



2022  
Annual  
Report



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# Director's Corner

Dear Friends and Supporters of Tigers United,

I am happy to share with you this annual report of the Tigers United University Consortium. As in previous years, this year has seen tremendous effort in saving this iconic species and we have achieved several notable successes. I am very proud to say that our universities are making a difference and offer the hope that our alumni and friends will continue to support our work.



First, our Ph.D. students and their faculty advisors are now in the research phase of their degree program and many will graduate within the next year. Graduation will signal two major accomplishments: (1) we will realize the impacts of students' research as research findings are published, and (2) we will contribute significantly to building the capacity of Indian conservation agencies as these students return to the ranks of Indian professionals. Having met and interacted with these students, their futures are very bright indeed!

Second, we have invested in developing new technologies that will increase efficiency and accuracy of tiger population estimates while saving costs and lives associated with human-tiger conflict. A donor to Clemson's program allowed Tigers United to partner with RESOLVE NGO, to produce and test an AI-assisted camera system in the Kanha-Pench wildlife corridor. This system takes only pictures of desired objects, in this case tigers and humans. This saves hours of labor going through unwanted pictures and significantly extends the camera's battery life. Moreover, the camera sends these wanted images in real-time to handheld devices of nearby conservation officers, who can intervene in keeping tigers and humans safely apart.

In July, we celebrated International Tiger Day with a final webinar of the Road to Vladivostok series, in a presentation by Andrey Kushlin, Ph.D., former program leader of the World Bank's Global Tiger Initiative. This followed the announcement by the International Union for the Conservation of Nature (IUCN) that the global number of wild tigers had increased to around 4,700 animals. And, this was followed by a new Declaration on Tiger Conservation signed by all 13 tiger range countries at the Vladivostok summit and a renewed commitment to continue their efforts to save tigers in the wild.

Finally, the support and commitment to our cause among the faculty, students, alumni and fans of our universities continues to increase and we look forward to achieving even bigger impacts in the near future. One exemplar of this commitment was LSU's Tiger Athletic Foundation's gift of \$250,000 to study the genetics of captive tigers, a population that is not well understood.

In closing, I want to thank all of our university partners who have enthusiastically engaged in bringing the power of our collective universities to bear on the challenges facing tiger range countries and their efforts to save our mascot. I can assure you, based on personal communications with professionals in those countries, that our efforts have not gone unnoticed and our influence will continue to have a positive impact on the Global Tiger Recovery Program for years to come.

With respect and appreciation,

Brett A. Wright, Director  
Tigers United University Consortium



LETTER FROM GLOBAL TIGER FORUM

“The St. Petersburg Declaration in 2010 led to a high level political commitment for conserving tigers and its habitat. Over the last decade, tiger populations in South Asia (Bhutan, India and Nepal) and Far-Eastern portions of Russia have been stable, with notable increases in India, Nepal and Russia. The situation in South-East Asia remains precarious, with the loss of functional tiger populations in three countries (Laos, Vietnam, and Cambodia). Despite ever-pressing challenges of habitat loss, prey base depletion, poaching and illegal trafficking, tiger range countries have shown immense commitment to continue their efforts for conserving the tigers in the wild. The Year 2022 started with the 4th Asia Ministerial Conference at Kuala Lumpur, where South East Asian countries committed to a South East Asia Tiger Recovery Plan (STRAP) and the host country (Malaysia) itself announced forward looking decisions on rehauling their Tiger Governance on the lines of what had been achieved in countries of South Asia. The financial gap requirements for protected area protection were reviewed and analysed, with several range countries reiterating the support for tiger conservation in KL Joint Statement, which evolved after a series of individual and regional consultations. This served as important groundwork for developing and endorsing the draft of the Vladivostok Declaration, which was finalized during a pre-summit meeting held in August at New Delhi.

