# **Best Practices for Handling Confiscated Turtles: The Kiten Protocol**

Yurii V. Kornilev<sup>1,2</sup>, Nikolay Natchev<sup>2,3</sup>, Ramon Mascort<sup>4</sup> & Uwe Fritz<sup>5</sup>

#### **Abstract:**

Although illegal wildlife trafficking is a global threat to biodiversity and a key reason for the decline of turtle populations, there are insufficient measures in place to combat it. Prompted by the recent seizure of over 1,300 European Pond Turtles in a single raid, experts on biology and conservation of chelonians discussed experiences on this and similar cases. Here, we present the result of this exchange. They are summarized in "Kiten Protocol", a set of general guidelines to be considered for confiscated turtles to ensure the animals' quick and successful return to the wild.

**Key words:** freshwater turtles, tortoises, restocking, biodiversity, animal trafficking

## Introduction

During the ongoing sixth mass species extinction, turtles represent some of the most endangered vertebrate taxa (Buhlmann et al. 2009, Luiselli et al. 2016). Among anthropogenic threats, non-sustainable overexploitation of turtles for consumption or pet trade is widespread and occurs on a large scale (Cheung & Dudgeon 2006, Turtle Conservation Coalition 2011, Mundy-Taylor 2013, Nijman & Shepherd 2015, TRAFFIC 2014, 2015, 2016).

Both globally and nationally, the successful reduction of damage to wild populations faces diverse challenges appearing at multiple levels. Complications include highly limited financial resources and lack of adequate material and trained personnel, usually not readily available to state and local agencies and other legally responsible entities. Such issues were highlighted during the *Fifth International Symposium on* Emys orbicularis and the other European Freshwater Turtles held in 2015 in Kiten, Bulgaria, a meeting that brought together over 70 chelonian scientists and professionals. A striking report was presented there about 1,300

European Pond Turtles (Emvs orbicularis) housed under suboptimal conditions after being confiscated in 2012 and their bleak fate since then, including the unlikely return to the wild of the surviving individuals (Nikolić & Golubović 2017). This situation prompted an extended and fruitful discussion, initiated during a special session at the symposium and continued afterwards. Initially, we focused on the details related to this particular confiscation and the possible means to alleviate it. However, we drew on the extensive expertise and experiences of the multi-national symposium team in order to devise a broader list of measures to be taken into account for similar situations in the future. Suggestions ranged from preventive and preferential actions needed to minimize both the number and duration of confiscations, through the veterinary requirements for captive care, to aspects of a hopefully successful return of turtles to the wild. In E. orbicularis, genetic differentiation of local populations is complex (e.g. LENK et al. 1999, Velo-Antón et al. 2008, Stuckas et al. 2014, VAMBERGER et al. 2015; Dux et al. 2017).

<sup>&</sup>lt;sup>1</sup>National Museum of Natural History – Sofia, Bulgarian Academy of Sciences, 1 Tsar Osvoboditel Blvd., 1000 Sofia, Bulgaria; E-mail: yurii.kornilev@nmnhs.com

<sup>&</sup>lt;sup>2</sup>Department of Integrative Zoology, Faculty of Life Sciences, University of Vienna, Althanstraße 14, 1090 Vienna, Austria <sup>3</sup>Department of Biology, Faculty of Natural Science, Shumen University, 115 Universitetska Street, 9700 Shumen, Bulgaria <sup>4</sup>C. La Jonquera, 17, 2; 17600 Figueres, Spain

<sup>&</sup>lt;sup>5</sup>Museum of Zoology, Senckenberg Dresden, A. B. Meyer Building, 01109 Dresden, Germany

Therefore, to avoid contributing to the erosion of biodiversity through genetic pollution by releasing genetically mismatching turtles to native populations, a genetic assessment of confiscated turtles is of paramount importance.

Below, we present the result of these

discussions, dubbed "The Kiten Protocol" as a contribution and a basis for future turtle and tortoise successful conservation measures to be taken. However, we stress that these are only brief guidelines and chelonian experts' opinions must be sought for every particular case.

## The Kiten Protocol

Experts on the study and protection of freshwater turtle and tortoise species and representatives from different European countries gathered at the 5<sup>th</sup> International Symposium on *Emys orbicularis* held in Kiten, Bulgaria, from the 19<sup>th</sup> to the 21<sup>st</sup> of August 2015,

*Concerned* by the overall increase in the illegal trafficking of native animal species in Europe and in particular by the mass illegal cross-border trafficking of turtles;

*Conscious* that the distribution area and population density of the five continental species of turtles native to Europe have reduced dramatically in recent decades;

Aware that the proper and quick release of seized animals can save many turtle lives and restore wild populations;

*Recognizing* that the principle of state sovereignty over its territory and over the species that live in it should not be an obstacle to achieving full and effective international cooperation;

