

April + May 2025

NTS NEWSLETTER

PUBLISHED BY THE NON-TRADITIONAL SPECIES CLUB AT THE UNIVERSITY OF ILLINOIS



WHAT'S INSIDE?

VICTORIA CROWNED PIGEONS	1
MAY MOTHERS	2
REWRITING EXTINCTION	4
MAY MARSUPIALS	5
NTS EVENT REVIEWS	6
FISH PICS	7



VICTORIA CROWNED PIGEON: STRUTTING INTO SUMMER LIKE IT OWNS THE FOREST

BY ROBIN BANASEK

School's almost out, pencils are dull, attention spans are fading fast, and summer break is practically flapping at the window. While students daydream about freedom, one rainforest resident is already in full hot-girl summer: the Victoria crowned pigeon.

Native to the lowland and swamp forests of New Guinea, this bird is basically the royalty of pigeons. It's enormous, about the size of a chicken, with striking blue-gray plumage, deep red eyes, and a lacy, fan-shaped crest that looks like it walked off a runway. Named after Queen Victoria (because of course), it carries itself with all the energy of a royal.

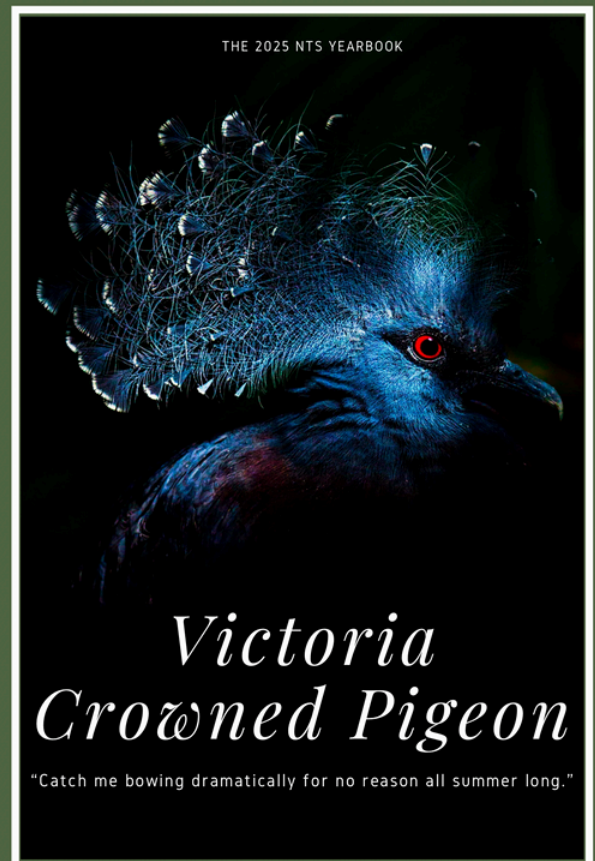
And when summer rolls in? That's peak performance season.

The Victoria crowned pigeon's dominance display is less "angry bird" and more "Barbie Swan Lake." When faced with a rival, it engages in a formal display known as bowing. The bird lowers its head, inflates its throat and upper chest feathers, and fans its tail slightly, all while pacing slowly in a circle or back and forth. This movement shows off its size, confidence, and, let's be honest, excellent posture.

But the real power move? A deep, echoing BOOM sound, produced by inflating internal air sacs. It's so low-frequency that it can travel long distances through the dense forest, acting like a feathery subwoofer to say: "Back off. This territory is taken."

Unlike some birds that get aggressive, the Victoria crowned pigeon lets body language and bass do the talking. It's basically passive-aggressive in the most glamorous way.

So as the school year ends and summer vibes roll in, remember: while you're tossing your backpack aside, this pigeon is already strutting confidently into the rainforest spotlight, fruit in one claw, crown perfectly fluffed.

