**Are Sharks Worth More Dead than Alive?: A Stated Preference Study on Shark Ecotourism in Costa Rica.**

**Alicia Berrios and Milan Scasny**

In this study we use a discrete choice experiment to elicit tourists’ preferences of shark ecotourism and contingent valuation to elicit the conservation of three - hammerhead shark species in Costa Rica. These species are currently endangered or red-listed by CITES and are not effectively protected by the Costa Rican government. The preservation of these species is critical since elimination means a much broader effect for their marine habitats. Determining the value of shark ecotourism for the public is important for such efforts, since the total economic value of shark ecotourism may be much greater than the value of these species on the global seafood market. Attaining information about tourist preferences for the conservation of various shark species can encourage governments to effectively eliminate and regulate illegal shark fishing practices, while promoting shark ecotourism. The estimated economic values of shark ecotourism in Costa Rica are critical for justifying such a transition towards ecotourism, and therefore, laying the foundation for incentivized marine ecotourism efforts across countries.

WTP values are derived from a sample that is representative of the tourist population (n=801). Data was collected by conducting in-person surveys at the Juan Santamaría International Airport in San Jose, Costa Rica during the 2016 summer. Data was collected at the departure gate- allowing for real expenditures to be obtained. Programming of surveys and result databases was done by the Centrum pro otázky životního prostředí of Univerzita Karlova. A local company,“ Infinet”, was hired to collect data and manage quotas on a weekly basis. A one-week pilot study was conducted to test the instrument, and allow for any technical issues to be remedied. The survey was comprised of two components: a discrete choice experiment, and a contingent valuation exercise. The DCE presented a mandatory one-time payment policy scenario which would elicit preferences for the conservation of coral reefs, shark species, or sea turtles or the development of city or beach infrastructure. Respondents were asked to choose between several policy options characterized by varying attribute levels (the cost in USD, and expected conservation effect, or amount of infrastructure development). The contingent valuation consisted of a split-sample treatment and double-bounded dichotomous choice for the costs selected by respondents. In a similar payment scenario, respondents were asked to choose between two policy options which would elicit preferences for the conservation of two of the three red-listed or endangered hammerhead species. Respondents were asked to repeat the exercise, where the third species was randomly included as a policy option.

Data was analyzed using the SAS software. Since the DCE comprised of multiple alternatives and responses, conditional and multinomial logit models were used to analyse the analysis. More specifically, the ability to understand how the effect of different costs and levels of each attributes in various policy options affected the respondents’ choices. Whilst, generalized logit analyzes the effect of respondent characteristics s (i.e. income, nationality, age, education) on their choices. The main result of this research is the mean WTP for each policy attribute, representative of the tourist population in Costa Rica. The responses from single-bounded dichotomous choice are analysed by Turnbul non-parametric estimator and logit model, whereas double-bounded DC responses are analysed using the logit for the interval data MLE. Data analysis is ongoing and the results will be ready by the Conference.