

# 17<sup>th</sup> INTERNATIONAL CONGRESS of SPELEOLOGY MANAGEMENT of WHITE NOSE SYNDROME



**The Australian Speleological Federation has developed protocols and information for delegates attending the 17<sup>th</sup> International Congress of Speleology in Australia in July. The information is reproduced here for the benefit of all ACKMA members. This is a serious issue, not just for this event, but for managing the risk of White Nose Syndrome entering Australian and New Zealand cave systems.**

## Introduction

Australia and New Zealand are free of the white nose fungus. This fungus has devastated cave-dwelling bat populations in the eastern USA and Canada and has been spreading westwards for 10 years. These bats were susceptible to the fungus as they had never experienced it before.

Studies showed that the fungus originated in Europe, and that bats in Europe had developed resistance to the fungus by natural selection over generations, so little if any disease or morbidity is seen in European cave bat populations although the fungus is widespread in European and UK caves. The fungus has now been detected in China and, as with Europe, there are no known catastrophic disease episodes attributable to the fungus.

The disease is seen in hibernating cave bat populations, of a number of different genera, as the fungus grows and produces its disease effects at temperatures below about 15°C. The fungus spores are generated in large numbers in caves used by bats. The infection is spread by bats as they migrate to other roosting caves or mines. As fungus spores are very difficult to inactivate they can also be transported by cave visitors to other sites. This is the quarantine dilemma faced by Australia and New Zealand.

In Australia and New Zealand, there are a number of cave dwelling bat species, which hibernate during winter at temperatures below 15°C. Several of these species are considered vulnerable and one is classed as critically endangered.

The 17<sup>th</sup> International Congress of Speleology is working closely with the Federal Department of Agriculture and Water Resources to manage the risk of WNS associated with the congress.

## Policy

The objective is to keep Australia and New Zealand free of the white nose fungus.

- All field excursion participants from Europe, Asia and North America are considered as coming from white nose fungus areas and thus may inadvertently bring the white nose fungus into Australia or New Zealand.
- By preference, bring cave clothing and caving equipment that has never been used in caves before.
- All field excursion participants should only bring personal cave clothing, including overalls, knee and elbow pads, footwear, caving bags, helmets, lights and vertical gear as specified by the excursion leader. If the excursion leader has arranged loan equipment then please use this and leave your own equipment at home.
- We realise that people prefer to use their own caving equipment. However, we also understand that participants will want to do everything that they can to ensure that WNS is not inadvertently introduced to Australia.

- All cave clothing and equipment that has been in a cave before must be decontaminated before being used in Australia or New Zealand.

## What to bring to Australia and New Zealand

- As far as possible, please do not bring any clothing or equipment to Australia or New Zealand that has previously been in a cave.
- For Chillagoe excursions: The Chillagoe Caving Club has purchased new helmets for the ICS excursions. Chillagoe caves will be warm, dry and even dusty. You will not require caving suits. Old clothing will be sufficient. You could purchase this from a charity shop in Cairns on your arrival there, or bring suitable clothing from home. For those choosing vertical caving, SRT equipment can be hired from the club (\$15.00 per day).
- The Naracoorte excursion: overalls, helmets, lights and Pelican cases for cameras will be supplied.



*Clean clothes and boots are critical when entering bat cave habitat. Bat winter census, Naracoorte 2009.*

*Photo: Steve Bourne*

## Cleaning clothing and equipment before coming to Australia and New Zealand

Any clothing or equipment that has been in a cave before will need to be cleaned to the standard below *before* bringing it to Australia and New Zealand. We are relying on the goodwill of participants re this.

- Clean any dirty personal cave clothing or equipment before disinfection.



*A healthy bat population. The ASF has put steps in place to ensure it remains that way. Naracoorte 2003.  
Photo: Steve Bourne*

- Separate submersibles which should include cave packs, ropes and harnesses from delicate gear.
- Don't forget to wash knee and elbow pads.
- Use a washing machine set to 60°C (140°F) for 20 minutes.
- For boots that are not suitable for washing machine treatment they must be scrubbed to remove all mud and dirt.
- Excursion leaders will have 6% hydrogen peroxide spray and isopropanol disinfectant wipes and instructions on how to use these.
- All helmets, lights, cameras, cave packs, compasses and other such equipment that has been used in a cave outside Australia or New Zealand must be cleaned with the wipes.
- All boots and shoes must be sprayed, unless they have never been worn before.
- A wash at 60°C (140°F) for 20 minutes will not damage your clothing. Hydrogen peroxide is commonly used in cosmetic products, e.g hair colouring and teeth whitening.

#### **At the commencement of your field excursion in Australia or New Zealand**

Expect to be asked if your clothing has been used in a cave outside of Australia or New Zealand before and how you have treated it. Again, we will be relying on your goodwill.

#### **References:**

<http://www.agriculture.gov.au/pests-diseases-weeds/animal/white-nose-syndrome>

<https://www.whitenosesyndrome.org/resource/national-white-nose-syndrome-decontamination-protocol-april-2016>

Australian white nose syndrome assessments and procedures:

<http://www.wildlifehealthaustralia.com.au/ProgramsProjects/BatHealthFocusGroup.aspx#WNS>

Some recent Australian press coverage re the White Nose threat to Australian bats: <http://mobile.abc.net.au/news/2017-03-30/caving-community-on-alert-with-threat-of-white-nose-syndrome/8397970?pfmredir=sm>

**Further information or questions please contact Nicholas White at: [biosecurity@speleo2017.com](mailto:biosecurity@speleo2017.com)**

Thank you for your efforts to keep Australia and New Zealand free of the white nose fungus. We appreciate your support.