## Control of the reptile trade in Switzerland

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Reptiles are intensively used for pets and as suppliers of animal products, such as skins, turtle-shell or meat. Consequently, a large number of reptile species are actually or potentially threatened by extinction (Honegger, 1969, 1974).

The original Appendices to the Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora therefore already contained a considerable number of reptile species (King, 1974). At the first meeting of the Conference of the Parties, held in October 1976 in Berne, additional groups of reptiles were added to the Appendices, bringing the number of protected species to about 330 (Anon, 1977).

Switzerland was among the first nations to ratify and implement the Convention. When our Office prepared the implementing decrees, it was felt that the danger of illegal importation of protected species by false or unprecise declaration was considerable, particularly with reptiles where few customs officers would be willing to examine in detail a consignment which might contain venomous snakes. It was therefore decided to go, in some respects, beyond the terms of the Convention and to regulate the import of live animals as follows (Dollinger, 1978):

(a) The importation of all mammals and birds, except some domestic species, and of all reptiles and amphibians was subject to licensing. Licences for Appendix I species are granted in limited numbers after consultation with the Scientific Authority for scientific, educational and breeding purposes only. The accommodation for such animals is specified and they may not be removed without special permission from the Swiss Federal Veterinary Office. Licences for Appendix II and III species are granted for any purpose and any number of animals but always under the condition that export permits or certificates, as required by the Convention, will be presented upon importation. Licences for reptiles and amphibians, protected under the terms of the Federal Law on the Protection of Nature and Landscape, are granted on condition that the animals may not be released, in order to avoid hybridisation between the endemic herpetofauna and subspecies from the Mediterranean area. Licences for all other species are given freely.

(b) All shipments were subject to border veterinary control upon importation. The customs may clear a shipment only after it has been examined by the veterinary officer and after he has issued a passport.

(c) Traders were obliged to keep records of all acquisitions and sales of protected specimens, with the exception of the sale of Mediterranean land tortoises to private persons.

A solid technical education for the controlling officers was regarded as one of the most essential conditions for a proper implementation of the Convention. In Switzerland the Border Veterinary Service was appointed to carry out the controls, assuming that veterinarians have a better basic zoological knowledge than customs officers and that they may more easily make a correct use of identification keys and manuals. We provided a written instruction and a small library for the veterinarians and held some practical courses, for example, demonstrating the handling of reptiles. In order to improve the practical training of officers, we designated only a few ports where wild animals may be imported, thus channelling the traffic in animals in such a way that only 12 full-time border veterinary officers and about 15 part-time assistants are concerned with identification problems.

Bearing in mind that our border veterinary officers were accustomed to deal with horses and cattle rather than with reptiles, and considering that even most zoologists cannot handle snakes and lizards properly, we thought it desirable that the reptiles should be identified without removing them from their transport bags. We therefore designed a 'reptile viewer' consisting of an acrylic glass tube covered at one end by a plate and reinforced at the other by a ring of the same material. We used tubes of various sizes, the most convenient having a diameter of 9 cm and a height of 8 cm. The reptile viewers are used as shown in Fig. 1.

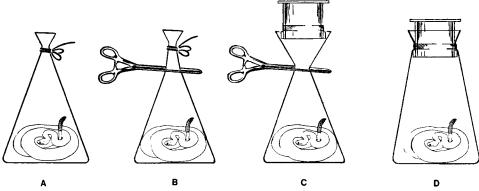


Fig. 1. Use of reptile viewer: a. the closed bag is laid on the examination desk; b. the top is secured by a pair of pincers or similar instrument (e.g. Péan) some centimetres below the twine; c. the twine is removed, the tube inserted into the bag, and the bag attached to the tube by an elastic strap; d. the pincers are removed and the contents can be inspected through the acrylic glass cover.

	1975 (Jul–Dec)	1976	1977
Appendix I			
(species subject to strict regulation for which trade can be authorised			
only in exceptional circumstances)	12	4	6
Appendix II			
(all species which may become threatened with extinction if trade			
is not regulated)	1228	7921	5211
Appendix III			_
(species listed by a Party state and requiring a legal export permit			
if exported from that state)		588	57
Species not listed	not recorded	24383	24624
TOTAL		32896	29898

Table 1. Reptiles and amphibians imported into Switzerland 1975-77 under the regulations of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Quite apart from the one million frogs imported for human consumption, more than 30,000 live reptiles and amphibians are imported into Switzerland annually (Table 1). As laid down by the Convention, we keep records on the trade in species listed under the Convention and communicate these annually to the International Secretariat (Dollinger, 1976, 1977, 1978). In addition, we try to obtain as much information on unprotected species as possible, in order to detect trends of trade before a species becomes endangered. In Table 3 imports of venomous snakes during 1977 are shown. The quite substantial figures show that a thorough training of the controlling officers and technical aids, such as the reptile viewer, are very necessary.

