

SAMPLE HANDLING

For Canine DNA Research at the University of Missouri

Blood Sample - The ideal sample for DNA extraction is 5 to 10cc's of whole blood, in **purple-topped (EDTA)** tubes (one or several, depending on tube size). For very small dogs, 3ccs should be sufficient. More volume will yield more DNA, so in this situation, a larger sample is appreciated. The blood sample needs only to be put in the tubes and rocked gently a few times to distribute the anticoagulant - do **not** spin, extract serum, or do anything further. Refrigerate if the sample is being held for any time before shipping, but do not hold the sample longer than 1 week before shipping or it may become unusable.

Frozen Semen - Frozen semen stored from deceased sires or affected dogs can be a source of DNA for testing. Please send 1 breeding unit (straws or pellets). They do not need to be shipped frozen, but do pack them in a crush-proof & leak-proof container. Special handling fee is \$40 for this sample, in addition to the regular testing fee.

Tissue Sample - DNA can be extracted from any cell-rich tissue. If a dog is to be tested post-mortem, a 1" cube (or equivalent) of tongue, other muscle, spleen, kidney, or liver will provide a large amount of DNA (one tissue is sufficient – do not send multiple tissues). Tissue samples should be placed in a clearly labeled freezer bag or other sterile container and frozen. **DO NOT place in formalin!** Place the bagged tissue inside another bag, freeze, and ship with a frozen cool pack (do not use dry ice, or ice cubes placed in a ziplock bag). If this is the only sample (no blood sample available), add special handling fee of \$40 to regular testing fee.

Label sample with the following:

call name - owner's last name

(If samples from several dogs are sent together, number samples and forms)

The ***Individual Dog Information Form*** that follows this instruction sheet should be completed, and a ***pedigree copy***, if available, should be included with the sample. If no pedigree information is available, please indicate this on the form. For any suspected affected dogs please complete the survey, pg 3 – this information is very important for the ongoing research. Survey page is not needed for clinically normal dogs.

Include TESTING FEE of \$65 for dogs with no clinical signs of DE, \$50 if clinical signs are present. Check or money order should be payable to "University of Missouri". Credit cards (Visa, Mastercard, or Discover only) can be accepted also.

Shipping - Ideally the sample should be shipped immediately (with a tissue sample make certain it is completely frozen first). If samples are held for a day or over a weekend, blood must be refrigerated, and tissue samples must be kept frozen. Ship via overnight delivery (FedEx, US Mail-Express service, or UPS). ***Do not send on a Friday*** - there will not be anyone to accept the delivery on a weekend, and the sample could be unusable by Monday. Pack in a small insulated container (most vets have these for shipping samples to labs), with one or more frozen cool packs – DO NOT use dry ice or a baggie full of ice cubes!!

The delivery address is;

Dr. Gary Johnson - DE Testing
320 Connaway Hall
University of Missouri
Columbia, MO 65211

(NOTE: if UPS does not recognize 320 Connaway as a valid address, use 201 Connaway)

If you need clarification, or have any questions about any of these procedures, please contact Liz Hansen by phone (573-884-3712), email (HansenL@missouri.edu), or regular mail (321 Connaway Hall, University of Missouri, Columbia, MO 65211).

UMC DE DNA TESTING & RESEARCH

Blood – Tissue – FTA-swab – semen - other _____

Breed: **Nova Scotia Duck Tolling Ret.**

Registered Name _____

Call name _____

Reg# _____ Birth Date _____

Male / Female - - Intact / Neutered

Microchip or Tattoo: _____

Color _____

Test Being Requested: DE – Degenerative Encephalopathy in NSDTRs

Owner: name _____

Veterinarian _____

address _____

address _____

city-st-zip _____

city-st-zip _____

phone (day) _____

phone _____

phone (eve) _____

cell _____

Fax _____

EMAIL _____

EMAIL _____

******Results are reported via email – please provide complete, legible email address!******

Report test results to (please circle): Owner Veterinarian Both

Does this dog exhibit any of the following conditions? (Please attach history for any Yes answer)

Y - N Allergies

Y - N Digestive difficulties

Y - N Arthritis

Y - N Heart Problems

Y - N Autoimmune Disorders

Y - N Hernia (where? _____)

Y - N Bite or Tooth Abnormalities

Y - N Reproductive Problems

Y - N Cancer / Tumors

Y - N Seizures

Y - N Cataracts / Vision Problems

Y - N Skin / Coat Problems

Y - N Deafness / Hearing Impaired

Y - N Skeletal Abnormalities (Hip Dysplasia, etc.)

Y - N Hindlimb weakness/paralysis

Y - N Temperament Problems (shy, aggressive, etc.)

other (please list):

If this is a dog with clinical signs, please complete survey on the next page!

Comments / Questions / Concerns? _____

I submit this sample and pedigree for the purpose of DNA testing; I understand that DNA left over following the test may be stored for potential future research; I understand that the results of this test will be reported only to the owner listed on this form and to the veterinarian (if requested) listed here, via email or FAX; and I have supplied complete and accurate information, to the best of my knowledge.

Signed: _____ date _____

PAYMENT INFORMATION: Check or money order payable to “University of Missouri” enclosed

OR Charge to VISA-MasterCard-Discover Card# _____

Cardholder name: _____ Exp Date: _____

FEE: Clinical signs of DE present = \$50; Clinically normal, fee=\$65; frozen semen or tissue, + \$40

Please answer the following questions about the symptoms your dog may be showing. Use additional pages as needed for descriptions.

Loss of coordination or strength: No Yes If yes, age when first noticed: _____ Months

Please describe: _____

Difficulties swimming: No Yes If yes, age when first noticed _____ Months

Please describe: _____

Seizures: No Yes If yes, age when first noticed: _____ Months

Please describe including when seizures occur: _____

Sleep abnormalities: No Yes If yes, age when first noticed: _____ Months

Please describe: _____

Incontinence: No Yes If yes, age when first noticed: ____ Months. Feces Urine Both

Please describe: _____

Abnormal tail posture or movement: No Yes If yes, age when first noticed: _____ Months

Please describe: _____

Training difficulties: No Yes If yes, age when first noticed: _____ Months

Please describe: _____

Abnormalities in behavior or personality: No Yes If yes, age when first noticed: ____ Months

Please describe: _____

Any other symptoms: _____

Pedigree (family tree) information is very helpful for this research, and is held in complete confidence by the researchers. Please enclose a pedigree copy or registration copy with this survey.

Pedigree enclosed Pedigree will be mailed or emailed separately Pedigree unknown/not available

Any other information you feel would be useful for the researchers, please list below or on back side of this page. Thank you for submitting this sample and completing this information.