

Project Title	Managing extreme heat report
Date submitted	August 28, 2020
Submitted by	Foster from the BC Agriculture & Food Climate Action Initiative
Summary	<p>The heat management technologies currently used by Fraser Valley producers may not meet future cooling requirements of extreme heat events because of climate change. Stakeholders mentioned that flock mortalities due to heat do occur from time to time in the Fraser Valley. As heat events become more extreme and more common, this may necessitate changes to flock management strategies and adoption of new technologies. Lessons can be learned from poultry-producing areas that are already warmer than the Fraser Valley. Georgia, Ontario and the UK were the regions that frequently arose in the jurisdictional scan. The literature review and jurisdictional scan of technologies and management practices found that some Fraser Valley producers are already using effective cooling methods.</p> <p>Opportunities for further technology adoption by the Fraser Valley poultry industry include:</p> <ul style="list-style-type: none"> • Use of apps to measure the Temperature Humidity Index (THI) • Exhaust Ventilation and Evaporative Cooling: • Ground Source Heat Pumps <p>Several opportunities exist to gather more information, undertake knowledge transfer and/or evaluate specific technologies for applicability to the poultry sector in the Fraser Valley. These include:</p> <ol style="list-style-type: none"> 1. Clarify potential transferability, producer interest and current uptake of heat stress apps. 2. Develop fact sheets and/or case studies regarding: <ol style="list-style-type: none"> a. Tunnel ventilation & cooling pads in a new poultry barn install b. Tunnel ventilation retrofit into existing poultry barns c. Comparison of evaporative cooling technologies (e.g. misting systems vs. cooling pads) d. Ground source heat pump feasibility 3. Develop materials to establish a standard for design and to outline effective operational strategies for improved tunnel ventilation system performance. 4. Develop fact sheets or other informational materials on best practices for managing the potential negative impacts of increased humidity using high-pressure misting and cooling pads.
Request	To discuss any possible follow-up action or projects
Decision	Directors identified two possible project areas: to look at removing hot air from the top of barns or barn peripheries and a factsheet on managing extreme temperatures that lists products/methods and contacts.
Additional comments	There is an executive summary that includes the poultry recommendations on pages 1-3, while the full poultry section extends from pages 10-28.