Export is difficult to control in a country with a liberalised border traffic system and in any case seems to be rather unimportant. Since the Convention entered into force the Office has issued export permits or re-export certificates for only 814 reptiles listed under the Convention.

Whenever a shipment of protected animals arrives at the Swiss border without the documentation prescribed by the Convention, the animals are seized and released to the importer only if he can fulfil the import requirements within 30 days after seizure. If not the animals are confiscated. Smuggled animals which are detected at the border or within the country are also confiscated. After a suitable time for conditioning such animals are either released into their original

	1975 (Jul–Dec)	1976	1977
APPENDIX I			
Osteolaemus tetraspis	o	I	3
Alligator mississippiensis	0	0	ī
Geochelone (= Testudo) radiata	0	3	0
Varanus bengalensis	12	ŏ	2
TOTAL	12	4	6
APPENDIX II			
Caiman crocodilus	I	50	293
Geochelone (= Testudo) carbonaria	16	96	155
Geochelone (= Testudo) denticulata	O	o	4
Geochelone (= Testudo) elegans	О	50	0
Geochelone (= Testudo) elongata	6	27	24
Geochelone (= Testudo) pardalis	10	4	19
Testudo emys	0	0	2
Testudo graeca	0	324	315
Testudo hermanni	810	2802	1107
Testudo horsfieldii	0	3476	2070
Testudo marginata	0	79	14
Kinixys sp	o	3	5
Malacochersus tornieri	5	0	0
Podocnemis expansa	ő	0	2
Phelsuma abbotti	not list		20
Phelsuma cepediana	not list		12
Phelsuma lineata	not list	æd	6
Phelsuma madagascariensis	not listed		4
Chamaeleo jacksoni	not listed		30
Chamaeleo spp	not listed		28
Uromastyx acanthinurus	not listed		15
Tupinambis teguixin	not listed		4
Tupinambis sp	not listed		44
Iguana iguana	not listed		115
Cyclura cornuta	not list	ed	4
Heloderma horridum	2	1	ò
Varanus dumerilii	0	2	3
Varanus exanthematicus	10	7	7
Varanus niloticus	ı	5	7
Varanus prasinus	0	ő	10
Varanus rudicollis	3	o	14
Varanus salvator	2	81	17
Varanus timorensis	o	7	I
Boa (= Constrictor) constrictor	22	356	272
Corallus enydris	not list		38
Epicrates cenchria	not listed		45
Eunectes notaeus	7	0	Ö
Chondropython viridis	not list	ed	25
Liasis albertisii	not list		9
Python curtus	2	10	6
Python m. bivittatus	116	124	120
Python m. pimbura	0	6	I
Python regius	114	260	254
Python reticulatus	90	131	85
Python sebae	11	16	5
Python timorensis	0	4	ó
TOTAL	1228	7921	5211

Table 2. Reptile species listed under Appendices I and II of the Convention imported into Switzerland 1975-1977.

Ahaetulla	33
Boiga	122
Chrysopelea	74
Dispholidus	22
Imantodes	12
Leptodeira	6
Psammophis	14
Telescopus	9
Thelotornis	7
Aspidelaps	13
Bungarus	6
Dendroaspis	40
Elapsoidea	3
Hemachatus	12
Micrurus	2
Naja	108
Atheris	2
Bitis	279
Causus	13
Cerastes	61
Echis	40
Vipera	399
Agkistrodon	65
Bothrops	7
Crotalus	141
Sistrurus	9
Trimeresurus	190
Total	1689

Table 3. Venomous snakes imported into Switzerland 1977.

habitat or given to Swiss or foreign zoos on a permanent loan basis, although they remain the property of the Veterinary Office.

By the end of 1977, the Office had confiscated a total of 109 reptiles. In one case (ten animals) the decision was revoked and the animals returned to

the importer, 28 animals have died, 51 are housed in Swiss and 22 in foreign zoos or institutes. The remaining 18 animals were taken back to their original habitat: 16 Hawksbill turtles Eretmochelys imbricata were released into the Indian Ocean with the aid of the Swiss Consulate General in Bombay, one Loggerhead turtle Caretta caretta was taken back to the Adriatic Sea, and one Mississippi alligator Alligator mississippiensis was surrendered to the US Fish and Wildlife Service. Although the release of these animals could have had no real impact on the populations of the species concerned, such actions have a high publicity value, motivating people, both in Switzerland and in the countries where the animals are released, to take an interest in the conservation of species.

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