The Vladivostok declaration released during the 2nd International Tiger Forum on 5th September, 2022 focuses on important realizations and the means to attain them. Historic range countries like Kazakhstan find a mention owing to their ongoing efforts towards recovering wild tiger populations. Issues such as illegal wildlife trafficking and the demand of tiger body parts abated by the proliferation of tiger farms have been highlighted as critical challenges in the effort to safeguard wild tigers. There is focus on leveraging new financial instruments, resource mobilization, and strengthening trans-boundary and regional collaborations. Apart from several other themes, there is a distinct recognition of tigers as the face of healthy ecosystems and biodiversity, and how their further loss would adversely impact ecosystem services, and exacerbate the adverse impact of climate change. The 12 year period emanating from St. Petersburg declaration and the 12 year road to Vladivostok had several learnings, challenges and milestones. Wild tigers continue to remain endangered, and their survival is critical to a plethora of diverse species, habitats and millions of human beings, which directly or indirectly depend on these wild ecosystems. With a mandate to continue its supporting and coordination role towards tiger conservation, GTF and GTIC will work with TRCs to further the implementation of this historic declaration, which clearly caters to the contemporary times. One significant step in this direction is the partnership between Tigers United, GTF and GTIC which aims to enhance capacity in the frontlines of tiger conservation, and provide state-of-the-art, locally applicable solutions to complement countries in their efforts to save the majestic wild tiger.”

Mohnish Kapoor  
Head - Programme and Partnerships  
Global Tiger Forum



IUCN ANNOUNCEMENT

In July, the International Union for the Conservation of Nature (IUCN) announced a 40% increase in the global tiger population, averaging around 4,700 tigers worldwide. While this is fantastic news, the tiger species is still classified as Endangered on their Red List of Endangered Species, with some tiger sub-species classified as Critically Endangered.

40% inc.  
WILD  
TIGERS

4,700  
avg.  
in WILD

EN  
status



“Although we still have a very long way to go, the new assessment shows that the tiger can be saved. There are more wild tigers alive today than in 2010, the result of range-state governments and partners committing to very focused protection of the species and its habitats. The threats have not gone away and will not for a long time. But there is every reason to believe the world can have even more tigers a decade from now if we double down on that commitment.”

-Dale Miquelle, WCS Tiger Program Coordinator





## GLOBAL TIGER FORUM MEETS

On September 5, 2022 the thirteen tiger range countries met for the second international tiger forum in Vladivostok, Russia. At this meeting, they formed an agreement for the next 12-year phase of the Global Tiger Recovery Program. The declaration below details their agreement.

### THE VLADIVOSTOK DECLARATION ON TIGER CONSERVATION (Vladivostok, Russian Federation, September 5, 2022)



We, the representatives of the People's Republic of Bangladesh, the Kingdom of Bhutan, the Kingdom of Cambodia, the People's Republic of China, the Republic of India, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Republic of the Union of Myanmar, the Federal Democratic Republic of Nepal, the Russian Federation, the Kingdom of Thailand, and the Socialist Republic of Vietnam, collectively referred to as the Tiger Range Countries (TRCs), being custodians of the last remaining tigers in the wild, along with countries with an intent to reintroduce tigers such as the Republic of Kazakhstan, have gathered at the 2nd International Tiger Conservation Forum in Vladivostok, Russian Federation, on 5 September 2022, with the common goal of ensuring viable wild tiger populations through conservation, recovery and reintroduction. We:

**EXPRESS** strong concern that Asia's most iconic animal faces imminent extinction in the wild, primarily due to loss, degradation and fragmentation of habitats, climate change impacts, poaching, prey-base depletion and human-tiger conflict.

**RECOGNISE** that the tiger is one of the most important indicators of biodiversity and healthy ecosystems and a symbol of sustainability. Current negative drivers and stressors will result in the extinction of tigers from the wild and loss of biological diversity together with the ecosystem services they provide, while also exacerbating the adverse impacts of climate change.

**ACKNOWLEDGE** the efforts of the TRCs to implement the Global Tiger Recovery Programme (GTRP), the outcome of the first International Tiger Forum in St. Petersburg in 2010. As a result of the measures taken, the number of wild tigers in the world has registered a recovery from as few as 3,200 to over 4,700.

