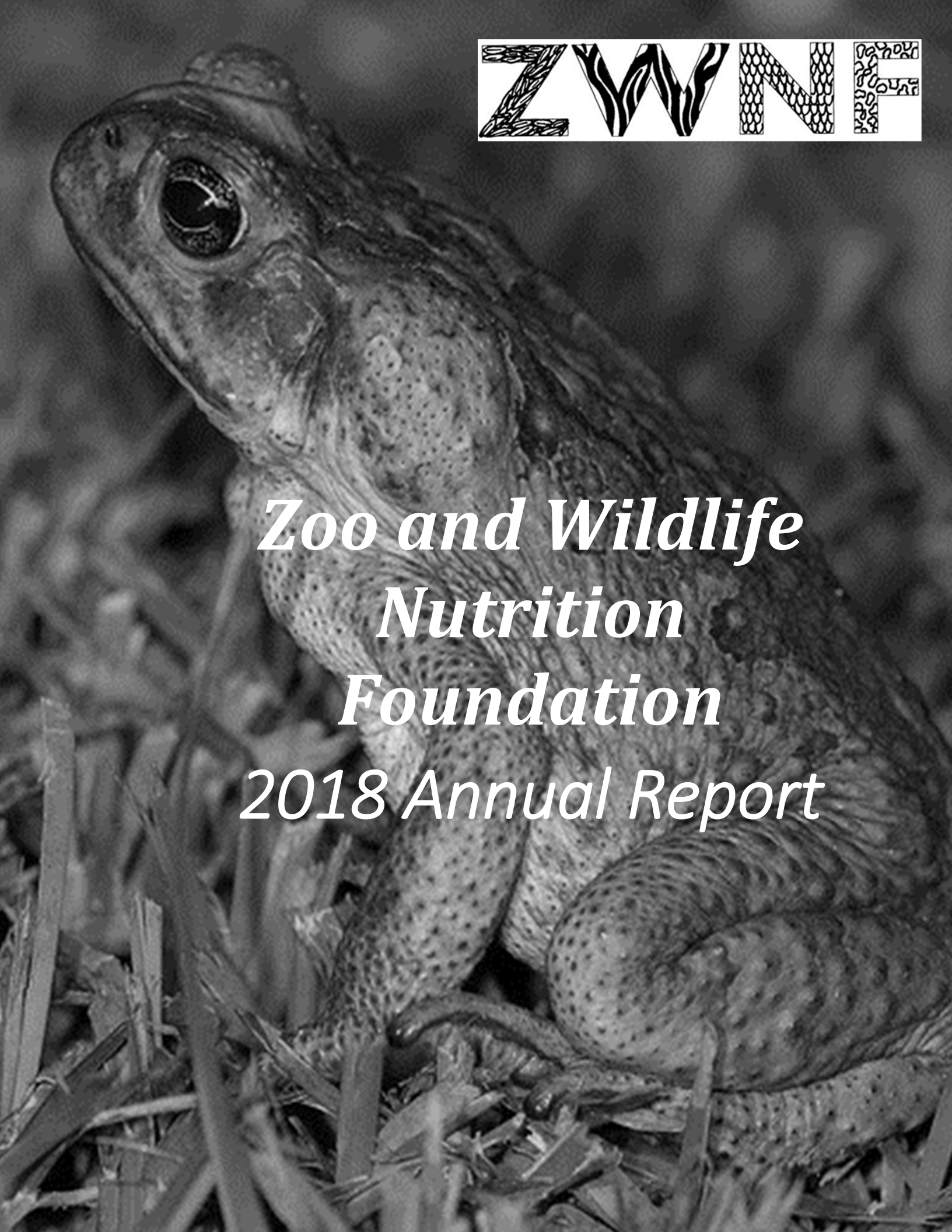




*Zoo and Wildlife
Nutrition
Foundation
2018 Annual Report*



Letter from the President
25 April 2019

Hello Everyone!

This is our third annual report and we are pleased to share that 2018 was a year of development for the Foundation. In the last two annual reports we shared our mission, some of our goals, and the projects on our “to do” list. We introduced our Board and gave you an outline of the finances at the time.

In this report, we are very pleased to share some our successes from 2018:

- Update on the SCARF grant residency
- Award winners for the small research grant and travel grant awards
- Information about the Foundation/NAG nutrition conference in September

As you read through this report, you will find additional details and updates on our projects, as well as background about the Foundation, its Board of Directors, and an update on our finances.

