TOWARDS SUSTAINABLE ZOO DIETS: A STUDY OF BARRIERS AND SOLUTIONS

Andrea L. Fidgett, PhD^{1*}, Amber M. Crittenden, BSc (Adv)², Anne Kehlhofer, GrDip, MA³, Zachary Murfet, BSc (Adv)², Francesca Torcasio, BSc (Adv)², and Michelle Shaw, MSc³

¹Nutritional Services, San Diego Zoo Global, San Diego, CA 92112, USA.

²Global Challenges Program, Monash University, Wellington Rd, Clayton VIC 3800, Australia. ³Taronga Conservation Society Australia, Bradleys Head Road, Mosman NSW 2088, Australia

Abstract

Conservation is a key mission of zoological institutions around the world. The World Association of Zoos and Aquariums reminds us in their 2005 Conservation Strategy Report that "conservation without action for sustainability is incomplete." If sustainability is not practiced by zoos, their efforts towards species preservation are being contradicted. Whilst there has been action to move towards sustainability in a number of areas of operation, including reducing electricity consumption, implementing renewable energy, improving waste management and recycling, sourcing more sustainable and certified products in the retail and food outlets, one area yet to see a substantial transition is zoo animal feed. A collaboration between Monash University (Victoria, Australia), Taronga Conservation Society Australia (New South Wales, Australia), and San Diego Zoo Global (California, USA) sought to understand the barriers and explore potential solutions to sustainable zoo diets.

Interviews were conducted with fourteen zoos, from the United States, Australia, Asia, New Zealand, and Europe. Interviews were mostly conducted with zoo nutritionists or the person responsible for food procurement to understand barriers to providing sustainable zoo diets. Respondents were asked about the barriers that zoos faced to improving the sustainability of animal diets and whether the institution is currently working towards overcoming the challenges identified. Motivation to pursue sustainable zoo diets was high and aligned with mission of the organization, and personal values of employees, alongside recognition of the increasing emphasis on sustainability by society and governments. Constraints included cost, lack of sustainable alternatives for necessary products, inability to categorically identify sustainable feeds, and even a lack of motivation in management to include sustainability in their procurement process. The other challenge is also to define what is meant by 'a sustainable feed', given that sustainability is such a buzzword and means different things to different people, it is important to have a mutual and clear understanding of what it is we are trying to achieve.

Six zoo food suppliers were also interviewed to determine their opinions, values, and practices; data pertaining to the sustainability of their business operation, such as water usage, land usage, and carbon footprint was lacking. Though quantifying their environmental impact, or reduction thereof, was not possible, all offered examples to qualify this was an area of business operations they were actively pursuing, whether that be sourcing local products or materials, or using and recycling materials in the production process. Proposed solutions to help the zoo animal nutrition profession make more informed choices included a Supplier Sustainability Checklist for evaluating the commitment of suppliers and identification of certifications that signify sustainable products that aligned to zoo missions.