**RECOGNISE**, with concern that there has been uneven progress towards tiger recovery, and some regions are continuing to lose or have lost their tiger populations.

**EXPRESS** concern about the continued paucity of sovereign funds for tiger conservation in several TRCs.

**SUPPORT** efforts of the TRCs to implement their National Tiger Recovery Programmes (NTRPs) while also noting that tiger conservation is a national priority and a collective responsibility, requiring cooperation and coordination between TRCs.

**WELCOME** the intent of countries to reintroduce wild tigers to areas where numbers need to be actively augmented, including in key parts of their historical range.

**EXPRESS** serious concern that there is still no comprehensive strategy to address the issue of phasing out of tiger farms while their impact on driving illegal tiger trade continues unabated.

**RECOGNISE** the importance of enabling intra-sectoral policies and cross-sectoral coordination for the long-term conservation of tigers and their habitats.

**CONFIRM** our commitment to the principles reflected in international treaties that ensure the conservation of biological diversity and the protection of rare and threatened species, including the tiger and its prey species, such as the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Migratory Species (CMS), the World Heritage Convention, the 2030 Agenda for Sustainable Development, the UN Framework

Sept 5

Convention on Climate Change (UNFCCC) and the Paris Agreement and other relevant initiatives.

**RECOGNISE AND APPRECIATE** the contributions of partners including international organisations and civil society in the implementation of the GTRP and NTRPs, and call upon the Global Tiger Forum and Global Tiger Initiative Council to continue to support and coordinate these efforts in future.

**REAFFIRM** our collective commitment to the principles and actions of the Hua Hin Declaration on Tiger Conservation (2010), the St Petersburg Declaration on Tiger Conservation (2010), the Thimphu Affirmative Nine-Point Action Agenda (2012), the Dhaka Recommendations (2014), the New Delhi Resolution on Tiger Conservation (2016), and the Kuala Lumpur Joint Statement on Tiger Conservation (2022).

In order to ensure effective implementation of the objectives and principles enshrined in this Declaration, TRCs commit to establish a mechanism that would oversee timely and efficient implementation.

By the adoption of this, the Vladivostok Declaration, we, the Tiger Range Countries of the world call upon the international community to join us in turning the tide and setting the tiger on the road to recovery.



Learn more at [TigerForum2022.com](https://TigerForum2022.com)



# International Tiger Day

## TIGER DAY WEBINAR

For International Tiger Day on July 29, Tigers United hosted a free webinar featuring Andrey Kushlin, Ph.D., a geographer-turned-banker who played a key role in the design and implementation of the Global Tiger Initiative (GTI) and the adoption and launch in 2010 of the Global Tiger Recovery Program (GTRP). Born, raised and educated in Moscow, Russia, he made a career at the World Bank in Washington, DC developing multi-million dollar public investment projects in sustainable forest management and biodiversity conservation across Europe and Asia.



As coordinator and manager of the GTI at the World Bank, he put together innovative partnerships with tiger range countries and various organizations in the nongovernmental, academic and business sectors, including the World Bank's seminal collaboration on tiger conservation with Clemson University. More recently, Kushlin was Deputy Director for forestry policy and resources at the UN Food and Agriculture Organization (FAO) in Rome. Since 2020, Kushlin is the co-founder and co-chair of EndPandemics, a global action alliance aiming to reduce the risks of future pandemics by tackling the root causes of zoonotic spillovers: habitat destruction,

wildlife trade and trafficking, and industrial farming. An Honorary Member of the Global Tiger Forum (GTF), Kushlin continues to assist tiger range countries in developing the next 12-year phase of the GTRP.