The most current information on the Foundation, as well as a link to donate in support of our important work can be found at: <https://nagonline.net/zwnf/>. We encourage your continued interest in the Foundation and its mission, as well as your support for the work that the Foundation does to train the next generation of zoo nutritionists! Thank you!

Sincerely,



Barbara Henry, MS
President, Board of Directors, Zoo and Wildlife Nutrition Foundation
Curator of Nutrition, Cincinnati Zoo & Botanical Garden



Definition, Mission, and Focus

Zoo and Wildlife Nutrition Foundation (ZWNF) is a Texas nonprofit corporation formed by concerned individuals to promote zoo and wildlife nutrition.

Our mission is to (a) provide nutrition education and advice for captive feeding programs in concert with the Association of Zoos and Aquariums Nutrition Advisory Group (NAG); and (b) participate in, and contribute to, global and regional nutrition research programs.

There are several ways in which we accomplish this. We maintain funds to support nutrition education and training. We administer a portion of those monies via the Sue Crissey Animal Nutrition Residency Fund which is pivotal in training the next generation of zoo nutritionists. We provide technical, financial, and administrative support for the NAG and its website (<https://nagonline.net>). At the same time, we facilitate the procurement and management of funds to support the ZWNF/NAG Conference on Zoo and Wildlife Nutrition, as well as to support research projects that further the understanding of exotic animal nutrition.

Changes to Board of Directors

The Board of Directors changed in 2018 with Barbara Toddes rotating off and Mark Griffin joining the board. The bylaws of the Foundation provide for the timely rotation of Board members to cultivate new ideas and involve other zoo nutrition professionals in idea generation and continued development.



Mark Griffin recently joined the ZWNF BOD

Current Members of the Board of Directors

The current ZWNF Board consists of Barbara Henry (President), Mike Maslanka (Vice President), Shannon Livingston (Secretary), Ann Ward (Treasurer), Kerri Slifka, Liz Koutsos, and Mark Griffin.

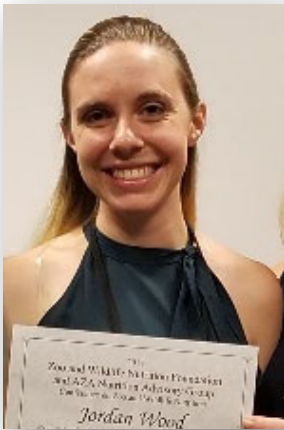
Announcing the 2019 ZWNF/NAG conference

What do Marlin Perkins, Tina Turner, Vincent Price, John Goodman, Charles Lindbergh, Ulysses S Grant, and Stan Musial have in common? They have all called St Louis their home and we can't wait to share with you the wonderful things about St. Louis during the 2019 ZWNF/NAG conference on zoo and wildlife nutrition. The conference will be held between September 29th and October 2nd in conjunction with AAZV and several other professional organizations (projected to be the biggest joint conference of these associations to date). Additional information about the Conference is available on the NAG website.



Small Grant Fund

The ZWNF has established an annual research grant for \$1,000 and an annual education/travel grant for \$500. We collaborate with the NAG to maximize the impact professional zoo nutritionists have on the care and management of current and future collections, as well as on training and leadership of the next generation of zoo nutritionists. Research to contribute to the field of zoo and wildlife nutrition, as well as funding to further education, are consistent with ZWNF goals and have been identified as NAG scientific and operational priorities, both of which will be supported by these grants.



The Foundation offered 2 grants in 2018:

The **travel grant** received one application, which was awarded to Jordan Wood. Jordan used this grant in order to travel to the Comparative Nutrition Society meeting in Quebec City during the summer of 2018. She presented on the analysis of the novel North Carolina Zoo African elephant (*Loxodonta africana*) diet and circulating vitamin and carotenoid concentrations.

The **research grant** received 7 applications, and the \$1000 grant was awarded to Tarra Freel, Kimberly Ange - van Heugten, and their colleagues, to study the impacts of diet transition on circulating vitamin A, vitamin E, carotenoids, and stress metabolites. This work is part of Tarra's Master's work in the Department of Animal Science at North Carolina State University.



Congratulations to our grant winners! We will post the announcement for the next round of grant applications in April of 2019 with a due date of 28 June 2019 to ensure broad distribution, interest, and access to these great opportunities.

