**MATE Organizational and Operational Regulations** 

**III. Requirements for Students** 

**III.1. Study and Examination Regulations** 

Appendix 6.13: The MATE Uniform Thesis / thesis

/ final thesis / portfolio guidelines

Annex 5.2: Content extract (abstract)

**Underwater Trails: Balancing Tourism and Conservation in** 

**Freshwater Conditions** 

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This research has yielded several significant findings that contribute to our understanding of

underwater trails in Hungary's freshwater environments and their potential for sustainable

tourism development.

Firstly, this study revealed a strong correlation between visibility, depth, and substrate type at

Hungarian dive sites. Sites with sandy or rocky substrates generally offered better visibility,

especially at greater depths. This information is crucial for dive trail planning and site selection,

as visibility significantly impacts diver experience and safety.

The development of a novel touristic value calculation method allowed for a quantitative

assessment of Hungarian dive sites. This method, which considers factors such as visibility,

depth, substrate type, and unique features, provided valuable insights into the potential of

various locations for dive tourism. Interestingly, the calculations showed a strong positive

correlation with user reviews from divecenter.hu, validating the effectiveness of the method.

My survey of 43 professional divers in Hungary yielded important insights into diver

preferences and behaviors. The results indicated that a majority of respondents dive in

freshwater locations in Hungary at least once a month, highlighting the importance of these

sites for the local diving community. Overall diving experience ratings were generally positive, with factors such as water clarity, unique underwater features, and ease of access significantly influencing site selection. Challenges encountered by divers primarily included poor visibility and lack of interesting underwater features, emphasizing areas for potential improvement.

The study also produced a comprehensive dive site inventory, mapping the distance of various locations from the capital city, Budapest. This analysis revealed a correlation between a site's proximity to the capital and its popularity, suggesting that accessibility plays a crucial role in dive site utilization.

Field research allowed for detailed mapping of existing underwater trails in Dorog and Gyékényes. These maps provide valuable resources for dive operators and individual divers, enhancing safety and navigation underwater. The Dorog Diving Museum Trail stood out for its unique educational value, showcasing various diving equipment and artifacts. The trails in Gyékényes, particularly the Diving Galactic Trail, demonstrated innovative approaches to creating engaging underwater experiences in freshwater environments.

The research also highlighted the potential for enhancing both the environmental and touristic value of dive sites. My suggestion for introducing artificial spawning nests for pikeperch presents an opportunity to combine conservation efforts with dive tourism. Similarly, the proposed underwater signage system could significantly improve the educational value of dive trails while enhancing the overall diving experience.

Interviews with diving and water tourism experts provided valuable insights into the current state and future potential of dive tourism in Hungary. These discussions emphasized the need for improved infrastructure, marketing efforts, and collaboration between stakeholders to boost the sector.

Lastly, the study underscored the importance of balancing tourism development with conservation efforts in freshwater environments. The recommendations provided for future underwater trails in Hungary aim to achieve this balance, promoting sustainable dive tourism while preserving the ecological integrity of these unique aquatic ecosystems.

This research has provided a comprehensive overview of the current state of underwater trails in Hungary's freshwater environments, identified key areas for improvement, and proposed innovative solutions to enhance both the touristic and environmental value of these sites.

These findings lay a solid foundation for the future development of sustainable dive tourism in Hungary.