This year, the Year of the Tiger according to the Chinese calendar, marked an end-point to the first 12-year phase where the 13 tiger range countries committed to attempting to double the global wild tiger population according to the Tx2 goal set in 2010. Kushlin presented on the GTRP, current challenges and opportunities for the range countries and more. He invited a panel of guests to speak during the event, including Doley Tshering from UNDP, Bhutan, Anupam Joshi from the World Bank and Maheshwar Dhakal, Director General of Nepal's Department of National and Wildlife Conservation. Guests attended from across the globe. Thank you to our guest speaker, panelists and attendees for a great event! **The webinar can be viewed on the Tigers United YouTube channel.**



**65** registrants  
**ONE** great event!

July 29

# International Tiger Day

## “TIGER, TIGER IN THE NIGHT... ...now visible in real time!”

For decades, tiger biologists have dreamt of a “smart” camera, a device that could detect a tiger on the prowl and send images instantly to a cell phone. Whether at dawn, dusk, or midnight, through monsoon rains or stifling heat, the remote unit would function 24/7, with long battery life, to protect and monitor this charismatic species.



...[W]e are excited to announce a major breakthrough in conservation technology: for the first time ever, wild tigers and their prey have been detected by AI-powered, cryptic cameras that transmit the images to the cell phones and computers of park managers. Just as important, the elapsed time from the motion sensor triggered by the passing tiger, to running the AI, to transmission to the cell network, to the Internet, and to the end user is less than 30 seconds, making this technology a true real-time system. To complete the wish list, using cellular communication, the camera-alert system can transmit more than 2,500 images on a single battery charge. In short, the dream has come true.

[Over the summer], India's National Tiger Conservation Authority, the Global Tiger Forum, and the Wildlife Wing of the State of Madhya Pradesh have partnered with Clemson University and the NGO RESOLVE to bring the world's most advanced, real-time wildlife monitoring system to the Kanha-Pench Tiger Conservation Landscape, in Madhya Pradesh.

The new technology, prototyped effectively in Africa for the past four years, and now available in Asia, is called TrailGuard AI. This tiny AI-embedded camera-alert system runs powerful computer models on-board the camera to weed out false positives before transmission of data, thus saving precious battery life, and sending only what the end user requires. Intel and the AI company CVEDIA both played critical roles in supplying the necessary computer chips and AI models to make this possible. First designed to detect poachers in African parks, the camera becomes a wildlife detector simply by updating the AI model to detect a range of endangered wildlife species. Where cell connectivity is excellent, as in much of India, TrailGuard AI takes advantage of the strong signal. Where there is no cell service, this system transmits images over long-range radio (LoRa).

Visit [www.resolve.ngo/docs/resolve\\_press\\_release\\_-\\_international\\_tiger\\_day\\_-\\_july\\_29\\_final.pdf](http://www.resolve.ngo/docs/resolve_press_release_-_international_tiger_day_-_july_29_final.pdf) to read more.

Originally published by RESOLVE NGO, July 29, 2022



# University Updates

Auburn Forestry and Wildlife student, Shivakumar Channapplar Maheshappa, has completed requisite course work for a doctoral program and submitted a draft dissertation research proposal titled, “Tiger conservation induced village relocation for community development in India,” and presented the same before the dissertation advisory committee during the spring.



After returning to India from Auburn to undertake field research, Maheshappa submitted a project to the State Forest Department, Government of Karnataka, India seeking funding support and necessary permission to conduct research in Nagarhole Tiger Reserve of India. Although the committee scrutinizing such proposals in the State Forest Department has given him in-principal approval to undertake research, requisite funds are yet to be released and he is awaiting the final approval and funds to undertake research.

Maheshappa is actively working on a systematic review paper titled, “Insights into conservation induced village relocation and its impact on rehabilitated communities in India: A Systematic Review,” and is working with his faculty advisor, Yaoqi Zhang, on several papers focusing on the evolution of property rights and its impact on forest conservation in India, the economics of tiger reserves, the incentive regulation of Joint Forest Management Committees for managing land-use changes involving forestry in India, and the theory and practice of public access to private forests.



Clemson University students continue to be actively engaged in their tiger conservation research, primarily focused on minimizing human-tiger conflicts in India. Pramod Yadav recently had an article published in Oryx entitled, “A systematic scoping review of tiger conservation in the Terai Arc Landscape and Himalayas,” and defends his research in December, 2022. Hrishita Negi is currently transcribing over 600 interviews conducted in India in early 2022 and will be remaining at Clemson University through Spring 2023 to continue her work. Pragati Mandloi continues her field work overseas after a recent leave of absence to put her family first. Their faculty supervisors, respectively, are Dr. Matt Brownlee, Dr. Rob Baldwin and Dr. Shari Rodriguez at Clemson University.



