### Assumptions:

- 40 circulation fans with 1 hp motors in naturally ventilated barn
- 1 hp motor consumes 1 kW of power
- Electricity costs $0.11/kWh
- Set point temperature is 68 °F
- In typical meteorological year, Gainesville has 5,002 hours with a temperature at or above 68 °F
  
  **(note: from Table 1, with a THI set point of 68, fans would only run 4,751 hours)**

### Example 2

Estimating the annual electrical cost of operating circulation fans in Gainesville, FL

\[
\text{Annual electrical costs} = (\text{hours over set point} \times \text{hours/yr}) \times (\text{number of fans}) \times (\text{electrical use per fan} \times \text{costs of electricity}) = 5,002 \text{ hours/year} \times 40 \text{ fans} \times 1 \text{ kW/fan} \times 0.11/\text{kWh} = 22,008/\text{year}
\]