



STILLWATER, Okla.—Alastair Watson, BVSc, MAgrSc, Ph.D., professor of Veterinary Anatomy with Oklahoma State University's Center for Veterinary Health Sciences, experienced a once in a lifetime discovery while doing research with a collaborative team in Taiwan. He recently published a paper in Marine Mammal Science detailing his work <http://www.blackwell-synergy.com/doi/full/10.1111/j.1748-7692.2007.00178.x>

“For the first time, we were able to describe the ninth and tenth DNA-confirmed specimens of *Indopacetus pacificus*, otherwise known as tropical bottlenose whales. They were a mature female and her calf,” explains Watson. “What was even more surprising was the fact that the juvenile whale had polydactyly or a sixth finger in his flipper. We only detected this when we took radiographs of the flippers. This is extremely rare.”



For the past six years, Watson has been sponsored by Lien-Siang Chou, Institute of Ecology and Evolutionary Biology, and Tzong-Fu Kuo, Department of Veterinary Medicine, both with the National Taiwan University in Taipei, Taiwan.

“I have been fortunate to have such generous sponsors,” says Watson. “Once a year I am invited to Taiwan to lead collaborative research projects on whales and dolphins. As an adjunct professor, I conduct research while mentoring graduate students.”

The two whales had originally traveled too close to the Taiwan shore. Attempts were made by the locals to return the whales to deeper water, which failed. When they tried to relocate the whales to a rehabilitation center, the whales were too ill and died.

“It is unfortunate that the whales did not survive,” agrees Watson. “However, the educational opportunity it presents is most valuable. For the first time man was able to touch this rare species while it was still living, and to make a close-up description. Now we are able to study its skeletal structure, DNA, and do additional research, including looking at the flipper with six digits. All dolphins and most whales have five fingers in each flipper.”

These two whales had acute pathology throughout their bodies consistent with lesions found in other whales that have been traumatized by sonar activity. The skeletons have been preserved and each is on display in a separate local museum.

In addition to research, while visiting Watson presents lectures at Universities and has participated in a symposium for local veterinarians sharing information on how to deal with stranded whales and how to do a necropsy (animal autopsy).

The Oklahoma State Center for Veterinary Health Sciences is one of 28 veterinary colleges in the United States and is fully accredited by the Council on Education of the American Veterinary Medical Association. For more information, visit <http://www.cvhs.okstate.edu>.