Clemson University post-doctoral researcher, Dr. Jeremy Dertien, continues to work alongside Dr. Rob Baldwin and RESOLVE NGO on TrailGuard AI, the novel artificially-intelligent system of trail cameras ‘trained’ to capture images of only tigers and humans in real-time.

Our staff and faculty continue to build networks internationally through annual visits to India and by working closely with the Global Tiger Forum. As you will read on the following pages of this report, Clemson teams returned from India the summer of 2022 having done just that.



Pramod Yadav, Clemson Ph.D. candidate, in India

# University Updates

Alessandra Bresnan is a Ph.D. student at LSU, who is examining the genetics of captive tigers in the United States, including tigers managed by AZA-accredited facilities through species survival plans (SSP) and generic tigers, those tigers with unknown genetic background that are found outside of AZA-accredited facilities. This past year, Alessandra completed her sample collection. She collected a total of 128 tiger samples from the three subspecies managed in the United States’ SSPs, consisting of 60 Amur, 27 Malayan, and 41 Sumatran tiger samples from 60 different institutions across the U.S. An additional 271 samples from generic tigers were also gathered primarily thanks to a collaboration forged with Texas A&M.



Alessandra also completed her lab work in 2022. In the lab, Alessandra extracted genomic DNA from all whole blood and tissue samples she received before submitting the extracted DNA for processing and whole genome sequencing. Whole genome sequences are in-hand and will allow Alessandra to begin targeted analyses but, in the meantime, Alessandra has been using high performance super computers to initiate analyses of 133 whole genome sequences deposited in public repositories from previously published tiger genome studies. These sequences will be helpful for increasing sample sizes and correctly identifying ancestry and subspecific hybridization within generic tigers.



Over the summer, Alessandra also submitted a paper for publication regarding wildlife trade of felid species into the U.S. using data from the USFWS (U.S. Fish & Wildlife Service). This paper showed that tigers are one of the most highly traded felid species. Alessandra is passionate about tiger conservation and believes her research will provide insight into important aspects of captive tigers in the U.S., including assisting the AZA-accredited captive breeding programs and investigating the genetic effects of commercialized breeding of generic tigers.

Mizzou students are as passionate as ever about saving the tiger species. The University of Missouri’s Tiger for Tigers organization was started in 1999 with the mission of ensuring there are wild tigers for as long as there are Mizzou tigers. The student-led organization was the nation’s first tiger mascot conservation program and is still running strong to this day. With approximately 134 members, the organization engages in activities such as fundraising for conservation programs, conservation outreach, providing educational and professional development opportunities for student members, and volunteering at large cat shelters and zoos in the Midwest. Recent education and volunteer trips included Dickerson Park Zoo in Springfield, MO and Turpentine Creek Wildlife Refuge in Eureka Springs, AR in spring 2022, and the group visited Crown Ridge Tiger Sanctuary in Genevieve, MO in fall 2022.





## DEPLOYMENT OF *TRAILGUARD AI*

When it comes to tiger conservation, Clemson University has a long history of trying to save its mascot from extinction. The number of tigers left in the wild is roughly equal to Clemson's incoming class of first-year students. With an estimated less than 4,000 tigers left [now 4,700] the species is classified as "Endangered" on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species. Some sub-species, like the Malayan and Sumatran tigers, are classified as "Critically Endangered."

India, where around seventy percent of the world's wild tiger population roams, has become a second (and often, first) home to researchers working in the field with this apex species. This summer, University faculty and students from a variety of fields visited India to engage around the interdisciplinary nature of tiger conservation efforts across the country.

