaselia), and screwworm flies (Chrysomya), all found in Iran, lay eggs in nutritious, delicious, decaying flesh for young to consume during larval development. Tiger is experiencing WOUND MYIASIS, a parasitic infestation of maggots (dipteran larvae) that can affect humans, domestic animals, and wild animals... INCLUDING TIGERS. Tiger's warm, still-living body speeds up the life cycle of the coffin flies. At lower temperatures the development to adulthood would be ~3 weeks, in the warm body temperature of the lethargic tiger, the earliest laid eggs are now 3rd instar larvae!

ALL OF A SUDDEN Tiger finds himself chest deep in shallow, warm coastal waters of the BAHAMAS! Specifically, a beach of NW Exuma Island. TIGER IS CAUGHT IN A RIPTIDE! Public Safety Announcement: Riptides can form even in clear weather, practice beach safety and know how to spot and escape riptides! These warm, shallow waters are not good for a buoyant cephalopod like Giant Squid... increased ambient temperatures can lower blood oxygen levels fourfold (due to arterial desaturation). BUT Giant Squid is BELOW the sea shelf, 300m down in the Great Bahama Canyon! This canyon is a steep-sided basin with depths reaching 6,000 feet (or ~5379 stoats), possibly the world's highest canyon walls. Here Giant Squid hunts for shoals of silvery, shimmery fish.

Although an adept swimmer, Tiger tires quickly in his current condition, and his paddles grow weaker

at the water surface of the Grand Bahama Bank!

The wound maggots have booty breathing holes (spiracles) that allow them to continuously feast but can't breathe submerged in ocean water. The maggots are drowning and saltwater flushes the maggots from the boar tusk wound. Deep below, the beaked mouth of the Giant Squid feasts on shimmery fish. Above turquoise waters abruptly shift to deep blue as Tiger drifts INTO THE TONGUE OF THE OCEAN!!! A last gasp and Tiger is "swallowed" into the Oceanic Abyss. GIANT SQUID OUTLASTS CASPIAN TIGER! Narrated by Katie Hinde, Chloe Josefson, and Marc Kissel.



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