Susan Crissey Animal Nutrition Residency Fund (“SCARF”)



Photo Credit: Paul Fahy

SCARF was established on November 14, 2002, by the Chicago Zoological Society and the NAG. SCARF was established to acknowledge and honor the significant impact that Sue Crissey had on the field of zoo nutrition during her fifteen (15) years at Brookfield Zoo. Sue died at 51 after an extended battle with ovarian cancer. During Sue’s time at the Brookfield Zoo, she expanded the nutrition program from one of diet purchase and preparation to a program of cutting-edge research and problem solving. She led the development of the institutional coalition called the Zoo Nutrition Network. She and her staff were

active in publishing many papers and worked to integrate zoo animal nutrition research with nutritional studies of wild-living animals. One of Sue’s greatest commitments was to train, professionally develop, and engage the next generation of zoo nutritionists. To that end, Sue participated in the training of three residents during her time at Brookfield and those individuals became successful zoo nutritionists at other AZA zoos. It is the hope that SCARF will continue to celebrate Sue’s tremendous achievements and contributions to expanding the field of zoo animal nutrition by providing support for residencies in zoo animal nutrition that will improve the welfare of animals in zoos and aquariums.

In 2007, the Fort Worth zoo was awarded funds to in part support a 3-year SCARF residency. At that time, for a 3-year program, significant additional funding from the institution or from another source or a combination was required. The Fort Worth Zoo obtained funding from Ringling Brothers and Barnum & Bailey Center for Elephant Conservation. Kibby Treiber, PhD, Virginia Polytechnic Institute and State University was selected as the first SCARF resident. During her residency she learned how to manage centralized operations and staff as well as all components of diet formulation initially concentrating on quarantine diets and eventually overseeing dietary management of a large variety of taxa park wide. The resident also set up and supervised the intern program. Her research mainly focused on elephants, energy metabolism and validating a body condition scoring system with ultrasound. During her residency in 2008, she presented on this topic at Elephant Managers Association Conference as well as at the Sue Crissey Symposium (SCS). Additionally, she presented a paper reviewing insulin resistance at the SCS. Kibby’s residency was shortened by a job opportunity to become a full-time staff nutritionist at the Fort Worth Zoo. She later, moved to Florida to start the first nutrition program at the Miami Metro Zoo.

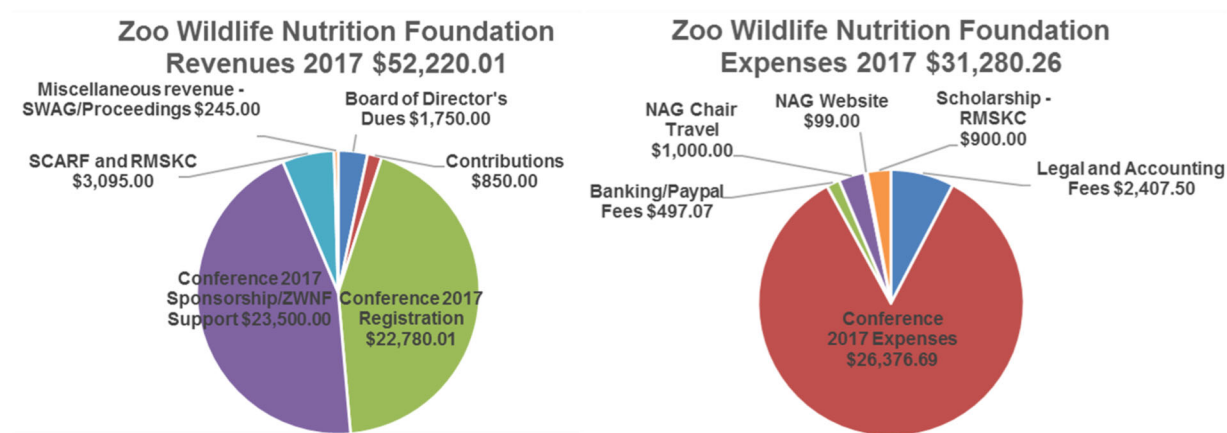
The Fort Wort Zoo received approval to add to the remaining funds to support a 2-year SCARF residency. Concurrently, the NAG/ZWNF was aware few institutions could obtain or

support the significant additional funds for the 3-year original plan. Adam Reppert, MS, RD, University of Illinois, was selected as the second SCARF resident. In addition to learning the comprehensive skills to manage a nutrition program similar to the first resident, Adam continued the development of BCS methods and tools and participated in the elephant research begun by the first resident. He presented on cheetah BCS at the 2011 NAG/ZWNF Conference and on great ape body fatness at the 2012 SCS. Adam is currently Staff Nutritionist at the Fort Worth Zoo.