Post-doctoral researcher, Jeremy Dertien, Ph.D., has been working with Robert Baldwin, Ph.D., Clemson professor and endowed chair of conservation, and RESOLVE to implement a system of artificially intelligent trail cameras in the Kanha-Pench region of India to detect and send images of wild tigers and poachers instantaneously. Dertien visited India this summer to set up around 20 cameras and conduct a ranger workshop with the Indian Forest Service, which was attended by many forest rangers and professionals interested in the technology.

"The rangers and guards were very engaged and hopefully this new technology will help them prevent future conflict between humans and tigers," said Dertien.

Implementing these intelligent camera traps will allow forestry staff to notify villagers of a roaming tiger nearby so that they can move their livestock as needed. The quick camera notifications will also help rangers detect poachers and halt harmful actions against the animals. As a result of this trip, the team hopes they will receive proof-of-concept from India's forestry staff that TrailGuard AI (as the project has come to be known) works and can be used in other countries where tigers still live in the wild.

"The test was fabulously successful," commented Baldwin. "For the first time ever, tigers in the wild were detected and their images sent in near real-time."



Jeremy Dertien, Ph.D., with Indian Forestry Staff in India, Summer 2022



"It was very exciting when that first tiger image popped up in my email," Dertien shared.

Dertien traveled with Clemson Ph.D. student Hrishita Negi and her father Himmat Singh Negi, Ph.D., former field director of India's Kanha Tiger Reserve, who helped make the project a success based on their extensive knowledge of the landscape. Hrishita is currently working in the field on a separate but related study. For her dissertation, she is researching the human dynamics of tiger conservation in a tiger corridor by studying the relationship between the villagers, forest guards and general conservation efforts. She conducted over 600 interviews in India earlier this year.

Originally published by Clemson News, July 13, 2022

## CLEMSON FACULTY DELEGATION

Protecting wild tigers involves more than just working with the species itself – the people who live and work near their ranges are integral, too. While the TrailGuard AI team worked near India's Pench Tiger Reserve, another team of faculty from the University traveled the country this summer to learn from its residents and pursue potential opportunities for students to experience the Indian culture.



Through the Schwehr Family Global Service-Learning Endowment, a delegation comprised of Clemson faculty from political science, women's leadership, agricultural sciences and conservation, and Indian members from the Global Tiger Forum, Global Tiger Initiative Council and National Tiger Conservation Authority, met to collaborate in India this summer. Through their visits to the Periyar Tiger Reserve and Corbett Tiger Reserve, they determined a great place for student and faculty engagement in India lies at the intersection of tiger conservation and interactions with the people living near these preserved tiger

landscapes. "The village communities are critical advocates and active participants in tiger conservation," commented Sarah White, Ph.D., a professor of plant and environmental sciences at Clemson. "The passion of community members for the protection of wildlife and plants within the tiger reserves was striking. I want our students to become similarly passionate and use their knowledge collaboratively with those communities to enhance conservation outcomes, especially as related to improving water quality and restoration of native vegetation."

"Learning about the role of local women's groups in everything from forest patrols, to pepper and honey production, to waste collection and recycling will help students see how important it is for communities to be partners in conservation and forest management," noted Diane Perpich, Ph.D., a professor of philosophy and women's leadership program director at Clemson.



Clemson faculty delegate in India, Summer 2022

"The 2023 goal is to bring a diverse group of students from women's leadership, political science and policy, and environmental science to begin to understand the nature of these disciplinary and professional intersection points by visiting and working with the Community Development Committees in and around these national parks," said Lori Dickes, Ph.D., associate professor, associate chair and graduate programs director in the Department of Political Science.

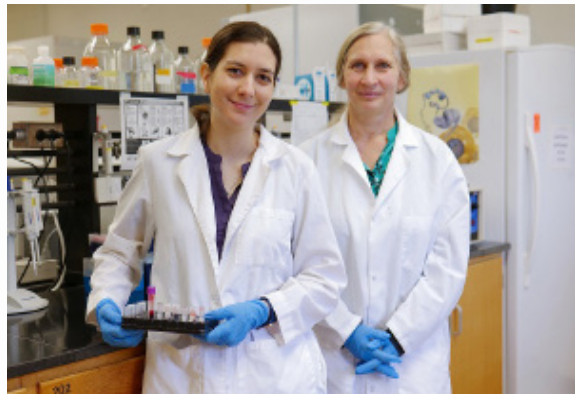
By fostering these relationships through the Schwehr program, the team also hopes to bring students, faculty and scientists to Clemson from India.

