

6 TRANSPORTATION OF SPECIMENS

All samples to be transported should be packaged in heavy-duty containers and should comply with the appropriate local protocol. It is important that all agencies involved in sending preserved samples are aware of the local regulations. Specimens sent in bottles should be sealed with tape and enclosed in sealed plastic bags. Specimens can also be sent wrapped; place tissues in paper towels moistened with 10% formalin and then place wrapped sample in a sealed bottle or in two sealed plastic bags (see Webb 1998). Place samples in a strong insulated container or cardboard box. Addresses on the transport box should be clearly marked. The inside of the container should contain a duplicate address and information specifying the material enclosed and nature of the shipment. Enclose a copy of the data sheet to provide pertinent information on the carcass.

Frozen samples must be shipped in very sturdy ice chests that will not break in transit. Use ice bricks to ensure samples stay cold. For long shipments, a substantial quantity of dry ice should be included. Three kilograms of dry ice lasts approximately 72 hours. Arrangements must be made with the receiver prior to shipping so that someone will be present to promptly handle the package and properly deal with the contents at the destination. Courier service and airfreight are acceptable. In the latter case, choose flights with a minimum number of connections, preferably at cooler times of the day. Inform the recipient by telephone of the identification number at the time of shipping in case the shipment is lost and requires tracing. In Australia, dry ice is considered dangerous goods and requires shipment in a specific foam container and accompanying paperwork filled out by a Dangerous Goods Officer. Therefore, prior to sending specimens in dry ice, the sender needs to liaise with a Dangerous Goods Officer in order to obtain instructions on packaging and paperwork.

In Queensland, Australia, the Department of Primary Industries Rockhampton Veterinary Laboratory supplies a specimen pack used for shipping diagnostic specimens¹ by road transit (i.e. by bus). The pack is designed to provide three waterproof layers around the specimens being shipped. The pack consists of a wax impregnated cardboard box, which contains a square gusseted plastic liner bag of the same design and density plastic as that used in export meat boxes. The specimens, preserved in appropriate jars, are packed into the plastic bag lined wax box, surrounded with sufficient absorbent material (i.e. clean cotton wool/wadding, shredded or crumpled newspaper) to absorb leakage. Several cold bricks should be included. The contents of the specimen pack are designed to provide workers with sufficient material for specimen collection and include:

- 2 large seal-able plastic bags
- 6 medium plastic jars
- 4 large plastic jars
- 5 x 70 ml sterile jars
- 20 x 20 ml bottles
- 6 scalpel blades (No. 22)
- 5 ice bricks

Bone specimens can be wrapped in protective paper or plastic and packed in styrofoam chips or an equivalent alternative.

International shipment of samples must comply with the local requirements of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In Australia, the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* is the legislative basis for conservation-orientated controls on the export and import of wildlife and wildlife products.

¹ Diagnostic specimens are any animal material including, but not limited to, excreta, secretta, blood and its components, tissue and tissue fluids, being shipped for purposes of diagnosis, but excluding live infected animals.

Controls under this Act apply to transactions undertaken by museums, zoos, scientific institutions, commercial organisations, tourists, migrants and the general public. The Act controls the export of most Australian native animals and plants and fulfils Australia's legislative requirements as a signatory to CITES.