*Recognizing* the efforts that the authorities of European countries have undertaken in recent years to protect wildlife by law and the acceptance of international agreements;

*Recognizing* that the delicate situation that European turtles are in requires the widest possible cooperation among all countries and their participation in providing an adequate and effective internal and international response;

**They agree** to recommend to the authorities of the European countries to follow the measures listed below in the event of a turtle confiscation:

Always bear in mind article VIII (Measures to be taken by the Parties) of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) that establishes what should be done once the animals have been seized, although there are additional highly recommended actions to carry out in the same sense as the aforementioned article VIII of CITES:

- Establish the precise locality of origin of the confiscated animals through a rapid police investigation;
- At the same time, *carry out* analyses (including genetic) of the turtles to determine their affiliation;
- *Encourage* gathering of DNA samples from wild populations and maintaining a unified database for correct determination of turtle's origin;
- *Complete* a thorough check of the animals to facilitate their handling, keeping them in separate groups to avoid stress and spread of diseases;
- *Boost* a rapid release of the turtles at their place of origin, once the exact locality has been ascertained and the health of each animal verified.

These recommended measures shall be accompanied along other actions:

- Acceptance of economic costs by the authorities based on realistic budgeting;
- Intensify control over the trafficking of protected species, including through the use of the Internet;
- Increase international cooperation and coordination among state agencies, authorities, NGOs, rescue centers and professionals in order to rapidly locate and repatriate confiscated animals;
  - Increase turtle specialists' assistance for scientific, sanitary, and logistic support;
- Encourage the creation and subsidize the maintenance of rescue centers recognized as collaborative CITES Centers with the aim of keeping animals for fixed periods of time, assessing their health and finally releasing them into their original habitat.

The names of researchers and experts that have discussed and approved this protocol are included in Appendix 1.

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#### **APPENDIX 1**

## The Kiten Protocol: Contributors and supporting signatories, in alphabetical order, with affiliations:

- Ayaz Dinçer Zoology Section, Department of Biology, Faculty of Science, Ege University, Izmir, Turkey
- BAYRAKCI Yusuf Faculty of Science, Department of Biology, Zoology Section, Ege University, Bornova - İzmir, Turkey
- **Bona Martin** Department of Anatomy, Faculty of Medicine, Pavol Jozef Šafárik University, Slovakia
- Budó Joan Tortoise Breeding Centre of Albera (Catalonia), Spain GIRONDOT Marc Laboratoire Ecologie, Systématique, Evolution, CNRS, Université Paris Saclay, AgroParisTech, Orsay, France
- GOLUBOVIĆ Ana Faculty of Biology, Belgrade University, Serbia HAVAŠ Peter Fauna Carpatica, Slovakia
- Horváth Enikő Department of Zoology, Faculty of Science, Pavol Jozef Šafárik University, Košice, Slovakia
- İLHAN M. Süleyman Ege University, Faculty of Science, Depart-

- ment of Biology, Zoology Section, Bornova İzmir, Turkey Ivanchev Ivo Gea Chelonia Foundation/Tortoise Rescue and Rehabilitation Centre, Banya, Bulgaria
- **LUKANOV Simeon** Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, Bulgaria
- Mărginean George Romania
- Martínez-Silvestre Albert CRARC (Catalonian Reptiles and Amphibians Rescue Center), Spain
- **NAUMOV Borislav** Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, Bulgaria
- NIKOLIĆ Sonja Institute of Zoology, Faculty of Biology, University of Belgrade, Serbia
- Ottonello Dario Associazione "Emys Liguria", Albenga (SV), Italy
- Popgeorgiev Georgi National Museum of Natural History,

- Sofia, Bulgarian Academy of Sciences, Bulgaria
- **PRUSAK Beata** Institute of Genetics and Animal Breeding Polish Academy of Sciences, Poland
- **Pupina Aija** Institute of Life Sciences and Technologies, Daugavpils University & Latgales Zoo, Latvia
- **Pupins Mihails** Institute of Life Sciences and Technologies, Daugavpils University & Latgales Zoo, Latvia
- SAÇDANAKU Enerit Research Center of Flora and Fauna, Faculty of Natural Sciences, University of Tirana, Albania
- Schindler Maria Danube Floodplain National Park, Orth an der Donau, Austria

- **Schneeweiss Norbert** Office of Environment, Conservation Station Rhinluch, Linum, Germany
- Soler Massana Joaquim CRARC (Catalonian Reptile and Amphibian Rescue Center), Spain
- Tomović Ljiljana Faculty of Biology, University of Belgrade, Serbia
- Vamberger Melita Museum of Zoology, Senckenberg Dresden, Germany
- **VERGILOV Vladislav** National Museum of Natural History, Sofia, Bulgarian Academy of Sciences, Bulgaria
- **VEYSSET Alain** Association Emys Conservation, France