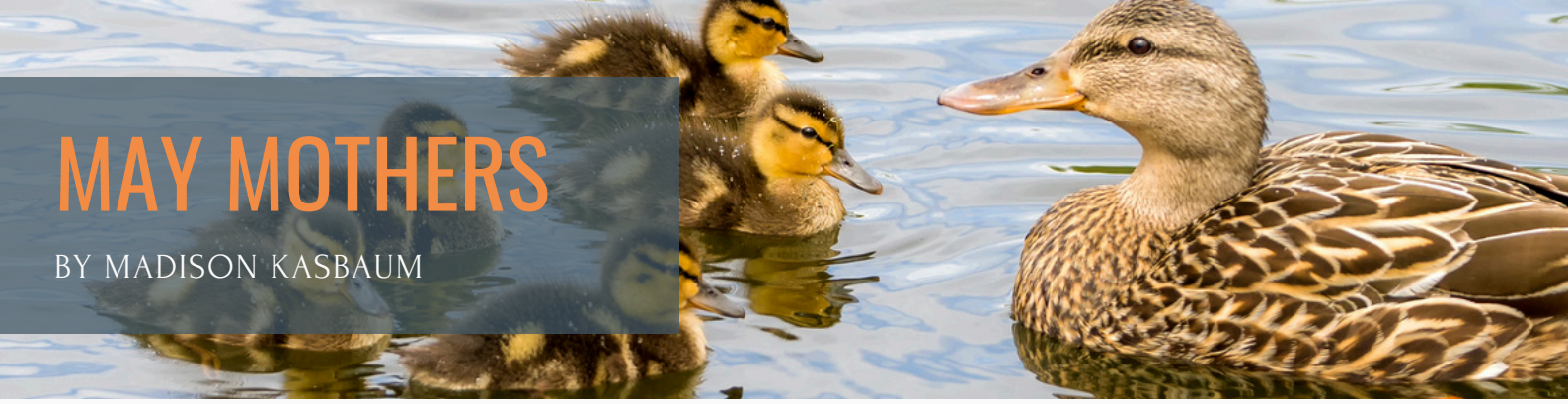


SOURCES

[Victoria Crowned Pigeon - Wikipedia](#)

MAY MOTHERS

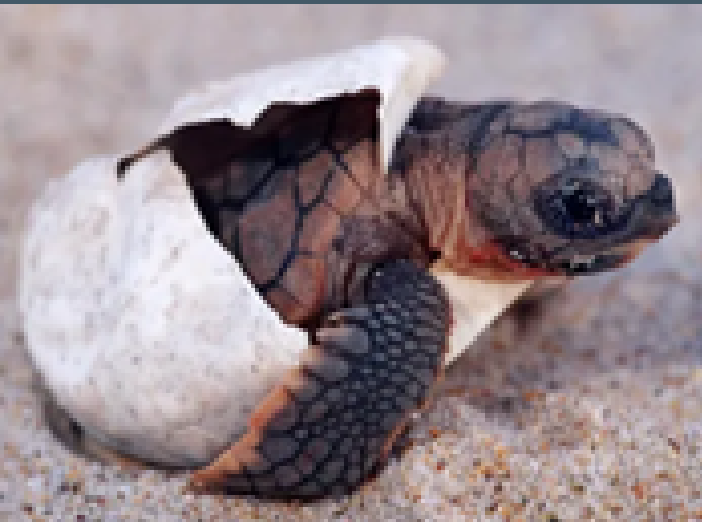
BY MADISON KASBAUM



Mothers in the animal kingdom display an astonishing array of nurturing strategies, each perfectly tuned to keep their young safe and fed. From the treetops of Borneo to the sandy shores of tropical beaches, let's celebrate these seven remarkable mothers and the lengths they go to care for their offspring.

Orangutans

They say a mother's work is never done, and it's especially true for female orangutans. Orangutan mothers care for their young entirely on their own, as males play no role. Infants rely entirely on their mom for food and transport for the first two years, clinging to her nonstop. She continues to care for them for 6–7 years, teaching them how to forage over 200 types of food and build new nests every night that can add up to 30,000 in a lifetime. Even after becoming independent around age 8, young orangutans often “visit” their mothers into their mid-teens.



Sea Turtles

Every two to three years, sea turtle mothers swim thousands of miles to special beaches to lay their eggs. They may come ashore several times during nesting season, laying groups of eggs at different spots. Once they arrive at their beaches, turtle moms dig a nest in the sand, lay their eggs, cover them with sand, and leave. Sea turtles spend most of their lives in the ocean. Most females return to land only on the nights they lay their eggs.

Hyenas

Spotted hyenas live in large, matrilineal clans (up to 130 individuals) led by an alpha female. Daughters and sons inherit the rank below their mothers to maintain strong coalitions and stabilize hierarchies. Daughters usually remain in their birth clan for life and build close relationships with their mothers and sisters. A hyena's place in the hierarchy matters a lot. A lower rank means less food access, more travel to hunt, and less time to nurse babies.





Orcas

Orcas also live in matriarchal groupings spanning generations (grandmother, mother, offspring, offspring's young). Sons briefly leave to mate and daughters to forage but always return home each day. While daughters learn to hunt and become independent, males depend on maternal food and protection for life. This "mama's boy" pattern likely arises because a pod collectively raises daughters' calves, allowing direct mothers to focus extra care on their sons. Researchers suspect orca mothers may not eat enough food themselves as they continue sharing with their full-grown sons. The females can also halt reproduction - sometimes for decades past menopause - to focus care on their adult sons, protecting them from conflict and boosting their survival and reproductive success.

