



Timely International Movement of Emergency Diagnostic Specimens for Conservation Purposes

Paper for CITES secretariat to administer circulation to CITES parties with the aim of identifying willing parties to submit an amended procedure for diagnostic specimens from CITES-listed species

Wildlife disease is increasingly recognized as a threat to endangered wild animal populations. Recent large-scale die-offs, as seen with the Saiga antelope mass deaths in 2015, highlight that their underlying causes may not be apparent in the field. Investigations require rapid and thorough diagnostic screening to inform response and control measures. Given current technical and practical challenges in establishing comprehensive diagnostic capacity for wild animals in many countries, shipment to international reference laboratories is often required for adequate analysis. If large die-offs are not addressed immediately (through the help of diagnostic procedures) it can impact the ability to trade the species, as proving sustainability of trade will be even more difficult with rapidly declining populations.

Under current CITES regulations, emergency diagnostic specimens are effectively considered trade products. While Resolution Conf. 12.3 (Rev. CoP16) on “Permits and Certificates” calls for simplified movement of urgent diagnostic specimens, and some bilateral arrangements are working e.g. between zoos and diagnostic labs, and among labs, the process remains cumbersome and untimely for professionals working with *in situ* free-ranging wildlife populations under emergency conditions. The unintended result is that wildlife veterinarians in the field are challenged by the CITES permitting process on each and every specimen, given that decisions on diagnostics are an iterative process requiring a number of submissions of samples to a variety of different laboratories and at different times as the case is worked up and variable according to the specific disease. This can lead to multiple applications and repeated cost on dispatch of samples and thus frequently impractical.

As a result, conservation managers working to respond to emergency disease events are subject to delays in obtaining international disease diagnostic results for Appendix I and Appendix II species. The length of time to obtain import and export permits has repeatedly hindered identification and implementation of control measures to prevent further disease spread and to inform local authorities and communities on disease risk to wildlife, livestock and humans. Annex 1 gives examples of these problems obtained from the IUCN SSC WHSG in a recent survey of its membership from a wide range of countries. Similar issues have been raised by the International Association of Forensic Pathologists and others.

The IUCN SSC Wildlife Health Specialist Group (WHSG) encourages Parties to consider the importance of disease threats to CITES species and identify acceptable solutions to address this conservation issue. We recommend Parties consider one of the following actions:

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- 1) Amend article VII.6 on “Exemptions and Other Special Provisions Relating to Trade” to include *emergency disease diagnostic specimens and specifically* Amending article VII.6 to include *emergency disease diagnostic specimens if sent to an internationally-recognized disease diagnostics laboratory (e.g. OIE (World Organisation for Animal Health) Collaborating Centres and Reference Laboratories)*. The CITES Secretariat would establish an approved laboratory list.
- 2) Alternatively, rather than amending Article VII paragraph 6, amend the Resolution that describes the actual functioning of that Article and paragraph. The relevant article is Resolution Conf. 11.15 (Rev. CoP12) <https://cites.org/eng/res/11/11-15R12.php>. The amended resolution would need to include a section to explain that emergency diagnostic specimens are included in the definition of “museum specimens”, and also a separate section providing an actual mechanism for allowing quick cross border movement of emergency specimens without other CITES permits. The mechanism in accordance with Article VII paragraph 6 would be for the exporter to place an official CITES label on the actual package marking it as containing emergency diagnostic specimens.

International reference laboratories: Establishing an approved laboratory list for emerging disease diagnostics would provide a verifiable and accountable non-commercial mechanism to promote timely international movement of specimens in emergency situations. Registration of receiving laboratories would prevent risk of laundering samples. Such laboratories may have added value in making resources available for supporting diagnostics not always readily available in the conservation community or country concerned. The OIE and FAO both utilize a reference laboratory structure for validating and verifying disease diagnoses.¹ OIE Reference Laboratories results are recognized by the World Trade Organization. The OIE has established a relationship with CITES that may help to facilitate the development of a process (please see Annex 2 for the agreement).

The challenge to a new protocol is informing the many government departments, professionals, agencies, NGOs and even CITES authorities which are often involved in dealing with a problem of this nature and who will need to be informed. Since diagnosticians likely to be involved with wildlife are probably aware of CITES permitting requirements in general but not necessarily for specific species, they will contact CITES authorities. It is at this point where action needs to be taken and where CITES could inform an enquirer of the fast track protocols and permitting/exemption procedures proposed above.

The IUCN SSC WHSG encourages Parties to propose amendments through COP 17 and to agree on a reference laboratory structure, potentially through the recent commitment stated between the OIE and CITES to deepen collaboration (Annex 2).

¹ OIE Reference Laboratories: <http://www.oie.int/our-scientific-expertise/reference-laboratories/list-of-laboratories/>

FAO Reference Laboratories: <http://empres-i.fao.org/eipws3g/index.html?animalProdNetwork=yes>

Annex 1: Examples of issues on barriers to the movement of emergency diagnostic specimens and resulting threats to the conservation of endangered species (feedback from IUCN SSC Wildlife Health Specialist Group members)

*"In May 2016 more than 60,000 Saiga antelope died over one week, each individual within hours of getting sick...within 3 weeks, across 180000 sq km 220,000 saiga from 15 subpopulations followed, the **disease destroying half the global population within just three weeks**. Rapid emergency diagnostic testing was critically needed for determining the cause of the outbreak and taking measures to control potential spread. **Despite the urgency of the situation, arranging export and import permits for such diagnostics took approximately five months.***

It is heartbreaking to see the CITES process inadvertently hinder conservation measures. There has been a drastic decline of Saiga antelope from over a million animals across the Steppe in the 1990s to virtually none in 2016. "

*"We have had delays shipping Steller sea lion, walrus, sea otter, ice seal and beluga samples. **Currently we have had a mortality event that occurred this summer in sea otters that we suspect is due to an unknown virus.** At this time routine PCR have been negative. **We would very much like to get samples to DFO for cultures as this lab is unusually successful in obtaining virus isolates. Currently all CITES permits are expired and it will take months before new permits can be obtained.** It seems that **this issue is not consistent with the reason for having these permits regulations-for the protection of these species.** It seems if one has a current marine mammal permit to have these samples, the CITES should have an exception for this shipping somehow."*

*"...on multiple occasions our **investigation into the cause of death for killer whales has been hampered and slowed by CITES permits.** This has included sending killer whale samples from the US to Canada and from Canada to the US (despite the fact that the whales swim free across the border almost daily during certain times of the year)"*

*"We have a blanket import permit allowing us to import whatever tissue sample from CITES appendix I-III. **Challenge has been obtaining export permits from originating country. Time frame can range from 1-3 mo.[months]The main issue we have encountered is varying requirements from originating countries for export permits.** USFWS is very strict on how export permits are to be filled out, and often time, originating country authorities do not fill out permits correctly causing significant delays and hassles. **Also, we have given up sharing diagnostic with other reference labs overseas due to hassles of getting an export permit for each and every sample.**"*