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RCW GENETIC SAMPLE COLLECTION

Thanks for offering to help collect tissue samples for our RCW genetics project. Detailed below is a brief outline of how to store and mail samples. We will send you everything needed to ship samples and will be happy to pay for shipping. Samples in vials with buffer can be sent via regular U.S. mail; no ice. If you have problems or questions, please call me (Susan Haig; see # above) or my lab manager, Tom Mullins (541-750-7389, tom_mullins@usgs.gov).

Eggs and Embryos

Embryos from abandoned/inviolate (i.e., unhatched at time of nestling banding) eggs can be a great source of DNA. The easiest way to deal with eggs would be for you to crack open each egg and carefully look for an embryo. Place the embryo in the vial with buffer. If there is no embryo, it will not be of use to us, so please do not send the yolk or shells.

NOTE: collecting inviolate eggs requires a USFWS permit. Although some of you have this option on your existing permit, if you do not, and wish to contribute eggs to this genetic research project, will have to amend your permit. Contact the RCW Recovery Coordinator for details; ralph_costa @fws.gov or 864 656-2432.

Muscle Tissue

Heart, pectoralis (breast), or any other muscle tissue, can be very helpful in genetic analyses, regardless of how old the carcass is. Cut the heart or pectoralis out of the body with a clean (sterile if possible—we can provide) scissors or scalpel. Place the entire heart or pectoralis (or a 1-2 cm³ piece) in the buffer vial and label accordingly (see below). See directions below for storing and shipping.

Other Body Parts

We can use almost anything to conduct our analyses, including bones, organs, etc. Just place it in a vial with buffer as above.

Feathers

Feathers can also be a handy source of DNA and are preferable to blood in mtDNA analyses.

Keep feathers as clean as possible to reduce contamination- be especially careful not to touch the base (quill) with your hands.

Keep feathers in cool dry place until mailing to us.

Labeling Vials

Please be sure each vial or plastic bag is labeled. Include the following on each label:

RCW

USGS or USFWS band #

Sex

Location = Property ID code from USFWS Annual Report (see Letter of Disposition for details).

Additionally, fill out all information in the Letter of Disposition.

Sample Storage

Store all body parts (except feathers) in the freezer. Feathers can be stored in a plastic bag in a cool dry place.

Shipping Samples

Shipping all body parts (except feathers - see below):

We will supply you with vials containing a buffer solution. Samples can be kept in these vials at room temperature for short periods of time (a week or so) but should be mailed via USPS (regular mail) w/o ice (or they can be frozen and mailed on dry ice) as soon as you receive the vial(s) and prepare it for shipping. **DO NOT REFRIGERATE SAMPLES** once they are in the buffer solution or they will come out of solution.

Shipping feathers:

Place feathers from each bird in its own, single plastic bag and label (piece of paper in the bag) as instructed above under "Labeling Vials". The bag can then be mailed, via USPS, in any appropriate-sized envelope.

**Thanks again for your help-your sample will be a great contribution to the project and
RCW recovery.**