Strawberry Poison Dart Frog

Female strawberry poison-dart frogs lay 3-5 eggs on leaves or bromeliad axils. The mother later ferries her tadpoles across the rainforest floor up to 100 feet high, depositing them in water-filled bromeliad leaf cups (or other small pools and puddles). There, she feeds each tadpole, ensuring they never go hungry, ensuring the title of nature's true "supermom." After about a month, the tadpole will metamorphose into a small froglet. Generally, the metamorph stays near its water source for a few days for protection, as it absorbs the rest of its tail with mom there for support along the way.



Crocodylians

Crocodile and alligator mothers build and guard nests on land covered with vegetation for warmth in freshwater tropical regions. Unlike most reptiles that leave their young after they lay the eggs, mother crocodiles remain attentive to their hatchlings. The mother responds to hatchlings that call from inside their shells, gently retrieves the eggs in her mouth, cracks them open to help the young emerge, and carries them to water for their first swim. Even after hatching, she furiously protects them for two to three years until the hatchlings are self-sufficient.

Kangaroo

A kangaroo first enters the outside world after gestating in their mother's womb for 28-33 weeks, but to call this a "birth" would be misleading. While the tiny kangaroo does indeed leave the mother's body, they immediately crawl into her pouch. At this point in their lives, the joey continues to develop in the mother's pouch for another eight months and at least three months after they leave the pouch. It is still possible for the mother to get pregnant for yet another offspring, but it is "paused" in the embryonic stage until the joey's development is finished. Mother kangaroos can feasibly care for three different offspring at three different points in their development, which is an expert level of mom multitasking!



SOURCES

[Seven Mothers of the Animal Kingdom](#) | [5 Remarkable Animal Moms - WWF](#) | [Unusual Mothers](#) | [7 Mother-Child Bonds That Take Protectiveness to the Next Level](#) | [Spotted Hyenas - Ngorongoro Hyena Project](#) | [Strawberry Poison Dart Frogs & Their Parental Care](#)

REWRITING EXTINCTION:

ENDANGERED SPECIES ACT REFORMS IGNITE DEBATE OVER THE FUTURE OF CONSERVATION

BY TONI KIM



Legislation in Congress

The Endangered Species Act (ESA) of 1973 has long been a cornerstone of U.S. environmental policy, safeguarding biodiversity and ecosystems. However, recent legislative proposals and administrative actions signal a significant shift in how the ESA may be interpreted and enforced.

Several bills currently before Congress aim to amend the ESA, reflecting a broader trend toward reevaluating its application. Notably, H.R. 181, introduced by Rep. Tom McClintock (R-CA), seeks to treat artificially propagated animals the same as naturally propagated ones under the ESA. This change could impact how species are listed and managed, potentially facilitating the use of biotechnological interventions in conservation efforts (Congress.gov, 2024).

Another significant proposal is H.R. 9522, the Endangered Species Act Amendments Act of 2024, which aims to incentivize species recovery on both private and public lands. The bill includes provisions to streamline permitting processes, establish clearer recovery goals, and reduce litigation related to ESA enforcement (U.S. House Committee on Natural Resources, 2024).

Additionally, H.R. 1897, introduced by Rep. Bruce Westerman (R-AR), focuses on optimizing conservation through resource prioritization and incentivizing wildlife conservation on private lands. It seeks to eliminate barriers to conservation and restore congressional intent by simplifying the permitting process (Congress.gov, 2024).



What is the true definition of harm?

The Trump administration has also proposed changes to the ESA's regulatory framework. One proposal redefines "harm" under the ESA to mean only direct injury or killing of endangered animals, excluding habitat destruction.

Conservationists argue this could undermine progress by allowing environmentally damaging land uses (People, 2024). Moreover, Secretary of the Interior Doug Burgum and others in the political arena have expressed support for "de-extinction" technologies, suggesting that species recovery could eventually eliminate the need for legal protections as inflamed by the recent "de-extinction" of the dire wolf (Waldman, 2025). Critics argue this focus may prioritize futuristic technologies over habitat conservation and species protection.



The Bottom Line

These proposed changes have sparked intense debate, with many warning that the full consequences of each proposal remain uncertain. Supporters argue that reform is needed to modernize the ESA and ease regulatory burdens on landowners and developers. Critics, however, contend that weakening core protections could jeopardize biodiversity and undo decades of conservation progress. As both the legislative and executive branches weigh the future of the ESA, the decisions made now could reshape U.S. environmental policy and conservation efforts for decades to come.

