Project Update: September 2017

In previous months our activities included:

- School workshops in the municipality of Bar.
- Distribution of promotional material Bar,Nikšić and Budva.
- National television promotions (RTCG, Vijesti, 777 channels) and an official reaction to the killing of a loggerhead turtle.

Field research took place in the Bar and Niksic (June - August). Despite extensive time spent surveying potential European pond turtle habitat, no sightings were registered in Niksic. Fieldwork within the Bar municipality revealed six *E. orbicularis* localities near the village of Virpazar, indicating that the region is favourable to this species. At all sites, members of the public were canvassed to help provide information on the current and historical local presence of both chelonians and their potential sites.

Key threats were recognised for *T. hermanni*, most notably fire, which occurred frequently throughout the central and southern parts of Montenegro. We had meeting with Customs, Ministry of Science, and the Environment Agency of Montenegro.

Additional threats that were identified included urban development, particularly rife in the coastal and central parts of the country which coincide with the recognised range of *T. hermanni*. There is also a long-standing issue with the illegal collection and cross-border trade of tortoises in and around the countries neighbouring Montenegro. As a result of perceived risk, meetings were held with the national customs authorities where we introduce potential risk and give to them our promotional material. Dialogue with local residents throughout out field research suggested that incidents of "informal" tortoise collection by non-local visitors, particularly children, during the summer months may be an issue in some areas. Educational discussions, together with the distribution of leaflets and booklets, were undertaken in an effort to enhance understanding, empathy and positive action towards turtles and tortoises. In addition to discussions with customs authorities, meetings were also held with the Ministry of Science and the Environment Agency of Montenegro. We will also be involved in an "Open Science Day" event, to be held in October, and will present a presentation on the turtles and tortoises of Montenegro.

As touched upon previously, research in Niksic was unsuccessful as far as identifying *Emys orbicularis* populations in potentially suitable habitat, or obtaining positive anecdotal references from local people. Rivers, canals and streams in the region tended to be relatively fast flowing in the summer. The elevation, at 600 m asl, may also be restrictive.

The climate of the Niksic Plain would appear to be favourable, due to prevailing warm coastal air currents, resulting in daily and annual temperatures which are noticeably higher than neighbouring areas. At many waterbodies in Niksic we found high levels of pollution, mainly in the form of single-use plastic items. Other apparent issues include substantial urbanisation and destruction of potential turtle habitat. Many waterways in the area are concrete canals and channels, while a significant number of rivers have rocky beds with no substantial areas of marginal or aquatic vegetation

for turtle refuge or basking. Also there is usual illegal electrofishing, as well as usage of fishing nets in which turtles may drown.

 In summary, we believe that the key limiting factors to turtle occurrence in Niksic are:

•	Low winter temperatures, affecting the survival of hibernating turtles.
•	Environmental pollution.
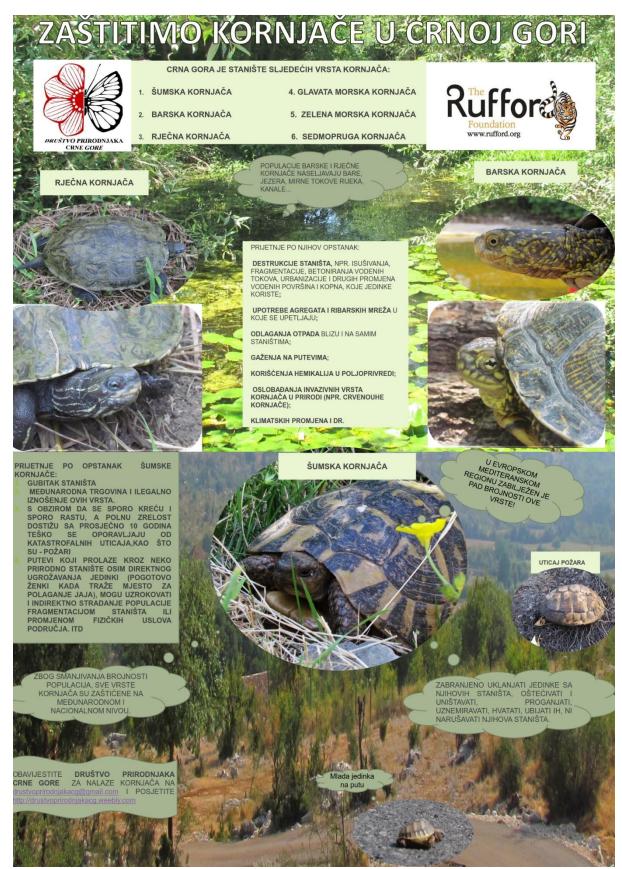•	Urban development.

In the Bar municipality at Virpazar, key threats were:

•	Environmental pollution.
•	Lake traffic, particularly in the summer months.
•	Unregulated and illegal fishing, including the indiscriminate use of nets, and electrofishing.

All project activities are published on the Natural History Association of Montenegro site at: http://drustvoprirodnjakacg.weebly.com/ and https://www.facebook.com/groups/drustvoprirodnjakacg/

Burned *Testudo hermanni boettgeri* in fire

Poster