

Research Article

Programmatic approaches to assessing and improving animal welfare in zoos and aquariums

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Abstract

There continues to be intense public, professional, and scientific focus on the welfare of animals in zoos and aquariums, but implementing welfare assessment tools consistently throughout this community remains challenging. Indirect measures can be used to assess “welfare potential” - the potential that animals will experience good welfare based on the care that they are provided with. Zoos and aquariums focus on welfare potential with their continued commitment to develop animal care guidelines (e.g. Animal Care Manuals) that can play a role within institutional accreditation or certification. The Association of Zoos and Aquariums Animal Welfare Committee has been pursuing approaches to maximize welfare potential by developing the concept of an integrated welfare approach or framework - an attempt to identify recommended animal care programs (e.g. enrichment, nutrition, veterinary care, research, and animal training programs) and their programmatic components. Objectively assessing the influence that animal care recommendations have on the welfare of individual animals is important to determine the efficacy of programmatic approaches. The future of welfare assessment within zoos and aquariums will include population-level evaluations - tracking emerging trends in health and behavior that come from both formal and informal institutional animal reports. Sharing this information, and performing meta-analyses of the data using epidemiological approaches, will become easier with advances in technology and database management software. Identifying welfare “red/green flags” throughout captive populations will provide direction for more focused assessments that will ultimately inform the design of more effective animal care programs. *Zoo Biol* 28:519-530, 2009. © 2009 Wiley-Liss, Inc.

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