SOURCES

[To Amend the Endangered Species Act of 1973](#) | [A Bill to Promote Conservation on Private Lands](#) | [At Risk Under Proposed Changes for Endangered Species](#) | [The Endangered Species Act Amendments of 2024](#) | [Endangered Species List Cuts](#)

MAY MARSUPIALS!

BY KATHERINE RAPER



The sun is out, the grass is green, the flowers are blooming, and marsupials are entering the scene! Of about 250 marsupial species, most reside in Australia, New Guinea, and their neighboring islands. However, about 70 species do reside in the Americas, with the majority in Central or South America; except for the Virginia Opossum, which we all know and love. The name marsupial comes from the Latin word marsupium, meaning (surprise, surprise) pouch! Most marsupials are known for these pouches, which is simply a flap of skin covering the nipples. In this pouch, marsupial offspring undergo premature birth and continue development while attached to the nipples on the mother's lower belly.

This extremely diverse group can also come in several different shapes and sizes. The largest marsupial, the red kangaroo, can grow to be 6.6 feet in height, 10 feet from muzzle to tail tip, and upwards of 90kgs in weight. The smallest marsupial, the long-tailed planigale, is only about 12cm in length. The variation in size is often in response to the variation in habitat. Marsupials around the world live in many different ecological systems. Some are burrowing species, some are terrestrial species, and, like the water opossum, are even semiaquatic! As I'm sure you can predict, differing habitats thus lead to differing diets. Marsupials range from herbivores, to insectivores, to carnivores, all evolving based off what their habitat provides.

Ultimately, marsupials are a special group of species that provide a lot of interesting qualities to the environment around them. Their ways of life, general anatomy, and birthing techniques are just a few of the many differences between them and other mammals. Hopefully this article provides just a little bit of insight into the wonderfully confusing and unpredictable livelihood of the marsupial. I hope everyone (including Virginia opossums) has a wonderful summer and gets to rest and recharge however they may see fit!



SOURCES

[Belgian Journal of Zoology - Density and Cover Preferences](#) | [California Academy of Sciences Dept. of Ornithology and Mammalogy - Sengis Biological Synopsis](#) | [Molecular Phylogenetics and Evolution - Phylogenetic Relationships](#) | [AZA Nutrition Advisory Group - Vitamin C for Giant Elephant Shrews](#)

EVENT REVIEWS: RABBIT WET LAB TRIP & GUINEA PIG S/N SURGERY TRIP

BY TONI KIM

On Sunday, April 27th, our AAZV Chair, Javelis hosted a rabbit wet lab at Arbor View Animal Hospital in Valparaiso, IN with Dr. Jenny Herbert. Dr. Herbert kicked off the day with a comprehensive presentation, covering everything from indications and proper techniques to crucial post-op care – ensuring we had a holistic understanding of the procedures on live patients. Then, it was time to put our knowledge into practice on cadavers. We successfully performed lacrimal duct flushes, enucleations, mass removals, hindlimb amputations, and even utilized the in-house CT. Dr. Herbert also generously shared insights from her clinic's real cases, set up of her multi-faced hospital, and their externship program. While the drive was a bit of a journey, the invaluable experience made it absolutely worthwhile!

On Sunday, May 4th, a small group NTS members embarked on a productive guinea pig spay/neuter trip to Almost Home Humane Society in Valparaiso, IN, led by our AEMV chair, Olivia, and guided by Dr. Julia Becker. Spending the day at the shelter offered a firsthand look at the multifaceted role of a mixed-species shelter veterinarian. We witnessed the shelter technician conducting their morning rounds on all surgical patients before we rolled up our sleeves and got to work. Our efforts resulted in the successful completion of many physical exams, four guinea pig neuters, a cat spay, numerous vaccinations, and radiographs to diagnose rare orthopedic leg pathologies. This experience was a significant step in expanding our clinical expertise, with Dr. Barger providing expert guidance, practical advice, and even some colorful, unforgettable acronyms along the way.



FISH PICS!

BY KAYLA BASKIEWICZ

What better way to wrap up this school year than with some fish pics? As many of us celebrate the start of summer by plunging into a pool, lounging by a lake, or swimming in the sea, it's important to remember just how many creatures call Earth's waterways their home. The following pictures were taken at the Shedd Aquarium in Chicago, and help show the diversity and natural beauty of our aquatic acquaintances. Stop by your local aquarium this summer to see these beauties for yourself!