Originally published by Clemson News, July 13, 2022



## TAF FUNDS STUDENT'S TIGER RESEARCH

Mike the Tiger is a major part of the heart and soul of LSU. Tiger pride runs deep on campus, and the LSU Tiger Athletic Foundation is turning its love of our tiger into research to benefit the species as a whole.



TAF will provide funding for a doctoral student in the LSU School of Renewable Natural Resources to conduct genetic research on tigers.

TAF will donate a total of \$250,000 during the next five years toward research that will complement studies already being conducted by Alessandra Bresnan, a doctoral student working with Sabrina Taylor, LSU AgCenter researcher and professor in the School of Renewable Natural Resources.

Bresnan is using DNA sequencing to get a better understanding of the genetic makeup of captive tigers in the United States.

"I will have 400 tiger genomes, and that includes tigers that are found in accredited zoos and ones in private hands in different facilities throughout the U.S.," Bresnan said.

More tigers are in captivity in the U.S. than are found in the wild, and Bresnan said scientists don't know much about the genetics of the captive population. She said there is an assumption that generic tigers — which are often found outside of accredited zoos — are either hybrids of several subspecies or are highly inbred and may not be genetically diverse.

"We want to get a snapshot of the population," she said.

Tigers in zoos accredited by the Association of Zoos and Aquariums have pedigrees and follow species survival plans. Bresnan plans to use tigers' genetic data to facilitate captive breeding and create a genetic baseline for the three subspecies with species survival plans: the Amur, Sumatran and Malayan tigers.

Bresnan expects to find a lack of genetic variation in some of the sampled generic tigers.

"If your population is invariant, so everybody is kind of the same genetically, then when change comes along such as disease or differences in climate, it means the population has less potential for adaptation," Taylor said. "That's not great for their future resiliency."

Environmental differences may drive genetic differences among subspecies in their home ranges. So when an Amur tiger is crossed with a Sumatran tiger, it cannot be reintroduced because it would be unsuited to either of the native ranges, Bresnan said.

Bresnan's research is funded by LSU through the Tigers United University Consortium, which is made up of LSU, Auburn, Clemson and Missouri — all universities with tiger mascots. The other consortium universities fund research on wild tigers.

"The U.S. has a problem of its own with tigers that probably needs some attention," Taylor said. "Very little is published on that, so we thought that was an important area to focus on."

Using Bresnan's data, researchers will have a better grasp on captive tigers' genetics in the U.S., a valuable baseline for future tiger research.

"By funding the next Ph.D. student, not only is TAF finding a way to give back to the academic side of LSU but also supporting the beloved symbol of the LSU community," said Matt Borman, CEO of the Tiger Athletic Foundation. "We are also proud that this initiative is working in conjunction with other institutions in the SEC for a mission that is bigger than ourselves."

Originally published by Tobie Blanchard, LSU Ag Center, June 7, 2022

## SUPPORT STUDENTS. SAVE TIGERS.

Are you an alum of Auburn, Clemson, LSU or Mizzou? We have established a \$1M goal per university for the next academic year to financially support FIVE student-faculty teams focused on tiger conservation at each campus.

Text **SaveTigers** to **41444**

Each \$200k 'package' provides dollars for research equipment, international travel, a housing stipend, graduate student tuition, faculty supervisor time and more, for up to FOUR years. While research areas will vary, each team will focus on saving tigers. The previous pages of this report are proof of the impact that can be made. There are many more domestic and international students with a passion for saving the tiger species - let's get them on board at one of these top-tier, land grant tiger mascot universities. YOU can make a difference by supporting students today - any amount helps! Text the number above or visit [TigersUnited.org](https://TigersUnited.org) to learn more and give through your desktop browser.







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