



WNS: what shall we do?

At present we know for sure that there is a serious microbiological problem and a menace for large bats populations in the United States of America, but we still have not identified its cause, pathology transmission mechanism and we still have not a clear view on the whole problem.

It is largely known that the translation of pathologies from a continent to another has deadly consequences, not only on human populations, but on all animal or vegetal populations, as they are infected by non adapted to the new host organism. Consider just diseases as smallpox, measles and others that exterminated American Natives during the 1500s. On the other hand the downy mildew, a plant disease caused by the parasite *Plasmopara viticola*, accidentally introduced in Europe from North America, nearly drove to the extinction of the Grapevine.

The facts above are the reason why many countries forbid the import of biological products, particularly potting compost.

One of the current hypothesis is that the disease that is killing large numbers of bats in the USA is generated by a causal agent imported from Eurasia that american bats are unable to face.

Many research groups are working on the matter in the United States. To know more about biological pollution please visit this page ([hyperlink](#)).

How shall we behave?

While waiting for a more accurate knowledge on the problem of White Nose Syndrome, we suggest some simple preventative measures to adopt, not only to limit the diffusion of the unknown causal agent of the WNS, but also to prevent moving micro organisms from one cave to another (microbiological pollution).

Underground environments are known to be ecological niches used by very specific life forms. The study of underground microbiology is still at its early beginning, but it will be in the next future a matter of great interest, even by the operative point of view.

During ordinary caving:

- 1) respect limits imposed to access to caves that are used by bats as a wintering or nursery site.
- 2) during the wintering time, when it is possible to diffuse WNS between colonies, it is important to limit the access to caves where bats are known to dwell, and avoid to enter places where bats winter.
- 3) clean thoroughly clothes and equipment every time you visit a cave, especially when your equipment will be used in a different karstic area next time.

If you find dead bats that show the symptoms of WNS:

- 1) please follow carefully the guidelines suggested by the GIRC ([hyperlink](#)); the Italian translation of the guidelines created by the US Fish and Wildlife Service are available here ([hyperlink](#))
- 2) report immediately the finding of the dead bats to the Società Speleologica Italiana, mailing to WNS@socissi.it; the SSI is cooperating with bat scientists to create a map of risk caves for bats.

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