## HoliCow - tool and global decisions to detect resilient heat stress cows

Laura Dale, Pauline Lemal, Marine Gele, Clement Grelet, Helene Soyeurt, Michael Lynch, Nicolas Gaudilliere, HoliCow Consortium, Andreas Werner, Julie Leblois

Dramatic decline in the number of small and medium-sized dairy farms occurred, therefore in HoliCow project our goal is to support those farmers. The objective of the project is to join forces to give these farms an opportunity to use affordable digital tools, to improve their competitiveness and resilience. A transnational database will be used to calibrate wide variety of different dairy breeds across Nord-West-Europe farms with the goal to gather sufficient data to develop safe alert system. The first work package is DATA for agricultural tools: Big Data integration to generate holistic added value regarding six crucial aspects: animal health and welfare, environmental impact, production, fertility, milk transformation and climate resilience. The main aim of the paper it to underline the heat stress group work in the direction of the creation of a tool to detect the resilient cows based on cow and herd information linked to heat stress MIR prediction data. TOOLS for farmers is the second work package where realization of fully integrated mobile or online tools for farmers, which means that all these predictions will be brought together to create an easily understandable indicator to assess cow resilience. In addition, transnational approach will lower barriers to implementation through common practices and learning approaches. PEOPLE for farmers is the last work package regarding trainings and interactive community actions. An integrated field lab from transnational network of pilot farms will enable concrete actions and shared learning. The platform will be continuously improved based on user feedback.