

Could Visiting the Saint Louis Zoo Lower Your Stress Level?

By John Sahrman, Amy Niedbalski, Dr. Sharon Deem, Louise Bradshaw and Rebecca Johnson



Public health data suggest that a variety of health issues, including mental health, are an increasing problem in industrialized countries (e.g., nature deficit disorder). These data, along with the increase in healthcare costs, support the need for low-cost, widely available ways for disease prevention to supplement the existing healthcare system. At the same time, while significant effort has been put into evaluating the educational impacts of Association of Zoos and Aquariums (AZA)-accredited facilities, the potential for direct health benefits of a visit to a zoo or aquarium has received little attention. In this study, we explored the potential of AZA zoos and aquariums to be part of a holistic solution to these public health problems. We studied the effects of an interactive experience at a touch tank exhibit featuring stingrays, sharks and horseshoe crabs on visitor stress levels. Stress was measured by physiological and psychological parameters. Heart rate was recorded before, during and after interacting with the animals, and mood was assessed using an established psychological instrument before and after the experience. The data revealed a complex reaction to the experience by the visitors. Heart rate was

higher and less variable while interacting with the animals compared to before or after. Mood data suggest that most visitors felt happier, more energized and less tense after the experience. Thus, interacting with the animals at the touch tank exhibit elicited a mild physical stress response during interactions reminiscent of a theme park experience like a roller coaster ride, but it ultimately led to a decrease in mental stress. The effects of confounding variables on stress measures, such as crowd level, are also discussed. Similar studies could help uncover the precise nature of health benefits offered by visits to AZA zoos and aquariums.

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North Carolina Aquarium at Pine Knoll Shores Honors Volunteers

Last year, volunteers gave more than 20,500 hours of service to the North Carolina Aquarium at Pine Knoll Shores, N.C. During a recent awards ceremony, the Aquarium honored them for their dedication and their valuable contributions.

Each day, volunteers provide visitors with assistance at the information desk, as exhibit interpreters, at the two touch pools and during events. Volunteer divers assist with dive programs and exhibit maintenance.

A few members of the force were singled out for special awards. Congratulations to two volunteers who earned the 2014 Volunteer of the Year Award - Nancy Aitken of Morehead City and Barbara Neptune of Morehead City.

- The Rookie of the Year 2014 Award was given to Tiffany VanWyck of Hubert, and Madeleine Massey of Wake Forest earned the Junior Volunteer of the Year Award.
- 2014 Above and Beyond Award winners include: Ellen Mueller of New Bern, Kay Howe of Pine Knoll Shores, Maureen Danehy of Pine Knoll Shores and Sheryl Woodbury of Pine Knoll Shores.
- Distinguished Volunteer Service awards went to Joan Rogers of Morehead City, Cheryl Balthrop of Newport, Sherry Wagner-Brown of Bogue, Lilla Wieseler of Indian Beach and Lynn Wilson of Emerald Isle.
- Jason Johnson of Cape Carteret was chosen as the 2014 Volunteer Diver of the Year and Chris Schiebel of Emerald Isle as the Volunteer Rookie Diver of the Year.
- The Dive Team of the Year Award went to Rich Westfall of Jacksonville, Tommy Pate of Winterville and Vic Riley of Swansboro.