

Assessment of exertion in draught horses on the route to Morskie Oko

Summary

No standards for exertion have been developed for draught horses. The purpose of our research was to characterize exertion in draught horses on the route to Morskie Oko. The research was conducted in 2019 on 323 horses pulling carriages with tourists on the 7-kilometre route to Morskie Oko. The route has numerous turns, and 82% of it is uphill, with an average gradient of 4.6%. The Restitution Effectiveness Index was used to assess the level of exertion. This indicator, based on measurements of heart rate prior to exertion, immediately after work, and after a short rest, is used to determine the level of exertion and indirectly provides information about the horse's physical capacity. The level of exertion among the horses proved to be highly diverse. For 3% of horses the work was very strenuous, and for 27% it was strenuous. The remaining 70% of horses were very well prepared for team work in mountain conditions. The Restitution Effectiveness Index proved to be a very good and rapid indicator of the adaptation of horses to their work, and its result can be treated as a guide for additional, more detailed monitoring of horses' health and condition.

KEY WORDS: draught horses, heart rate, Restitution Effectiveness Index