In 2017, the Foundation was pleased to request proposals from qualified institutions to apply to train the 3rd SCARF resident. This continued the 2-year program plan with additional funding provided by ZWNF which resulted in more interest/applications. We announced in our 2017 annual report that the residency was awarded to the Toronto Zoo. Toronto hired Sarra Gourlie in April of 2018 as the 3rd SCARF Nutrition Resident. She began an intensive training program which included all aspects of zoo nutrition required of a SCARF training institution. Sarra spent some time in the commissary learning diet preparation as well as food purchasing and inventory. While learning about quality control she standardized their past analyses and developed a “cheat sheet” for future organization. She updated some of processes and procedures for quality control and sanitation. She had a hand in diet evaluations of many species while updating the SOP’s for the analysis program. She learned about body condition scoring and was able to put that into practice. Finally, Sarra participated in animal area meeting as well as outside nutritional research on going at Toronto Zoo. We look forward to sharing more about Sarra and the Toronto Zoo program!

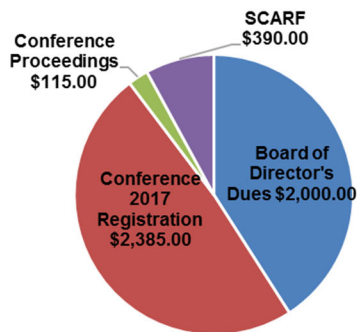
2017 and 2018 Financial Statements updates

One of the main roles of the ZWNF and NAG is to host the Conference on Zoo and Wildlife Nutrition every other year. Because of this, the Foundation revenue and expense reports look very different between conference and non-conference years (due to registration fees, sponsorship donations, and the off-setting conference expenses). Because of the disparity, we have shared the previous two years of financial statements to highlight the importance and impact of the Conference.

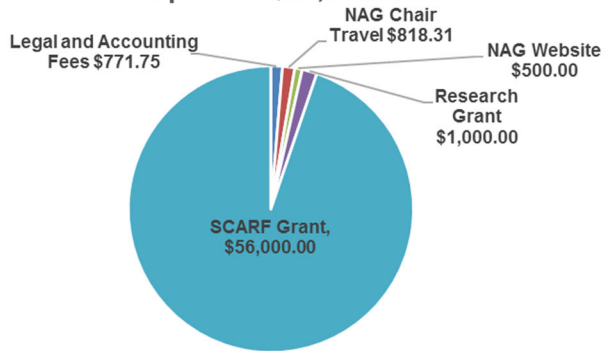


2017 was a Conference year. The Conference was held in Frisco, Texas in conjunction with AAZV, and was well-attended by zoo nutrition professionals and veterinarians alike. Note that sponsorship donations and conference registration made up the largest portions of revenue, whereas conference expenses (meals, rooms, transportation, audio-visual, etc.) accounted for the largest portion of expenses. Also note, revenues exceeded expenses by \$20,939.75 for 2017.

Zoo Wildlife Nutrition Foundation
Revenues 2018 \$4,890



Zoo Wildlife Nutrition Foundation
Expenses \$59,090.06



2018 was not a Conference year. There were few Conference-related additions (registrations and proceedings sales) that were accounted for in 2018 instead of 2017. Note the considerably smaller revenue total for the non-Conference year. Expenses exceeded revenues by \$54,200.06 primarily due to the award of the SCARF Residency grant to the Toronto Zoo under the direction of nutritionist Jaap Wensvoort. Funding supports a robust 2-year training experience for a future zoo nutritionist. Also, notable as a first-time expense, was the award of the \$1000 research grant to Michelle Shaw (Taronga Zoo) and Mike Power (Smithsonian National Zoological Park and Conservation Biology Institute) for research conducted on nutritional needs of pangolins.

Consider a Gift

The Zoo and Wildlife Nutrition Foundation was created to support the important work of not only the AZA Nutrition Advisory Group, but of the profession of zoo and wildlife nutrition as a whole. The more we learn about appropriate nutrition and diets for wildlife in human care, the greater our ability to manage and reproduce those animals and help maintain sustainable populations. The more we learn about their free-ranging counterparts, and the ability of habitats to meet the nutritional needs of those animals, the more we can help manage the animals and ecosystems for sustainability.

The Zoo and Wildlife Nutrition Foundation supports efforts in both realms – for the future of sustainable wildlife populations. Please consider supporting us in this critical endeavor (visit the NAG website to do so: <https://nagonline.net/287/sue-crissey-animal-nutrition-residency-fund-scarf/> or <https://nagonline.net/zwnf/>). We appreciate your support!