Texas A&M University
At Galveston
1001 Texas Clipper Road
Ocean and Coastal Studies Building, 243
Galveston, TX 77553

Department of Marine Biology
Telephone: (409) 599-0379
E-mail: orbachd@tamug.edu

June 16th, 2014

From: Dara Orbach, Ph.D. Candidate
To: Dr. Kathy Burek, Alaska Veterinary Pathology Services

Re: Request for female cetacean reproductive tracts from deceased stranded animals

My Ph.D. dissertation focuses on post-copulatory female choice as a mating tactic in polygynandrous dolphins, whales, and porpoises. As one element of this research, I am examining the structure and function of cetacean vaginal folds (pseudocervices) to assess their potential role in sexual selection and sperm storage. My sampling protocol includes characterizing the gross morphology of female cetacean reproductive tracts (including the uterine horns, cervix, and vagina) across age classes and species. I am collecting tissue samples, photographs, and measurements from as many species as possible to assess the roles of phylogenetic relationships and behavioral ecology on reproductive tract morphology.

I am requesting assistance with the opportunistic collection of reproductive tracts from stranded female dolphins, whales, and porpoises. My NMFS parts authorization letter (attached) allows me to receive reproductive samples from cetacean species that regularly occur in Alaskan waters. I require fresh code 2 (preferred) or code 3 whole reproductive tracts from any age class of females including adults, subadults, calves, and fetuses. This includes the genital opening, vagina, cervix, uterus, oviducts, and ovaries (see figure below). The inclusion of the bladder assists me to orient to the ventral and dorsal side of the animal, although it is not a necessity. I understand that sampling protocols often require collection of the ovaries and parts of the oviduct or uterus. While whole samples are preferred, tissue samples with sections cut out or absent are still helpful for answering my research questions, as long as the cervix, vagina, and genital opening are intact.

When samples are collected, they should be double-bagged in Ziploc or airtight bags with a label which includes the appropriate field identification number, species, and my name (Dara Orbach). Please notify me by e-mail (orbachd@tamug.edu) of the species, original stranding date, GPS coordinates of stranding location, body length, age class (i.e. fetus, calf, subadult, or adult), and reproductive state of female (i.e. pregnant, lactating, or non-pregnant) when a sample has been collected. Please freeze the samples until they are ready for shipment. All costs related to preserving/shipping cetacean samples will be paid in advance or reimbursed. For shipping, please surround samples with ice packs and notify me 24 hours before shipment. Please ship all samples as overnight deliveries to the following address using UPS account # 7AW017 (reference # to include is 'Würsig'):

Dara Orbach
Texas A&M University at Galveston
Department of Marine Biology
OCSB room 243
1001 Texas Clipper Road
Galveston, Texas 77553

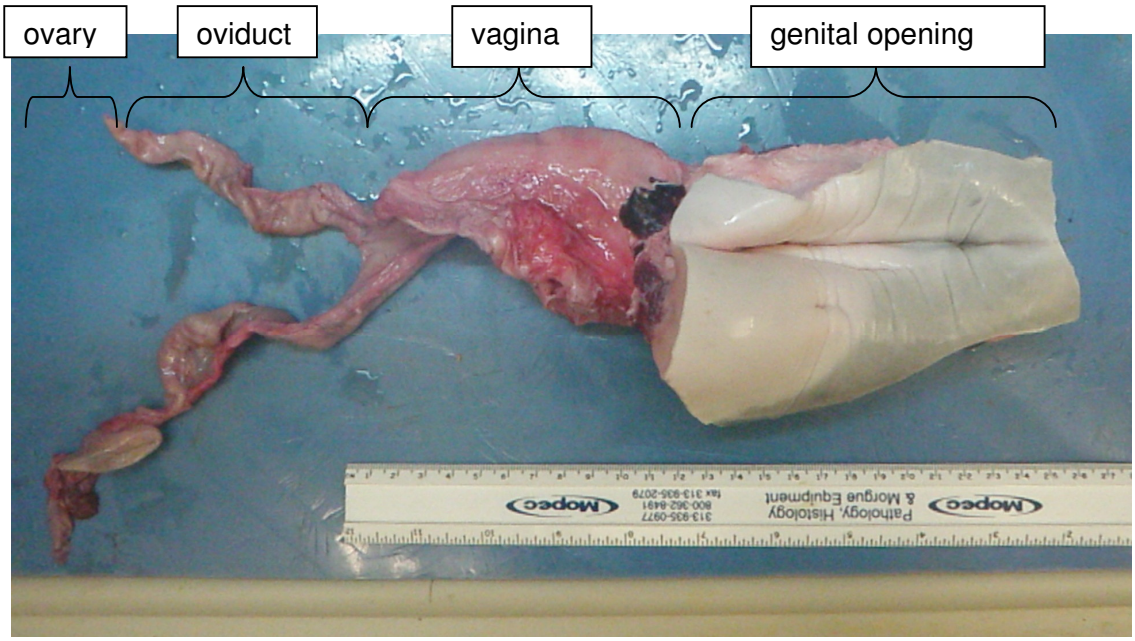

Figure 1: Female bottlenose dolphin reproductive tract demonstrating the tissue parts to be extracted.

The intention is to include all resulting data in my Ph.D. dissertation as well as at least 1 peer-reviewed publication. Appropriate personnel will be acknowledged in any resulting publications. Images and measurements from the dissections are available upon request.

Thank you for your consideration of this sample request. I am happy to answer any further questions regarding this research and request.

Sincerely,
Dara Orbach

Ph.D. Candidate
Marine Mammal Behavioral Ecology Group
Department of Marine Biology- IDP
Texas A&M University at Galveston
orbachd@tamug.edu
http://www.tamug.edu/mmbeg
409-599-0379