

# Parasites as beneficiaries of species protection legislation and Conservation Medicine & Biology Impact Assessment efforts.

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**Background:** Thoughtless or even intentional damage to domestic flora and fauna for self-interested profit or vanity is viewed by our society as a violation of its values. Thus, the protection of rare species, nature conservation and the protection of the environment are more and more in the focus of public interest. Despite the generally high acceptance of such legislative measures among the public, some lead to conflicts of interest. Parasites infecting man may be among the cluster of endangered and thus protected animal species as well they may belong to the category of organisms to be eradicated for man's sake. In Austria, one case of such a discrepancy is known: the conservation status of the two known native species of Medicinal leeches, *Hirudo medicinalis* LINNEUS, 1758 and *H. verbana* CARENA, 1820.

**Analysis:** The conservation status of a species is achieved by entries in at least three layers in the body of laws:

1. International statements of NGOs and Conventions

a. *H. medicinalis* is specified as „Lower Risk/near threatened“ in the Red List of the International Union for Conservation of Nature (IUCN).

b. The Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) lists both leech species in appendix II (vs 25.09.2012).

2. European regulations:

a. The Convention on the Conservation of European Wildlife and Natural Habitats of the Council of Europe, being an Interstate Treaty and part of the Austrian national law (BGBl. No 372/1983), mentioning *H. medicinalis* only as being protected.

b. The Council Regulation (EC) No 338/97 for all EU countries and the Commission Regulation (EU) No. 750/2013 replacing the annexes of 338/97, listing both species in annex B.

3. National and federal laws, especially the Austrian Species Trade Act 2009 and the Species Trade Insignificance Regulation 2010. In the European and the Austrian Red List: no data set entry.

**Résumé:** Medicinal leeches are not considered as an endangered species in Austria, just the transnational trade is restricted and a subject to tax. The listing in annex B of the Commission Regulation (EU) No. 750/2013 effects a close control of purchase, animal keeping, medical application and disposal of the leeches. These regulations should effectually meet the public target of an environmental protection by prevention of a continuing bastardisation of fauna without disenabling authorized use.

**Literature:** Hassl A. (2013): Protection of Endangered Species: The interplay between aesthetics, law, economics and evolution. .SIAK-International Edition 2013: 84-94.

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A medicinal leech, *Hirudo medicinalis*, in a clear Carinthian pond near Villach formerly used for recreation purposes.

Another medicinal leech attacking and threatening an individual of an amphibian species protected by Austrian law, *Bufo bufo*.

